Abstracts of the Third Annual Scientific Conference of the European Association of Psychosomatic Medicine (EAPM)

Challenges and Chances for Psychosomatic Medicine in Health Care

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Abstracts Plenary Sessions

Wednesday July 1st, 2015

Communicating with patients with serious medical illness and their treatment teams: lessons learned from the trenches
Crone C
Washington DC, USA

General rules and creativity in clinical communication about medically unexplained symptoms
Salmon P
University of Liverpool, UK

General rules about clinical communication can be helpful to practitioners but are inevitably limited in the guidance they offer about how to respond in specific situations with specific patients. Because every clinical situation is to some degree unique, practitioners need to be intuitive and creative in their interactions with patients as well as being guided by general principles. Researchers can therefore gain potentially valuable insights from studying the solutions that practitioners find to communication dilemmas in routine practice. The problem of knowing how practitioners should best communicate with patients about ‘medically unexplained symptoms’ illustrates this argument. These are physical symptoms which practitioners think are not caused by physical pathology. Over 25 years, clinical researchers and educators have developed general rules for communication to help such patients, particularly in primary care where practitioners were encouraged to help patients reattribute symptoms to psychosocial problems. Unfortunately, while training does change practitioners’ communication, there has been little evidence of appreciable benefit to patients. However, detailed studies of practitioners’ communication with such patients in routine consultations suggests some potentially more helpful communication strategies, particularly ones which transcend the dualism that pervades clinical discourse in this field.

Communication skills in models of collaborative care
Unützer J
Seattle, USA

Collaborative Care, an approach in which mental health professionals work closely with primary care physicians to treat common mental disorders such as depression and anxiety in primary care has been shown to improve access to care, mental and physical health outcomes, and to reduce overall health care costs. Effective collaboration requires effective communication between patients, primary care physicians, mental health professionals, and clinic support staff. We will explore communication skills needed to implement effective communication in Collaborative Care. These include making the case for collaborative care with patients, providers, practices, and health care payors. They also include effective communication between patients and providers, primary care providers and mental health specialists. We will review how differences in communication in a collaborative care team can make the difference between more or less effective implementation of collaborative care programs.

The multicenter KOMPASS study – Results and consequences for clinical practice
Keller M
Medical University Heidelberg

Experiences with training physicians at the Sloan Kettering Cancer Center
Bialer P
New York, USA

20 years research on communication skills training for physicians – What is the lesson to learn?
Langewitz W
Basel, Switzerland

The last 20 years have seen the rise of a new topic in medicine: communication between health care provider and patient. After a slow beginning the topic is now in its post-puberty stage, characterised by open debates in various fields: what is the essence of patient-centred communication, what is the essence of ‘good communication’, who defines good communication, who profits from professional
communication in health care, how much should we train, for how long, and when during a professional career, etc. The good news: we have come to accept that the answers are much more complex than we had thought initially; the bad news: for some questions there are no answers, because the perception of communication is highly individual.

Anatomy of Malice: the Rorschach Tests of the Nuremberg War Criminals
Dimsdale JE
San Diego, USA
Seventy years ago the International Military Tribunal in Nuremberg conducted an almost yearlong trial of the leading Nazi war criminals. Affiliated with the court were Douglas Kelley, M.D., psychiatrist and Gustave Gilbert, Ph.D., psychologist. They had the audacious idea of studying the Nazi leaders’ malice with Rorschach tests. Their findings have been mired in controversy, lawsuits, and, sadly, suicide, but finally these moldering tests have been released.

This lecture will discuss how Kelley and Gilbert viewed the psychological states of Robert Ley, Hermann Goering, Julius Streicher, and Rudolf Hess and will frame the observations from the context of contemporary research in social psychology and neuroscience.

The Nuremberg Medical Trials – Lessons to be learned
Leven KH
Erlangen/Nuremberg, Germany
The Nuremberg Medical Trial (1946/47), initiated by the US, stands as the paradigm example for the symbolic value of justice vs. medical crimes. The trial itself has by now accomplished a history of decades; its direct effects in contemporary German and international medicine have to be discerned from longterm effects, especially concerning the reception of NS-medicine in Germany since the 1980s and concerning international research ethics via the “Nuremberg Code”, originally being part of the sentence at Nuremberg in 1947.

Thursday July 2nd, 2015

Integrating Care: Mental Health as a Global Human Right
Summergrad P
Dept. of Psychiatry, Tufts University School of Medicine, Boston, Massachusetts, USA
Mental disorders are ubiquitous and are among the great scourges of mankind. The stigma, fear and discrimination associated with these illnesses, and the limitations of our scientific understanding have historically kept mental health care separated from general medical services, despite clear evidence of the comorbidity of these disorders and the importance of an evidence based approach to care. Beginning in the 1930's in the United States and elsewhere, psychiatric care and science have increasingly been integrated into general medical care systems, medical training and scientific discovery. Accompanying these efforts have been three related themes: efforts to reduce the stigma of psychiatric illness, equal care and insurance coverage under parity for mental disorders as all other medical disorders, and efforts to extend and improve mental health services in a rapidly globalizing and developing world. This talk will review the history of these developments, highlight the important data and models for integrating care and suggest a way forward to make these anti-discrimination, scientific and integrated care issues a more central part of the global agenda.

Collaborative care for the depressed medically ill patient: Implementation and outcome
Unützer J
Seattle, USA
Most patients with common mental disorders such as depression or anxiety do not receive effective treatment. When they do receive health care for these mental health problems, they are more likely to be treated in primary care than by a trained mental health specialist such as a psychiatrist. We will explore efforts to reach more patients with effective care by integrating mental health professionals into primary care. We will explore several strategies to accomplish such integration and focus on the approach with the strongest evidence-base to date, Collaborative Care. In this evidence-based approach, psychiatrists and other mental health professionals support
primary care physicians treating patients with common mental disorders such as depression and anxiety. Effective collaborative care programs use evidence-based treatments, caseload registries to make sure that patients don’t fall through the cracks, and systematic psychiatric caseload review and consultation. We will review the evidence-base for collaborative care, give examples of new targets for collaborative care, and review studies that examine differences in implementation of collaborative care programs across different health care settings. We will also show a brief video that illustrates core principles of evidence-based collaborative care.

Friday July 3rd, 2015

Immune-to brain interactions in the development of sickness behavior and depression
Dantzer R
MD Anderson Cancer Center, Houston, TX, USA
Anyone who has experienced a viral or bacterial infection knows very well the feelings of sickness, in the form of malaise, lassitude, fatigue, numbness, chills, muscle and joint aches, and reduced appetite. Sickness behavior is induced by activation of immune-to-brain communication pathways by the proinflammatory cytokines that are produced at the site of inflammation and it is usually reversible. However, when the peripheral immune responses is too intense or lasts too long, the behavioral response to cytokines can become maladaptive and culminate in an episode of decreased motivation, anergy and depression. The transition from sickness to depression is mediated by activation of the tryptophan-degrading enzyme, indoleamine 2,3 dioxygenase (IDO), which is the first and rate-liming enzyme of the kynurenine metabolic pathway. IDO activation was initially thought to lead to tryptophan starvation and decreased bioavailability of serotonin. However, this is not the case. IDO activation induces the formation of kynurenine that is transported into the brain where it is further metabolized into neurotoxic kynurenine metabolites including quinolinic acid. Quinolic acid acts as an agonist of brain NMDA receptors as demonstrated by the ability of ketamine to block and NBQX to restore inflammation-induced depression. Elucidation of the mechanisms of inflammation-induced depression and sickness reveals a wide array of new targets for the development of interventions aiming to alleviate these conditions.

How to understand health consequences of complicated grief: Neuroscience findings and clinical implications
O’Connor MF
Tucson, USA

Psychosomatic Medicine: Chances and Challenges in Health Care
Kathol R
Minneapolis/Burnsville, USA
Over 2/3rds of patients with mental health and substance use disorders (MH) seek treatment primarily from their general practitioners in the medical setting but most receive none. This includes over 50% of patients with serious mental disorders. Ineffectively treated MH disorders in patients seen in medical settings are associated with poor medical and MH outcomes, illness persistence with high complication rates, and 200% of medical service use/cost compared to non-comorbid patients. The Affordable Care Act (Obama Care Health Reform) creates an opportunity to utilize health services research on comorbidity cost and integrated care model findings to generate a business case for transitioning to value-added MH services in general hospitals and medical clinics (Patient Centered Medical Homes). The value-added models being developed to improve care, care quality, and cost as a part of health reform require Psychosomatic Medicine expertise and involvement for future success.

Investigating chronic pain
Kroenke K
Indianapolis, USA
Saturday July 4th, 2015

Psychotherapy with the Medically Ill: Internet Based Methods

Psychodynamic psychotherapy online?
Beutel M
Mainz, Germany
The presentation reviews the limited evidence for psychodynamic online interventions and possible reasons for the scarcity of psychodynamic studies in this strongly emerging field. Psychodynamic online interventions are exemplified by a transdiagnostic internet-based aftercare program for patients after inpatient medical rehabilitation for mental, respectively physical (psychosomatic, cardiological, orthopedic) disorders. The core component was a standardized weekly writing task (‘blog’). Patients’ blogs were followed by individual feedback from the online therapist within one week day. Interventions followed the model of CCRT (Luborsky) asking the participant to describe social encounters when returning from rehabilitation to daily work and social life according to his or her wish (W), the reactions of the others (O) and the self (S). The program was evaluated in an RCT with 632 patients. Acceptance was high (75%), and attitudes toward work, life satisfaction, depression and anxiety improved significantly in the intervention group compared to the control group (information only). Patients reported a good therapeutic alliance, which was strongly correlated with the online therapist’s ratings. Patient alliance report was a better predictor of outcome than therapist rating. Options and perspectives for psychodynamic online therapy are discussed.

Internet-based psychotherapy: Indications, outcome and the therapeutic relationship
Knævelsrud C
Berlin, Germany

Exploding myths about medically unexplained symptoms
Creed F
University of Manchester, UK
Many doctors classify medical disorders as either “Organic” or “Functional” / “Medically Unexplained” but this dualism does not fit with current knowledge. The myths associated with this mode of thinking need to be recognised and dispelled. “Medically unexplained symptoms” include the Functional somatic syndromes, the DSM-IV diagnosis of somatoform disorders and individual symptoms or symptoms clusters not included in these diagnoses. The associated myths suggest that medically unexplained symptoms:
1) Are evidence of an underlying psychiatric disorder
2) Have an aetiology distinct from organic disorders
3) Are persistent, disabling and resistant to treatment
The evidence that each of these statements is false will be demonstrated.

Workplace bullying among junior physicians in relation to depressive symptoms: The chicken, the egg or both?
Loerbroks A
Duesseldorf, Germany
Workplace bullying and depression are closely interrelated and, in fact, this relationship may be bi-directional. Prospective evidence disentangling temporal sequences remains however sparse and yielded inconsistent findings. Furthermore, it has been suggested that a potential depressogenic effect of bullying may only become evident after more extended periods of follow-up (i.e., > 1 year). The Elsevier-EAPM Young Investigator Award presentation will provide details on the rationale for and findings from a prospective study among junior hospital physicians from Germany, who represent a population frequently exposed to bullying at the workplace.
Abstracts of Scientific Symposia

Illness Mechanisms in Functional Somatic Syndromes and Somatic Symptom Disorder

The need for a generic, balanced, data-driven understanding of functional somatic syndromes and somatic symptom disorder
Schröder A
The Research Clinic for Functional Disorders and Psychosomatics Aarhus University, Denmark

Background: Balanced conceptualisations of functional somatic syndromes (FSS) such as fibromyalgia or chronic fatigue syndrome are rare. While some define FSS as purely psychological disorders, others talk about biomedical diseases of unknown origin. The DSM-5 Somatic Symptom Disorder definition has tried to isolate the psychological features of these illnesses, with a risk of continuing the artificial split into ‘psychiatric’ and ‘medical’ diagnoses in the field of FSS. At the same time, the common focus on ‘specific’ FSS is a hindrance not only for a better understanding of generic illness-mechanisms, but also for a detection of specific risk factors linked to certain symptom profiles or illness courses.

Method: This presentation will integrate some of the data presented in the previous presentations into a generic illness model of FSS, based on a review of systematic and narrative reviews.

Results: Very few systematic reviews have investigated specific mechanisms for various FSS simultaneously. While some illness mechanisms are found consistently across various FSS, others may be linked to certain symptom profiles. The large body of literature, mostly with focus on single FSS, hampers the development of a data-driven generic FSS model.

Conclusion: There is an urgent need for systematic reviews that include various FSS simultaneously, as well as for more empirical testing of specific elements of a generic illness model of FSS in well-designed studies.

Less is more. A critical view on etiological models of functional somatic symptoms
Rosmalen JGM
University Medical Center, Interdisciplinary Center for Psychopathology and Emotion regulation, Groningen, The Netherlands

Background: Several authors have proposed models specifying the factors involved in the etiology of functional somatic symptoms. This narrative review aims to describe these models with regard to their similarities and differences.

Method: The models will be systematically evaluated on the following aspects. First, the relative contribution of biological, psychological and social elements. Second, the structure of the model, specifically the interrelations and feedback loops between the elements. Third, the timescale to which the models apply.

Results: We included six well-known models. All of these contain psychological elements and most contain social elements. Biological elements are relatively underrepresented. The presence and type of included interrelations and feedback loops between elements vary widely among models. The same is true for the timescale, with models describing short-term processes covering less than a second to several years.

Conclusion: Current etiological models vary widely, possibly related to the fact that empirical testing is largely lacking. I propose to combine existing models into a higher level model which is suitable for empirical studies in the domain of biology, psychology and sociology.

Developmental trajectories and risk factors of functional somatic symptoms: A synthesis of findings from two large epidemiological studies
Rask CU
Aarhus University Hospital, The Research Clinic for Functional Disorders and Psychosomatics, Aarhus, Denmark

Background: Empirical research shows considerable heterogeneity in the clinical presentation and course of functional somatic symptoms (FSS) in children and adolescents. By applying a developmental perspective, issues concerning factors that influence on the severity, trajectories, and outcomes of FSS can be addressed. Aim: To describe a
developmental approach for conceptualizing and studying FSS in children and adolescents. **Method:** A review and synthesis of Results on various risk factors of FSS from child, familial, social and environmental domains from two large European longitudinal population-based studies: The Danish ‘Copenhagen Child Cohort (CCC2000)’ and the Dutch ‘Tracking Adolescents’ Individual Lives Survey (TRAILS),’ respectively.

**Results:** A detailed overview of identified predisposing and maintaining factors of FSS in the two studies will be presented. Based on the Results, possible interactions across risk domains and potential developmental pathways of FSS will be discussed.

**Conclusion:** Further longitudinal studies, exploring developmental phenotypes and trajectories of FSS, are needed to increase our understanding of the processes that underlie the development of somatoform and related disorders during lifespan. The perspective of mapping modifiable early risk mechanisms could have implication for the treatment and prevention of these disorders.

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**What can we learn about functional somatic syndromes form neuroimaging studies?**

**Pallesen KJ**

Aarhus University Hospital, The Research Clinic for Functional Disorders and Psychosomatics, Aarhus, Denmark

As a general observation, neuroimaging studies on functional somatic syndromes (FSS) report inconsistent Results. Exceptions from this tendency may be the association between FSS and increased activity of limbic regions in response to painful stimuli and a generalized decrease in grey matter density. The FSS research field can likely benefit from the unique insight offered by magnetoencephalography (MEG) and, to a lesser extent, electroencephalography (EEG), which are currently the only imaging tools that directly capture the full temporal repertoire of neuronal activity in normal and pathological human brain function, without recourse to an unknown coupling to hemodynamics. These Method offer the further advantage of a comfortable silent measurement environment, in contrast to the claustrophobic and noisy fMRI environment, and hence are better suited for the study of conditions characterized by elevated stress levels. Newly developed MEG/EEG analysis Method promise to capture subtle perturbations in neuronal networks in the brain that relate to prolonged or severe mental and/or physical stress. In my talk, I will present some of this evidence.

**Psychological mechanisms consistently associated with functional and somatoform disorders**

**Kleinstäuber M**

Philips-University of Marburg, Department of Clinical Psychology and Psychotherapy, Marburg, Germany

**Background:** There is a lot of empirical evidence that cognitive, emotional, and behavioral factors are involved in the etiology and maintenance of functional somatic syndromes and somatoform disorders. The current narrative review aims at summarizing research Results on such psychological factors.

**Method:** Based on searching different electronic literature databases, studies are selected according to a-priori defined inclusion criteria. Study Results will be summarized in regard to different psychological factors and how strongly they are associated with somatoform symptoms.

**Results:** Psychological factors that seem to be consistently related to functional somatic syndromes or somatoform disorders are, for example, trait negative affectivity, somatic symptom attribution, somatosensory amplification, emotion-focused stress coping strategies, catastrophizing, anxiety sensitivity, a self-concept of bodily weakness, different biased cognitive processes (e.g., memory biases), and illness behaviors. These variables seem to be not only associated with symptom severity but also with symptom-associated outcomes such as depressive mood or level of functioning.

**Conclusion:** Although there appears to be evidence that somatoform and functional somatic syndromes are related to a number of psychological factors, the precise nature of these relationships seems to be complex and yet unclear.
A Bio-Psycho-Social Perspective on HIV/AIDS

Psychiatric comorbidities in HIV/AIDS patients
Blanch J
Hospital Clinic of Barcelona, Barcelona, Catalonia, Spain

HIV infection and psychiatric disorders have a complex relationship. Being HIV infected could result in psychiatric disorders as a psychological consequence of the infection or because of the effect of the HIV virus on the brain. Disorders may be as varied as depression, anxiety, sleep disorders, neurocognitive disorders or serious mental illness. In addition, psychiatric conditions may predispose individual to acquiring HIV infection (through high risk behaviors), and/or create a barrier to medical care, communication with clinicians, and adherence to medical recommendations. This presentation will review the assessment and diagnosis of HIV-related psychiatric disorders and discuss current treatment modalities.

Psychosocial work with HIV-AIDS patients and families through community health care Workers in South Africa
Merk U
Medico international, Frankfurt, Germany

Background: South Africa has one of the highest HIV prevalence rates worldwide and is struggling with the impact on the health system. Apart from emergency cases, care for (AIDS related) medically ill patients in poor communities is mainly done by appr. 70 000 Community Health Care Workers (CHW). Most of these CHW are non-professional community members, mainly women, who receive basic training in AIDS related medical care. In this challenging context innovative approaches are needed to organise psychosocial support for HIV-AIDS patients and families.

Method: The presentation will outline the conceptual approach and practical experience of two such innovative programmes, one in Johannesburg (Sophiatown Community Psychological Services) and one in Durban (Sinani Programme for Survivors of Violence), who train CHW in psychosocial support with HIV-AIDS patients and families (especially children and foster families). It will discuss training Method, follow up mentoring and supervision as well as self-care approaches for CHW themselves.

Results: Based on interviews and evaluation reports the successes and challenges of the presented approaches will be discussed. In addition the question will be raised in which way innovative approaches from non-governmental organizations can contribute to strategies of psychosocial support for AIDS related medical care in the public health system in South Africa.

Conclusion: Working with non-professionals as psychosocial care givers to the medically ill can be a successful approach not only in South Africa if a certain framework is used, including stable working conditions and a professional training and supervision system.

Working with HIV/AIDS patients in San Francisco
Frankel SA
University of California in San Francisco, Psychiatry, San Francisco, USA

Background: The University of California San Francisco (UCSF) HIV Positive Care Center is the only American site for the "INTERMED Self-Assessment" (IM-SA) validation study. We have a culturally and perhaps medically, distinct population of patients, most of whom have complex clinical presentations. This population is familiar from inner city areas of the USA but perhaps less frequently encountered in European settings. Our patients are all HIV positive, and many are also HCV positive. Most are indigent and many are homeless. The incidence of substance use disorders is high. To describe the unique medical, psychiatric, and behavioral characteristics of patients from the HIV patient population served at the 360 Positive Care Center at UCSF and the challenges of treating these patients as a group in San Francisco within the American health care system.

Method: To achieve the above goal five detailed case studies involving these patients will presented, including the transcripts of Conclusions with the multiple care providers involved with each patient.

Results: The creation of an initial, composite profile of our patients demonstrating how their behavior and treatment is shaped by their cultural and economic environment.

Conclusion: American HIV patients are a medically and behaviorally distinct population. In part their medically related behavior is
shaped by the absence of a uniform and integrated health care system.

“The HD project” – biomarkers of depression in HIV newly diagnosed patients
Ferrari S1, Menozzi M2, Alboni S1, Miselli M1, Rigatelli M1, Ghidoni A1
1University of Modena & Reggio Emilia, Dept. of Psychiatry, Modena, IT,
2University of Modena & Reggio Emilia, Dept. of Life Sciences, Modena, IT
Background: Inflammatory mediators may be relevant to explain the frequent comorbidity between depression, neurocognitive disorders and HIV. HIV induces activation of inflammatory mediators, mainly cytokines, that have been involved in the onset of depression and response to antidepressant treatment.
Aim: To identify recurring profiles of inflammatory biomarkers subtending depression, effectiveness of antidepressants and neurocognitive disorders among HIV-infected individuals.
Method: All adult newly HIV-diagnosed outpatients attending HIV clinics in three towns of Northern Italy will be screened, assessed for depression and studied immunologically and for neurocognitive disorders. The study-specific set of immune biomarkers will consist of: IL-1β and α, IL-6, IL-23, IL-18, IFN-γ, TNFα, MCP1, IL-8, BDNF, FGF-8, CNTF; IL1Ra, IL18Rα type II, IL18Rβ short, IL18BP.
Results: 17 patients have been enrolled so far: of these, 6 (35%) were positive to PHQ-9 screening. Three of the 6 PHQ-9-positive patients were positive to the diagnostic assessment for depression. No neurocognitive disorders were found among the 17 patients. As the project will develop, it is expected that frequency of depression, neurocognitive disorders and effective antidepressant treatment will be found to correlate to the profile of immune biomarkers. These findings might help to understand the etiology of depression in HIV, and specifically the role of inflammation and immunological changes.

Antidepressant treatment associated with antiretroviral medications: The significant contribution of the pharmacist in consultation-liaison psychiatry
Guitteny M1, Chepeaux A1, Secher-Pineau S2, Supiot C2, Allavena C2, Raffi F2, Bulteau S1, Vanelle J-M1, Sauvaget A1
1University Hospital of Nantes, Dept. of Addictology and Consultation-Liaison Psychiatry, Nantes, FR, 2University Hospital of Nantes, Infectious Disease Dept., Nantes, FR
Background: Major depression is a common comorbidity in HIV-infected population, with an estimated prevalence of 20-40%. Co-administration of antidepressant treatment (AD) with antiretroviral therapy (ARV) can be complex. The choice of the antidepressant medication has to take into account the potential interactions with the antiretroviral medications, especially protease inhibitors. The contribution of the pharmacist is helpful to perform a critical and enlightened literature review on co-administration AD-ARV and to analyze data from a collaborative study with the infectious disease Department of the University Hospital of Nantes (France).
Method: 1354 HIV-infected outpatients, included in a larger study on the topic of sleep disorders, were assessed according to the Beck Depression Inventory (BDI-II) and according to an interview which collected antidepressant medications.
Results: High scores at the BDI-II were reported for 18% of the studied population. Some of them received a current antidepressant medication. Selective Serotonin Reuptake Inhibitors (SSRIs) were the main antidepressant medications (62%) prescribed for this HIV population.
Conclusion: Co-administration of antidepressant treatment with antiretroviral therapy is not unusual. The potential for drug interactions requires a good collaboration between infectious disease specialists, CL-psychiatrists and pharmacists. Pharmacists are acknowledged to act as an interface in an interdisciplinary and multidisciplinary framework. In an integrative approach, collaboration with pharmacists can promote medication adherence among patients with HIV and improve therapeutic strategies.
New Insights into Stress Regulation and Stress Related Risk Factors for Incident Type 2 Diabetes Mellitus.

Increasing risk for incident type 2 diabetes by sub-threshold stress conditions: Findings from the population-based MONICA/KORA cohort study
Baumert J1,2, Lukaschek K1, Kruse J3,4, Emeny RT1, Meisinger C1,5, Ladwig K-H1,6
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Background: Sub-threshold adverse life conditions may exert their detrimental influence on incident type 2 diabetes (T2D) in synergism with other stressful conditions. In this context, metabolic dysregulations may be experienced mainly in subjects exposed to a combination of such deleterious conditions. Depressed mood, sleeping disorders, negative self-perceived health, low social network and low life satisfaction are among those stress conditions with a notable prevalence and T2D risk. Therefore, the aim of the present study was to assess the effect of the number of adverse stress conditions on incident type 2 diabetes independent of cardio-metabolic risk factors.

Method: The study population consists of 7,172 subjects drawn from the population-based MONICA/KORA Augsburg surveys conducted 1989-1995 and followed up within the KORA framework by 2009 in the Augsburg region (Southern Germany). A “stress risk score” (SRS) was defined as the number of the adverse sub-threshold stress conditions fatigue, sleeping disorders, negative self-perceived health, low social network satisfaction and low life satisfaction ranging from 0 (no adverse condition) to 5 (five adverse conditions). A number of 583 subjects developed an incident T2D risk within the follow-up period. Cox regression with mediation and interaction analyses was performed to assess T2D risk.

Results: The SRS was more pronounced in women than in men and increased by age (both p values < 0.001). Moreover, significant associations between the SRS and low educational level, family history of diabetes, alcohol consumption, physical inactivity, obesity and hypertension were observed. The risk for incident T2D increased with rising number of adverse conditions and was 31-33% higher for two or three conditions and 73% higher for four or five conditions compared to no conditions in a risk factor-adjusted model. The effects of the cardio-metabolic risk factors on T2D risk were rather unaffected by SRS (change-in-estimates were lower than 5%).

Conclusion: The present study showed an increase of risk for incident T2D by a stress risk score, even if accounting for established cardio-metabolic risk factors. Therefore, in case of adverse stress conditions, considering coping strategies to face these conditions may be a valuable way to contribute in preventing T2D onset.

Lack of social interaction as risk factor for T2DM-onset: Findings from the population-based MONICA/KORA study
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Background: Several psychosocial factors have been shown to increase the risk of type 2 diabetes mellitus. This study investigated the association between social isolation and social inhibition and incident type 2 diabetes mellitus.

Method: Data were derived from the population-based MONICA/KORA study conducted in 1984-2009 in the Augsburg region (southern Germany). The study population comprised 8,952 participants (4,669 men/4,283 women) aged 30-74 years without diabetes at baseline. Social isolation was assessed using the Social Network Index. Sex-specific hazard ratios were estimated from Cox proportional hazard models.

Results: During a mean follow-up of 15.5 years, 904 incident type 2 diabetes mellitus cases (558 men, 346 women) were observed. Social isolation significantly increased the risk of incident type 2 diabetes mellitus in both men and women in unadjusted analyses. After adjustment for age, survey, parental history of diabetes, smoking status, alcohol intake, physical activity, hypertension, dyslipidemia, BMI, education, sleep complaints and
depressed mood, the risk of developing type 2 diabetes mellitus for the socially isolated compared to the socially integrated was 1.31 (95% CI=1.11-1.55) in men and 1.10 (95% CI=0.88-1.37) in women. A formal test for interaction with level of education reached significance in men. Stratified analyses revealed a HR of 1.50 (95% CI=1.23-1.83) in men with a low level and 0.87 (95% CI=0.62-1.22) in men with a high level of education.

**Conclusion:** Social isolation is an independent predictor of type 2 diabetes mellitus in men. This association is particularly pronounced in men with a low level of education.

**Higher body mass index (BMI) relates to lower glucocorticoid inhibition of inflammatory cytokine production following acute psychosocial stress in men**

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**Background:** Body mass index (BMI) and mental stress seem to exert part of their cardiovascular risk by eliciting inflammation but adverse effects of stress on inflammatory activity with BMI are not fully understood. We investigated whether higher BMI is associated with reduced glucocorticoid inhibition of inflammatory cytokine production following stress in men while controlling for age and blood pressure. We measured glucocorticoid inhibition of lipopolysaccharide (LPS)-stimulated release of the proinflammatory cytokine tumor necrosis factor (TNF)-α.

**Method:** Forty-two men (age range 21-65 years; body mass index (BMI) range 21-34 kg/m2) underwent the Trier Social Stress Test. Whole blood samples were taken immediately before and after stress, and during recovery up to 60 min post-stress. Glucocorticoid sensitivity of LPS-stimulated TNF-α expression was assessed in vitro with and without coincubating increasing doses of dexamethasone. Moreover, salivary cortisol was measured during the experiment and on a normal day for assessment of baseline circadian cortisol.

**Results:** Higher BMI was associated with lower glucocorticoid sensitivity of monocyte TNF-α production after stress (main effect of BMI: p=0.001) and with more pronounced decreases of glucocorticoid sensitivity following stress (interaction of stress-by-BMI: p=0.002). Neither LPS-stimulated TNF-α release nor baseline glucocorticoid sensitivity were associated with BMI. Similarly, BMI was not associated with salivary cortisol, either in reaction to stress or in circadian cortisol secretion.

**Conclusion:** Our data suggest that with increasing BMI, glucocorticoids are less able to inhibit TNF-α production following stress. This might suggest a new mechanism linking BMI with elevated risk for adverse cardiovascular outcomes following stress.

**Association of salivary cortisol levels and type 2 diabetes in the KORA-Age study**

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**Background:** Dysregulation in the hypothalamic pituitary adrenal (HPA) axis, specifically in cortisol secretion (a marker of HPA axis activity), has been suggested to play a role in the development of Type 2 Diabetes (T2D). However, conflicting and limited epidemiological evidence on the association of cortisol and diabetes, demands further investigations. Therefore, the aim of the present study was to examine the association of salivary cortisol levels and T2D in a representative sample of older men and women.

**Method:** A cross-sectional analysis was conducted among 757 study participants (mean=75±6, 65 - 90 years old,) of the population-based KORA (Cooperative Health Research in the Region of Augsburg) - Age study. Associations were examined between T2D status and salivary cortisol measured upon waking (M1), 30 min after awakening (M2), and in the late evening (E). Multivariate regression analyses were used to examine the association of cortisol levels and T2D.

**Results:** A greater cortisol awakening response (CAR) levels were observed in participants with T2D (age-adjusted LS (Least Squared) means = 4.49, 95% Confidence Interval (CI) =3.1-5.9) compared to non-diabetic participants (3.48, 2.84-4.12) while raised late evening cortisol levels were observed in individuals with T2D (0.80 nmol/L, 0.68-0.92) compared to non-T2D (0.66, 0.60-0.71). After adjustment for important covariates, T2D was significantly associated with a greater CAR levels in men (Odds ratio (OR) =1.37, 95% CI=1.05-1.80,
P=0.02) and raised evening levels, which was more apparent in women (OR=1.35, 95% CI=1.01-1.80, P=0.045).

**Conclusion:** In this aged population, sex-specific associations between T2D and dysregulated cortisol secretion, particularly in the CAR and late evening cortisol measurements were observed. Further research should be done to investigate the role of neuroendocrine system in the pathophysiology of T2D.

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**A review of the functional and molecular implications of stress, neurotrophins and neuropeptides in type 2 diabetes development and progression**

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Psychosocial stress interacts with tissue regenerative capacity, inflammation and oxidative stress in functional tissues not only in a hormone- and neurotransmitter-dependent but also in a neurotrophin- and neuropeptide-dependent manner. Key effector cells of this interaction belong to the immune system. Mostly, these mediators promote tissue inflammation through innate and adaptive pro-inflammatory mechanisms. However, under certain conditions local neurotrophin- and neuropeptide-immune interaction can exert protective effects, attenuate inflammation and promote cell survival in functional tissues. Whether such neurotrophin- and neuropeptide-immune circuits exist in diabetes mellitus (DM) and how they might affect diabetes development or progression is largely unknown to date. In a focused review of the available psychoneuroimmunology literature on DM type II, stressors will be discussed, which activate the neurotrophin- and neuropeptide-immune stress cascades. Focus will be on nerve growth factor (NGF), brain derived neurotrophic factor (BDNF) and substance P (SP). Conditions under which these stress mediators are released and their subsequent modulation of energy metabolism, tissue trophism and immune responses that either aggravate or protect from DMI will be reviewed. The aim is to promote understanding of the bio-psycho-social network in DM pathogenesis and the psychotherapeutic and pharmacologic treatment options targeting neurotrophins and neuropeptides arising thereof.

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**Early childhood adversity and T2 diabetes onset in adult life**

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The presentation should be part of the symposium "New insights into stress regulation and stress related risk factors for incident Type 2 diabetes mellitus". We present a systematic review of recent studies about the impact of early childhood suffering on T2 Diabetes onset in adult life. This is an addition to the epidemiological and neuroendocrinological Results presented at the symposium. There is a growing number of cross sectional studies, which show an elevated risk to develop T2 Diabetes for people who have experienced sexual or physical abuse in their earlier life. Other extreme early childhood adversities like exposure to Holocaust conditions seem to be associated with a higher likelihood of suffering from diabetes later on. A recent epidemiological study from our working group indicates such an association especially among people who developed the symptoms of PTSD. We present a systematic review and discuss Methodological limitation and the importance for further research.

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**Transplantation I: Challenges in Transplant Psychiatry - the 2015 update**

**Eating disorder symptoms in liver transplant recipients**

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**Purpose:** to assess presence of eating disorder symptoms in liver transplant recipients. Background: Anorexia is the symptom that affects daily activities most frequently among all gastro-intestinal complications post liver transplant. Bulimia and binge eating disorder share disease features with addiction, which is common in liver transplant recipients. To our knowledge, there is no data regarding the prevalence of eating disorders in liver transplant patients.
Method: We surveyed a convenience sample of 135 adult patients who received liver transplantation at our center. The questionnaire included demographic information, Eating Attitude Test (EAT 26), Hospital Anxiety and Depression Scale (HADS) and Short Form Health Survey (SF 36).

Results: The analysis of the first 32 questionnaires returned (response rate of 30.1%) showed an average time since transplant was 2.5 ± 2.4 years. 7 (21.9%) respondents were within the first year post transplant; 21 (65.6%) were male, 6 (18.8%) had received dual transplant (liver-kidney), 13 (40.6%) had a HADS anxiety subscore >8 and 8 (25%) had HADS depression subscore >8. At the time of the survey, 13 (40.6%) were obese, 12 (37.5%) were overweight and 7 (21.9%) had normal Body Mass Index (BMI). Eleven (34.4%) screened positive for eating disorders on EAT; 3 (9.4%) had anorexic cognitions, while 9 (28.1%) had at least one behavior consistent with eating disorder. The most common behavior (6 subjects, 18.8%) was using laxatives, diuretics or pills to control the body weight or shape. Binge eating behavior was more common in liver kidney transplant than in liver only recipients (p=0.03). Anorexic cognitions tended to be present in liver-kidney recipients, compared to liver-only recipients (33.3% vs. 3.8% not statistically significant, p=0.08). The use of laxatives, diuretics or pills to control body weight or shape correlated with physical health scale of the SF-36 (p=0.04).

Conclusion: Symptoms of eating disorder are present in a significant proportion of liver transplant recipients. More information is needed regarding the impact of these symptoms upon quality of life and transplant outcomes.

Expanding the role of transplant psychiatrist on a liver transplant team
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Background: Current traditional role of the transplant psychiatrist in most centers in the US focuses on assessment of transplant candidacy. Much of the research in transplant psychiatry focuses on developing and using proper assessment tools. While standardization in transplant evaluation is a goal, assessment is only a small part in the overall mental health care of the end stage liver disease patient. Limitations of the “assessment only model”: We are assessing patients at a time of crisis and great family turmoil, when patients are regressed and intense anxiety interferes with learning and coping. One time evaluation does not allow for development of a trusting relationship with patient and family and does not allow for recognition of long term problems as a result of chronic liver disease, substance use disorder or long term immunosuppression.

Method: literature review and expert opinion. The hypothesis is that rather than being a judge our role should be to guide patient and families on their long transplant journey.

Results: The proposed model defines the role of the transplant psychiatrist as follows: a. Assessment: about 25% of time is spent on the traditional transplant evaluation. b. Education: 30% of time is devoted to teaching patients about transplant/post-operative life style and how to become an active participant in medical care. Psychiatrists are best qualified in communicating complicated medical concepts, to assess language/cultural and learning barriers. Teaching is done through individual meetings, focused workshops, online teaching and newsletter. c. Treatment: 30% of time is devoted to treat uncomplicated depression/bipolar/anxiety/pain and sleep disorders both pre and post-transplant. Monthly medication visits can become psychotherapy session and serve to conduct health maintenance. Psychiatrists are fundamental in developing programs to prevent and treat substance use disorders. The psychiatrist needs to be comfortable and up to date on the management of immunosuppression, Hepatitis C and the most common chronic illnesses such as diabetes or hypertension. Palliative and end of life care is not delegated to another team, but managed in conjunction with palliative care medicine. The psychiatrist needs to be comfortable in assisting with weight management and nutrition as the next epidemic in liver transplant is NAFL. When the psychiatrist is fully integrated into the transplant clinic, improved retention and overall compliance are the norm. d. Train: 15% of time is devoted to teaching transplant psychiatry/GI fellows and residents as well as the medical and surgical team about mental health issues in transplant patients.

Conclusions: the proposed model enhances the role of the psychiatrist in the transplant setting.
The Know-How of Face transplant psychiatric evaluation
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**Background:** Discuss practical strategies for evaluating candidates for facial transplantation.

**Method:** There are differences between solid organ transplantation and facial transplantation that should be considered in evaluating candidates. The meaning of the injury may differ depending whether the facial difference is from a congenital condition, illness such as cancer or burns, a self-inflicted injury or an injury inflicted during an assault. In addition there may be differences in how men and women perceive facial difference. Ten cases, (5 male and 5 female, 5 Caucasian and 2 African American) will be presented that demonstrate high risk, moderate risk and low risk candidates for facial transplantation. Substance abuse issues may be important in predisposing to facial injury, and can influence appearance of facial grafts, as well as long term outcomes due to risk of rejection in patients that relapse to substance abuse. Smoking cessation is particularly important for a transplant that is not life-saving, but potentially life enhancing. Protection from sun damage is also important long-term. Assessment of Post-traumatic stress and capacity to consent in those with traumatic brain injury are important in determining readiness for facial transplantation.

**Conclusions:** Practical strategies for stratification of face transplant candidates by risk can be useful in maximizing benefit of transplantation, as well as determining the optimum timing for the transplant.

**Differentiated assessment of personality and its implications in living kidney donation**
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**Background:** Multiple ethical problems have arisen in the context of living organ donation. Even though most programs require some sort of psychosocial evaluation, the implications and consequences of this procedure display great variety. However, psychosocial evaluation is necessary to ensure that donor candidates take their decision well-informed and free and that donation poses no threat to their mental health. To date little is known concerning personality characteristics of living donor candidates and possible implications of personality characteristics for living organ donation. Our study pursued two goals. Firstly, we compared the personality of living kidney donors to healthy controls. Secondly, we analysed the personality profile of problematic and unproblematic donor candidates in comparison to healthy controls.

**Method:** 49 consecutive kidney living donors underwent an extensive psychosocial evaluation to assess suitability for donation. Problems concerning the degree of information(1), donor-recipient-relationship(2), and/or mental health(3) were rated on a 3-point rating scale (0= highly problematic, 1 = problematic, 2 = unproblematic). Independent of psychosocial evaluation candidates as well as 49 age-and gender-matched healthy controls filled in psycho-diagnostic questionnaires concerning psychological distress (Symptom Checklist 90-R) and personality (Temperament and Character Inventory, TAS-20 (Toronto Alexithymia Scale).

**Results:** There was no significant difference between donors and controls with regard to psychological distress or personality. In 13 candidates (26.5%) donation was assessed as highly problematic. Problematic donors and suitable donors displayed no difference concerning age, gender, formal education, donor-recipient relationship and psychological distress. However, problematic donors scored significantly higher on reward dependence compared to suitable donors and controls (p<0.05). High reward dependence was associated with a lack of adequate information on donation (r=-0.35, p<0.05).

**Conclusion:** Reward dependence may be associated with an increased tendency to deny potential negative consequences of donation. This is problematic, because the prospective donor should comprehend the risks and benefits of the donation for donor and recipient and should be capable to balance risks and benefits freely. We discuss different possibilities how to proceed in problematic cases.
The Stanford integrated psychosocial assessment for transplantation, healthcare utilization, and adverse medical events for 3 years post-kidney transplantation


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**Background:** To determine if Stanford Integrated Psychosocial Assessment for Transplantation (SIPAT) score predicts healthcare use and complications in the 3 years post-renal transplantation.

**Method:** Transplant social workers retrospectively completed the SIPAT tool for 50 renal transplant recipients, whose records were reviewed for 3 years post-surgery or to graft failure. Primary outcomes were the number of hospitalizations, inpatient days, clinic visits, and acute medical events (hospitalizations+urinary tract infections (UTIs)+bacteremia+rejection+graft failure). Secondary outcomes were acute rejection, UTIs, and bacteremia. Outcomes were standardized by length of follow-up. We assessed the univariate relationship between outcomes and SIPAT score and variables in the Scientific Registry of Transplant Recipients program-specific deceased donor (DDKT) and living donor (LKT) risk adjustment models for 3-year graft survival. SIPAT score, DDKT/LKT status, and variables that had univariate correlations (p<0.15) with any outcome were maintained for multivariate linear regression.

**Results:** 47 patients (24 DDKT, 23 LKT) had a mean follow-up of 2.6 years (range 0.09-3.0); 3 patients were excluded due to missing donor data. Per year of follow-up, our sample had a mean of 1.5 hospitalizations, 7.2 hospital days, 8 clinic visits, and 0.4 UTIs, 0.1 bacteremia episodes, and 0.1 rejection events; one patient had graft failure. SIPAT scores averaged 10.7 (range 0-25, excellent to minimally acceptable). DDKT and LKT recipients were similar with respect to SIPAT scores and outcomes. SIPAT score was not a statistically significant predictor for any outcome at a univariate level or after multivariate adjustment. The regression coefficient for SIPAT score contributed the greatest to the multivariate model predicting number of hospital visits to and contributed the least to the model predicting number of rejection episodes.

**Conclusion:** Our study suggests that SIPAT score does not predict healthcare use or medical outcomes after adjustment for potential confounders. This may be due to small sample size, differences in duration of follow-up, or variations between recipients of kidneys versus other organs. Further work is needed to determine if SIPAT predicts medical outcomes in the renal transplantation population.

Mood and Emotion in People with Chronic Pain

A genetic model for chronic widespread pain: clinical comorbidities and psychological correlates

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**Background:** The aim was to investigate the etiological structure underlying chronic widespread pain (CWP) by disentangling the covariation between CWP and previously reported comorbidities (i.e., depression) and psycho-affective correlates (i.e., anxiety, emotional stability, and emotional intelligence) into genetic and environmental components.

**Method:** A total of N = 3,266 female twins (mean age 56.6 years) comprising 753 full MZ pairs, 699 full DZ pairs were subject to multivariate twin analyses.

**Results:** Almost every fifth woman reported suffering from CWP (20.8%). The best fitting/most parsimonious model was the AE common pathway which revealed two phenotypic latent variables, one common to anxiety, emotional intelligence, and emotional stability (f1) the other common to depression and CWP (f2). One additive genetic and one non-shared environmental factor common to f1 and f2 were detected, as well as an additional additive genetic factor loading on f2.

**Conclusion:** Our Results show that the clinical overlap of CWP and depression is due to a common latent trait. Similarly, the co-occurrence of CWP and psycho-affective correlates is due to another common latent trait which, however, is influenced by the same genetic and non-shared environmental factors. This is the first study to reveal the structure and relative importance of genetic and environmental influences on complex
etiological mechanisms CWP and its correlates.

Depression in chronic pain patients - questioning a narrow concept within a complex condition
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Depression is meant to be the most important psychological factor within the condition of chronic pain. Most studies confirm a high percentage of 80% of depression in chronic pain subjects. Neurophysiological investigations suggest an overlap between chronic pain and depression within specific transmitter systems. But seen from the perspective of the patient depressive symptoms might be more than just a diagnosis or transmitter deficit. Few have questioned the concept of a twin existence of depression and chronic pain. Studies will be introduced which have shown that the amount of chronic pain patients with coexisting depression differs strongly according to measurement procedure and its quality. The meaning of life concept and its change under the existential experience of chronic pain might lead to another appraisal of grieving and mourning and therefore to another understanding of pathopsychological mechanism in chronic pain patients.

Mood spectrum disorders in chronic pain patients
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Introduction: Chronic pain is a complex syndrome that affects thinking, mood and behaviour (Nekovarova et al., 2014). It is strongly associated with major depressive disorders (30-40%) but few studies have investigated the prevalence of bipolar disorders in chronic pain patients (Holmes et al., 2012; Nicholl et al., 2014). Aim: To investigate the prevalence of mood spectrum disorders in patients treated for chronic pain in a Pain Clinic, and their impact on pain perception.
Method: Hyperthymic (Hyp), Cyclothymic (Cyc) and Depressive (Dep) temperaments were investigated using the Semistructured Affective Temperament Interview (Akiskal HS and Akiskal K, 1992). DSM IV Mood Disorders were assessed via the Mini International Neuropsychiatric Interview (MINI) (Sheehan et al., 1994), and multidimensional pain components were investigated via the Italian Pain Questionnaire (IPQ) (De Benedittis et al., 1998).
Results: 566 chronic pain subjects (376 females and 190 males) of mean age 58.28 (sD=16.00) were investigated. Hyp was found in 141 (25%) and Dep in 184 (32%). Current Major Depressive Episode (cMDE) was assessed in 227 (40%) subjects, 35% of whom reported a past episode; 192 (34%) reported lifetime MDE (lMDE), 31 (5.47%) Dysthymia (Dy), 31 (5.47%) Hypomanic episodes (HyE), 7 (1.23%) Manic Episodes (ME), and 63 (11.13%) suicide risk (SR). Associations were found between Dep temperament and increased sensory (t=2.06; p=0.02) and evaluative (t=3.19, p=0.001) pain dimensions. Hyp subjects showed lower pain dimension scores, but not significantly so. CMDE was associated with an increase in both affective pain dimensions (t=3.57, p=0.0004) and Dy (t=3.21 p=0.001). HyE subjects showed greater affective pain (t=1.88, p=0.06).
Conclusion: CEDM is seen in 40% of chronic pain subjects. Sensory and evaluative components of pain are modified by the presence of affective temperament, and affective pain dimension is modified by the presence of mood disorders.

Mindfulness and chronic pain. What is next step?
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Background: Several meta-analyses have been performed comprising less specific “mindfulness-derived” interventions. There is a lack of randomized, controlled clinical trials investigating the effects of the full MBSR mindfulness meditation program on chronic pain.
Method: A total of 109 patients with nonspecific chronic pain were randomized to either a mindfulness meditation program (MBSR) or to a waiting list control. Pain, physical function, mental function, pain acceptance, and health-related quality of life were measured. Within a 2.5-year period, 43 of
the 109 randomized patients completed the mindfulness program, while 47 remained in the control group. Data were compared at three time points: at baseline, after completion of the course/waiting period, and at the 6-month follow-up.

**Results:** Significant effect (Cohen’s d=0.39) was found on the primary outcome measure, the SF36 vitality scale. On the secondary variables, significant medium to large size effects (Cohen’s d=0.37–0.71) were found for lower general anxiety and depression, better mental quality of life (psychological well-being) feeling in control of the pain, and higher pain acceptance. Small (non-significant) effect sizes were found for pain measures.

**Conclusion:** A standardized mindfulness program (MBSR) can exert clinically relevant effects on several important dimensions in patients with long-lasting chronic pain. What is a logical next step?

**Emotional aspects of chronic pain**

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The modulation of chronic pain by emotions is today widely accepted and confirmed by discoveries in neurosciences. Various factors pertaining to negative affectivity can contribute to pain intensity and chronicity, as well as to its disabling consequences. Contemporary integrative models take into account not only classical cognitive factors but also patients personal vulnerabilities such as affect regulation disorder. Interpersonal dimensions are also receiving renewed interest in particular attachment modes. Such dimensions as “catastrophism”, perceived injustice and anger have got increased emphasis as target for therapy. Therapeutic approaches increasingly emphasize motivation as well as acceptance of pain and goal achievement despite the presence of pain.

**Collaborative Care: Embedding Routine Mental Health Assessment and Management in General Hospital Settings**

**Improving distress in dialysis: The development of an online cognitive-behavioural therapy (CBT) intervention for managing distress in dialysis**

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**Background:** Psychological distress prevalent in end-stage kidney failure (ESKF), affecting approximately 40% of dialysis patients. Whilst screening for distress identifies people in need of intervention, psychological treatments tailored to the ESKF population should be available as an alternative to pharmacological treatments. We reviewed psycho-social correlates of distress in dialysis; specifically change processes outlined in the common-sense model (CSM) and performed user involvement to refine theoretical assumptions and generate a cognitive-behavioural therapy (CBT) treatment model for the dialysis population.

**Method:** Studies that reported relationships between distress and CSM concepts, including health threats, illness cognitions, and illness management procedures were narratively reviewed. We translated review Results into a CBT treatment model and mapped CBT intervention techniques onto correlates of distress. The content of a seven session online programme was determined by the CBT treatment model and refined with input from six patient representatives.

**Results:** Review Results identified loss of role, worry about health, and adherence to self-management procedures as salient chronic stressors. Pessimistic cognitive appraisals of ESKF increased levels of distress also. Cognitive themes included attributing a high number of symptoms to ESKF, believing ESKF to be unpredictable, with a high degree of impact on functioning, in addition, to having a negative view of personal and treatment capabilities for managing ESKF. Illness
management procedures used in the context of distress in dialysis are unclear, but adherence to ESKF treatments decreases. User involvement identified planning of fluid intake, compensatory behaviours, and acceptance as strategies used to offset negative emotions.

**Conclusion:** Translation of CSM review Results into a dialysis specific CBT treatment model identified the importance of targeting illness specific cognitive themes and using behavioural activation and activity scheduling to manage dialysis specific stressors. Traditional CBT approaches may need supplementing with “third-wave CBT”, for example, acceptance in the context of ESKD.

**Integrating mental and physical healthcare: Research, training and services (IMPARTS) - A flexible service development platform for general hospital teams**

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**Background:** The aim of IMPARTS was to facilitate embedded integrated care through 5 core components: web-based screening; care pathway development; training in mental health skills; provision of bespoke self-help materials; and research as an outgrowth of patient care.

**Method:** Patients received an information sheet explaining the purpose of screening and completed a series of outcome measures tailored to their condition whilst waiting for their appointment. The data captured populate the electronic patient record (EPR) in real-time; the results are immediately available to the clinician. The system is flexible and administers different questionnaires depending on variables such as diagnosis and date of last assessment. The data captured inform automated algorithms in EPR, which operationalise care pathways agreed with the clinical team. Care pathways vary but may include referral to community services, or mental health services embedded within the acute trust.

**Results:** Feasibility and acceptability data collected from the first four services that implemented screening (rheumatology, limb reconstruction, psoriasis and hepatitis C) show that fewer than 5.1% of patients declined screening. The proportion of patients completing the IMPARTS questionnaire varied widely across services, from 98.2% in psoriasis to 40.1% in hepatitis C. IMPARTS has now been implemented in 22 services across 3 London hospital sites and 2 NHS Foundation Trusts. At 1st February 2015, a total of 7,238 individuals have been screened across 11,153 encounters. The prevalence of probable depressive disorder ranges from 4% in post-transplant renal patients to 60% in chronic pain patients. The prevalence of generalised anxiety disorder ranges from 6% in post-transplant renal patients to 30% in rheumatology.

**Conclusion:** The IMPARTS platform is acceptable to patients and can be effectively embedded in routine general hospital practice. The data reveal wide variation in the prevalence of mental disorder, with relatively asymptomatic conditions such as adult congenital heart disease and renal transplant patients showing lower levels of psychological morbidity, than chronic pain, rheumatological, and dermatology patients.

**Measuring distress in musculoskeletal physiotherapy: An example of integrated care in action**

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**Background:** Musculoskeletal disorders (MSDs) are a major cause of pain and disability, constituting a significant societal burden. Psychological constructs are important predictors and mediators for developing and maintaining long term pain-related disability and a biopsychosocial approach to assessment and treatment of MSDs is recommended. Physiotherapists are a key professional group assessing and treating people with MSDs but screening by them for psychosocial risk factors is inconsistent. Embedding routine collection of patient-reported psychological factors such as depression, pain self-efficacy and avoidance behaviours, may improve quality of patient care and outcomes.

**Method:** The primary aim of this project was to implement screening for psychological risk factors in people attending a NHS physiotherapy musculoskeletal service and characterise the prevalence of distress. To achieve this, self-report questionnaires were embedded within informatics associated with the Integrating Mental and Physical Health Research and Training (IMPARTS)
programme to assess: depression, anxiety, risk of persistent disability secondary to back pain, fear avoidance beliefs, pain catastrophizing and pain self-efficacy. A secondary aim was to develop associated care pathways to guide physiotherapist decision making. These include: group physical exercise, psychologically informed physiotherapy, Improving Access to Psychological Therapies (IAPT), Accident & Emergency (A&E) or letter to the General Practitioner (GP).

Results: 23% of people attending were screened during the first 3 months; Of 406 screened, 14% were identified as having probable major depression and 18% as having probable anxiety disorder. Of the 121 patients using the developed care pathway, 68% (N=82) were allocated to group exercise or IAPT for symptoms of depression or anxiety, and 32% (N=39) had severe levels of depression and or suicidal ideation and required a letter to the GP or A&E. Just over one third of those screened reported back pain as the primary reason for attendance. Of those, 40% scored at high risk of persistent pain-related disability.

Conclusion: Physiotherapy musculoskeletal service redesign to incorporate a systematic approach to identifying psychosocial risk factors in people with MSDs has highlighted the prevalence of comorbid distress. The need for physiotherapists to expand their approach and integrate psychologically-informed practices into consultations is paramount.

Effectiveness of collaborative care in the workplace for depression: Results of a controlled observational trial
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Background: Within the vocational context common mental disorders gain more attention for societal and economic reasons. The unmet need for easy accessible and early interventions led to the implementation of various offers in this area in Germany e.g. the “Psychosomatic Consultation in the Workplace” (PCIW). The intervention contains an initial psychosomatic consultation at the workplace, including diagnosis, crisis intervention, and, if necessary, referral to further medical or psychotherapeutic treatment. In contrast to care as usual (CAU) the intervention is part of the occupational health care system and takes place at the facilities of the company physician. First Results indicate that consultation in the workplace makes us reach patients earlier in the course of disease. Whether this is effective or not is not investigated yet.

Method: We performed a controlled observational trial with 12 weeks follow-up. Users of the PCIW were recruited consecutively in three companies that established the offer in cooperation with local psychosomatic clinics. The comparison group (CAU) was recruited in two cooperating psychosomatic clinics excluding individuals with no work. Depression was assessed by means of the PHQ-9. Effects of setting (PCIW/CAU) on the change of depression was analyzed by general linear models with membership in the setting as independent variable and controlling for selection bias by means of propensity score adjustment.

Results: 174 participants were recruited for the observational and 193 for the control group. Age in years (PCIW 44.9, SD 10.1/CAU 39.4, SD 11.9) and gender (PCIW 70% male/ CAU 30% male) and service utilization i.e. previous contact with the psychotherapeutic-psychosomatic-psychiatric health care system (PCIW 38% / CAU 63%) differ between the groups (p< 0.05). Depression improved in both groups over time: PHQ-9 baseline PCIW 12, SD 5.8 / CAU 14, SD 6.1, follow up: PCIW 9, SD 6.3/ CAU 11, SD 6.2, p <0.01). There was nor group (PCIW/CAU) nor group*time effect.

Conclusion: PCIW is an easy accessible and effective therapeutic offer in the vocational context. Even though the user profile differs on behalf of age, gender and disease severity the effect of the intervention seems to be the same. Which implicates that the psychosomatic consultation could be successfully transferred into the workplace setting.
Development and evaluation of a local patient care plan for patients with neurologic symptom disorder at Karolinska University Hospital Huddinge

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Background: Functional neurologic symptom disorders account for one third of neurologic outpatients. The diagnostic process is often not standardized, time-consuming and costly. Evidence-based treatments exist but effectiveness seems to depend on factors such as the diagnostic process, the mediation of an alternative non-stigmatising explanatory model to the patient, engagement, team-unity and cooperation. At the Karolinska University Hospital we developed a model of integrated and collaborative care. The goal was to facilitate the diagnostic process in order to transfer patients earlier to evidenced based treatment according to a step-based model of care.

Method: A working group consisting of representatives from C-L psychiatry, neurology, rehabilitation medicine, physiotherapy, occupational therapy, psychology and social work was established. A local patient care plan was developed collaboratively based on existing structures and routines at the hospital. Patients with suspected functional neurologic symptom disorder are prioritized for in-patient neurologic assessment, which is planned and structured by a specialist in neurology who communicates a team-based approach to the patient. Evaluations by psychiatrist, occupational therapist, physiotherapist and social worker are performed during inpatient assessment. After team Conclusion the neurologist communicates the Results of the assessment, diagnosis and the treatment plan in a non-stigmatising and transparent way. Treatment takes place according to severity in either in-patient, daycare or outpatient setting. Follow-up is performed by physiotherapist/rehabilitation medicine specialist and psychiatrist and discussed at regular multi-disciplinary conferences.

Results: The preliminary patient care plan was implemented in November 2014. About 2 patients/week are currently involved. Preliminary Results will be evaluated during spring 2015. Current data suggest that the team based approach and transparent communication during inpatient assessment facilitates engagement in treatment and possibly positive treatment effects.

Conclusion: Our experience is that the development and the implementation of a consensus patient care plan for patients with functional neurologic symptom disorder demands collaboration of clinicians from different clinics in order to adapt to local prerequisites. Preliminary data and analysis of this first patient care plan at Karolinska University Hospital will be presented.

Communication skills training

What clinicians perceive with regards to end-of-life communication: Latent discourses and unvoiced topics

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Background and method: Training needs of clinicians with regard to communication with patients at the end-of-life were assessed by means of focus groups with physicians and nurses of different medical disciplines.

Results: While relevant information has been gained in this project, a most interesting observation was the existence of “latent aspects” of the data and “unvoiced topics”. Latent aspects of the data concerned the significance of the manifest discourses of the clinicians, for examples their requests for guidelines for conclusion of assisted suicide, which might not only be taken literally but as an expression of anxiety and uncertainty. With regard to the unvoiced topics, contextual factors influencing end-of-life communication were not mentioned in the focus groups; for example factors related to the clinician’s emotional life (such as helplessness, failure or burnout), the health care context (such as the dehumanisation of modern medicine, institutional constrains), the clinicians’ socialisation (such as the hidden curriculum in higher education or social reproduction) or elements related to contemporary society (such as dominant discourses and theoric of dying).
Conclusion: These results serve as an introduction to the symposium, to address some blind spots with regard to communication skills and teaching of communication skills and to point out some perspectives with regard to innovative research and teaching.

What clinicians perceive as needs with regard to end-of-life communication: Manifest discourses
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Background: Most communication skills trainings are based on conceptual frameworks and defined approaches. The aim of our study was to develop a training based on perceived needs of clinicians caring for dying patients, which addresses comprehensively end-of-life communication.

Method: Perspectives of physicians and nurses of different medical specialties with high prevalences of dying patients were explored by means of focus-group Conclusions (N=8). The data were analyzed using thematic analysis with an inductive data-driven approach. The analysis of focus-group Conclusions considered the manifest aspects of the data: what clinicians emphasized with regard to challenges they face and training needs when encountering dying patients.

Results: We identified (i) 148 different types of training needs, which were related to 22 core themes, and clustered into 3 themes, and (ii) 78 different types of challenges, which were related to 14 core themes, and clustered into 3 themes. The collected material was operationalized in the curriculum of a one-day training, which was held four times in 2014. The evaluation of how participants experienced the training, inspired by a questionnaire assessing Balint groups, focused on participants’ changing perceptions and attitudes.

Conclusion: Evaluation showed that the training met and sometimes exceeded expectations of participating clinicians who reported a change of attitudes towards death and dying and the initiation of an introspection process.

Development of a national, longitudinal communication skills curriculum for undergraduate medical education
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Background: Due to changes in the Medical Licensure Act in May 2012 medical communication skills are now officially established as being part of medical education and examination in Germany. Accordingly, all medical faculties are expected to integrate the teaching and assessment of communication skills in their current curricula. On this basis, a project was initiated that aims to support this integration and to develop a national, longitudinal communication skills curriculum. The project is supported by the German Federal Ministry of Health and by now consists of an interdisciplinary task group of more than 460 representatives from 36 medical faculties.

Method: Overall, the project consists of two major parts. As a first part, an analysis of the current state of teaching and assessment of communication skills at the medical faculties in Germany is currently being conducted. To this end, data about the structure, content and learning Backgrounds realized in the respective courses and exams are collected. Regarding the latter, the communication-related learning backgrounds defined in the “National competence-based learning catalogue of medicine“ are used. As a second part, current best-practice examples of teaching and assessment of communication skills are collected from the medical faculties. These examples are then classified according to the learning Backgrounds and sections of communication competences mentioned above.

Results: Up to now, 28 faculties took part in the data collection relating to the analysis of current state. In addition 130 best-practice examples from 29 faculties have been gathered. Based on the classification and analysis of these best-practice examples complemented by a Conclusion among experts, a blueprint for a longitudinal communication skills curriculum was developed. It consists of
300 teaching units distributed among 3 modules: 1) core curriculum of medical communication, 2) inter-professional communication and 3) advanced communication.

Conclusion: The blueprint and underlying best-practice examples aim to support the medical faculties to (further) develop their own communication skills curricula. Specifically, it should enable an integration of communication-related learning Backgrounds into already existing courses and lectures to avoid further strain on teaching capacities.

Teaching Breaking Bad News to medical students: an efficacy study comparing two teaching programs
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Background: Breaking bad news (BBN) is an important clinical task. There is a lack of undergraduate teaching on BBN which may represent a key to the improvement of physicians’ communication skills. We examined the impact of a communication skills training program in BBN for medical students and compared to two teaching formats.

Method: Master level medical students (N=239) were randomized into small group training (control group: CG) – or individual supervision (intervention group: IG). In both groups, the training used video-taped interviews with simulated patients (SP). Post-training, each student performed a video-taped SP encounter to assess the outcome. Interviews were rated using the Roter Interaction Analysis System (RIAS), a checklist of teaching objectives, as well as several non-verbal dimensions.

Results: RIAS coding showed that students in the intervention group were significantly less verbally dominant after the training (p=0.013), and compared to control group students (p=0.031); they were also significantly more empathetic than students in the control group (p=0.022). Ratings on the check list of teaching objectives also favored intervention group.

Conclusion: Dominance and empathy are key dimensions of patient-centered communication, and our data suggests that students receiving one-to-one teaching are more able to adjust to patient’s values, needs and preferences.

Does patient-centered communication matter? Cancer patients’ perspective
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Background: Since little evidence is available whether and how physician communication behaviour affects patients’ experience of bad news encounters, our study aimed to investigate cancer (ca) patients’ immediate emotional response to the disclosure of a cancer diagnosis, with the oncologist displaying either an enhanced patient-centered (E-PCC) or a low PCC communication (L-PCC) style.

Method: Using an experimental design, N=189 subjects, of whom 97 previously had experienced a ca diagnosis, and 92 participants without ca, were randomly assigned to watch a video displaying disclosure of a ca diagnosis, where the oncologist displayed either L-PCC or E-PCC behavior. Participants were blinded to the existence of two different video versions. Identical questionnaires – STAI-S for state anxiety and Bf-S for mood – were completed twice, before (TO) and following (T1) watching the L-PCC and E-PCC video. At T1, participants rated their ‘Trust in physician’.

Results: Watching ca disclosure resulted in substantial increase of anxiety and mood disturbance that was significantly less pronounced among subjects in the E-PCC compared to the L-PCC condition. Trust in physician was substantially higher in subjects exposed to the E-PCC condition.

Conclusion: Even in an extremely distressing condition such as ca disclosure, PCC matters: patients benefit from physician’s respect, empathy and encouragement with lower anxiety and mood disturbance, and with fostered trust in the physician.

Somatic Symptom/ Somatoform Disorders – Diagnosis and Treatment in Primary Care

A Danish nationwide educational program for primary care physicians in the treatment of bodily distress/ medically unexplained symptoms
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Bodily distress or medically unexplained symptoms are prevalent in primary care and the majority of patients are managed in
primary care. The TERM-model was developed in 2000 in connection with a research project on the treatment of BDS/MUS in primary care delivered by GPs. A major challenge is that many GPs are unfamiliar with the condition and hence do not know how to treat it. The aim therefore was to convey theoretical knowledge to GPs about the condition and provide them with clinical skills. The primary intention with the programme was that it is more effective to treat patients at an early stage of their illness preventing development into a chronic condition that is difficult to treat. The 3-day educational programme has been mandatory for all doctors training to become a specialist in general practice in parts of Denmark for five years, and from 2016 it will be mandatory country-wide. The programme is fully documented and teaching material is available also in English. GPs in the UK and other countries have also been trained according to the programme.

References:

A systematic review of the current barriers to diagnosing somatoform disorders in primary care
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Background: Medically unexplained symptoms, functional syndromes, and somatoform symptoms constitute the reason for a large proportion of primary care visits. Such somatoform disorders, however, appear to be difficult to recognise and are consistently under diagnosed. Given that somatoform symptoms are associated with high impairment and low quality of life, it is critical to improve early detection. It is first necessary to identify what currently obstructs successful diagnosis. To this end, we conducted a systematic review to identify the barriers which may impede successful diagnosis of somatoform disorders.

Method: Our systematic review Methodology followed a pre-published protocol and was registered in PROSPERO (CRD42013002540). The review included the relevant peer-reviewed qualitative and quantitative literature published in English or German in the past 10 years in: MEDLINE, EMBASE, PsycINFO and The Cochrane Database of Systematic Reviews. Additional studies were identified from the reference lists of included studies. Both title and abstract screening and data extraction from full text manuscripts was conducted by two independent reviewers. Manuscripts were excluded based on a list of exclusion criteria. Data were synthesised using a combination of textual narrative and thematic analysis approaches. Wherever possible, the PRISMA statement was used as the basis of the Method and reporting of the review and bias was assessed using the Cochrane collaboration’s recommendations.

Results: Data from full text publications (n=177) was independently extracted and combined in a custom database. The level of evidence and assessment of bias for the final included studies (n=42) was independently conducted. In total n=379 barriers were identified comprising 77 subthemes, 16 thematic categories and five over-arching themes, i.e., patient-related, primary-care-practitioner related, doctor-patient interactional, situational, and conceptual/operational.

Conclusion: Results suggest some barriers will be alleviated with the new DSM-5 criteria, others are possibly modifiable by interventions, some require widespread paradigmatic change. More direct empirical investigations are also needed. We hope that the Results of this study can be used to overcome the barriers to diagnosis of somatoform type disorders by designing appropriate interventions to improve care for these patients.

Diagnostic accuracy for somatoform disorders and comorbid depression and anxiety disorders in primary care
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Background: Somatoform disorders are highly prevalent in primary care settings and depression as well as anxiety disorders are often comorbid with somatoform disorders. Research has identified several barriers to a correct diagnosis of somatoform disorders, including a dysfunctional doctor-patient
The aim of the present study was (a) to analyze the diagnostic agreement between primary care physician’s (PCP) assessments and diagnoses from a structured clinical interview regarding the presence of somatoform disorders and a comorbid depression or anxiety disorder, and (b) to investigate whether a comorbid depression or anxiety disorder as well as patients’ Conclusion of psychosocial problems are predictors for the detection of somatoform disorders by PCPs.

**Method:** Data from the Hamburg Network for Somatoform and Functional Disorders (SofuNet) was analyzed. All patients in the participating PCP practices were consecutively screened for somatoform disorders, depression and anxiety disorders and were asked how often they discussed psychosocial problems with their PCPs (n=1826). Those screening positive (n=283) were invited to participate in a telephone interview including the sections for somatoform disorders, depression and anxiety disorders from the Composite International Diagnostic Interview (CIDI). Furthermore, information on the presence of somatoform disorders was collected from participating PCPs. The final study population consisted of 112 patients.

**Results:** According to CIDI, 70 (62.5%) patients fulfilled the criteria for a current somatoform disorder. From those, 44 (62.9%) had a comorbid depression and 37 (52.9%) had a comorbid anxiety disorder. Analyses revealed no agreement between PCP assessments of somatoform disorders and the CIDI diagnosis (κ=0.09; p=0.10). A slight agreement was observed for depressive disorders (κ= 0.26; p<0.001) and anxiety disorders (κ=0.15; p<0.05). Comorbid depression, but not comorbid anxiety disorder or patients’ Conclusion of psychosocial problems significantly predicted the detection of somatoform disorders by PCPs (OR 8.62; CI 1.10-67.73).

**Conclusion:** The diagnostic process for somatoform disorders in primary care needs to be improved. A comorbid depression enhances the likelihood of PCPs recognizing the presence of a somatoform disorder. Patients’ Conclusion of psychosocial problems with PCPs was not a predictor of PCPs’ correct diagnosis of somatoform disorders in the present study.
(r = 0.35) and depressive symptoms (r = 0.22). Patients with a higher SSD-12 psychological symptom burden reported higher general physical and mental health impairment and significantly higher health care utilization.

**Conclusion:** The SSD-12 is the first self-report questionnaire that operationalizes the new psychological characteristics of DSM-5 SSD. Initial assessment indicates that the SSD-12 has sufficient reliability and validity to warrant further testing in both research and clinical contexts.

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**Enhanced medical care – means of choice in somatoform disorders? Experiences from a randomized clinical trial “PISO”**

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**Background:** The treatment of somatoform disorders takes place on different levels of the health care system, and primary care professionals usually are the first contact persons. These patients are characterized by the presence of physical, often non-specific bodily complaints, excessive health anxieties and health care use. Physical treatment alone often does not result in commensurate success. In our recently published brief psychodynamic interpersonal therapy study “PISO: Psychosomatic Intervention for Patients with Multi-Somatoform Disorders” (ISRCTN 23215121; Sattel et al., 2012) we compared psychotherapy with enhanced medical care (EMC) as control condition. EMC was designed according to recently updated national clinical practice guidelines for “Non-Specific, Functional and Somatoform Bodily Complaints” (Schaefer et al., 2012). The aim of this presentation is to examine efficacy of the EMC.

**Method:** 103 patients were assigned at random to EMC, consisting of 3 structured sessions, during a three months period. Primary outcome was bodily quality of life (SF-36), additionally depression (PHQ-9), somatization (PHQ-15) and health anxiety (Whiteley-Index) were assessed at baseline, directly after treatment as well as 9 month later. 88 patients (85.4 %) provided data for long-term outcomes. Results: Within the EMC group bodily quality of life and health anxiety significantly improved directly after treatment (effect sizes d=0.27 and 0.31). The long-term outcomes demonstrated small but significant improvements for bodily and mental quality of life (d= 0.24 each), depression (d= 0.19), somatization (d= 0.20) and health anxiety (d=0.38).

**Conclusion:** Primary care potentially benefits from advances developed in novel psychotherapy studies for somatoform disorders. The PISO study compared “Enhanced Medical Care” based on recent practice guidelines with brief psychotherapy. EMC significantly improved bodily and mental quality of life and mental distress in those patients. The guidelines provide useful information for a practitioner to weigh, decide and carry out specific and appropriate measures for these patients, e.g. by providing structured algorithms for diagnosis and therapy.

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**Illness Perceptions and Explanatory Models - What Can We Learn from Different Cultures?**

**Explanatory models of psychosis amongst British South Asians**

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**Objective:** A strong interest in the understanding, exploring, and extracting explanatory models of psychosis has recently arisen. Explanatory models (EMs) offer justifications and propose explanations when coping with and treating illnesses; therefore, they may be important predictors of clinical outcome. Explanatory models of psychosis have been explored in many non-Western countries; however, very little research has examined EMs of psychosis in the UK. We therefore aimed to elicit and describe explanatory models of psychosis amongst British South Asians, using both quantitative and qualitative methods.

**Method:** EMs of psychosis were examined using the Short Explanatory Model Interview (SEMI) in a cross-sectional sample of 45 patients.

**Results:** Most patients (55.5%) attributed their illness to supernatural causes. Few patients cited a biological (4.4%) cause. Majority of patients held dual EMs of psychosis (77.7%), combining prescribed medication and seeing a traditional healer as a treatment method. DUP was not significantly associated with EMs of psychosis.
Conclusion: Results suggest that patients hold multi-explanatory models in order to make sense of their illness and these stem from deep rooted traditional beliefs. This highlights the importance of educational intervention and may be working in collaboration with the traditional healers in the UK to provide a positive support system for British South Asians. Further work is required in order to fully understand the relationship between EMs of psychosis and DUP.

Symptoms between social and cultural psychiatry: The kids are alright? Understanding syndromes related to digital age
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Background: The World Congress of Psychiatry in London in November 2014 highlighted how society and psychiatry itself are facing rapid change. In this aspect of the cultural and social diseases seem to meet.
Method: Literature Search, Qualitative Study
Results: Syndromes associated with digitalization seem to call for an evaluation and our finest tools and how they interact with the human psyche. Though the whole society is changing globally, some new syndromes appear to be a warning and a trend.
Conclusion: Syndromes related to digital age become common especially among the youth population. They are sensitive interface man versus hi-tech-machine. We will expose the literature on these syndromes and identify some of the most frequent clinical symptoms.

Current understanding of hypnosis in psychotherapy: A cross bridge between different cultural explanatory models in psychiatry?
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Background: At close range in everyday’s work, psychiatrist will not be aware of the different belief systems in explanatory models within his or her patients, nor of his or hers own ethnocentric confounds in psychiatric diagnosis, classification, let alone treatment options. Although the concept of hypnosis is not uniformly described in literature nor unequivocally appreciated by medical sciences, neuroscience showed that with hypnosis, the interplay between attention (cingulate), meaning and reasoning (frontal lobe) and affect (somatosensory area and amygdala) is changed. Details of hypnotic procedures and suggestions will differ depending on the goals of the practitioner; it can be used in the treatment of a variety of functional disorders. In hypnotherapy, the way the patient formulates the problem is central. Weather a headache is caused by the western concept of migraine, or because someone is bewitched, or haunted by a past life experience, is not important for the therapy. All explanations can and will be accepted as starting point for psychotherapy. Within hypnotherapy, these models are changed through metaphoric work, which implicates a very carefully cooperation with the patient and the illness believes at stake.
Method: Literature study
Results: Values, meaning and value judgements in psychiatric diagnosis are presented in the work of John Sadler. Current understanding of hypnosis as found in current literature shed a light in understanding the neurobiology of meaning and reasoning.
Conclusion: The current understanding of hypnosis reveals the neurobiology of reasoning, believe systems and it’s relation with ‘functional’ disorders. Understanding hypnosis and psychotherapy using metaphors provide a cross bridge between different cultural explanatory models in psychiatry.
References:

Experiences from Norway - two case reports of highly complex patients with migrational background
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Background: Challenges and importance of cultural sensitive bio-psychosocial assessment in migrant patients.
**Method:** Clinical observation, two case reports.

**Results:** Cultural factors such as patients health and illness beliefs as well as the circumstances of migration and social burden play a crucial role in migrant patients. Language barrier is a risk factor for poor medical and psychosocial care.

**Conclusion:** Factors like these also influence the course of patients’ medical illness. To meet patients needs CL-psychiatrists not only have to assess the complexity but also institutional have to be taken to ensure adequate care for migrant patients.

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** Nobody Told Me About It! A Qualitative Study of Barriers and Facilitators in Access to Mental Health Services in Women with Depression in Karachi, Pakistan**

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**Background:** Studies conducted in Pakistan reveal a high prevalence of depression, particularly in women. Evidence based and effective treatments are available for treatment of depression, yet there is a significant gap in the number of women in need of treatment and those who receive it. This qualitative study identifies the barriers and facilitators in access to mental health services for women with depression in Karachi.

**Method:** In-depth interviews were conducted with 29 women with depression who were accessing mental health services in Karachi. The study was conducted at three different mental health care sites in the Karachi. The three sites were selected to ensure the inclusion of participants from various socio-economic Backgrounds and services accessed from public and private sector.

**Results:** The transcriptions were coded for key themes and further analysis. Women reported receiving a referral from health care providers and acquaintances. Awareness, severity of the symptoms and affordability also helped in accessing services. Similarly, inability to recognize depression in self, lack of awareness in families and lack of referral and treatment from primary health care providers greatly delayed access to mental health care. They also mentioned that lack of awareness led to perceived stigma, discouragement to seek mental health care causing many to visit faith healers. Women’s inability to make a decision for themselves also delayed their access.

**Conclusion:** Study Results suggests that the majority of the women reach to required mental health care services after suffering for a long time, mostly after depression gets severe, or their functioning is impaired or the symptoms becomes visible. The study calls for the development of a referral system within formal and informal health care systems. It also highlights the need to raise awareness at mass level so people can identify depression and ultimately reduce stigma.

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**Brain & Bowel**

**Population prevalence and psychosocial profile of chronic constipation of somatic and functional origin**

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**Background:** Prevalence of chronic constipation (CC) in Germany has been reported to be 5%, and this number is substantially lower than in other European countries and worldwide, but solid data are unavailable. Reliable epidemiological data comparing constipation of assumed organic origin to functional constipation (either IBS-C, or functional constipation meeting or not meeting Rome III criteria) are scarce.

**Method:** We conducted a computer assisted telephone interview in >15.000 individuals. Those who acknowledged the presence of constipation symptoms during the preceding 12 months were followed by a postal questionnaire.

**Results:** Of 15.002 individuals, 2193 (14.6%) acknowledged having experienced constipation during the last 12 months, 864 (5.8%) reported constipation during the last 4 weeks, and 380 (2.5%) having current constipation symptoms. From all constipated who agreed to participate, 627 questionnaires (60.4%) were used for evaluation. More than half (n=353, 56%) reported one or more chronic medical conditions that could account for the constipation, or took medication more than twice/week that may have induced or enforced constipation. Of the remaining 262, 70 met Rome criteria for IBS-C, 45 met Rome criteria for functional constipation, and 147 were labelled "functionally constipated". Major group differences were found between the
somatically constipated in comparison to the other three groups (age, social and working status, health satisfaction and problems) but not between the three groups of functionally constipated. However, a specific profile for quality-of-life was found for all 4 groups. **Conclusion:** Up to 15% of the general (German) population may report symptoms of constipation, depending on its definition. More than half of them may have constipation secondary to another clinical condition while the remaining may have functional constipation of different degree and profile.

**Management of Irritable Bowel Syndrome (IBS) in a low income country: Exploratory randomised controlled trial of a culturally adapted psychological intervention and Imipramine**

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**Background:** IBS affects a substantial percentage of adults in all regions of the world. While point prevalence is estimated at 10-20%, lifetime prevalence is much higher. In our previous study in Karachi Pakistan we found prevalence of IBS similar to the rates reported from the West. The IBS was associated in men with high income and few years of education and in women with being married and stressful life events. Disability was associated with distress. Investigations were more likely in men than women. The treatment of IBS in non-Western, low income countries may be different from treatment of IBS studied in USA, Europe and Australia. There are limited reports of randomised control trials from low and middle income countries.

**Method:** A factorial randomized controlled trial. A total of 100 patients with ROME 111 diagnoses of IBS will be recruited and randomly assigned to one of four conditions: (1) standard care (SC), (2) SC+ Culturally adapted (Ca) psychological intervention, (3) SC + Imipramine, and (4) SC+Ca psychological intervention + Imipramine. We will explore the views of the patients and clinicians in a nested qualitative study to understand the barriers and facilitators to recruitment.

**Results:** IBS Symptom Severity Scale and IBS-QOL will be measured at baseline, 6 and 12 weeks. An intention to treat analysis will be undertaken for a factorial trial. The results are expected to be ready for presentation at the conference.

**Conclusion:** These low cost treatments may have the potential to benefit large numbers of patients in a low income country.

**Adverse childhood experiences and associations with self-reported gastrointestinal symptoms in young adults**

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**Background:** The exposure to adverse experiences (ACEs) during the first 18 years of life can have negative long term effects on people’s mental and somatic health. However, the link between abdominal and/or bowel symptoms and physical, sexual and emotional abuse remains controversial. We aimed to determine whether self-reported childhood abuse increases the risk of reporting gastrointestinal symptoms (GIS) during adulthood.

**Method:** Using a CDC-WHO methodology (the Family Health History Scale and Health Appraisal Questionnaire) we assessed the prevalence of different types of abuse and of gastrointestinal complains in young adults. The sample consisted from 2097 Romanian university students (1332 female and 735 male). Logistic regression analysis was used to determine whether abuse was associated with gastrointestinal complaints.

**Results:** With few exceptions, men and women reported similar prevalence for each ACE category. The exceptions included physical abuse which was reported more often by men than women who were more likely to report higher prevalence for emotional and sexual abuse. Being exposed to physical abuse increases the risk of reporting GIS compared with those who did not report it (OR=1.35, 95% CI=1.044-1.763); psychological abuse increases the probability of reporting GIS (OR=1.65, 95% CI=1.269-2.151), while the sexual abuse was also associated with this type of symptoms (OR=2.52, 95% CI=1.347-4.717). The most prevalent reported symptoms were diarrhea, constipation, abdominal pain and indigestion. The results also indicate that as the exposure to ACEs categories increases the odds for experiencing these types of symptoms increase as well.
Conclusion: This is the first Romanian study which investigates the relationship between traumatic childhood experiences and psychosomatic health problems in a national representative university sample. Considering the high prevalence of these events and the strong relationships between exposure to adverse experiences and psychosomatic health problems, several preventive, counselling and national policy recommendations will be presented.

Prognosis of the Irritable Bowel Syndrome – A longitudinal follow-up study of the general population in Denmark
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Background: The Irritable Bowel Syndrome (IBS) can be viewed as a dysfunction of the interaction between the gastrointestinal (GI) and the central nervous system. IBS fluctuate over time and should be seen as a symptom continuum, which can develop into persistent syndromes and severe disabilities. Due to differences in delimitation of IBS and a general lack of longitudinal follow-up studies in unselected populations – the prognosis of IBS remains uncertain. We aim to illustrate the fluctuating IBS symptom continuum in relation to all-cause mortality and development of severe GI disorders.

Method: The study was a longitudinal population-based study comprising two cohort studies Monical (1982–1987) and Inter99 (1999–2004) (N=7500). Participants filled in a questionnaire about abdominal symptoms experienced within the last 12 months. The definition used: “Subjects stating that they often experience both abdominal pain and distension and additionally, either altering stool consistency or borborygmus”, where often is defined as once a month or more often (pain) and frequently or almost constantly (other symptoms). We defined the exposed individuals by dividing the population into IBS symptom groups according to degree of IBS definition fulfillment at baseline and/or at the follow-up study 5 years later. The two cohorts were followed until December 2013 in Danish Central Registries to assess all-cause mortality and development of severe GI disorders.

Results: The Results showed that the population could be divided into symptom groups, where 40% had symptoms but did never fulfill the IBS definition, 8% had fluctuating IBS and 2% had persisting IBS over a 5 year period. 50% reported no IBS symptoms at either baseline or follow-up 5 years later. The preliminary Results showed that none of the IBS symptom groups were associated with increased all-cause mortality. Further, none of the IBS symptom groups were associated with an increased development of severe GI disorders. The associations were adjusted for age, sex, mental vulnerability and the study cohort.

Conclusion: This longitudinal study is an example where the exposed individuals were not only defined as ‘IBS’ or ‘non-IBS’ individuals. The study supports that IBS symptoms in the general population do not increase mortality or development of severe GI disorders, which is of great clinical interest. Further research in prognosis of IBS should take fluctuation of symptoms into account.

The role of mood in irritable bowel syndrome symptom severity and the quality of life
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Background: Irritable bowel syndrome is one of the most common functional gastrointestinal disorders with complex and diverse aetiology. There is a great number of possible factors related to the onset and progression of the disorder. The goal of this study was to test the role of mood in symptom severity and health related quality of life of irritable bowel syndrome patients.

Method: A total of 49 patients (age M=45,11; SD=14,01; F=38) participated in the study and completed a set of questionnaires examining trait anxiety (STAI-T), depression (BDI-II), neuroticism and extraversion (BFI), general (SF-36) and disease specific health related quality of life (IBS-36). The participants also kept a diary of their mood (PA and NA), symptom severity and daily stressful events for 2 weeks, and their faecal calprotectin levels were determined based on one sample.
**Results:** The results of regression analyses show that symptom severity and disease specific quality of life could not be predicted based on any of the included variables. However, calprotectin levels and depression were significant predictors of the physical component of SF-36, while positive mood and depression were significant predictors of the mental component of SF-36. Cross-correlation analyses showed that participants whose positive mood was less variable had weaker relationships of symptom severity and daily stress levels. Path analyses showed that depression was a direct predictor of quality of life and an indirect predictor of symptom severity, via daily stressful events.

**Conclusion:** Mood seems to have a significant effect on both quality of life and symptom severity of IBS patients. High levels of depression are related to lower quality of life and higher symptom severity, while positive mood is related to higher quality of life and its stability has an impact on the relationship of stress and symptom severity. This would imply that interventions focused on the patients' mood could improve not only their quality of life, but also help in alleviating their symptoms.

**Transplantation II: Standardizing Psychosocial Assessment of Transplant Candidates**

**Assessment and treatment of alcohol use disorders in liver transplant candidates**

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**Background:** Alcohol-induced endstage liver disease is a common indication for liver transplantation. Risk for post-transplant relapse to alcohol use, with consequent injury to the graft organ or non-adherence to the immunosuppression regimen, is a significant concern affecting patient survival and donor organ procurement. Although relapse risk factors have been examined across several countries, there are no consistent guidelines for candidate selection. This presentation will examine international Results on factors associated with relapse to post-transplant alcohol use, the efficacy of pre- and post-transplant treatment interventions in preventing relapse, and an evidence-based approach to patient evaluation.

**Method:** Review European and U.S. studies of predictive and protective factors of relapse to alcohol use after liver transplantation. The presentation will include a review of psychosocial and pharmacologic treatment interventions for transplant candidates and their role in maintaining post-transplant abstinence.

**Results:** Factors repeatedly associated with post-transplant return to drinking include briefer length of abstinence, poor or limited social support, a history of other substance use, and prior alcohol rehabilitation. A combination of pre- and post-transplant alcohol treatment interventions, including alcoholics anonymous, has been associated with improved post-transplant abstinence. Biologic monitoring for pre-transplant alcohol use commonly detects unreported drinking.

**Conclusion:** Longer pre-transplant abstinence increases the likelihood of post-transplant sobriety, though select patients with briefer abstinence have done well. Fostering social support and a combination of both pre- and post-transplant treatment interventions hold promise for improved outcomes in alcoholics pursuing liver transplantation.

**Identifying high risk characteristics of living kidney donors**

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**Background:** The largest ever study of the emotional well being of donors was recently published and demonstrates that most donors do well following kidney donation. However, a small number experience emotional difficulties after donation and report depression.

**Method:** A review of all literature on depression in kidney donors will be presented and risks factors such as young age, moral obligation to donate, complications after donation, financial stress and ethnicity will be discussed.

**Results:** Risk variables for increased rates of depression have been determined in the literature for living kidney donors. Common risks include: history of depression, pain, chemical dependence, moral obligation,
adverse recipient outcome, post donation complications or rehospitalizations.

**Conclusion:** Recent studies shed light on adverse outcomes for kidney donors and indicate a need for improved patient education about higher risk populations and potential interventions to help high risk groups. Strategies such as pre-donation motivational interviewing to identify residual ambivalence may help donors motivated by moral obligation. Stress reduction for donors with medical complications possibly using unmindfulness based stress reduction could alleviate distress occurring post- donation and reduce longterm depression rates.

**The hand transplant evaluation**

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**Background:** Psychosocial assessment and counseling are crucial for the evaluation and optimization of the suitability of transplant candidates, especially in the field of vascularized composite allotransplantation (VCA). The interdisciplinary evaluation raises important psychosocial issues: e.g. assessing candidates that consider reconstructive hand transplantation (RHT) as best treatment option to regain functionality and the sensation of touch, to resolve potential body concerns, and to improve health related quality of life (HRQOL). These issues in VCA are receiving increased attention but standardized psychosocial evaluation and follow-up protocols are still needed.

**Method:** The clinical experiences in VCA, particularly in RHT and in comparison with solid organ transplantation, will be discussed and the international literature on RHT (focusing on psychosocial issues) will be reviewed and presented. Individual contributions of the attendees will help to advance the development of shared guidelines and standardized psychosocial evaluation protocols.

**Results:** An overview of recent investigations in VCA will be summarized, including highly relevant psychosocial topics for RHT: e.g. domains of evaluation, pre- and post-transplant follow-up, psychiatric complications, evaluation of body image and HRQOL. Recent work highlights the potential for a multicenter research approach that uses standardized assessment strategies and also emphasizes the need for a shared assessment approach to understand psychosocial outcomes. Eliciting the input of attendees to propose ‘best practice’ approaches to support future guidelines will be offered.

**Conclusion:** A successful transplantation requires a multi-staged multi-disciplinary psychosocial evaluation to identify those most suited to RHT and minimize psychological morbidity. With such procedures in place, current transplant programs can be advanced and the contributions of transplant recipients from a consensus process will support guidelines development for this special area in transplantation medicine.

**Predictive value of the SIPAT for post-transplantation outcomes**

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**Background:** Psychosocial factors may significantly affect post-transplant outcomes. The Stanford Integrated Psychosocial Assessment for Transplantation (SIPAT) was developed as an assessment tool to enhance the pre-transplant psychosocial evaluation; and has an excellent inter-rater reliability (Pearson's correlation coefficient = 0.853), and high predictability of post-transplant psychosocial outcomes (p<0.001).

**Method:** We identified every heart, lung, liver, or kidney transplant recipient assessed with the SIPAT pre-transplantation and transplanted between 6/1/2008 and 7/31/2011 at our institution. We then analyzed prospectively accumulated psychosocial and medical outcomes at one year of follow-up. The primary outcomes were organ failure and mortality.

**Results:** 217 subjects were identified and included in the analysis. The average SIPAT score was 12.9 (SD 8.65) with range of 0 – 42. The average age at the time of transplantation was 51.9 (SD 13.4) years with the range of 20 – 80 years of age. Although there was no significant difference in the primary outcome (i.e., organ failure, mortality), due to low occurrence, the data clearly demonstrated that SIPAT score were significantly correlated with the probability of poor medical and psychosocial outcomes. SIPAT scores predicted organ rejection episodes (p=0.02), medical hospitalizations (e.g., transplant related complications) (p<0.0001), and infection rates (p=0.02). Similarly, SIPAT scores also
predicted psychiatric decompensation (p<.005) and failure of support system (p=0.02); and a trend in treatment adherence (p=0.09). When all psychosocial and medical outcomes were combined and logistic regression analysis was performed on these two pooled outcomes, it was also found that higher SIPAT scores increase the probability of an occurrence of undesirable medical outcomes (p=0.04) and negative psychosocial outcomes (p=0.03).

**Conclusion:** SIPAT is a comprehensive screening tool designed to assist in the psychosocial assessment of organ transplant candidates, while standardizing the evaluation process and helping identify subjects who are at risk for negative outcomes after transplantation. The outcomes of the current study suggest the SIPAT is a promising pre-transplantation assessment tool whose results may help predict not only psychosocial outcomes, but also medical outcomes after the transplantation.

**Trends and challenges in Europe in standardizing the psychosocial assessment and care of transplant candidates and organ donors**

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**Background:** The psychosocial assessment of future transplant recipients and organ donors in Europe and their psychosocial follow-up is characterised by a great heterogeneity among countries, but also within individual countries. In the past decade there have been attempts to understand the differences in these practices and to work towards a harmonisation of assessment and postoperative care of donors and recipients. Our target is to understand better these differences, highlight successes and emerging areas of concern, and promote exchange among professionals to improve evidence-based strategies of assessment in transplantation and ensure quality of care.

**Method:** Review of Results of research and collaboration initiatives in Europe and focus on two individual country experiences (Germany, Portugal)

**Results:** We will present the Results from the symposium "Standardizing Psychosocial Assessment of Transplant Candidates" at the APM annual meeting in Fort Lauderdale in November 2014. Results from European initiatives regarding assessment and care of organ donors and recipients (European Union funded research projects, ELPAT- Ethical Legal and Psychosocial Aspects in Transplantation/subgroup of ESOT-European Society of Transplantation, LIDOBS-Living Donor Observatory, German Transplantation Society, Deutsches Kollegium für Psychosomatische Medizin etc.).

**Conclusion:** Differences in assessment and care of organ recipient and donors can be explained by the particular history of professional groups involved in transplantation in different countries, the availability of resources, structural issues of the specific health systems, cultural issues, awareness on the need for a thorough assessment and care. The continuous increase of the number of organ transplantations creates further practical and ethical challenges in assessment and care of organ donors and recipients.

**Research from Early-Career Psychiatrists and Psychologists**

**Association between anxiety and depressive symptoms with metabolic syndrome in primary care: results of an Italian cross-sectional study involving outpatients.**

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**Background:** Metabolic syndrome (MetS) is a heterogeneous entity represented by the coexistence of multiple alterations: abdominal adiposity, impaired glucose tolerance, hypertriglyceridemia, HDL hypocoleserolemia and hypertension. Symptoms of anxiety and depression are frequently comorbid with MetS. Aim of the present study was to measure the association between symptoms of anxiety and depression with the five criteria of MetS in outpatients attending GPs’ practices.

**Method:** This is a cross-sectional study, involving male and female patients aged 40-80 attending five GPs’ practices within one month in Modena, Northern Italy approved by the local Ethical Committee. All patients were screened for the presence of MetS and depressive/anxiety symptoms, using the Hospital Anxiety and Depression Scale. Exclusion criteria: age < 40 or > 80; use of antidepressants or antipsychotics; previous stroke, heart attack or cardiovascular disease;
Psychological distress and quality of life in lung transplant patients. A six months observational study

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Background: It is crucial to identify lung transplant recipients who experience no significant improvement in health-related quality of life (HRQoL), and, thus require psychosocial care. Objectives: To (1) assess psychosocial outcome trajectories in lung transplant recipients related to psychological distress and HRQoL during the first six months post-transplant; (2) identify patients with poor psychosocial trajectories; and (3) assess potential outcome predictors regarding psychological distress and HRQoL at six months post-transplant.

Method: A total of 40 patients were examined for psychological distress (SCL-K-9) and HRQoL (EQ-5D) during their first six months post-transplant. Hierarchical cluster analyses were performed to identify distinct types of postoperative outcome trajectory. Correlational analyses examined medical and psychosocial predictors of the outcome at 6 months post-transplant.

Results: Three distinctive clusters were identified, summarizing either patients with (1) optimal post-operative trajectories (35%), (2) good post-operative trajectories (42.5%), and (3) poor post-operative trajectories (22.5%). The latter tended to be older, to suffer from more severe disease, to have more co-morbidities, and to have had a prolonged ICU and/or hospital stay. Disease severity, length of stay and EQ-5D two weeks post-transplant were strong predictors of psychological distress and impaired HRQoL at six months of follow-up.

Conclusion: Results underscore the psychosocial needs of patients with poor post-transplant trajectories. Further longitudinal research with larger subject samples is needed to further investigate outcome profiles of these patients and identify additional outcome predictors.

A cross-cultural comparison of climacteric symptoms

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Background: Culture has been shown to influence climacteric symptoms of women. This cross-cultural study compared the climacteric symptoms, self-esteem and perceived social support between Mosuo and Han Chinese Women and explored the culture impact on these variables. Mosuo is a Chinese minority with matriarchal structure and Han Chinese is the majority ethnic group of China with patriarchal structure.
**Method:** Through convenience sampling, 54 Mosuo women and 52 Han Chinese women aged between 40 and 60 completed the sociodemographic questionnaire, Menopause Rating Scales (MRS), Self-Esteem Scale (SES) and Perceived Social Support Scale (PSSS).

**Results:** As compared to Han Chinese women, Mosuo Women scored lower in psychological and somato-vegetative factors of the MRS, but higher in the SES and the “intra family support” factor of PSSS. Multi-linear regression indicated that in Mosuo group high severity of climacteric symptoms was correlated with low self-esteem, while in Han Chinese group high severity of symptoms was correlated with low self-esteem, little perceived intra family support and the history of premenstrual symptoms.

**Conclusion:** Mosuo women during climacteric showed better health status, higher self-esteem and perceived more intra family support compared with Han Chinese women. The predictors of the severity of the climacteric symptoms were different in each ethnic group respectively, which could be related to cultural diversity in the interaction between symptom severity and psychological characteristics.

**Analysis of current state regarding teaching and assessment of communication skills in undergraduate medical education in Germany**

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**Background:** The value of successful physician-patient-communication for patients’ well-being is empirically supported and increasingly recognized in health policy initiatives. Accordingly, due to changes in the Medical Licensure Act in May 2012, communication skills are now an obligatory part of teaching and assessment in medical education. On this basis, a project supported by the German Federal Ministry of Health has been initiated that aims to support the integration of communication skills into medical curricula. As a first step, an analysis of the current state of teaching and assessment of communication skills at the medical faculties in Germany is currently being conducted.

**Method:** Two main data sets are collected for each course and exam which aims to – at least partially – teach or assess communication skills. First, several structural characteristics are acquired for each course (e.g., teaching formats and Method) using semi-structured telephone interviews. Second, the learning Backgrounds realized in each course and exam, respectively, are specified. To this end, we use the learning Backgrounds defined in section 7 (“physician as communicator”) and section 14c (“medical communication skills”) of the “National competence-based learning catalogue of medicine”. In an on-site workshop at the faculty, the corresponding lecturer then states which of these learning Backgrounds are covered in a certain course or exam.

**Results:** Up to now, 28 faculties took part in the data collection. Regarding structural features, a first analysis revealed, for instance, an approximately equal distribution between theoretically and practically oriented teaching formats and that standardized patients are used at almost all medical faculties. Regarding learning Backgrounds, it was found that a rather large amount of learning Backgrounds concerning general communication skills is covered. This coverage is comparatively lower for specific communication-related topics like the consideration of socio-economic factors.

**Conclusion:** Overall, the analysis serves to map the current state and distribution of structural features and foci of learning Backgrounds regarding teaching and assessment of communication skills in medical education. Thereby, current conceptions of communication-related curricular activities are rendered tangible and transparent. This mapping of current state could then serve as a basis for future developments and to illustrate future changes.

**The long shadows of early life events: childhood adversity moderates depressive symptoms changes following retirement in the GAZEL cohort.**

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Aim: To examine the role of adverse childhood life events (ACLE) on changes in depressive symptoms following retirement.

Method: In the GAZEL cohort, 10 ACLE (e.g., mother's absence, abuse, financial difficulties) were investigated in 2004. CESD (Center for Epidemiological Studies–Depression scale) scores, collected every 3 years since 1993, enabled to compute changes in depressive symptoms following retirement. The association between these changes and ACLE was examined with general linear models adjusting for gender, age, occupational status, history of sick leaves for depression and alcohol consumption.

Results: 9242 participants were included with a mean CESD decrease following retirement of 2.2±7.4 (p<0.001). Six clusters were identified with Two-Step Cluster Analysis: no ACLE (cluster 1, n=1146); increasing socioeconomic adversity (clusters 2 to 4, n=2099, n=2111 and n=1136, respectively); socioeconomic and psychosocial adversity without (cluster 5, n=1217) or with interpersonal conflicts (cluster 6, n=1533). Clusters were associated with CESD changes (p<0.001; eta²=0.007). Compared to participants from cluster 1, those from clusters 4, 5 and 6 displayed significantly less improvement of depressive symptoms following retirement with CESD changes (p<0.001; eta²=0.007).

Conclusion: ACLE, especially interpersonal conflicts, are associated with less improvement of depressive symptoms following retirement.

Psycho-Cardiology

Association of the Type D personality with SCID diagnosis of mental disorders - results from the SPIRR-CAD trial

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Background: The Type D personality, defined as a combination of negative affectivity (depression, anxiety, irritability) and social inhibition, is significantly associated with increased mortality in patients with coronary heart disease (CHD). However, to date no study exists on the association of Type D personality with interview-based diagnoses of mental disorders. Aim of the current study was to assess the association of mental disorders with Type D personality in depressed CHD patients.

Method: Cross-sectional study of patients with CHD and HADS depression score > 7. We assessed socio-demographic and clinical data, depression (HADS, HAM-D), Type D personality (DS-14) and mental disorders according to DSM-IV (SCID I & II). Results were calculated using t-tests and logistic regression analyses in order to control for potential confounders.

Results: Depressed CHD patients (n=570; age 59.2 ± 9.5; 78.9% male; 78.9%, HADS-D 10.4 ± 2.5; HAM-D 11.3 ± 6.6, Type D 60.1%) were studied. 78.9% of patients with Type D personality and 73.1% of non-Type D patients suffered from at least one mental disorder (p=0.129), but Type D patients significantly more often had more than one mental disorder (p=0.004). Compared to non-Type D, patients with Type D personality significantly more often had social phobia [odds ratio (95% CI): 3.79 (1.10 to 13.12); p=0.035], dysthymia [1.78 (1.12 to 2.84); p=0.015] and compulsive [2.25 (1.04 to 4.86); p=0.038] and avoidant personality disorder [8.95 (2.08 to 38.49); p=0.003]. The prevalence of affective disorders, other anxiety or personality disorders was not different.

Conclusion: This study is the first to show that Type D personality in depressed CHD patients is associated with more complex and enduring mental disorders such as social phobia, dysthymia and personality disorders according to DSM IV Cluster C. This implies increased demands on the psychotherapeutic treatment as
Enhancement of physical activity for elderly patients with diastolic heart failure by a psychosocial motivational intervention (pilot data from an add on study to the Ex-DHF Trial)

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Aim: Heart failure with preserved ejection fraction (diastolic heart failure, DHF) is common in elderly patients (pts). Reduced exercise capacity has deteriorating effects on health outcomes in these pts. A specific and effective treatment for DHF is lacking. The ongoing Exercise Training in Diastolic Heart Failure (Ex-DHF) Trial aims to improve health outcomes by regular physical exercise but maintenance of regular physical exercise is often difficult for elderly pts. Our motivational intervention pilot study aims to identify helpful motivational strategies to support elderly pts in maintaining or starting physical activity (PA).

Method: Consecutive pts are recruited from the Ex-DHF Trial. In Ex-DHF, pts with DHF are randomized to either usual care or usual care enhanced by a training program. The first 21 pts interested in our motivational support are offered 6 to 7 semi-structured sessions based on motivational interviewing techniques over 24 weeks. Pts are asked to fill in a self-observation report of their daily PA. The first, the second and the last sessions are held face-to-face. Other sessions are mainly held by telephone. Ex-DHF pts not interested in our support are recruited for the control group. The outcome assessment takes place 24 weeks after inclusion. All pts receive a 6-minute-walk-test (6-MWT), a spiroergometry and complete the same set of self-report questionnaires as in Ex-DHF. For pts of our intervention group (IG), items assessing the personal benefit are added.

Results: Analyses of preliminary data of N=16 pts. (IG only; 8 male, age M=72.6 (66-82) years) show that the motivational sessions were rated as helpful. 81.3% of pts. quoted at least a little more PA. This is supported by a trend towards a self-reported increase in PA by 5 hours/week on the IPAQ. There is no substantial increase in physical capacity as measured by the 6-MWT and spiroergometry. Perceived bodily pain and general health perceptions as measured by the Short Form-36 Health Survey tend to show a decline in subjective health status.

Conclusion: The motivational support was widely accepted. In general, elderly persons experience an increasing amount of physical problems and tend to reduce their PA for recovery. In our experience, personal motivational sessions are helpful to resume activity. After the training program pts maintained their self-reported PA during our intervention and pts without training could even increase it.

Individual symptoms of depression across age and sex in the prediction of all-cause mortality in patients with myocardial infarction

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Background: Depressive symptoms are associated with poor prognosis in patients with myocardial infarction (MI). Age and sex could be important effect modifiers in this relationship. This study compared the clinical profile of patients with MI across age groups and sex and assessed the prognostic value of depressive symptoms in the prediction of all-cause mortality.

Method: The data of an individual-patient data meta-analysis was used. MI patients were stratified across age groups (≤55, 56-69 and ≥70 years) and sex. Clinical variables included history of MI, Killip class, medication use, diabetes, smoking and body mass index. Depressive symptoms were measured with a shortened version of the Beck Depression Inventory, consisting of 10 items: the BDI10.
All-cause mortality was the endpoint. The risk of all-cause mortality was estimated for the BDI sum score and for each of the 10 items using multilevel multivariable Cox regression analysis. Multivariable adjustment included all clinical variables. Participants were followed up in average for 3.83 years.

**Results:** The total sample included 6,673 patients. The sum score of the BDI10 was associated with all-cause mortality in univariable models in all groups, besides women aged ≤55. In fully-adjusted models, the association was only present in men aged ≤55 (HR: 1.32 95%CI 1.06-1.66; p <0.01) or ≥70 years (HR: 1.37 95%CI 1.17-1.60; p <0.01). In fully-adjusted item-level analyses, men aged ≤55 years were affected only by indecisiveness and fatigability, with an increased risk of respectively 44% and 51% for all-cause mortality. In men aged 56-69 years, the increased risk associated with dissatisfaction and work difficulties was respectively 55% and 55%. The increased risk in men aged ≥70 years was respectively 27% for sadness, 49% for hopelessness, 48% for self-dislike, 36% for work difficulties and 49% for fatigability.

**Conclusion:** There are important differences in the clinical profile of patients with MI for different sex and age groups. Depressive symptoms differentially affected patients in different strata. Especially in older men depressive symptoms predicted mortality. Accounting for these differences when estimating prognosis and treating patients with MI is desired in clinical practice.

**WEB-based distress management program for implantable CARdioverter dEFibrillator patients (WEBCARE): Results and lessons learnt**

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**Background:** The implantable cardioverter defibrillator (ICD) is the mainstay of treatment for the prevention of sudden cardiac death due to life-threatening tachyarrhythmias. Although the device is generally well accepted, one in four patients suffer from anxiety and depression. Distress in ICD patients is associated with a 2-fold risk for premature death, warranting intervention. We will present the results of WEBCARE – the first e-health trial in ICD patients - and discuss lessons learnt and how to move the field forward to optimise patient care.

**Method:** Consecutive patients (n=289) implanted with a first-time ICD and recruited from six implanting centres were randomised to the 3-months’ WEBCARE e-health intervention versus usual care. Patients completed standardized and validated questionnaires at baseline, 3-, 6-, and 12 months’ follow-up and provided saliva samples for the assessment of the cortisol awakening response. Patients will be followed up on the long-term for tachyarrhythmias and mortality. The trial is registered on http://www.ClinicalTrials.gov (NCT00895700).

**Results:** The WEBCARE intervention did not show any statistically significant effects neither on disease-specific nor generic patient-reported outcomes. There was a gradual increase in dropout during the course of the 3-month intervention, with 83.5% completing the first lesson, while only 23.3% eventually completed the whole treatment. Reasons most often given by patients for dropout were: technical problems with the computer, time constraints, feeling fine, and not needing additional support. Completers versus non-completers did not differ systematically on any of the demographic, clinical, and psychological characteristics.

**Conclusion:** The results of WEBCARE show that a “one-size fits all” approach may not work and that a more patient-tailored approach targeted to patients’ needs and preferences may be warranted, whether it is e-health or face-to-face treatment. Although e-health interventions have been shown to be as effective as standard face-to-face treatment and they have several advantages, they may for now be for the selected few at least in ICD patients.
The effect of gender on health-related quality of life in depressed post-cardiac surgery patients
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**Background:** It is known about the men prevalence among patients with cardiac diseases. While studies have also documented about depression relations to cardiovascular diseases, depressed post-cardiac surgery (CS) patients’ health related quality of life (HRQOL) and the effect of gender on it remains uncertain. Therefore, the aim of this study was to investigate HRQOL and the gender association with different HRQOL aspects in depressed post-cardiac surgery patients.

**Method:** A convenience sample of 460 post-surgery patients was recruited from the outpatient department from January 2012 to December 2014 two months after CS. Patients completed instruments that included a SCL-90R (Symptom Checklist Revised) depression scale and nine SF-36 (Medical Outcomes Study 36-item Short Form HealthSurvey) scales, which define nine different aspects of HRQOL. Only the patients with increased depression scale score and without contraindications were included into the study. Total sample consisted of 153 patients. Data were analyzed in the whole group and in two subgroups – females and males. Analyses used descriptive statistics, including mean and standard deviations; independent-sample Student’s t-tests, linear and logistic regression analyses. P<0.05 was considered as statistically significant.

**Results:** The mean score of depression scale was moderate in the group, it didn’t differ between the subgroups. The Results have demonstrated the low HRQOL according to the three aspects (limitations for physical and mental problems, general health perception). The mean scores of mental health, energy/vitality and general health perception scales scores were significantly lower in the female subgroup. It was found the significant relations of depression to three SF-36 scales in whole group; to five SF-36 scales in the female subgroup; to three ones in the male subgroup. All associations were stronger in the female subgroup. According to the logistic regression analysis a worse energy/vitality scale’s score was related with the female gender; the associations with mental health and general health perception scales have shown the tendency for significance.

**Conclusion:** Gender impacts the HRQOL in depressed postoperative cardiac patients – the Results demonstrated some worse HRQOL aspects in females. Therefore, gender should be considered in assessing and addressing the individual care needs of these patients in order to attain optimal treatment outcomes.

Somatoform and Related Disorders in Children and Adolescents - Clinical Aspects and Treatment

**ACT-based group therapy of severe functional disorders in adolescents: presentation of pilot data**
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**Background:** App. 5-10% of adolescents report recurrent functional somatic symptoms. Some experience persistent symptoms and may receive functional somatic syndromes (FSS) diagnoses, characterised by severe disability and reduced quality of life. Despite a high need for care, treatment of FSS in adolescents is sparsely investigated. The aims of the study are to evaluate and in a pilot study test the feasibility and overall effect of group-based Acceptance and Commitment Therapy (ACT) for severe FSS in adolescents.

**Method:** 19 young patients attended a manualized group-based ACT-programme, developed for adolescents (15-19 years) with severe FSS. The programme consisted of nine 3 hours group sessions and a follow up meeting after 3 months. To evaluate the patient’s opinions of the treatment and their overall effect, they completed The Patient Satisfactory Form, a modified Experience of Service Questionnaire (ESQ) and Patient Global Impression of Change (PGIC).

**Results:** All patients rated the treatment as good to excellent; they would recommend the treatment to a friend with similar problems and planned to use what they had learned in the
future. The poorest scoring regarded the need for more hand-out material during therapy. All patients reported an overall positive impression of change.

**Conclusion:** The ACT-based programme was well received by the patients. A RCT is planned to evaluate the treatment effects by self-reported outcome measures and Background markers for physiological stress response.

**Clinical features of children with functional somatic symptoms referred to psychiatric treatment**

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**Background:** Little is known about which children with functional somatic symptoms (FSS) are referred from paediatrics to psychiatric assessment and treatment. The aim was to conduct a systematic investigation on clinical features of paediatric inpatients with FSS being referred to child mental health services (CAMHS) and to describe paediatricians reasons for referral.

**Method:** Sixty children with FSS, admitted in a large Danish paediatric department during 2012. Medical record data on clinical characteristics and paediatric management was compared between referred (N=16) and non-referred (N=44) children.

**Results:** Information on psychosocial factors and symptom interference was lacking in most paediatric records. Compared to non-referred children, referred children presented significantly more multisymptomatic FSS (p<0.01), longer symptom duration (p<0.05), had more clinical investigations performed and a longer admission in the paediatric setting (≥ 2 weeks, p=0.02). They also received more treatment elements prior to referral. The most frequent stated referral reason was inadequate treatment response.

**Conclusion:** Paediatric inpatients with the most severe FSS were more often referred to CAMHS. However, referral reasons were generally vague and psychosocial information supporting indication for psychiatric intervention was frequently missing. This points to the need of clinical guidelines in order to improve and systematize mental health intervention in children with FSS.

**Attachment style and perceived social support as predictors of somatoform disorders in adolescents**

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**Background:** Social support has been variably defined within numerous studies, with different measures and strategies of measurement. Perceived social support, defined as perceptions that one is cared for and loved or has a confident or intimate friend, has been consistently related to the normal personality development. Literature data emphasize the role of the attachment style in coping with stress and also in creating behavioral sets. This study aims to investigate the association between attachment style and perceived social support (seen as protective factors) and the onset of somatoform disorders in adolescents, with the ultimate purpose to outline a Method for a better evaluation and management of these disorders.

**Method:** Participants included 60 adolescents, aged between 12-18 yrs., sex ratio females: males 7:3, admitted in the Obregia Psychiatric Hospital - Bucharest without a major psychiatric diseases, but referred from Pediatric to Psychiatry section for their somatic symptoms with no organic Background. Within a cross-sectional study design, these symptoms were screened through Giessner Bogen Beschwerden Questionaire, while their perceived social support and attachment style were measured through Social Support Survey Instrument and Vulnerable Attachment Style Questionnaire (VASQ). Correlations among these variables were measured, to evaluate the relationship between somatoform symptoms and attachment style, and social support, respectively.

**Results:** Among the two independent variables considered, social support proved to be directly correlated to the onset of somatoform disorder, both globally (high total VASQ scores) and specifically (high insecurity scores) (p < .05). Attachment style was not correlated directly to somatoform disorders, however insecure...
anxious attachment style was a predictor for a poor perceived social support (p < .05) and a high level of proximity seeking (p < .05). A significant factor associated to the onset of somatoform disorders was the family structure (> .05) and the changes in the family climate (especially in girls p < .03).

**Conclusion:** These Results illustrate the positive role of perceived social support in encouraging expression and inner growth in teen-age years, preventing the use of somatoform symptoms as indirect messages. Medical team and family may play a role in working together for a better assessment of psychosomatic symptoms in adolescence.

**Diagnostic practice of psychogenic nonepileptic seizures (PNES) in the pediatric setting**

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**Background:** There is no formal guidelines for diagnosing psychogenic nonepileptic seizures (PNES) in children and little is known about the current clinical practice of diagnosing PNES in the pediatric setting. The aim was to conduct a national survey to investigate pediatricians’ diagnostic practice for PNES.

**Method:** A questionnaire on use of terminology, ICD-10 codes, and the clinical diagnostic approach to pediatric PNES was distributed to all pediatricians (N=64) working in the field of neuropediatrics and/or social pediatrics in the Danish hospital setting.

**Results:** The response rate was 95% (61/64). There was no consensus on which terminology or diagnostic codes to use. The respondents were asked to indicate to what degree they thought each of 18 history characteristics and 24 paroxysmal event characteristics would support a diagnosis of PNES if a child presented with it. In total, five history characteristics and six paroxysmal event characteristics were agreed upon to be very predictive of PNES by at least 50%. Supplementary diagnostic tests such as blood chemistry measurements (e.g. blood glucose or acute phase reactants) and electrocardiograms were inconsistently used. Only 49% reported to use video-electroencephalography (video-EEG) frequently as part of their diagnostic procedure.

**Conclusion:** The Results demonstrate a need for clinical guidelines in order to improve and systematize the diagnostic approach for PNES in children.

**Health anxiety, illness beliefs and functional symptoms in children of mothers with severe health anxiety – an exposure study**

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**Background:** The aetiology of health anxiety (HA) is believed to be multifactorial and to include genetic as well as environmental factors. Experience with illness and intergenerational transmission of illness beliefs and behaviours are considered as important risk factors, but research in children in this field is insufficient and lacks adequate comparison groups. The aim of this study is to investigate the possible intergenerational transmission of HA by examining the occurrence of illness beliefs and functional symptoms in three groups of children.

**Method:** In total, 150 children aged 8-17 years and their parents will be included. Case group: 50 children of mothers with severe HA Control group I: 50 children of mothers with Rheumatoid Arthritis Control group II: 50 children of healthy mothers. All the children will complete a battery of standardized questionnaires including questionnaires regarding health anxiety, illness beliefs and functional symptoms.

**Results:** Data collection is still ongoing. Preliminary data from 60 children regarding HA, illness beliefs and functional symptoms will be presented. Data from the three groups of children will be analysed and compared.

**Conclusion:** The preliminary data will be discussed in terms of potential risk factors for developing HA and functional symptoms in children. Increased knowledge of the possible intergenerational transmission of HA can help to better understand and possibly prevent development of severe HA.
Brain-Immune Associations in Chronic Fatigue

Mood and anxiety disorders in chronic fatigue syndrome, fibromyalgia, and irritable bowel syndrome. Results from LifeLines
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Background: Functional somatic syndromes (FSSs) have often been linked to psychopathology. The aim of the current study was to compare prevalence rates of psychiatric disorders between individuals with chronic fatigue syndrome (CFS), fibromyalgia (FM), and irritable bowel syndrome (IBS).

Method: This study was performed in 94,516 participants (mean age: 44.6 years, SD 12.5, 58.7 % female) of the general-population cohort LifeLines. FSSs were assessed by self-reports. Mood disorders (i.e. major depressive disorder and dysthymia) and anxiety disorders (i.e. generalized anxiety disorder, social phobia, panic disorder with/without agoraphobia, and agoraphobia) were assessed by means of the Mini International Neuropsychiatric Interview. Risks on psychiatric disorders were compared for individuals suffering from CFS, FM, and IBS using logistic regression analyses adjusted for age and sex.

Results: Prevalence rates of CFS, FM, and IBS were 1.3%, 4.0%, 9.7%, respectively. Individuals with CFS, FM and IBS had significantly more mood (ORs 1.72 to 5.42) and anxiety disorders (ORs 1.52 to 3.96) than individuals without FSSs, but prevalence rates were low (1.6 to 28.6%). Individuals with CFS had more often mood (ORs 2.00 to 4.08) and anxiety disorders (ORs 1.63 to 2.32) than individuals with FM and IBS. Major depressive disorder was more common in FM than IBS (OR 1.58, 95%CI=1.24-2.01) whereas these groups did not differ on dysthymia or anxiety disorders.

Conclusion: Mood and anxiety disorders are more prevalent in individuals suffering from FSSs, and particularly CFS, than in individuals without FSSs. However, most individuals with FSSs do not suffer from mood or anxiety disorders.

Systematic review of circulating cytokines in chronic fatigue syndrome
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Background: The close link between chronic fatigue syndrome (CFS) and infection and the association of certain cytokines with acute sickness behaviour have led to the belief that there may be a link to cytokines in the pathophysiology of the condition. There has been no systematic review of this literature

Method: We systematically reviewed the English language literature for the last 30 years, using standard Method with two independent reviewers and exploring the appropriate databases. We searched for case control studies reporting primary data Results of cytokines concentrations in blood samples with cases of CFS or ME, compared to healthy controls, both at baseline and after various stimulation tests such as exercise. We used the Newcastle-Ottawa quality assessment scale of case control studies.

Results: The quality of the studies varied. On the whole there were no significant differences between cases and controls in most cytokines measured, although insufficient studies were available for a number of cytokines. The most consistently found difference was of elevated concentrations of Transforming Growth Factor beta (TGF-β) in 5/7 studies, which usually did not change significantly after stimulation. Stimulation studies were generally unhelpful.

Conclusion: The evidence for cytokines being associated with CFS was either absent or generally weak, but more studies of TGF-β may be justified. Stimulation studies do not add much to our understanding. Studies of cytokines in other tissues may be worthwhile.

Cortical hypoactivation during resting EEG suggests CNS pathology in patients with chronic fatigue syndrome
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Objectives: An increasingly crucial issue in Chronic Fatigue Syndrome (CFS) is to better comprehend and measure its pathophysiological process within the context of the central nervous system (CNS). CFS symptoms include deficits in working memory, selective and sustained attention, speech, executive functioning, error correction, and
information processing speed, in as many as 90% of CFS patients.

**Method:** EEG recordings were obtained from 19 scalp locations with link-ear reference during a 3-minute, eyes-closed task in 50 CFS patients and 50 healthy control subjects, matched for age (range 28-74 yrs), gender, and educational level. The Multidimensional Fatigue Inventory (MFI-20) and the Fatigue Severity Scale (FSS) were likewise administered to the same group of patients. Using the EEG data, current densities were localized and computed from 1-30 Hz with exact low-resolution electromagnetic tomography (eLORETA) from 6,239 cortical grey matter voxels based on each patient’s EEG.

**Findings:** Frontal, temporal, parietal, limbic and sub-lobar regions of interest (ROI’s) demonstrated significantly different current densities in CFS patients when compared to healthy controls (HC). Statistically significant differences were found in the delta (1-3 Hz) and in the beta 2 (19-21 Hz) frequency bands in both the left and right hemisphere. Delta sources were found predominately in the frontal and limbic regions of interest (ROI) with beta-2 sources found predominately in central and superior parietal ROI’s. Linear regression models, predicting current density from the MFI-20 reduced motivation subscale, found increased delta in the left frontal, temporal, parietal, limbic and sub-lobar ROI’s.

**Discussion:** We found a global expression of CNS hypoactivation in CFS. eLORETA findings demonstrate a link between CFS patient symptoms and brain regions with quantifiable changes in brain state and function (e.g. △ delta / △ beta in frontal/parietal regions which relate to dysexecutive symptoms. eLORETA is not a stand-alone diagnostic, but can be used to evaluate the nature and extent of cognitive impairment in CFS; and may facilitate the early identification of patients suffering from CFS, and serve as a surrogate to assess response to therapy.

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**Psychotherapy in the Medically Ill**

**Towards a possibility of psychotzherapy for patients with diabetic foot ulcer in a surgical hospital**

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**Background:** Patients with foot diabetic ulcer have serious psychoemotional disorders that worsen the course of the disease and impede its prognosis and require appropriate correction. However, the possibility of therapy for these patients is limited by many factors, including serious psycho-emotional condition of the patients and a lack of appropriate specialists. The aim of this work was to study the possibility of using some Method of elevated circulating concentrations of cytokines, supported by the role of infections triggering the illness and the similarity with acute sickness behaviour, which is associated with elevated circulating cytokines. A preliminary study supported the roles of transforming growth factor beta and tumour necrosis factor alpha.

**Method:** We measured serum protein levels and mRNA of 11 cytokines at baseline, after commuting across London, and before and after exercise. After exercise, samples were taken immediately, 3 hours and 2 days later. We studied 24 patients with CFS and 21 age- and sex-matched healthy but sedentary controls, following a preliminary study.

**Results:** There were significant differences between patients and controls in TGFβ protein levels both at baseline and all other measurement points. No other cytokine was abnormally distributed. Neither commuting nor exercise had a significant effect on TGFβ or any other cytokine concentrations. There were no significant differences in mRNA between groups at any time point.

**Conclusion:** This study replicates the Results in both our preliminary study and a systematic review that circulating TGFβ was at a higher concentration at all times in patients with CFS compared to controls. In this study, mRNA for TGFβ was no different between patients and controls. This finding cannot be related to post-exertional exacerbation of symptoms, but needs further exploration. Studying cytokines in other body tissues, such as cerebrospinal fluid may provide different results.

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**Case control study of circulating cytokines in chronic fatigue syndrome**

White PD, Clark L, Thomas JM, Murphy M, Buckland M

Queen Mary University of London, Academic Psychological Medicine, London, UK

**Background:** A hypothesis suggests that chronic fatigue syndrome is associated with case control study of circulating cytokines in chronic fatigue syndrome

White PD, Clark L, Thomas JM, Murphy M, Buckland M

Queen Mary University of London, Academic Psychological Medicine, London, UK

**Background:** A hypothesis suggests that chronic fatigue syndrome is associated with...
psychotherapy for these patients and evaluate their effectiveness.

**Method:** An experiment was made using the Method of autogenous training, as well as cognitive-behavioral and psychodynamic Method. 50 patients with diabetic foot ulcer which were treated in the surgical hospital participated at the study.

**Results:** Method of autogenous training was used for all patients. It has been shown to be effective, because psycho-emotional and somatic state of about 70% of patients has improved. This was manifested in reduced mental tension, anxiety and depressive symptoms. In somatic status a decrease in level of glycated hemoglobin and lipids of blood and an improvement of the regulation of heart rate were observed. The possibility of applying to these patients a person-centered therapy including cognitive behavioral and psychodynamic Method was limited by the severity of psychosomatic condition, low motivation for treatment, and the lack of adequate number of specialists. It was possible to apply this therapy only to 8 patients, which had sufficient motivation for treatment and relatively preserved intelligence. The positive dynamics after the implementation of the therapy in the form of improved psychosomatic condition, internal picture of the disease and the mobilization of personal resources was observed in most of them. This helped to improve the prognosis and the quality of life of these patients. The Results were confirmed in a retrospective study over the next two years.

**Conclusion:** According to the Results of the study it can be concluded that the Method of autogenous training is applicable for the majority of patients with diabetic foot ulcer in the surgical hospital. Carrying out the same person-centered therapy including cognitive-behavioral and psychodynamic techniques is limited by several factors, including the severity of psychosomatic condition, low motivation and low availability of therapy for these patients.

**Hope for the hopeless or old wine in new bottles: ACT in chronic pain**
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**Objective:** Chronic pain is a major health issue worldwide. It causes severely reduced quality of life for the patients as well as high healthcare costs. Multidisciplinary approaches including CBT have been shown to be effective, but still a large percentage of patients does not benefit in the long run.

**Method:** Acceptance and Commitment Therapy (ACT) is a third wave behavioral therapy. In the presentation, a review of current literature will be given to evaluate its evidence basis. Clinical cases will illustrate the core processes and workability of ACT.

**Results:** ACT focuses on values-oriented behavior rather than on symptom reduction. Metaphores and mindfulness techniques are applied to promote acceptance and psychological flexibility. Cognitive interventions refer to Relational Frames Theory (RFT). Metaanalyses show that ACT is effective especially in chronic pain and depression. For a broad range of other diseases results are promising, but the quality of studies do not allow definite conclusions.

**Discussion:** By promoting acceptance and values-based behavior ACT is a promising treatment option for chronic illnesses including chronic pain. Comparison with traditional therapies is difficult because symptom reduction is not targeted with ACT. Further high quality research is needed to draw definite conclusions about the evidence of ACT.

**Group therapy with the medically ill**
Novak M
Baycrest Hospital, Canada

Grouptherapy with medically ill patients could be a unique form of therapy. Several type of groups (mostly time-limited and manualized) based on their theoretical orientation have been applied and tested in patients with medical illness. Independently of the theoretical Background, groups can provide a unique support component by peers, who can understand the daily practical and emotional challenges of living with a significant medical illness. Beyond the practical issues of illness management, existential topics are important, meaningful components of these groups, which could be addressed in both time-limited and open-ended groups. New forms of group therapies, such as online groups can give access to therapy for many patients who would not able to get these services otherwise due to their illness, costs of transportation and parking or distance of living. Online groups are also an excellent source of support for
caregivers who often are not able to commit the time to attend these sessions in person. After reviewing the literature, I will provide insight into my work with various groups with patients with sleep disorders, narcolepsy and chronic kidney disease (on dialysis and after kidney transplantation).

**Group therapy with elderly patients**

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Older adults with emotional and psychological struggles often have medical co-morbidities. Younger adults with medical illness often have medical co-morbidities. With an ever-increasing aging and medically ill global population, group therapy is particularly suited to help these populations adapt as optimally as possibly to deal with the many losses associated with aging and/or medical or depressive illness. This presentation will focus on how group therapists working with those living with acute, chronic or terminal illness, some younger, some older, help group members, be it in community or hospital or institutional settings, live with the many challenges of maintaining self-care, self-esteem and social and interpersonal relationships. Technical and countertransference challenges, along with clinical examples, will help illustrate themes and therapeutic factors. In a here-and-now setting encouraging interaction between the presenter and audience, audience members have the opportunity to learn and understand more about one\'s own emotional reactions in working with such difficult -to-treat populations, become more aware of one\'s own personal feelings with respect to issues of aging and medical disability and its impact on working with these populations, and better learn how to identify practices/techniques that facilitate the psychological coping and healing processes in adults dealing with medical problems. With the creation of more cohesive therapeutic settings, more medically ill and aging patients will be helped to cope, emotionally grow and even flourish in their last or later stage of life.

**From Couples to Parents: Life-long Psychobiological Adaption**

**Modern fatherhood and its consequences on psychobiological well-being**

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**Background:** Today active involvement of the father in child rearing is taken for granted. For the father, the adaption to the new role during the transition to fatherhood leads to psychosocial consequences such as an elevated stress level, risk for psychopathology or a decrease in parental relationship quality. The other way round, mental health of the father has a significant influence on parental relationship quality and child development. Aside from psychosocial aspects (e.g. socio-economic status, personality traits, stress load), biological correlates, such as stress and male sexual hormones, interrelate with the adoption of the paternal role and thus might influence mental and physical health status of the father and satisfaction with the father role. As a consequence of modern family constellations, paternal care is not limited to the fathers’ genetic offspring. Instead, in the form of step-, adoptive or foster fathers, men also invest in non-genetic offspring. While it is known that children coming from complex, non-traditional family models show a higher vulnerability for poor mental health, consequences on paternal health and well-being are relatively unknown. The goal of this study therefore is to investigate the consequences of modern fatherhood on paternal stress level, mental health and well-being.

**Method:** 3207 fathers, stepfathers, adoptive fathers and foster fathers of all age groups from the German-speaking part of Europe participated in a broad online survey on psychosocial conditions and costs of fatherhood across lifespan. Amongst other parameters, subjective chronic stress, psychological well-being and life satisfaction were assessed. In addition, biological parameters (cortisol, testosterone) were measured on a sub-sample (N=428) of these fathers by collecting saliva samples.

**Results:** Preliminary results show a significant impairment of mental health and general life satisfaction in fathers with complex family constellations compared to fathers living in a traditional father-mother-child family model.
Beneath differences in socioeconomic status, part of this result can be explained by the lack of a steady relationship in this group of fathers. Hormonal correlates will be presented at the conference.

**Conclusion:** The additional stress load for fathers due to complex family constellations might represent a possible risk factor for higher vulnerability of children living in some types of contemporary family constellations.

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**Modulation of couples' stress hormones in everyday life through a minimal couple intervention**

Ditzen B

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**Background:** Social integration, such as being embedded in a close social network and interactions with friends and family, has a substantial influence on individual health and longevity. Individuals in content close relationships live longer and happier lives, and are less likely to have chronic psychological or physical illnesses than those who are alone. With regard to mortality, effects of social integration are equal to or even exceed those of well-established lifestyle factors such as smoking cessation, doing sports, and alcohol reduction. Thus, social relationships can be seen as central predictors of quality of life, health and even longevity.

**Method and Results:** This presentation will give an overview on recent research about the association between couple interactions and health-related outcomes. Couple relationships, as the predominant type of social relationships for adult humans, show specific effects on individual health. Virtually every adult, indicate that they have lived in a committed couple relationship at least once in their lives. Consequently, the identification of relevant psychological and biological mechanisms underlying the effects of couple relationships on health is one of the most compelling research topics in behavioural medicine and public health in general.

**Conclusion:** The Results are discussed with an emphasis on targeted intervention programmes.

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**The challenge of becoming parents**

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One of the most challenging events in romantic relationships is the transition to parenthood. The majority of parents experience the birth of their child as an event of joy, but at the same time they find parenthood can be stressful, with high demands in the role of a new parent. A large body of research documents a significant decline of couple relationship satisfaction across the transition to parenthood, with about 1/3 of the couples becoming clinically distressed by 18 months after birth. There is considerable variability around the mean decline in couple relationship satisfaction across the transition to parenthood. Additionally a reciprocal influence between sensitive, responsive parenting of an infant and the quality of the couple relationship has been found: chronic and intensive exposure to destructive parental conflicts increase the likelihood of ineffective parenting and children’s dysfunction such as health problems, higher psychological arousal and higher likelihood for anxiety disorders and depression. Variability in couples’ adjustment to parenthood and the association between parents’ relationship and their child’s health and development highlight the need to examine the risk and resilience factors associated with that differential adjustment. A sample of 210 couples who are expecting their first child are being recruited for a randomized controlled trial of the effects of the Couple Care and Coping Program (CCC-P) Switzerland. CCC-P is a synthesis of two evidence-based programs: Couple CARE for Parents and Couples Coping Enhancement Training. The interdisciplinary intervention is delivered by psychologists and midwives. CCC-P is being compared to two other conditions: a self-directed learning to adapt to parenthood watching a documentary and doing exercises, and treatment as usual (TAU).

This paper will report the innovative concept of the new program and its content as well as a brief description and aim of the study.
Specific levels of competence in the context of mental or physical health in partnerships
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The degree of relationship competence and coping strategies of both involved partners is important for the relationship satisfaction as well as the wellbeing of the partner. In the study the competences and patterns of competence and its influence on the wellbeing are investigated.
Both partners of the 111 surveyed healthy couples (age: M = 37 years, SD = 2.12; 48% married) completed an extensive questionnaire to specify the relationship-specific skills (including cohesion and problem solving). The data show an association between physical and psychological wellbeing as well as relationship satisfaction. Three distinct patterns of competences were identified based on attachment style, relationship climate, goal orientation, social integration and self-esteem. These patterns of competence significantly differ in relationship satisfaction and psychological wellbeing but not in physical wellbeing and gender. The results prove that not a single competence but different patterns of competence have an important influence on psychological wellbeing.

Characteristics and Treatment of People Who Attend the Emergency Department
Predictors of attendance at the Emergency Department in a population of patients with COPD
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Background: Approximately one quarter of patients with COPD suffer from depression. The aim of this study was to determine whether depression was a predictor of attendance at the Emergency Department in people with COPD.
Method: Before and after assessments, one year apart were conducted on a primary care population of patients with COPD at 6 general practices in Manchester. Patients completed the Hospital Anxiety and Depression Scale at baseline and data re ED attendances and hospital admissions were recorded from NHS electronic data systems.
Results: Out of 350 patients with COPD in the study who completed the HADS at baseline, 173 (18.2%) were cases of depression (a score of 8 or more on the HADS). Logistic regression showed a significant association between HADS depression score 8 or more and prospective A&E attendance (odds ratio=2.7, 95% CI 1.5,4.7, p=0.001) and prospective emergency admission (odds ratio=2.6, 95% CI 1.5,4.4, p=0.001), over the following 12 months, adjusting for age, gender, severity of COPD and previous use of unscheduled care.
Conclusion: Depression is a powerful independent predictor of both attendance at the emergency department and emergency hospital admission in patients with COPD.

Illness perceptions of people with chronic illnesses attending the emergency department are associated with suicidality risk independent of depressive and anxiety disorders
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Background: To assess the factors associated with suicidality risk in people with long-term conditions (LTCs) attending the emergency department.
Method: In a cross-sectional design, 349 patients with diabetes, COPD and rheumatic diseases seeking urgent care at our AED during an 18-monty period were interviewed with the MINI. We assessed the independent associations of MINI diagnosis of depressive and anxiety disorders and illness perceptions (B-IPQ) with the suicidality risk (Risk Assessment of Suicidality Scale) after adjusting for demographics, comorbidities, and previous history of depression in hierarchical multiple regression models.
Results: Eighty patients (22.9%) were considered suicidal, 95 (27.2%%) were diagnosed with Major Depressive Disorder and 46 (13.2%) with any Anxiety Disorders according to the MINI. Adverse beliefs about treatment control (p=0.05), history of depression (p=0.004), major depressive disorder (p<0.001) and any anxiety disorder
(p=0.001) were the significant independent correlates of suicidality risk.

**Conclusion:** A remarkable proportion of people with LTCs attending the emergency department present elevated suicidality risk, which is associated with adverse illness perceptions about treatment control, along with depressive and anxiety disorders. Apart from the early recognition of mental illness, clinicians should also pay attention to the patients' knowledge and beliefs about their physical illness to reduce suicidality risk.

**Psychological treatment for people who present to the emergency room following self-harm: psychodynamic-interpersonal therapy**

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**Background:** Over 150,000 people in England present to Emergency Departments each year following self harm. In Manchester, 1,300 people present to the main teaching hospital, Manchester Royal Infirmary. The aim of this presentation is to present two cases of successful treatment using psychodynamic interpersonal therapy.

**Method:** Each client had 4 sessions of therapy. Before and after scores on the CORE were completed. A clinical and reliable index of change was calculated.

**Results:** The main outcome on the CORE will be presented together with two case histories describing the treatment. The service was established 10 years ago following a successful randomised controlled trial. The presentation will also describe how the model was disseminated into clinical practice following completion of the trial.

**Conclusion:** PIT is a useful and effective treatment for self harm.

**Setting up a primary care clinic for people at risk of self-harm**

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**Background:** Self harm is a common presentation to the emergency department. Usually people only have access to self harm services in the UK if they have actually self harmed, as opposed to contemplated self harm or thought by their GP to be at immediate risk of self harm.

**Method:** The presentation will describe the setting up of clinic in primary care to prevent self harm. Two GP surgeries with very high rates of people who self harm were targeted for the intervention. Clinics were set up in both surgeries for self harmers or self harm contemplaters. The clinics ran for six months. Attendance rates at A&E for self harm were compared before and after and with GP practices without clinics.

**Results:** There was a fall of self harm presentations to A&E at the practices with self harm clinics, whereas the rates of presentation at other practices in a similar area of Manchester rose in the same time frame.

**Conclusion:** Further evaluation of this work is required but it shows promise regarding the potential reduction in presentations to A&E of self harm.

**Patients with Multiple Somatic Symptoms in China**

Dysfunctional illness perception and illness behaviour associated with high somatic symptom severity and low quality of life in general hospital outpatients in China


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**Background:** In primary care populations of Western countries, high somatic symptom severity (SSS) and low quality of life (QoL) are associated with adverse psychobehavioural characteristics. This study assessed the relationship between SSS, QoL and psychobehavioural characteristics in Chinese general hospital outpatients.

**Method:** This multicentre cross-sectional study enrolled 404 patients in 10 outpatient departments from Neurology, Gastroenterology, Traditional Chinese Medicine and Psychosomatic Medicine. A structured interview was used to assess the cognitive, affective and behavioral features. Standard instruments were used to assess SSS,
emotional distress and health-related QoL. Patients with low SSS (PHQ-15 < 10, SOM-) were compared to patients with high SSS (PHQ-15 ≥ 10, SOM+).

Results: As compared to SOM- patients, SOM+ patients showed more frequently adverse psychobehavioural characteristics in all questions of interview. In hierarchical linear regression analyses adjusted for anxiety, depression, gender and medical conditions, high SSS was associated with “catastrophising” and “illness vulnerability”; low physical QoL was associated with “avoidance of physical activities” and “disuse of body parts”; low mental QoL was associated with “need for immediate medical help”.

Conclusion: In Chinese outpatients, high SSS was associated with negative illness and self-perception, low physical QoL with avoidance behavior, low mental QoL with reassurance seeking.

Quality of doctor-patient relationship in patients with high somatic symptom severity in China

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Background: High somatic symptom severity (SSS) is associated with reduced health-related function and may affect doctor-patient interactions. This study aimed to explore the quality of doctor-patient relationship (DPR) and its association with SSS in outpatients of Chinese general hospitals.

Method: This multicenter cross-sectional study assessed the quality of DPR from both doctor’s and patient’s perspective within 484 outpatients in 10 departments of Biomedicine (BM), Traditional Chinese Medicine (TCM) and Psychosomatic Medicine (PM). SSS was assessed with PHQ-15, quality of the DPR was measured with CARE, PDRQ-9 and DDPQR-10. Psychosocial variables such as depression, anxiety and quality of life were used.

Results: From the doctor’s perspective, patients with High SSS were rated as significantly more difficult than patients with low SSS. Patients from TCM department rated the quality of their DPR higher than those in BM (p< 0.01) and were rated as less difficult than those in BM and PM (p< 0.01). Patients who felt more empathy from doctors had better relationships with doctors. Multiple regression analysis revealed satisfaction of treatment, time of treatment and psychosocial variables: age, health related anxiety, depression, mental quality of life, sense of coherence and SSS as predictors for DPR.

Conclusion: BM and PM departments could learn how to manage patients with high SSS and establish long-term relationships with their patients from TCM departments.

Connections between physical symptom severity, health anxieties, perception of the disease, emotional stress and quality of life in one sample of Chinese breast cancer patients

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Background: Physical symptoms in cancer patients could be an expression of a depressive disorder, an anxiety or a dysfunctional perception of the disease. This study assessed the differences between cancer patients with highly severe symptoms (SOM+) and patients with lesser severe symptoms (SOM-) with regard to perception of the illness, emotional stress, a sense of coherence and quality of life as well as predictors for highly severe physical symptoms.

Method: 255 Chinese breast cancer patients were investigated in light of their somatic severity of symptoms (Patient Health Questionnaire – PHQ-15), perception of the disease (Brief Illness Perception Questionnaire- B-IPQ), disease-related anxieties (Whiteley-7), emotional stresses (PHQ-9 and GAD-7), a sense of coherence (SOC-9) and quality of life (EORTC-30). The
affiliation to two groups (SOM-, PHQ < 10 vs. SOM+, PHQ >= 10) was predicted based on step-by-step binary-logistical regression.**

**Results:** The most frequent and most stressful symptoms were: fatigue, insomnia, and pain in arms and legs. Significant relationships were found between high physical symptom severity and psychological variables (PHQ-9, GAD-7, Whiteley-7, SOC-9 and B-IPQ) and the quality of life. The predictor variables for a high somatic symptom severity were depression (PHQ-9) and disease-related fears (Whiteley-7).

**Conclusion:** There are relationships between physical symptom severity and psychobehavioral variables in Chinese breast cancer patients.

**Comparison of the factorial structure of the PHQ-15 between Germany and China**

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**Background:** Generic measuring instruments such as the PHQ-15 are often only translated into another language without checking the factorial structure in the new application fields. The structure of the PHQ-15 used in China was not sufficiently compared with the factorial structure in Germany.

**Method:** The PHQ-15 was used to gather the somatic symptoms from a group of 491 Chinese study participants and a group of 2,517 German patients. The confirmatory factor analyses was used for the comparison between both groups and examination of the questionnaire for the Rasch scalability.

**Results:** Descriptive analyses showed significant differences in the total score of PHQ-15. The factorial structure of the instrument could be confirmed in both groups (Chinese sample: CFI = 0.954, TLI = 0.944; German sample: CFI = 0.929; TLI = 0.914). However, it was not possible to find an acceptable model across both groups. For further analyses to identify latent classes across both groups, items had to be excluded which could not be integrated into the Rasch model.

A 4-group model was found as best-fitting model. It showed also significant differences in distributions of relative frequencies in both samples.

**Conclusion:** There are differences in the factorial structure between a Chinese and a German sample. It must be assumed that if the PHQ-15 is used in different cultural groups, the items have different meanings. A direct comparison of the total value does not seem to be meaningful.

**ADHD in Adults and Psychosomatic Diseases**

The Psychoneuroendocrinology of Attention Deficit/Hyperactivity Disorder (ADHD): a theoretical frame for a better pathophysiological knowledge and the development of new treatment strategies

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**Background:** Attention Deficit/ Hyperactivity Disorder (ADHD) has a prevalence of 5-7% among children in primary school (Polanczyk et al. 2007), and it has long been recognized as a behavioural disorder compromising attention, organization, motivation-related dimensions, social functioning and impulse control in developmental age and adulthood.

**Method:** Some large, naturalistic longitudinal Magnetic Resonance Imaging (MRI) studies focusing on neurodevelopment in ADHD from childhood to adulthood have recently showed that some specific cortical and sub-cortical brain regions display an aberrant developmental trajectory in subjects with ADHD compared to age, sex and IQ-matched healthy controls (Philip Shaw et al. 2013; P Shaw et al. 2007; Philip Shaw et al. 2014). More specifically, the regions whose developmental processes are significantly altered in ADHD are the whole cingulate cortex, the dorso-lateral prefrontal cortex, the parietal cortex and the striatum, especially in its ventral part. This is consistent with the fact that the persistence of ADHD in adulthood is typically associated with clinical dimensions such as motivational deficits, proneness to addictive behaviours and inattention/disorganization. Furthermore, the aforementioned regions are embedded in brain...
functional loops that provide autonomic, cognitive and affective regulation while managing the rapid, multiple changes of the environment in a delicate balance between inhibition and disinhibition (Thayer and Brosschot 2005). If this is chronically disrupted, as in ADHD, an autonomic imbalance may emerge as the final common pathway linking psychosomatics and psychopathology. In fact, it is known that ADHD subjects display increased cortisol levels, which normalize with treatment paralleling clinical response (Scassellati et al. 2012).

**Conclusion:** These neural and endocrinological mechanisms needs to be specifically addressed in future studies as they may represent the basis for the somatic comorbidities of ADHD in adulthood. Furthermore, they may provide a model to better understand ADHD pathophysiology and develop new treatment strategies capable of breaking the “vicious cycle” created by the anomalous subject-environment interaction peculiar to this disorder.

**ADHD in C-L Services: the role of omega 3 beyond the EBM based prescription of methylphenidate/ atomoxetine**

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**Background:** Neuroimmunology impacts on the pathophysiology in neurodevelopment disorders including attention-deficit/hyperactivity disorder (ADHD), in psychiatric disturbances such as schizophrenia, depression, bipolar and somatoform disorders but also primarily in somatic chronic diseases like cardiovascular pathologies, obesity, psoriasis, rheumatoid arthritis or diabetes.

**Method:** One of the most responsible mechanism is the immediate and subsequently chronic activation of microglia and astrocytes by pro-inflammatory cytokines, IL 1, IL 6, TNF-α and IL 12 and by the anti-inflammatory cytokines IL 10 and IL1RA. Neurodegeneration (NO, Glutamat) on the one side and neuroprotection (Neurotrophins) on the other side are the origin but also the consequences. Methylphenidate (MPH) and atomoxetine (ATX) commonly used as ADHD therapeutic agents exhibit different neuroprotective mechanism by tyroxin hydrolase and BDNF increasing in different brain region not affecting pro-inflammatory activities; for example MPH, not ATX, can enhance cell proliferation and neuroblast differentiation in the subgranular zone of the dentate gyrus via increasing BDNF level. However, omega-3 (n-3) polyunsaturated fatty acids [PUFA e.g., eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA)] have anti-inflammatory properties by antagonizing n-6 PUFA (arachidonic acid)-induced pro-inflammatory prostaglandin E2 formation and by decreasing the nuclear factor-κB activation. This transcription factor is a potent inducer of pro-inflammatory cytokine production, including interleukin 6 and TNF-α, both of which are decreased by EPA and DHA.

**Conclusion:** Selective pharmacotherapy and omega 3 supplementation, last correctly prescribed in duration, at least for 3 months, and with daily dosages from 2 to 3 g, are a clinical relevant augmentation approach in C/L Services. Additionally exercise, which promotes brain plasticity through the increases of neurogenesis, neurotrophins levels, and synaptic plasticity, should be considered in the multimodal intervention required in complex symptomatology.

**ADHD in adults and eating disorders**

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**Background:** Attention-deficit/hyper activity disorder (ADHD) is a relevant psychiatric disorder with prevalence rates ranging from 5–10% in school-aged children and 4 - 7% in adults (Spencer et al. 2007). ADHD is characterized by a persistent pattern of inattention, hyperactivity/ impulsivity or both. Affected patients have difficulties focusing and sustaining attention, modulating activity level and controlling impulses and emotions. There is some evidence that the presence of adult ADHD is meaningfully associated with the presence of relatively severe cases of bulimia nervosa, binge-eating disorder and obesity, with prevalence rates up to 11.4% (Sobanski et al. 2007). There also some studies suggesting that ADHD symptoms in childhood significantly predicted the development of these EDs in adulthood (Nazar et al. 2008).
Method and Results: The mechanisms explaining the link between ADHD and EDs have not been fully explored yet, but there are several hypotheses in regard. For example, one theory states that the poor planning and difficulty monitoring one’s behavior manifestations of ADHD may lead to overeating, while another states that ADHD patients may be inattentive to internal signs of hunger and forget to eat when engaging in interesting activities leading to binge eating when less stimulated. An alternative explanation suggests that binge or over eating is a compensatory mechanism to help control frustration associated with attention and organizational difficulties (Bleck et al. 2014). There are several reports showing the effectiveness of stimulants, especially methylphenidate and methylamphetamine, for the treatment of patient with EDs and ADHD (Biedermann 2005).

Conclusion: The presence of comorbid ADHD in EDs patients may be clinically highly relevant for the treatment of EDs, especially: bulimia nervosa, binge-eating disorder and obesity. Therefore clinicians should be aware of this association and assess patients for both disorders. This might allow a more appropriate clinical management and, ultimately, a better quality of life for patients with ADHD and EDs.

ADHD in adults and the impact on suicidality in C-L psychiatry services
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Background: Suicidality, one of the most common causes of accesses to hospital emergency departments, represent a serious public health problem (Nock MK et al., 2013) and high health care costs (Stensland MD et al., 2010). Several studies suggest a high risk of suicide especially in affective disorders aggravated by preexisting impulsivity and emotional dysregulation. Both symptoms characterize ADHD in adults. Despite the prevalence rates of ADHD in adults ranges from 4 to 7% (Spencer et al. 2007), the core symptoms remain masked til 90% by various psychiatric disorders mainly affective diseases, anxiety and personality as well as addictive disorders and PTSD. Thus, the diagnosis of ADHD in the C/L Services must be assumed to be underestimated.

Method and Results: In an extensive Medline research including key words regarding ADHD in adults and C/L Psychiatry no publications from 1966-2014 were identified. Only 3 papers describing ADHD in children in a C/L setting are reported. On the other hands there are more than 93 papers of 1697 dealing with C/L Psychiatry and suicidality-suicidal behavior/self harm and 237 papers of 7348 dealing with ADHD in adults and suicidality/suicide/suicidal behavior/self harm. Some research would show that the rate of suicidal ideation is higher in this disorder than the general population.

Conclusion: Despite the lacking of specific clinical research in C/L regarding the role of ADHD in adults for suicidality/suicidal behavior/self harm it can be hypothesized, that the pool of symptoms of ADHD mainly the impulsivity plays an important role, especially at a young age. Impulsivity, associated with other externalizing behaviors, can increase attempted suicide risk and consequently complete suicides, especially in combination with other psychiatric comorbidities. There are some limitations to consider; nonetheless based on our own experiences it is recommended to take into account in C/L Services the presence of the masked ADHD in adults for its clinically highly relevance in analyzing the risks of suicide but also due to the impact of ADHD on the coexisting illness course.

Three Recent Cochrane Reviews of Interventions for Somatoform Disorders: Where Do We Stand and How to Increase the Body of Evidence?

Enhanced care by generalists for functional somatic symptoms and disorders in primary care, a Cochrane systematic review
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Background: Patients with medically unexplained or functional somatic symptoms are common in primary care. Previous reviews have reported benefit from specialised interventions, but there is a need for treatment models, which can be applied within the primary care setting. We aimed to assess the clinical effectiveness of enhanced care interventions for adults with functional somatic symptoms in primary care. The intervention should be delivered by professionals providing first contact care and be compared to treatment as usual. The review focused on patient outcomes only.

Method: We searched for studies in 10 databases up to September 2012. No language restrictions were applied. We selected randomised controlled trials (RCTs) in primary care in adults with functional somatic symptoms. Two authors independently screened identified study abstracts, extracted data and assessed risk of bias.

Results: We included seven studies with 233 general practitioners and 1787 participants. Methodological quality was moderate. Studies were heterogeneous with regard to selection of patient populations and intensity of interventions. Outcomes relating to physical or general health (physical symptoms, quality of life) showed substantial heterogeneity between studies (I² > 70%) and post hoc analysis suggested that benefit was confined to more intensive interventions; thus we did not calculate a pooled effect. Outcomes relating to mental health showed less heterogeneity and we conducted meta-analyses, which found non-significant overall effect sizes for changes at 6 to 24 months follow-up; mental health; illness worry; depression and anxiety. Effects on sick leave could not be estimated.

Conclusion: Current evidence does not answer the question whether enhanced care delivered by front line primary care professionals has an effect or not on the outcome of patients with functional somatic symptoms. Enhanced care may have an effect when delivered per protocol to well-defined groups of patients with functional disorders, but this needs further investigation. Attention should be paid to difficulties including limited consultation time, lack of skills, the need for a degree of diagnostic openness, and patient resistance towards psychosomatic attributions.

Non-pharmacological interventions for somatoform disorders and medically unexplained physical symptoms (MUPS) in adults, a Cochrane systematic review
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Background: The presence of medically unexplained physical symptoms (MUPS) is a key feature of somatoform disorders. We aimed to assess the effects of non-pharmacological interventions for somatoform disorders and MUPS in adults.

Method: We searched multiple databases, and included randomised controlled trials which involved adults diagnosed with a somatoform disorder or MUPS, who were assigned to a non-pharmacological intervention compared with usual care, waiting list controls, attention or psychological placebo, enhanced care, or another psychological or physical therapy intervention. Four review authors, working in pairs, extracted data and assessed risk of bias. Primary outcomes were severity of somatic symptoms and acceptability of treatment.

Results: We included 21 studies with 2658 randomised participants. All studies assessed some form of psychological therapy. We found no studies that included physical therapy. The number of sessions ranged from 1 to 13, over a period of 1 day to 9 months. Follow-up varied between 2 weeks and 24 months. Participants were recruited from various healthcare settings and the open population. Due to the nature of the intervention, lack of blinding resulted in a high risk of bias for most studies, 11 studies reported a loss to follow-up of more than 20%. For all studies comparing some form of psychological therapy with usual care or a waiting list, the psychological therapy resulted in less severe symptoms. Psychological therapies showed a 7% higher proportion of drop-outs during treatment. Five studies assessed symptom severity comparing some psychological therapy with
Pharmacological interventions for somatoform disorders in adults, a Cochrane systematic review

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Background: Somatoform disorders are characterised by chronic, medically unexplained physical symptoms (MUPS). We aimed to synthesise studies on pharmacological interventions for somatoform disorders in adults to improve optimal treatment decisions.

Method: We searched for studies in 10 databases up to January 2014. We selected RCTs of pharmacological interventions versus placebo, treatment as usual, another medication, or a combination of different medications for somatoform disorders in adults. One review author and one research assistant independently extracted data and assessed risk of bias. Primary outcomes included the severity of MUPS on a continuous measure, and acceptability of treatment.

Results: We included 26 RCTs, with 2159 participants. The duration of the studies ranged between two and 12 weeks. We found no significant difference between tricyclic antidepressants (TCAs) and placebo for severity of MUPS. For new-generation antidepressants (NGAs), there was very low-quality evidence showing they were effective in reducing the severity of MUPS. For natural products (NPs) there was low-quality evidence that they were effective in reducing the severity of MUPS. One meta-analysis showed no clear evidence of a difference between TCAs and NGAs for severity of MUPS. Finally, one meta-analysis comparing selective serotonin reuptake inhibitors (SSRIs) with a combination of SSRIs and antipsychotics showed low-quality evidence in favour of combined treatment for severity of MUPS. The risk of bias was high in many domains across studies.

Conclusion: The current review found very low-quality evidence for NGAs and low-quality evidence for NPs being effective in treating somatoform symptoms in adults when compared with placebo. We found serious shortcomings such as the high risk of bias, strong heterogeneity in the data, small sample sizes and a short follow-up. Furthermore, the significant effects of antidepressant treatment have to be balanced against the relatively high rates of adverse effects. Future high-quality research should be carried out to determine the effectiveness of medications other than antidepressants, to compare antidepressants more thoroughly, and to follow-up participants over longer periods.

Interventions for somatoform disorders: how to increase the body of evidence?
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Background: Three recently published Cochrane systematic reviews, presented in the first three sessions of this symposium, provide a comprehensive overview of the randomised controlled trials that have addressed interventions for somatoform disorders and MUPS. In the final session of the symposium
we aim to discuss the priorities for future research, given the accumulated evidence.

**Method**: Strengths and limitations of the studies that have been performed so far were extracted from each of the three Cochrane reviews. We also made an inventory of the recommendations for future research.

**Results**: This last part of the symposium will be devoted to discussing the way ahead:
- Which interventions should be investigated for the treatment of somatoform disorders?
- Which patient groups should we include: can we agree on uniform inclusion criteria?
- Which pitfalls in the design of previous studies should we avoid?
- Can we agree on preferred outcome measures?
- Can we work together when designing new studies?

**Neuropsychiatry**

**Acute brain failure: Pathophysiology, prevention, and treatment of delirium**

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Delirium is a neurobehavioral syndrome caused by the transient disruption of normal neuronal activity due to disturbances of systemic physiology. It is also the most common psychiatric syndrome found in the general hospital setting; causing widespread adverse impact to medically ill patients. Studies have demonstrated that the occurrence of delirium is associated a number of short and long-term problems: Short-term, patients suffering from delirium are at risk of injuring themselves (e.g., falls, accidental extubation) and of accidentally injuring their caregivers due to agitation and paranoia. Long-term, delirium has been associated with increased hospital-acquired complications (e.g., decubitus ulcers, aspiration pneumonia), a slower rate of physical recovery, prolonged hospital stays, and increased placement in specialized intermediate and long term care facilities. Furthermore, delirium is associated with poor functional and cognitive recovery, and decreased quality of life. This talk will review delirium’s clinical presentation and characteristics, and summarize behavioral and pharmacological techniques associated with successful prevention and treatment techniques.

**Neuroinflammation & delirium: blood transfusions as triggers of delirium**

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**Background**: Blood transfusions are associated with increased mortality, hospital stay, and hospital cost. Similarly, Transfusions are associated with an increased risk of delirium during the perioperative period. Delirium is an acute confusional state associated with increased health care costs, mortality, and long-term cognitive decline. We studied whether blood transfusions may be an independent risk factor for the development of delirium.

**Method**: This project aims to determine whether donor age influences the deliriogenicity of blood products by examining 4133 patients who received transfusions between 2011-2013 at the Stanford University Medical Center identified from the clinical data repository. Donor demographics were obtained from the Stanford Blood Center. Logistic regression with covariates of donor age and number of transfusions was performed using R statistical software.

**Results**: From the original sample (n = 4133) we identified 400 subjects who subsequently developed delirium (9.68%). About half of those patients had received a blood transfusion. Transfusions characteristics: The number of transfusions correlates positively with an increased diagnosis of delirium and use of restraints; FFP and cryoprecipitate, the components containing modulators of inflammation, were associated with an increased incidence of delirium. Recipient characteristics: contrary to previous studies, older patients were less likely to be diagnosed with delirium; although along with previous Results male gender is associated with an increased incidence of delirium. Donor characteristics: The age and gender of the donor did not reach significance. However there was a trend towards female blood being deliriogenic. Central American donor blood was associated with a decreased use of restraints; African, Asian, Indian/Middle Eastern donor blood, other race donor blood, and multiple race donor blood, as compared to Caucasian, were associated with an increased risk of delirium and restraints; O(-) blood was associated with fewer diagnoses of delirium & orders for restraints; Older donor blood was more likely to lead to infection and mortality.
**Conclusion:** We conclude that older blood product donor age is associated with an increased risk of delirium following transfusion. Logistic regression analysis revealed that there is a significant correlation between donor age and the incidence of delirium (range 0-3%).

**Emotional processing in Parkinson patients: an fMRI study**
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**Background:** In addition to disturbances in mood and motivation, research suggests that patients with Parkinson’s disease (PD) may also encounter difficulties in emotional processing. Emotional processing refers to the conscious and unconscious process of recognising, experiencing and expressing emotions. This study aims at assessing emotional processing and its neurological correlates in patients with PD.

**Method:** Patients with idiopathic PD under dopamine replacement therapy (n=19; 13 male; average age 60.2 years; average UPDRS part III 23.8 SD 8.6) and matched healthy control subjects (n=19; 13 male, average age 60.8 years) were studied with event-related functional magnetic resonance imaging (fMRI) during an emotional processing task. Subjects passively viewed positive, negative and neutral pictures from the International Affective Picture System (IAPS) during fMRI scanning. Subjective ratings of valence and arousal levels of the same picture set were obtained outside the scanner.

**Results:** Parkinson patients and control subjects showed clear within-group differences in valence and arousal ratings, but no between-group differences. Comparing within-group differences of functional emotional reactivity, PD patients showed more activation of frontal structures (i.e., the dorsomedial prefrontal cortex and orbitofrontal cortex) and hippocampus, while healthy control subjects showed more activity of the thalamus and brainstem for highly arousing positive or negative pictures. In between-group comparisons, PD patients show less activation of the putamen, and more activation in the frontal structures than control subjects. All results remained significant after correction for apathy, depression and anxiety. Regression analyses showed that activity in putamen and frontal areas were both not influenced by disease related factors such as the use of levodopa, disease duration, and severity of motor symptoms.

**Conclusion:** Although PD patients did not exhibit clinical differences in recognizing and experiencing positive or negative emotions compared to control subjects, there were clear differences in the level of functional activation of the putamen and frontal cortex. We hypothesize that the reduced activity of the putamen may be directly related to the pathophysiology of PD, while the increased frontal cortex activity may be compensatory to this reduced activation of the putamen.

**Recognition of facial expression of emotion in patients with personality disorders: „Everywhere anger?“**
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**Background:** Emotions and their regulation are the main therapeutic topic in the treatment of personality disorders

**Method:** A sample of 49 patients (21 female, 28 male) with DSM/ICD Diagnoses personality disorder (cluster A n = 17, cluster B n = 28) were compared with a non-clinical sample (n = 73) according to their ability to identity facial expressions of emotions with the Comprehensive Affect Testing System (CATS).

**Results:** Cluster A and B patients show highly significant less ability to
− Identity emotion (control 4.9, cluster A 1.6, cluster B 2.4)
− Name emotion (control 5.1, cluster A 2.6, cluster B 2.6) and less ability in all other investigated subtests. The main emotional misinterpretation was anger, e.g. if sad faces were presented in cluster A 53% and cluster B 39% named anger as emotion! This happens in all investigated emotions (surprise, neutral, happy, anxious, disgust).

**Conclusion:** Anger is a major treatment problem in personality disorders. Treatments have to focus on the function of emotion discrimination and naming to enable affect regulation.
Research on Attachment

Can unresolved attachment status after bereavement or separation be predicted from emotional awareness and heart rate variability?
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**Background:** Unresolved attachment status as assessed in the Adult Attachment Interview (AAI) has been found to predict infant attachment disorganisation, but little is known about the predictors of Unresolved loss following the experience of loss in adults. We assume that mentalization, and affect regulation jointly predict Unresolved loss. The aim of this study is a) to reveal associations between mentalization in terms of emotional awareness and physiological indicators of affect regulation in terms of heart rate variability (HRV) in bereavement and separation, and b) investigate the contributions of mentalization and HRV to presence vs. absence of Unresolved status in the AAI.

**Method:** In wave 1, 114 adults aged between 25 and 57, who experienced loss through bereavement and/or separation up to 3 years previously, were administered the Levels of Emotional Awareness Scale (LEAS; Lane et al., 1990). HRV (PNN50, RMSSD, and SDNN) was assessed during a laboratory session involving baseline conditions (e.g. resting state) and films eliciting sadness and anxiety. One year later, the AAI (Main & Goldwyn, 1985/2002) is being administered.

**Results & Conclusion:** Only HRV data below 5% artefact ratio were used (n = 84; 23 male). 72 participants had lost a close friend or relative through death (11 of them in addition to separation), 12 participants had experienced separation and/or divorce from an intimate partner. Participants with high LEAS scores demonstrated higher PNN50 (F = 15.14), RMSSD (F = 16.05), and SDNN (F = 9.18) than those with low LEAS scores (all ps <.05), thus confirming the affect regulatory function of emotional awareness (Subic-Wrana et al., 2011). An interaction, (F = 2.91; p < .05) between type of loss and laboratory condition revealed higher SDNN during resting state in the “separated only” group than in the group who had experienced bereavement, suggesting that bereavement weakens baseline HRV more than does separation. Another interaction, i.e. between LEAS competence and type of loss, showed that it was the “separation only” group that accounted for the differences in HRV depending on LEAS competence. It can be concluded that, in newly separated individuals, strengthening mentalization in terms of emotional awareness may help protect HRV regulatory function. AAI administration and coding are under way, and will reveal in how far emotional awareness and HRV predict attachment status in bereaved and separated individuals.

Does unresolved attachment predict functional cognitive impairments after the activation of attachment related anxiety?
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**Background:** Insecure and secure attachment styles can be regarded as structured ways to handle attachment related anxiety. From this point of view, an unresolved attachment status hints at deficits in a structured regulation of attachment related anxiety and may lead to overwhelming anxiety, reflected in symptom formation and functional deficits in central ego functions, e.g. in cognitive functioning. In order to explore this question, we measured the cognitive functioning in a baseline condition and after the experimental evocation of attachment related anxiety in 40 patients after intake for a psychotherapeutic treatment program and in 20 healthy volunteers.

**Method:** Patients and healthy volunteers were administered a block-tapping task and a numbers recollection task (from the Wechsler Adult Intelligence Scale WAIS) after a structured clinical interview (SKID) as baseline condition and one week later after the experimental evocation of attachment related anxiety. Anxiety was evoked with the Adult Attachment Projective (AAP), an established attachment measure that presents 7 pictures depicting attachment dangers (e.g. separation, illness and death of loved ones); the attachment status was also assessed with the AAI. Data were analysed in regard to the question, if a history of childhood traumatization (measured with the Childhood Trauma Questionnaire, CTQ), emotion-related mentalizing (measured with the Levels of Emotional Awareness Scale, LEAS) as well as childhood trauma and/or an unresolved
attachment status predict impairments in cognitive functioning in the experimental condition.

Results & Conclusion: Unresolved attachment status and a history of childhood traumatization together predicted a decrease in cognitive functioning after the evocation of attachment related anxiety; an unresolved attachment status alone had no impact on the cognitive functioning in the experimental condition. We will discuss our findings in regard of the question if the unresolved attachment status needs sub-categories in order to become a meaningful clinical category.

Contributions of patient and psychotherapist attachment status to treatment outcome, and the role of the patient’s openness
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Background & Method: The predictive value of the therapist’s own attachment representation (Adult Attachment Interview, AAI) and the patient’s attachment relationship to the therapist (client’s attachment to the therapist, CATS) on therapy outcome (SCL-90) was evaluated. The attachment representations of N = 22 psychotherapists who treated N = 429 patients were assessed. Stepwise logistic regressions were calculated to investigate the influence of each predictor individually.

Results: The therapist’s as well as the patient’s attachment representation were both individually a significant predictor of therapy outcome. The analysis revealed a strong redundancy effect between the secure and the avoidant-fearful scale of the CATS. The two scales of the CATS might measure two poles of a similar scale with the negative pole as the – in this case – better predictor of the therapy outcome. In addition, a suppressor effect could be shown of the attachment avoidance on the effect of the therapists’ attachment on to the therapist outcome. Depending on how much the patient opens up, the therapists’ attachment status shows a positive influence.

Conclusion: Therefore, the interaction and matching of both attachment experiences might be responsible for therapy outcome. Since in this study the group of therapists was small and the variables were dependent variables, further research has to be conducted to solidify the results.

The relevance of attachment status in various stressful conditions for cognitive functioning, resolution of loss and separation, and psychotherapy outcome: Discussion
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This contribution will provide a Conclusion of the three papers 1) Can Unresolved attachment status after bereavement or separation be predicted from emotional awareness and heart rate variability? 2) Does unresolved attachment predict functional cognitive impairments after the activation of attachment related anxiety? and 3) Contributions of patient and psychotherapist attachment status to treatment outcome, and the role of the patient’s openness. The Results from these studies will be discussed in light of the relevance of a secure therapeutic relationship that allows exploration of past experiences and current difficulties. This is required to help patients move towards more secure and organised working models of attachment which will enable them to better deal with interpersonal and achievement-related challenges as well as critical life events.

Psychosomatic Medicine in Japan and South Korea

New advances in psycho-rheumatology and organ transplant psychiatry in Japan
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Two topics from recent work in psychosomatic medicine in Japan are discussed: (1) psycho-rheumatology and (2) organ transplant psychiatry. (1) Rheumatologic diseases, especially systemic lupus erythematosus (SLE), are associated with a high incidence of psychiatric manifestations. However, it is not known whether this association is a direct consequence of active SLE, an indirect epiphenomenon associated with the disease or its therapy, or an effect unrelated to SLE. In particular, distinguishing corticosteroid-induced psychiatric disorder from NPSLE is so difficult that clinicians are often faced with a
therapeutic decision-making dilemma. The presenter summarizes new Results from recent studies in Japan. Unlike in the West, 90% of kidneys and livers transplanted in Japan are from living donors, primarily family members. Following the first case of organ trade in 2006, the Japan Society for Transplantation modified their ethical guidelines to specify that the voluntary intent of living donor candidates should be confirmed by a third party, such as a psychiatrist. In 2012, the Committee on Organ Transplant Psychiatry of the Japanese Society of General Hospital Psychiatry developed guidelines for confirming the decision making involved in living organ donation. The presenter reviews recent calls from the field of organ transplant medicine for psychosomatic medicine in Japan to include medical ethics consultations.

Distressed personality without a partner enhances the risk of depression in patients with coronary heart disease.

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**Background:** Cultural differences in the combined effects of Type D personality and other mediating factors in the Asian population have not been reported. We examined the influence of the Type D personality in relation to the presence of a partner by measuring symptoms of anxiety and depression, quality of life, self-perception of health status in coronary heart disease (CHD) patients and normal controls.

**Method:** Normal controls (n = 541) and patients with CHD (n = 110) were included. All participants completed self-report measures on Type D personality, questionnaires on socio-demographic factors, the Spielberger State and Trait Anxiety Inventory-State (STAI-S), and the Center for Epidemiologic Studies Depression Scale (CES-D). By stratifying participant group, personality type, and partner status, eight groups were constructed.

**Results:** The subjects with Type D personality showed higher mean scores on the STAI-S and CES-D as well as perception of their health. In cases of depression, CHD patients with Type D personality and without partner showed about a 50-fold increase in odds ratio when compared with non-Type D normal controls with partners. Odds ratio for depression changed from 31.44 to 48.72 in CHD patients with Type D personality based on the existence of a partner.

**Conclusion:** Having a partner significantly predicted the risk of depression. It is important to identify social support systems in CHD patients with Type D personality.

Preventive effects of ramelteon on delirium

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**Background:** No highly effective interventions to prevent delirium have been identified. We examined whether ramelteon, a melatonin agonist, is effective for the prevention of delirium.

**Method:** We performed a multi-center, rater-blinded, randomized placebo-controlled clinical trial in intensive care units and regular acute wards in four university hospitals and one general hospital. Eligible patients were 65-89 years old, newly admitted due to emergency, and able to take medicine orally. Sixty-seven patients were randomly assigned using the sealed envelope Method to receive ramelteon (8 mg/day; n=33) and placebo (n=34) every night for 7 days. Main Outcome Measure was incidence of delirium as determined by the DSM-IV-TR.

**Results:** Ramelteon was associated with lower risk of delirium (3% vs. 32%, P=.003), with a relative risk of 0.09 (95% confidence interval (CI), 0.01-0.69). Kaplan-Meier estimates of time to development of delirium were 6.94 days (95%CI, 6.82-7.06 days) for ramelteon and 5.74 days (5.05-6.42 days) for placebo. Comparison by log-rank test showed that the frequency of developing delirium was significantly lower in patients taking ramelteon than in those taking placebo ($\chi^2=9.83$, P=.002).

**Conclusion:** Ramelteon administered nightly to elderly patients admitted for acute care may provide protection against delirium. This finding supports a possible pathogenic role of melatonin neurotransmission in delirium.
Characteristics of patients with mental problems and the care by medical staff in a general hospital emergency room in Japan
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Background: Many patients who have behavioral problems visit emergency rooms (ERs). In order to create an effective intervention program for such patients, we investigated the characteristics of the patients who visited an emergency room and the care provided there.

Method: Physical and psychiatric problems of the patients who visited the ER and the care provided by medical staff were investigated in National Hospital Organization Kumamoto Medical Center in 2013 and 2014.

Results: A total of 1981 patients with psychiatric or behavioral problems visited the ER during the study period. The frequent psychiatric problems were dementia (21%) and suicide attempts (9.4%). Among the patients who visited the ER after a suicide attempt (n=518), only 40% of them were evaluated by the ER care providers for their psychosocial Backgrounds and risks for future re-attempts.

Conclusion: In the emergency care settings, there are significant numbers of psychiatric patients and suicidal patients. The staff in the emergency departments may hold negative or ambivalent attitudes toward these patients. From 2013, the Japanese Society for Emergency Medicine, General Hospital Psychiatry and Emergency Psychiatry, started providing a training workshop for emergency department personnel, which is called the “PEEC (Psychiatry Evaluation in Emergency Care)” program. In this program, clinical skills for addressing diverse behavioral problems which can be seen in ERs are taught. We will present the detail.

Longitudinal Symptomatology of Depression and Anxiety in Chronic Conditions

One-off screen predicts future symptoms of depression and anxiety in Coronary Heart Disease
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Background: There is a lack of evidence among longitudinal analysis than can accurately assess just how persistent symptoms of depression and anxiety are in the course of CHD, and whether an initial screen for these symptoms can predict this persistence. Currently, there is controversy surrounding the alleged benefits of screening for depression. We report on a longitudinal, multi-wave analysis of a primary care cohort of CHD patients, with the aim of determining the differences of reporting positive symptoms of depression and anxiety amongst people with a baseline positive and negative screen.

Method: The population used for this study is the cohort conducted by the UPBEAT UK research programme, consisting of 803 patients on CHD registers in general practices throughout South London. Baseline measures using the Hospital Anxiety and Depression Scale (HADS) for depression and anxiety where then repeated at 6, 12, 18, 24, 30, and 36 months. Using a multi-level, mixed effects model, we determined the positive and negative predictive values (PPV and NPV) for baseline screen of depression and anxiety symptoms using a cutoff of 13 on the HADS-total, and also determined the PPV and NPV for two consecutive screens (baseline + 6 months).

Results: Patients who had increased anxiety and depression at baseline (cutoff of 8 on HADS-D, HADS-A) continued to have high scores on the HADS in 61.2 and 59.7% of time points, respectively. Among patients who had low scores at baseline the values were 9.7 and 9.3%. The PPV of a baseline screen for symptoms of distress (HADS-total) was 67.8%, and the NPV was 95.7%. When measuring both baseline and 6-month positive screens for HADS-total, the PPV rose to 86.7%, whilst the NPV dropped to 79.5%.

Conclusion: There is a large difference of the continuing reporting of symptoms between patients with scores above and below the cutoff on the HADS at baseline. Results suggest
that a single, one-off screen can be used both to identify and follow-up at-risk patients who screen positive, and to remove from follow-up those patients who screen negative. Two consecutive positive screens further suggest the strong predictive value of this measure. We believe these results show that screening for depression and anxiety symptoms in CHD population is a valid and necessary measure to identify patients at risk for the detrimental outcomes associated with this comorbidity.

**The impact of baseline and persistent symptoms of depression and anxiety on long-term physical health outcomes and response to treatment in rheumatoid arthritis**

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**Background:** Mental disorders are highly prevalent in rheumatoid arthritis (RA) and are associated with poorer physical health outcomes in cross sectional studies. The aim of this analysis is to examine the longitudinal impact of symptoms of depression/anxiety on treatment response and long-term physical health in rheumatoid arthritis.

**Method:** Secondary analysis of clinical trial data was performed. Data were collected at baseline and at 6-monthly intervals for 2 years. The EuroQol (EQ-5D) identified depression/anxiety symptom severity. Our primary outcomes of interest were 1) disease activity (DAS-28) and its components: tender and swollen joint counts, patient global assessment and erythrocyte sedimentation rate (ESR); and 2) physical disability measured via the Health Assessment Questionnaire (HAQ). Secondary outcomes were assessor global assessment (AGA), Larsen score, pain levels, and odds of reaching clinical remission. Multi-level models assessed the impact of baseline and persistent depression/anxiety on outcomes over 2-years.

**Results:** Data from 379 patients were included. After adjusting for covariates, baseline depression/anxiety symptoms were associated with increased tender joint counts (TJC) and DAS-28 outcomes. Persistent depression/anxiety symptoms significantly predicted increased DAS-28, HAQ, TJC, patient and assessor global assessment, pain, reduced Larsen scores, and reduced odds of reaching clinical remission at 2-years. Patients with symptoms of depression/anxiety at baseline had a reduced treatment effect of prednisolone on HAQ by almost a half, in comparison to patients with no symptoms of depression/anxiety at baseline.

**Conclusion:** Baseline and persistent symptoms of depression/anxiety predict several objectively- and subjectively-measured physical health outcomes over time, as well as substantially reducing prednisolone treatment response. We suggest that mental health should be routinely measured both in clinical practice and in research, and managed alongside rheumatological disease to optimise health outcomes. Further research is required to examine whether treatment of mental disorders can improve rheumatological outcomes.

**Analysing the longitudinal course of depression - a comparison of different methods**

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When analysing individual trajectories of depression across time, the fact that repeated observations of individuals are not independent (i.e. correlated) should be taken into account. Several techniques to do this are available, such as mixed models, MM and latent growth models, LGM. These models can also elegantly incorporate different stages of the course of the disease in the modelling process. MM do so by the inclusion of a ‘time’ variable denoting each stage in the model and LGM can be conducted in a piecewise manner, where each ‘piece’ represents a timepoint. Moreover, both techniques can further be extended to allow for possible heterogeneity in health trajectory (shape), but do so in different ways. MM can include random slopes to account for heterogeneity in growth; LGM can be extended into latent class growth models to allow for the possible revelation of subgroups of individuals determined by the data with distinct trajectories across time.
Distinct developmental trajectories of late life depression: their predictors, patterns, and association with health related outcomes
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Background: The impact of depression on ageing populations is significant, and when associated with comorbid physical conditions it is even greater, affecting the prognosis and disease outcomes, service use, and health-related quality of life. This impact varies across time, and there is a lack of information regarding the trajectories of symptoms of depression amongst these patients. This study is a secondary analysis of data from the West Friesland Study, aiming to use latent class analysis to determine the trajectories of depression in this population, associating these trajectories with baseline predictors, costs, and healthcare outcomes.

Method: The West Friesland Study is a primary care cohort study analyzing depression in later life (>55 years), with baseline measures and 6 month follow-ups over 3 years. Depression was measured using the Montgomery Asberg depression rating scale (range 0-60), with a higher score indicating more severe depression. The dataset comprises 388 patients with either depression (n=234) or depressive symptoms (n=154) at baseline. 85% of the cohort has at least one comorbid medical condition, including heart disease, diabetes, respiratory problems, etc.), with 215 patients having more than one comorbidity. Using this longitudinal and repeated measures data, latent class analysis will determine distinct trajectories of depression symptomatology amongst this cohort, and these latent classes will be used to identify predictors of class membership, as well as the association of these trajectories to costs and health-related outcomes.

Results are ongoing, and will be presented at the conference.

Behavioural Medicine in the Psychosomatic Context

Burnout syndrome, coping strategies and risk behaviour in physicians working with terminal patients
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Background: Burnout has been of longstanding interest for researchers in the field of Medical Psychology, as it can lead to high costs for the individual (i.e. mental ill-health), but also for society (e.g. absenteeism, decrease of work efficiency, deterioration of interpersonal relationships). In general burnout occurs as a result of individual characteristics and an unfavourable work environment. Physicians are among the professional categories that are most commonly exposed, as they often cumulate both categories of risk factors.

Method: Our study targeted Romanian physicians working with terminal cases and consisted in a comparative assessment of their incidence of burnout, on one hand, and their use of dysfunctional coping strategies and risk behaviours, on the other hand. A total of 97 physicians (34 working on a regular basis with terminally ill adults, 32 with terminally ill children and 31 controls) participated in the study. Included specialties for the study participants were Neurosurgery, Cardiology and Oncology. They were assessed using the COPE questionnaire, the Maslach Burnout Inventory and a questionnaire assessing risk behaviours, such as smoking, alcohol consumption and inappropriate diet. Unpaired Student’s t test and one-way analysis of variance (ANOVA) were applied to evaluate the associations between coping strategies, demographic variables, risk behaviours and burnout scores.

Results: Physicians working with terminal cases showed a much more substantial use of emotion-centred strategies, such as positive reinterpretation, mental and behavioural disengagement, focus on emotions, denial and religious coping (p < .05). Denial, mental disengagement and religious coping were especially prevalent in physicians dealing with children with terminal diseases, compared to the other two groups (p < .05). Risky behaviours were more prevalent in physicians dealing with terminally ill adults compared to
controls. Burnout scores were higher in both groups of physicians dealing with terminal patients, compared to the control group.

**Conclusion:** These Results suggest inefficient skills in Romanian physicians working with terminal patients in dealing with challenges brought on by daily professional stress. This result indicates the need for supplementary actions (including education and active screening for burnout, and psychotherapeutic assistance) to ensure better quality of life and work performance for these specialists.

**Psychobiological Mechanisms underlying the Effects of Couple Interactions on Health**

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**Background:** Social integration, such as being embedded in a close social network and interactions with friends and family, has a substantial influence on individual health and longevity. Individuals in content close relationships live longer and happier lives, and are less likely to have chronic psychological or physical illnesses than those who are alone. With regard to mortality, effects of social integration are equal to or even exceed those of well-established lifestyle factors such as smoking cessation, doing sports, and alcohol reduction. Thus, social relationships can be seen as central predictors of quality of life, health and even longevity.

**Method and Results:** This presentation will give an overview on recent research about the association between couple interactions and health-related outcomes. Couple relationships, as the predominant type of social relationships for adult humans, show specific effects on individual health. Virtually every adult, indicate that they have lived in a committed couple relationship at least once in their lives. Consequently, the identification of relevant psychological and biological mechanisms underlying the effects of couple relationships on health is one of the most compelling research topics in behavioural medicine and public health in general.

**Conclusion:** The Results are discussed with an emphasis on targeted intervention programmes.

**System barriers and women’s beliefs on cervical cancer screening in Romania & Bulgaria**

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**Background:** Although cervical cancer prevention has been quite effective during the last decades, this cancer form continues to pose a serious health threat for women. Incidence and mortality by cervical cancer have been shown to decrease in western European countries; however, stable or rising rates were reported in Eastern European countries where screening activity is either lacking or still suffering from low quality implementation.

**Method:** The present study aimed at exploring the interplay of different levels of predictors of PAP smear intention and behaviour and to compare these in Romania and Bulgaria. A national representative sample of women aged 26 to 65 was selected in Romania (N= 1053, mean age 40.95) and Bulgaria (N= 1099, mean age 49.2) to answer a structured questionnaire assessing cognitive variables (i.e. attitudes towards taking the smear test, descriptive and injunctive social norms, self-efficacy and perceived behavioural control) and systemic barriers related to accessing the health system and provider-patient communication. In addition, knowledge about the smear test and demographic factors (i.e. age, education, marital status, financial situation) were assessed. Hierarchical linear regression was conducted to identify the best predictors of intention for screening in the two countries.

**Results:** Results suggest that predictors of intention differ in the two countries. Intentions for taking the smear test were mainly predicted by attitudes and injunctive barriers in both countries. Nevertheless, in Romania, perceived control and system barriers represented significant predictors of women’s intention to take the test, while in Bulgaria descriptive norms played an important part. Similar predictors of behaviour were found for both countries, namely that systemic barriers play an important role for screening.

**Conclusion:** Based on these Results, implications for practice are recommended.
The role of behavioural sciences and psychosomatic medicine in sleep health
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Background: Although Sleep Medicine is a relatively new medical discipline, already a wide range of epidemiological and clinical data have convincingly demonstrated the relevance of sleep health to both physical and mental health. We propose to consider sleep as a “bridge” in the interplay between physical and mental health.

Method and Results: On the one hand, medical disorders and their associated symptoms experienced at night (such as pain, pruritus, nycturia, etc.) have a profound impact on sleep quality and quantity and may contribute to the onset or worsening of sleep disorders. On the other hand, sleep disruption or sleep disorders affect physical-somatic symptoms or contribute to worse clinical outcomes. Examples for this bidirectional relationship are the links between sleep disordered breathing and insomnia, circadian problems and cardiovascular diseases and metabolic disorders. A third type of connection between sleep health and physical or mental health could be a potentially common pathophysiological mechanism (e.g., inflammation) underlying or contributing to both medical and sleep disorders. The relationship between disrupted sleep and mental health disorders (mood disorders, anxiety, schizophrenia, addiction) has been acknowledged for a long time. More and more attention is also given to the fact that sleep disruption can be a precursor of mental health problems, e.g., insomnia preceding and potentially leading to depression.

Conclusion: Behavioural sciences and psychosomatic medicine can contribute to a comprehensive and integrative understanding of sleep health, and also to the development and implementation of effective sleep health-promoting interventions (including sleep hygiene and cognitive-behavioural therapy based interventions) both on individual and population levels. Focusing on sleep health with a positive approach (such as wellness, well-being, emotional health, performance) rather than using a disease/illness focused approach could be particularly relevant and helpful. In this talk, we will review the most important aspects of sleep health and how the behavioural sciences and psychosomatic medicine can contribute to sleep medicine.

Somatic Symptom Disorders: Management & Treatment

Somatic symptom profiles in the general population: A latent class analysis in a Danish population-based health survey
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Background: Somatic symptoms, i.e. uncomfortable or distressing bodily sensations experienced by a person, are common in the general population. Around 30% of somatic symptoms can however not be explained by well-defined disease. Multiple symptoms are associated with poorer health status and more health care use. To enable better research within prevention and treatment of multiple somatic symptoms, the aim of this study was to identify and describe groups of people with similar somatic symptom patterns defined as somatic symptom profiles.

Method: Information on 20 self-reported common somatic symptoms was achieved from a population-based questionnaire survey of 36,163 randomly selected adults in the Capital Region of Denmark in 2006-7 (55.4% women). The participants stated whether they had been considerably bothered by the symptoms within 14 days. We used latent class analysis to identify somatic symptom profiles in men and women separately including age as a co-factor. The impact of the symptom profiles will be explored by relating the profiles with self-perceived health, and socio-demographic information will be used to characterise the symptom profiles. To validate the symptom profiles, the analyses will be re-conducted in another Danish population-based cohort of 21,708 persons with information on the same symptoms.

Results: 39% of the participants had been considerably bothered by at least 1 somatic symptom within 14 days, while 13% had been considerably bothered by 3 or more symptoms. The most common symptoms were
musculoskeletal pain and tiredness. The preliminary Results from the latent class analyses showed several different somatic symptom profiles described by number and type of somatic symptoms. The majority of the population had a profile characterised by no considerably bothering symptoms, while a minor group of around 2% had a high number of bothering somatic symptoms from different body parts. The remaining profiles were more likely to be defined by specific symptoms.

**Conclusion:** The preliminary analyses identified a somatic symptom profile defined by multiple symptoms and several profiles defined by specific symptoms. The profiles can be used in further symptom research, but their relation to well-defined diseases, functional somatic syndromes and the concept of bodily distress should be explored. Still, this large population-based study may contribute to the understanding and delimitation of syndromes of bodily distress.

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**Evaluation of a stepped, collaborative and coordinated health care network for somatoform and functional disorders (Sofu-Net)**

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**Background:** The successful management of somatoform and functional disorders in primary care is often limited due to low diagnostic accuracy, delayed referral to psychotherapy, and unstructured overuse of health care. This study aims to analyse whether establishing a stepped, collaborative and coordinated health care network for somatoform and functional disorders improves the diagnostic process, treatment recommendations, and reduces health care utilisation.

**Method:** A regional network (Sofu-Net) was established to connect 41 primary care physicians (PCP), 35 psychotherapists, 7 mental health clinics, and a specialized outpatient clinic. The network was evaluated in a pre- and 12-months-post-intervention study through the identification of primary care patients at high-risk for somatization using the Patient Health Questionnaire, and subsequent detailed assessment via a telephone interview and a PCP questionnaire.

**Results:** Out of the pre (n=1882, 51 years, 60.7% female) and 12-months-post Sofu-Net samples (n=2200, 50.5 years, 59.4% female), 267 (16.2%) and 269 (15.3%) patients were at high-risk for somatization respectively. From these, 156 and 123 patients were interviewed. Twelve months after Sofu-Net establishment, high-risk patients more frequently discussed psychosocial distress with their PCP (63.3% vs 79.2%, p<.001). PCPs prescribed more antidepressants (3.8% vs. 25.2%, p<.001) and less benzodiazepines (21.8% vs. 6.5%, p<.001). Sofu-Net did not affect physicians’ detection rates of somatoform disorders, rates of recommendation to initiate psychotherapy, or patients’ health care utilisation.

**Conclusion:** The network fostered shared Conclusion of psychosocial distress and improved medication prescription behaviour. Sofu-Net might change the treatment process and thereby improve the management of somatoform and functional disorders.

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**Are self-help interventions an effective treatment for medically unexplained symptoms?**

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**Background:** Medically unexplained symptoms (MUS), which are highly prevalent in all fields of medicine, are difficult to treat. Psychological treatments have shown modest effects, but these are costly, time consuming, and not easily accessible. Self-help interventions might overcome these barriers. The primary aim of this systematic review and meta-analysis was to assess the efficacy of self-help interventions for adults with MUS.

**Method:** Relevant studies were identified by searching electronic databases (PubMed, Embase, PsycINFO, and CINAHL from inception to May 2014) and scanning reference lists of included articles and related reviews. Two researchers independently selected randomized controlled trials comparing self-help to usual care or waiting list in adults with MUS. Data were extracted independently by
two researchers using standardized forms. Standardized mean differences (Hedges’ g) were pooled using a random-effects model. Studies were critically appraised using the Cochrane ‘risk of bias assessment tool’. Outcomes were symptom severity and quality of life directly post-treatment and at follow-up.

**Results:** Out of 548 studies identified, 18 studies met all inclusion criteria. Studies were heterogeneous with regard to patient populations, intervention characteristics, and outcome measures. Compared to usual care or waiting list, self-help was associated with lower symptom severity (17 studies, n = 1894, g = 0.58, 95% CI 0.32 – 0.84, p < 0.001) and higher quality of life (16 studies, n = 1504, g = 0.66, 95% CI 0.34 – 0.99, p < 0.001) directly post-treatment. At follow-up equal effect sizes were found for both outcomes. A high risk of bias was established in the majority of included studies. However, sensitivity analyses suggested that this did not significantly influence study Results. Funnel plot asymmetry indicated potential publication bias, yet accounting for this using the ‘trim and fill’ Method did not alter our Results.

**Conclusion:** Self-help is a promising form of treatment for MUS. Compared to conventional psychological treatment, self-help has the potential of being widely available at much lower costs. Furthermore, self-help might offer an alternative to psychological treatment for patients who are unwilling or unable to visit a mental health care facility.

**Long-term economic evaluation of group CBT for functional somatic syndromes**

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**Background:** Functional somatic syndromes (FSS) are associated with excess healthcare and societal costs. Cognitive-behavioural treatment (CBT) improves functioning and quality of life in FSS; however, knowledge about its cost-effects is scarce. We aimed to compare the long-term cost-effects of group CBT with that of enhanced usual care (EUC) from both a healthcare and a societal perspective.

**Method:** 120 participants from a previous randomised controlled trial (BJP 2012;200(6):499-507) were followed by means of public registries as regards societal (labour-marked-related and health-related benefits) and healthcare (primary and secondary care and medication) costs. All costs were calculated as annual per capita public expenses, corrected for estimated tax income as regards societal costs, and inflated to 2010 €. Groups were compared using regression models controlling for baseline costs, and differences are reported with bias corrected and accelerated (BCa) confidence intervals obtained via bootstrap with 1000 repetitions. Moreover, we analysed development of societal costs for seven years before and three years after treatment, as compared to a matched population control group, by means of random effects modelling allowing individual levels and slopes in a group-specific, piecewise linear model.

**Results:** Group CBT was associated with a reduction in annual healthcare costs, as compared to the year before randomisation, during the first year after treatment (-1293 €, BCa 95% CI -2155 to -460), while EUC patients remained stable (+94 €, -1300 to 1697). Excess treatment costs of 1545 € were offset by savings of -1569 € (-2927 to -211, p=0.024) in other healthcare domains already during the first year, and outperformed by subsequent savings in the following two years. An annual increase in societal costs of +2027 € during the seven years prior to trial entry changed into an annual decrease of -1499 € after group CBT, while societal costs continued to rise after EUC (+1300 €). The difference in annual changes (slopes) was 2798 € (541 to 5056, p=0.015) in favour of group CBT, leading to an ultimate annual saving in societal costs during the third year of -8565 € (-12,095 to -5034, p<0.001).

**Conclusion:** Group CBT was associated with large, sustainable reductions of societal costs as compared to EUC. A wider implementation of psychological treatment for severely impaired FSS patients may have the potential to induce large savings in public expenses.
An explanatory framework for Medically Unexplained Symptoms in medical consultations
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Background: Patients with Medically Unexplained Symptoms (MUS) want explanations for their symptoms. Constructive explanations allow patients to reduce the threat associated with symptoms. They provide a basis for symptom management and indicate a collaborative relationship with the healthcare professional. On the other hand, explanations which emphasise psychosomatic causality are rarely effective in primary care. We developed a Symptoms Clinic Intervention (SCI) for patients with multiple MUS in which GPs negotiate explanations which avoid direct psychosomatic causality. To examine explanations used in the Symptoms Clinic Intervention and to describe their components and structure.

Method: We examined transcripts of 43 consultations (16 patients) from the Multiple Symptoms Study 1 and approximately 80 consultations (23 patients) from the Multiple Symptoms Study 2. Consultations involved patients with multiple MUS and were conducted by the intervention developer (study 1) or 4 specially trained GPs (study 2). Explanations from study 1 were extracted and classified using a group sort procedure. The classification was then applied to data from study 2 and revised.

Results: In study 1 there were 99 episodes of explanation each with one or more components. Analysis of data from study 2 is ongoing. Patients in both studies engaged constructively with the explanations. We classified explanation components into three clusters or layers: cause, mechanism and purpose. The causal layer included both specific distant adverse events and more proximate descriptors of uncertainty and complexity. Mechanisms included biological and psychological mechanisms such as alarm, dissociation and central sensitisation. The purpose layer sat between the causes and mechanisms and was framed in terms of understandable adaptive responses. It acted as a narrative bridge between causes and mechanisms which avoided the dualist dichotomy of either physical disease or psychosomatic cause.

Conclusion: This study examined extended biopsychosocial explanations within medical consultations. Using a data-driven Method we identified and tested a narrative bridge between distant causes and generative mechanisms which is acceptable to patients within a medical consultation. At present data is limited to long consultations. Further studies should examine the effect of such explanations on patients’ management and experience of symptoms, in both long and normal shorter consultations.

Psycho-Dermatology

Secreted mammal Ly-6/urokinase-type plasminogen activator receptor-related proteins (SLURPs) are altered both in chronic inflammatory (atopic dermatitis) and mental (depression) disease
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Neuropeptides are increasingly recognized as potent modulators of the stress response both in inflammatory and in mental diseases. We here report data obtained in healthy control individuals and in individuals with a chronic inflammatory (atopic dermatitis [AD]) or mental (depression [D]) disease. We also report on controls and AD subjected to an acute experimental laboratory stress test (Trier social stress test [TSST]). By ELISA we found that AD and D had higher levels of SLURP-1, an endogenous ligand to alpha 7 nicotinergic acetylcholine receptor (nAChRα7), in serum. Quantitative RT-PCR of full thickness skin biopsies from controls and AD revealed that SLURP-1 was altered in inflamed compared to healthy skin and before and after TSST. Taken together, allergic inflammation and depression both increase SLURP-1 serum levels and acute stress interacts with chronic inflammation to regulate local SLURP-1 levels in target tissues.
such as the skin. These Results are essential for understanding and development of novel treatment strategies in chronic inflammatory and mental diseases.

Body dysmorphic concerns in dermatology
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Interest in body image has increased in recent years, and researchers from different disciplines have started studying factors that affect people’s experiences of embodiment, as well as the impact of body image on behaviour. Most people would like to change something about their bodies and the way that they look, but for some it becomes an obsession.

Body image is an important issue in many people, whether in extreme ways, like those who have Body Dysmorphic Disorder, or in more subtle ways. Body image is the subjective evaluation of one’s appearance, and body image concerns is an umbrella term that consists of several dimensions, including affective, cognitive, behavioral, and perceptual components.

A healthy skin plays an important role in a person’s physical and mental wellbeing. Skin diseases such as acne, psoriasis and vitiligo produce cosmetic disfigurement and patients suffering these and other visible skin conditions have an increased risk of depression, anxiety, feelings of stigmatization and self-harm ideation. Body image affects our emotions, thoughts, and behaviours in everyday life. But, above all, body image influences our relationships. Furthermore, body image has the potential to influence our quality of life. Promotion of positive body image is highly recommended, as it helps to improve people’s quality of life, physical health, and health-related behaviors. Dermatologists have a key role in identifying body image concerns and offering patients possible treatment options.

How much do patients with skin conditions itch, and how does it affect their lives
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Background: The aim of this work was to study the impact of itch on quality of life, emotional wellbeing and family function in patients with dermatological problems. Methods: The study sample comprised of 203 outpatients seen by the dermatologist. Patients were asked to complete the self-reporting Itch Severity Scale (ISS), the Dermatology Life Quality Index (DLQI), The Hospital Anxiety and Depression Scale (HADS), and the Family
APGAR test. In accordance with the scores obtained for the Itch Severity Scale (ISS), the patients were divided into two groups: the itch group (X1) and the non-itch group (X2).

Findings: 60.10% (N = 122) of the patients obtained a positive score on the ISS scale. The results of the DLQI showed statistically significant differences (p < 0.001) between the two groups. The results of the HADS also revealed statistically significant differences on Emotional Distress (p < 0.001) and Anxiety (p < 0.001), although results for the Depression subscale were not statistically significant. The scores of the Family APGAR test showed no differences between the two groups.

Discussion: a) Perceived quality of life of dermatology patients with itch is lower than for those with no itch; b) Patients with itch show greater symptoms of anxiety; c) Although the results of the APGAR did not provide clear evidence that patients with itch suffer a greater impact with regards to family function than those with no itch, further research is suggested.

Skin and Psyche: What’s new in Psychodermatology?
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Psychodermatology developed in the past years to more scientific proofed research and several aspects were mentioned with regard to psychosomatic aspects in skin diseases. Psychoimmunology studies, Stress reactions, Epidemiology of depression and anxiety as comorbidities in skin diseases, skin Picking Syndrome and Body Dysmorphic Disorders are the hotlist in new aspects in Psychodermatology. Some recent studies will present with regard to this topics.

Psychoneuroimmunoimmunology: On the Bidirectional Relationships between Behavioral Factors and Immune Activity

On the complex interrelationships between stressors, sleep disturbance and immunological and endocrinological stress system variables: an integrative single case study on a healthy woman
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Background: The interactions between stress system activity and sleep are complex and fraught with inconsistencies when investigated with the usual methodological approach to PNI research (e.g. pre-post-design).

Method: In this study, we therefore applied an integrative research design to investigate the complex interrelationships between stressors, sleep disturbance and immunological and endocrinological stress system variables under conditions of “life as it is lived”. For this purpose, a healthy 27-year old woman collected her entire urine for 63 days in 12-h intervals (from 8 p.m. to 8 a.m. and from 8 a.m. to 8 p.m.) (total: 126 measurements) for the determination of cortisol (ELISA) and neopterin (immune activation marker) per creatinine levels (HPLC). In addition, every 12 h, the proband filled out questionnaires to measure emotional states (EWL) and daily routine variables (DIARI) including sleep behavior, and determined her body temperature. Weekly interviews with the proband provided information on the occurrence of emotionally meaningful stressors during the period of the study. This study applied time series analysis according to Box and Jenkins (1976) consisting of ARIMA modeling and cross-correlations analyses (p<0.05).

Results: Bivariate analyses revealed a network like structure between the variables measured. Specifically, stressors were followed by significant decreases in recreational value of sleep and total sleep time (TST). Moreover, stress system variables (neopterin, cortisol) as well as body temperature fitted consistently into the stress-sleep connections with regard to the directions, signs and temporal delays of the cross-correlations.
Conclusion: These findings on a healthy woman suggest a possible mediating role of immunological and endocrinological stress system parameters between the occurrence of stressors and sleep problems. Further studies must follow to strengthen these first findings.

Cause-effect relations between immune activity and sleep in a patient with prior breast cancer and current cancer-related fatigue and depression: A time-series analysis approach

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Background & Method: This study on a prior breast cancer patient with cancer-related fatigue (CaRF) and depression investigated the bidirectional cause-effect relations between cellular immune activity and subjective sleep variables. The 49-year-old patient (cancer diagnosis 5 years ago) collected her entire urine for 28 days in 12-h intervals (from 8 pm to 8 am, from 8 am to 8 pm) (total: 55 measurements; night only: 28 measurements). Urinary interleukin-6 (IL-6), neopterin (immune activation marker) and creatinine levels were determined using ELISA and HPLC technique. Every morning, she answered questions on the following variables: sleep quality (SQ), sleep recreational value (SRV), total sleep time (TST), time in bed before falling asleep (TIB), times waking up during the night.

Results: Cross-correlational analyses after ARIMA modelling of the serial data showed that high levels of SQ were first followed by IL-6 decreases after 24 h (lag 1, r=-.535) and then by IL-6 increases after a total of 96 h (lag 4, r=+.435). Furthermore, increases in SRV and TST were followed first by IL-6 decreases after 24 h (lag 1: r=-.428, r=+.426) and then by IL-6 increases after a total of 96 h (lag 4: r=+.326, r=+.392; p=n.s.). Regarding neopterin, opposite response patterns were observed: Increases in SQ and SRV were followed by neopterin level increases after 24 h (lag 1; r=+.231, r=+.282; p=n.s.) and then by decreases after a total of 96 h (lag 4; r=-.411, r=-.472). No other sleep variables were significantly related to IL-6 and neopterin levels. No systematic effects in the other direction were observed in this study, i.e. from immunological parameters to sleep characteristics.

Conclusion: This study supports our previous findings by showing that positive incidents like good sleep finally lead to neopterin decreases in patients with a disrupted stress system. The observed opposite patterns of IL-6 could indicate anti-inflammatory capacities of this cytokine. Further studies must follow to generalize these findings.

Effects of different antidepressants on pro-inflammatory cytokines in rats undergoing chronic mild stress without lipopolysaccharide induction

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Background: Recent research evidence indicates that depression leads to pro-inflammatory cytokines hyper-secretion and inflammatory response system activation. Antidepressants reverse these depressive symptoms. However, the relative efficacy between classes of antidepressants to reduce pro-inflammatory cytokines remains unknown. This study aims to compare the effects of eight different antidepressants (agomelatine, amitriptyline, bupropion, escitalopram, fluoxetine, moclobemide, mirtazapine, and venlafaxine) and a mood stabilizer (lithium) on peripheral and central pro-inflammatory cytokines in rats undergoing chronic mild stress (CMS) without lipopolysaccharide induction.

Method: The study included fifty female adult Sprague-Dawley rats divided in the following groups: 8 different antidepressant and a mood stabilizer groups subjected to CMS procedure (CMS/different antidepressant groups), a CMS group with distilled water (CMS/vehicle), and a non-CMS (negative) control group. The following parameters were investigated: sucrose preference, duration of immobility, body weight gain and the levels of pro-inflammatory cytokines (interleukin (IL)-6, IL-1β and TNF-alpha) in serum and brain samples.

Results: The CMS rats treated with agomelatine, amitriptyline, escitalopram, fluoxetine, mirtazapine, venlafaxine and non-
CMS (negative) controls demonstrated significantly lower level of serum IL-1β compared to the CMS/vehicle group (p<0.05). For brain cytokine levels, both IL-1β and IL-6 were significantly lower in CMS rats treated with agomelatine, amitriptyline and escitalopram and non-CMS control as compared to CMS/vehicle. No significant differences were observed in serum and brain TNF-α and IL-17 levels.

**Conclusion:** Our data suggest that agomelatine, amitriptyline and escitalopram demonstrated significantly lower serum and brain levels of IL-1β, as well as brain levels of IL-6 in an animal model of depression without LPS challenge. This study revealed potential therapeutic effects of agomelatine, amitriptyline and escitalopram by reducing central and peripheral levels of IL-1β and IL-6 in addition to alleviation of depressive symptoms.

The interaction between physical activity and neuroinflammation

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Chronic activation of the immune system and the resulting immune signaling to the brain can lead to an exacerbation of sickness and the development of symptoms of depression in vulnerable individuals, for example, fatigue and a decrease of physical activity. Therefore, systemic inflammation is an important biological event that might increase the risk of major depressive episodes in patients with autoimmune disease or chronic metabolic and cardiorespiratory diseases. Otherwise, an inactive lifestyle is known to increase the risk of developing a systemic inflammatory state. Exercise regulates several factors of the innate and adaptive immune response. Particularly, regular moderate exercise has anti-inflammatory effects, and, therefore, can protect against the development of chronic diseases. Recently, evidence arises that exercise may also control inflammatory responses within the central nervous system. It was demonstrated that regular exercise training provides anti-neuroinflammatory benefits by ameliorating inflammatory processes in the brain and to improve the adverse behavioral responses caused by neuroinflammation. Some of these studies found a link between exercise and the brain-derived neurotrophic factor (BDNF) signaling pathway as a biochemical mechanism to explain the exercise effects. Another mechanism might be the production of IL-6 by the active skeletal muscle which is assumed to modulate tumor necrosis factor receptor-mediated neurotoxicity. In conclusion, these data demonstrate, first, that neuroinflammation leads to an amplified inactive lifestyle. Second, physical activity and exercise training is an anti-neuroinflammatory therapeutic affecting patients’ behaviour and disease state. Thus, it can be assumed that physical activity represents a behavioral factor which is bidirectionally interrelated with immune activity.

Sleep, sleep deprivation and immune functions

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Sleep regulates immune defense. The first half of nocturnal sleep in humans is predominated by slow wave sleep, which serves memory and recovery functions. In addition, slow wave sleep facilitates the release of growth hormone (GH), prolactin and aldosterone, while levels of cortisol and catecholamines are low. This unique endocrine milieu existing around midnight enhances the production of pro-inflammatory cytokines like interleukin (IL)-12 and tumor necrosis factor (TNF) by stimulated monocytes and seems to support the extravasation of T cells to lymph nodes. GH, prolactin, aldosterone, IL-12 and TNF are endogenous adjuvants that promote in particular T helper (Th) 1 immune responses. Accordingly, sleep versus wakefulness in the night following a morning vaccination increases numbers of antigen-specific Th1 cells and levels of Th1 dependent antibodies. Prolonged sleep loss in turn is associated with immunodeficiency and with a shift of the Th1/Th2 cytokine balance towards Th2, not only in sleep restriction experiments but also in clinical conditions like insomnia or depression. Moreover, sleep loss increases the unstimulated, spontaneous release of pro-inflammatory cytokines like IL-6 and TNF, resulting in a stress-like inflammatory response. This low-grade systemic inflammation is related to daytime fatigue and
impacts metabolic and atherosclerotic pathways. In sum, the immunological consequences of sleep loss, i.e., immunodeficiency and sterile inflammation likely contribute to the strong relationship between poor sleep and increased all-cause mortality.

Brain Neuroimaging

Approach and avoidance in complicated grief: Neuroscience results and clinical implications
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Background: Complicated Grief (CG) is the term applied to a small percentage of bereaved persons who don’t adapt after the death of a loved one, and is proposed for inclusion in the ICD-11. Both approach toward, and avoidance of, loss-related reminders, is currently hypothesized to be a significant mechanism in the maintenance of CG. Current evidence indicates that those with CG frequently demonstrate behavioral avoidance, yet photos of the deceased elicit increased activity in reward centers of the brain, including the nucleus accumbens. The current study aims to clarify the involvement of neural pathways associated with both approach and avoidance of specific reminders of the deceased loved one. We hypothesize that increased activity in neuroanatomical regions associated with reward will differentiate spousally bereaved persons with CG compared to married Nonbereaved controls.

Method: Twenty-six older adults formed three groups based on grief severity: Complicated Grief (n=8), Non-Complicated Grief (n=9), and Nonbereaved controls (n=9). None met criteria for Major Depressive Disorder. Using event-related functional neuroimaging, all participants saw a photo of their spouse (living or deceased, depending on the group) or a photo of a stranger.

Results: In those with Complicated Grief compared to Nonbereaved, bilateral hemodynamic responses in the amygdala (x=24, y=-2, z=-16, Z = 3.93, p<.005) and right orbitofrontal cortex (OFC: x=16, y=42 z=-16) were significantly activated, indicating a group-specific increase in recruitment of these brain regions. Replicating prior research, those with CG showed activation in precuneus and mid-cingulate regions in comparison to Non-Complicated Grief and Nonbereaved controls.

Conclusion: These Results indicate that areas associated with evaluation of reward (OFC), and negative emotional experience (amygdala) are both recruited in those with CG when exposed to images of their deceased loved one. Reward evaluation in OFC may be functionally related to approach behaviors, and amygdala activation may drive avoidance behaviors. These neuroanatomical data will be discussed in relation to implications for treatment of CG, building on existing clinical trials of psychotherapy for this disorder.

Brain neuroimaging in Psychiatry: ADHD, schizophrenia and anxiety
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The different techniques and method of neuroimaging have transformed the study of the cognitive and affective dimensions in the domain of psychiatric diseases. Researchers are now capable of identifying and characterizing brain areas and circuits associated with human cognitive, affective functions. The Results of these lines of research in the specific domains of are helping in our understanding of the pathophysiology of neuropsychiatric disorders, such as ADHD, schizophrenia and anxiety. Moreover, they are also becoming critical for monitoring the evolution of such disorders and characterizing the success and screening of therapies, as well as for finding biomarkers for risk or susceptibility factors. The current situation of psychiatric neuroimaging allows the hope of not waiting too long before applying this information clinically to patients with psychiatric disorders.

Brain neuroimaging in pain disorder
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Patients with pain disorder are characterized by lasting pain symptoms that are – according to DSM-5 – „very distressing or result in significant disruption of functioning, as well as excessive and disproportionate thoughts, feelings and behaviours regarding the pain symptoms“. The neurobiology of these disorders is still not well understood and
battles an ongoing Cartesian dualism. However, recent neuroimaging Results especially using fMRI suggest that particularly the neural mechanisms of the affective dimension of pain are disturbed in patients with this most commonly occurring form of somatic symptom disorder, and underlying mechanisms may include processing of social experiences in overlapping spatio-temporal patterns of neural activation. In this talk we will present recent biological data at least in part from our own neuroimaging research that could help to deepen our understanding of the enigmatic nature of pain disorder.

**Neuroimaging of the joint hypermobility syndrome: the role of interoception**

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**Background:** Joint hypermobility, an expression of a common variation in the connective tissue protein collagen, is increasingly recognized as a risk factor to anxiety, pain, fatigue and related disorders (including anxiety disorders, fibromyalgia, irritable bowel syndrome, temporomandibular joint disorder). However the neural underpinnings of these associations still remain unclear. This study explored brain responses to facial visual stimuli with emotional cues using fMRI techniques in general population with different ranges of hypermobility.

**Method:** The final sample consisted of fifty-one non-clinical volunteers (thirty-three women) that were assessed with a clinical examination for hypermobility, completed state and trait anxiety questionnaire measures and performed an emotional face processing paradigm during functional neuroimaging.

**Results:** Trait anxiety scores significantly correlated with state anxiety and hypermobility scores. BOLD signals of the hippocampus positively correlated with hypermobility scores for the crying faces versus neutral faces contrast in ROI analyses. No results were found for any of the other preselected regions of interest (ROIs, previously described as important affective processing regions). However, hypermobility scores were associated with key affective processing areas (i.e. the middle and anterior cingulate gyrus, fusiform gyrus, parahippocampal region, orbitofrontal cortex and cerebellum) in the whole brain analysis.

**Conclusion:** Hypermobility scores are associated with trait anxiety and higher brain responses to emotional faces in emotion processing brain areas (including hippocampus) described to be linked to anxiety and somatic symptoms. These findings increase our understanding of emotion processing in people bearing this heritable variant of collagen and the mechanisms through which vulnerability to anxiety and somatic symptoms arises in this population.

**The neuroconnective phenotype: A new model of Illness. Preliminary data**

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**Background:** The association between the joint hypermobility syndrome and anxiety has proven to be very strong 25 years after its first description. This finding has allowed opening a broad spectrum of clinical and research views, particularly when mental and somatic symptoms appear intermingled coexisting and not just causing the other. There is evidence of specific somatic signs or conditions in psychiatric illnesses, but it has often been neglected in present nosologies. There are already examples of such comorbid situations like diabetes and schizophrenia, which some have considered part of the same illness. However the most studied and developed comorbid condition is the joint hypermobility syndrome in anxiety patients.

**Method:** In order to include the myriad of somatic Results often unnoticed but often found in the same patient, we propose a new phenotype built around the core of the association between anxiety disorders (particularly panic, agoraphobia and social phobia) and the Joint Hypermobility (better Hyperlaxity) syndrome. On the basis of the available genetic, neurophysiological, neuroimaging and most clinical data, several dimensions could be organized together in this neuro-connective model. The five dimensions proposed are 1) Behavioral dimensions (patterns of defensive behaviors often identifiable at the extreme of a continuous axis), 2) Somatic symptoms (i.e. dysautonomia, asthenic somatotype, dark or “blue” sclera, easy bruising, etc.), 3) Somatosensory symptoms (increased olfactory sensitivity, difficulties in eye contact and sensitivity to some luminous stimuli, dizziness...
(unsteadiness), sighing, pains and dynias), 4) Psychopathology, includes increased exteroception (e.g. meteorosensibility), increased and interoception, reduced proprioception and depersonalization, and 5) somatic illness, which include irritable bowel, dysfunctional esophagus, dizziness or unsteadiness (central vestibular pattern), chronic fatigue, fibromyalgia, etc.

Conclusions: The well-established association between a collagen condition and anxiety has open new ways to clinical and basic research. Most probably, new forms of psycho-somatic conditions will emerge and different nosological approaches will be required. The Neuro-connective model is a proposal under research, which may be useful for clinical practice. Preliminary data on this model will be presented in the session.

Psychosomatic Medicine in Obesity: Mechanisms and Interventions

Targeting impulsivity in Binge Eating Disorder
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Background: The trait variable impulsivity consists of (a) reward sensitivity and (b) rash-spontaneous behaviour. Impulsivity is closely linked to the core pathology of BED which relates to regular overeating with experienced loss of control. However, evidence on food-related impulsivity in BED is so far widely lacking. Food-related impulsivity might be a starting point for the advancement of treatment approaches for BED.

Method: We have developed two experimental paradigms addressing both components offood-related impulsivity. The attention competition paradigm presents pairs of food and non-foodpictures and primarily assesses reward sensitivity (i.e. rewarding stimuli attract attention). The antisaccadic paradigm peripherally presents a single picture and primarily assesses rash-spontaneous behaviour as participants are asked to suppress the urge to look at the presented pictures (i.e. it is more difficult to suppress a saccade to rewarding stimuli). We use eye tracking to assess gaze behaviour. We investigated 76 participants with BED, obese and normal-weight controls in a cross-sectional design and conducted a pilot study on changes after CBT for BED.

Results: Compared to obese and normal-weight controls, BED patients showed increased attention to food, they had more difficulties suppressing saccades to food and non-food pictures and had difficulties disengaging from food pictures they were erroneously looking at. Patients who benefited from a CBT for BED also improved their antisaccade performance. We found evidence for increased reward responses and disinhibition towards food in BED patients, but not in weight-matched controls. This suggests that BED might be a subtype within the obesity spectrum that is characterized by increased food-related impulsivity and might profit from specific interventions targeting impulsivity. We are currently piloting a CBT-oriented group therapy that specifically targets impulsive eating habits in BED patients and will present first experiences from this pilot trial.

How to treat binge eating disorder: Is Dialectical BehaviourTherapy as effective as Cognitive Behaviour Therapy?
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Aims: The purpose of the study is to test whether Dialectical Behaviour Therapy (DBT) is as effective as Cognitive Behaviour Therapy (CBT) for treating binge eating disorder (BED).

Background: Several treatment models have shown to reduce binge eating in BED with CBT currently being the treatment of choice. Although CBT is effective, a substantial number of patients does not reach abstinence from binge eating. Considering this, it is important to develop other treatment models in order to increase abstinence rates. One such treatment model is Dialectical Behaviour Therapy (DBT) which focuses on emotion regulation. Some evidence exists that DBT can indeed be considered an effective treatment for BED. So far, DBT was found to be effective in an uncontrolled design and when compared to a waitlist (Telch, Agras & Linehan, 2000; 2001). In addition, DBT proved superior to an active control condition in attaining abstinence from binges although, at 12 months follow-up, this difference between treatments was no longer statistically significant (Safer, Robinson
DBT for BED has never been directly compared to the current treatment of choice. Comparing DBT to CBT would prove the ultimate test of effectiveness for DBT.

**Method:** At our treatment centre we have set up a large study in which we compare DBT (Safer, Telch & Chen, 2009), to our CBT treatment-as-usual which is an intensive outpatient treatment, based on the manual developed by Fairburn, Marcus and Wilson (1993). Our study consists of two trials: a randomized controlled trial, and a quasi-experimental trial for those patients that do not wish to be randomized. Although the trials are still ongoing, conclusions can already be drawn from our quasi-experimental trial (N = 100).

**Results and conclusions:** We find that both CBT+ and DBT are effective in reducing binge frequency. On some secondary outcome measures (such as shape and weight concerns), differences between the two treatments do emerge. In this presentation, we will discuss these Results in terms of working mechanisms of both treatments. Based on these Results, we will also look at the question what patients may benefit more from what treatment.

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**Psychosocial predictors of post-operative excess weight loss after bariatric surgery**

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**Background:** Bariatric surgery is a way of Excess Weight Loss (EWL) in obesity but psychosocial determinants of its success warrant further exploration.

**Method:** 307 patients (82.8% females), aged 40.5 (SD: 12.1), with a mean BMI of 45.2 were assessed prior to surgery. BDI (Depression), SF36 (Quality of Life), TAS (Alexithymia), SBI (Social Interactions) and EDI (Eating Disorders) were completed at baseline and for 101 patients 14.1 months after surgery. Results were weighted by the probability of answering at follow-up. EWL was defined considering 25 as a normal BMI.

**Results:** Mean EWL was 61.1%. EWL was associated with the type of surgery (higher with by-pass: p<0.001; eta2=0.228) and negatively with age (p=0.007; eta2=0.079). In univariate analyses, not being a sweat eater, reduced social life, history and current depression, BDI score, alexithymia, limited social interactions at SBI and EDI scores of Drive for Thinness and Ineffectiveness were all positively associated with EWL. In a stepwise linear regression model, four variables predicted EWL (total R2=0.514): type of surgery, young age, limited social interactions (additional R2=0.052) and alexithymia (add. R2=0.034).

**Conclusion:** Young people are likely more motivated for complying with post-operative diet constraints. Baseline psychological distress, especially depression, is not a pejorative indicator. Alexithymic pragmatic patients could take advantage of surgery without being too disrupted by their emotional life.

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**Nutrition and eating behavior 4 years after laparoscopic sleeve gastrectomy**

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**Background:** The outcome of conservative treatment, especially with severe obesity, is rather poor. In contrast, obesity surgery has been shown to be an effective treatment. Laparoscopic sleeve gastrectomy (LSG) is characterized by its limited risk and concomitant substantial weight loss outcome. However, to date, long-term follow-up data on eating and nutrition behavior are lacking.

**Method:** Of 169 patients who had undergone LSG, 148 were contacted. 82 participated in the study (55.4 %). 64 were examined at the study centre and 18 by interview via mail and telephone. Symptoms of eating disorders were assessed using a structured interview (EDE) and validated questionnaires (SIAB, EDI,
Data on nutrition intake were acquired by two 24 h recalls and a validated food frequency questionnaire and subsequently analyzed using the multiple source method.

**Results:** On average the LSG lay 4 years ahead of the follow-up examination. The initial BMI prior LSG was 48.6 ± 8.1 kg/m² and 4 years after follow-up 36.1± 10.8 kg/m². The excess weight loss was 49.5 ± 33.2 %. Prior LSG n= 8 patients fulfilled the diagnostic criteria of a full syndrome binge eating disorder, 4 years after LSG only n=1 one patient. In the follow up LSG patients report self-induced vomiting 7.4 %, loss-of-control-eating 15.7 % und grazing 39.1%. In 10 % of the patients the energy intake exceeds the energy requirements needed in order to maintain the actual body weight.

**Conclusion:** The excess weight loss after 4 years LSG was 50 %. In the long-term follow-up we found low prevalence of full syndrome eating disorders, however a substantial proportion of patients with disturbed eating behaviour, what may be paralleled by an increased energy intake. It is likely that the surgery outcome could be positively influenced if patients at risk were identified in time and supported by targeted interventions.

**Physical activity and cognitive functioning in patients undergoing bariatric surgery**
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**Aim:** To investigate the relationship between daily physical activity (PA) and cognitive performance in extreme obesity.

**Method:** Seventy-one participants (77.5% women) with a mean body mass index (BMI) of 46.9 kg/m² (SD 6.0) and a mean age of 41.4 (SD 11.9) years completed SenseWearPro2activity monitoring for a period of seven days. Neurocognitive functioning was assessed by a computerized test battery, including tasks of executive function (Iowa Gambling Task), visuospatial short-term memory (Corsi Block Tapping Test) and verbal short-term memory (Auditory Word Learning Task). Furthermore, questionnaires assessing eating disturbances and depressive symptoms were administered. Somatic comorbidities were assessed by medical chart review.

**Results:** Physical activity level in the sample was low with mean steps per day within wear time being 7140 (SD = 3422). The majority of participants were categorized as sedentary (31.0%) or low active (26.8%). After adjusting for multiple testing, no significant association between PA estimates and cognitive performance was found. Lower PA was modestly correlated with higher BMI but not with age, somatic comorbidity or depressive symptoms. Group comparisons of patients with (29.6%) and without (70.4%) regular binge eating did not reveal significant differences in PA or cognitive function.

**Conclusion:** The findings indicate no association between daily PA and neurocognitive performance in morbidly obese patients. Future studies should explore the relationship between the variables with regard to a broader BMI range and with respect to potential changes after substantial weight loss due to bariatric surgery.

**Anxiety & Depression in the Medically Ill**

**Depression at the time of hospital discharge in internal medicine inpatients**
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**Background:** This study is intended to test the hypothesis that, among internal medicine patients diagnosed of depression at the time of hospital discharge, the prevalence is influenced by both demographic characteristics and type of depression.

**Method:** Consecutive patients aged 18 years or more, randomly selected among consecutive admissions to Medicine wards in 7 hospitals of the National Health System in Spain. Instruments: Spanish versions of
screening/case-finding instruments. Relevant for this study are the Mini-Mental, Hospital Anxiety and Depression Scale (HADS), CAGE and drug screening, Standardized Polya-valent Psychiatric Interview (SPPI) and Cumulative Illness Rating Scale (CIRS) (severity of physical condition).

Procedure: A two-phase screening was implemented at the time of discharge in Part I, hospital study: lay interviewers used the Mini-Mental, CAGE and HADS; and standardized clinicians used the SPPI. CIRS was used to control severity of physical conditions. Cases of depression were diagnosed according to ICD-10 research criteria.

Results: Three hundred and twelve patients with depression and 777 controls were identified, the global prevalence of depression being 15.9. By depression type, the prevalences were 6.1, 3.6 and 6.2 for Adaptive, Dysthymia and Major depression, respectively. The prevalence of global depression was significantly higher in the age group 65-74 years, and also among the women. However, the interaction between age and gender was apparent, since in men depression was more prevalent above the age of 65, but among the women it was more prevalent below the age of 65. Differences with the global Results were also observed when type of depression was investigated: in the adaptive depressions, no differences in the prevalence by age were observed among the women; in dysthymia, the highest prevalence was observed in the group aged 75-84 years. Compared with the controls, CIRS scores (number of medical categories affected and total severity score) were significantly higher in the depressed patients; similar Results were also observed in both patients with major depression or dysthymia, but no differences were found in adaptive depression.

Conclusion: In this first study in internal medicine patients at the time of hospital discharge, both age and gender influence the prevalence of depression, but relevant differences are observed in relation to the type of depression.

Enhancing depression screening in cardiology with active patient participation: The DEPSCREEN-INFO Randomised Clinical Trial

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Background: International guidelines advocate depression screening in patients with coronary heart disease (CHD) and other chronic illnesses, but evidence is lacking. The DEPSCREEN-INFO trial aimed to assess the efficacy of two depression screening approaches.

Method: DEPSCREEN-INFO is a randomised controlled observer blinded efficacy trial in depressed patients from three cardiology settings in Hamburg, Germany. Patients with CHD or arterial hypertension were randomised to either a control group where only cardiologists received written feedback or an intervention group where both cardiologists and patients received written feedback regarding depression status and treatment. The primary outcome was change in PHQ-9 depression severity one month after screening. Secondary outcomes included depression severity after six months, anxiety severity, somatic symptom severity, health care utilization, and the patients’ handling of the depression screening result. This trial was registered at German Clinical Trials Register (DRKS00003277).

Results: Of the patients who screened positive for depression, 220 patients’ cardiologists received the depression screening Results and 155 patients’ cardiologist plus the patient themselves received written feedback. Whereas significant group differences in PHQ-9 change scores were not noted after one month (ES=-0.07; p=0.56), the patient-feedback group showed significantly greater improvements in depression severity compared to the control group after six months (ES=0.26; p=0.04). Similarly, the patient-feedback group showed greater improvements in anxiety
Are we betting on the wrong horse? Anxiety instead of depression as a causal risk factor for heart disease
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After many years of research, the role of affective disorders in the development of heart disease is still unclear. Research has focused predominantly on depression, but the question whether depression actually causes heart disease remains unanswered since intervention trials targeting depression did not affect cardiac endpoints. In addition, several studies showed that depression predicts not only the onset of heart disease, but the onset of various other physical conditions as well. In recent years evidence for an association between anxiety and heart disease has grown. There is a considerable overlap between depressive and anxiety disorders. However, fear disorders, including panic disorder, agoraphobia, social phobia, specific phobia, and post-traumatic stress disorder, appear to be distinctly different from depressive disorder and generalized anxiety disorder, i.e. distress disorders. Categorizing disorders into fear and distress disorders may be more useful than using the classic division (i.e. anxiety versus depressive disorders), or examining all disorders separately, when investigating the association between affective disorders and heart disease. A comparison of the associations between fear and distress disorders with physical conditions may provide essential information needed to justify and design future intervention trials. Fear disorders develop at an early age, are often persistent, and can predict depression. Fear disorders preceding distress disorders may therefore explain, at least part of, the relationship between distress disorders and heart disease. In addition, fear disorders are characterized by phobic fear and somatic arousal and these features appear to be particularly strongly related to the heart disease.

Conclusion: Brief written patient-targeted feedback in addition to depression screening seems to encourage the patient’s active role in an informed self-management of depression. Medium-term effects are significant improvements in depression severity that are equal in size to more intensive psychotherapeutic or pharmacological treatments of depression in cardiac patients.

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Does anxiety mean the same in English and German language? Evaluation of the psychometric equivalence of the PROMIS® Anxiety Item Bank and its German Translation
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Background: The comparability of patient-reported outcomes measures across languages is a prerequisite for international research, and also a key purpose of the US-American Patient-Reported Outcomes Measurement Information System (PROMIS®). In our study we assessed the psychometric equivalence of
the PROMIS Anxiety Item Bank and its German translation. We applied the approach provided by Paz et al (2013) using Method of Differential Item Functioning (DIF) and Item Response Theory (IRT) based linking.

**Method:** The German translation of the PROMIS Anxiety Item Bank (Pilkonis et al, 2011; Wahl et al, 2011) was administered to a representative sample of the German general population (N=2504) and compared to the English source measure assessed in the PROMIS-sample (N=788) of the US-general population (see Pilkonis et al, 2011). Psychometric diagnostics were assessed through classical item analyses, unidimensionality testing with confirmatory factor analysis fit indices, monotonicity testing using Mokken’s scale analysis (1971), and IRT item parameter estimation applying Samejima’s Graded Response Model. DIF due to language was compared using Lordif (Choi et al, 2011).

**Results:** The German translation of the PROMIS anxiety item bank showed to be internally valid, monotone, and unidimensional. Results for the German vs. US-American data were: Cronbach’s α 0.97 vs. 0.97; mean standardized factor loadings 0.84 vs. 0.82; fit indices CFI/TLI/RMSEA 0.96/0.95/0.07 vs. 0.98/0.98/0.06; no residual correlations (|ρ*|<0.20) in both samples; scalability coefficient H 0.59 vs. 0.51; mean slope of IRT item parameters (range) 2.75 (1.85-3.98) vs. 2.72 (1.27-3.88). Two of 29 items showed marginal DIF: “I felt worried“ („Ich war besorgt“) with pseudo R2Δ=0.022; “I worried about other people’s reaction to me („Ich war besorgt, wie andere Menschen auf mich reagieren“) with pseudo R2Δ=0.024. Scale score differences between person-scores ignoring DIF vs. accounting for DIF were exceedingly small (mean/median differences <0.01 Θ-units). Compared on a common T-score metric the PROMIS anxiety mean of the German sample was 7 points (0.7 SD) below the US-American mean.

**Conclusion:** The comparability of the PROMIS anxiety item bank and its German translation is not impaired by DIF due to language. The US-American general population sample showed a higher mean anxiety symptom score than the German general population sample. Implications for international research will be discussed.

Hope – a useful scientific concept in psychosomatics?

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Hope has been defined as “a multidimensional, dynamic, empowering state of being, that is central to life, related to external help and caring, oriented towards the future and highly personalized to each individual“ (Cutcliffe 1997). The importance of hope in somatically ill patients is intuitively and clinically evident for physicians as well as patients and relatives. Loss of hope goes along with lower functioning in both physical and psychological domains. Although a lack of hope is associated with depression and anxiety, hope represents more than the absence of clinically relevant depressive and/or anxious symptoms. However, there is a gap between the subjective importance of hope for patients and the paucity of research on hope as a concept in psychosomatic medicine. This talk will start with historic and philosophic roots of the concept of hope, follow different psychological approaches to operationalization, show correlations with psychological factors and present new validation data for an assessment instrument (Herth Hope Index- German).

Psycho-Oncology

Couples and family-oriented interventions to alleviate psychological distress in cancer patients and their partners/families
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**Background:** The diagnosis of cancer marks a critical life event for the entire family that can cause distress and significant challenges for all involved. Cancer can turn an entire family system upside down, causing upheaval in the organization of everyday life, in the distribution of roles within the family and between partners. Previous research has shown that partners of patients with advanced cancer are at an even greater risk of developing a psychiatric disorder than the patients themselves. This finding is of high clinical
importance because family members are frequently the most important source for psychosocial support and that burdened family members can hinder patients’ adjustment to their illness. Screening for and identifying of psychological stress in family members of cancer patients as well as family-oriented interventions are therefore key elements in psycho-oncology to address these issues.

Method/ content used in the symposium: In this symposium, short input lectures from different perspectives will present an overview on the current state of research and on clinical experience, followed by an interactive goal-oriented Conclusion, based on case examples and authors’ experience while including participants’ requests, thus enabling participants to integrate systemic approaches in their practice according to their specific conditions.

Web-based counseling for families with parental cancer: First data on effectiveness for children’s psychosocial well-being
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Background: A parental cancer diagnosis challenges the family’s stability and the parent-child relationship. It may impact the children’s well-being, so that about one third of them develop clinically relevant levels of psychological distress. FAMOCA is a web-based counseling program for families affected by parental cancer, providing information and coping strategies age-specifically to improve family’s adjustment. This study aims to evaluate the efficacy of this interactive intervention, especially on the psychosocial well-being of the children.

Method: After initial cancer diagnosis of a parent, 90 families with children between three and 18 years will be randomly referred either to the intervention (IG) or the control group (CG). The IG follows the online program during four months, where age-specific information as well as practicing of coping strategies are provided via multimedia. Families of the CG receive an information booklet for parents and children. Children’s emotional, behavioral and social problems (Strengths and Difficulties Questionnaire, SDQ), and quality of life (KINDL) are assessed at the beginning, at the end of the program and 12 months after the parent’s diagnosis.

Results: The study started in January 2014 and first Results will be presented for the children at the beginning and at the end of the program. After ending the program, we expect children of the IG to have less emotional, behavioral and social problems, as well as a higher quality of life than children of the CG.

Conclusion: Many families affected by parental cancer wish for a psychooncological support, but a face-to-face contact is needed and is primarily focused on the parents. FAMOCA is an innovative, low-threshold internet program, which aims to improve the adjustment to cancer of all family members. Children’s worries, questions and coping are addressed by information and exercises age-specifically, and thus risk factors for maladjustment and psychological distress reduced.

A relaxation strategy for reducing chemotherapy side-effects
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Background: Chemotherapy side-effects diminish quality of life and can lead to treatment delay. It is well established that some side-effects, especially nausea and vomiting, result from classical conditioning, and may be reduced by behavioral interventions. These are often not employed due to time and cost. We studied the effects of ‘Mindfulness Relaxation’ (MR), consisting of a 20-minute meditation, informed by principles of mindfulness, yoga, and guided imagery, on anticipatory nausea and vomiting.

Method: Patients undergoing chemotherapy for solid tumours were randomized to MR (n=204), a relaxing music control (RM)(n=225) and standard care (SC)(n=210). The MR was delivered by the chemotherapy nurse prior to the chemotherapy, in an attempt to establish a pre-emptive relaxation response (RM was delivered at the same time point). Subjects also received a tape of MR or RM to be used for home practice, and at all chemotherapy administrations. Anticipatory nausea and vomiting (Morrow Assessment of
Nausea and Emesis-MANE) was assessed at the midpoint and end of chemotherapy.

**Results:** Subjects’ average age was 54.7 years (range: 21.6-85.0), 92.0% were women, with 86.6% Caucasian, and 11.6% African American. The majority of the patients had breast cancer (84.50%) other malignancies were: GI: 7.01%; lung: 2.55%, Gyn 2.12%. Most patients had early stage disease (stage I: 25.2%; stage II: 57.6%; stage III: 15.8; stage IV: 1.4%). MR reduced anticipatory nausea compared to SC (adjusted p-value =.043) controlling for age, gender, cancer stage, and emetogenic level of chemotherapy. Examination of its impact on other variables is ongoing.

**Conclusion:** This study demonstrated that a brief, nurse-delivered, behavioral intervention could reduce anticipatory nausea. MR is low cost and widely applicable. Understanding how patient characteristics impact on efficacy will further advance our understanding of the applicability of MR into the chemotherapy setting.

**Psychological factors and 5-year cancer survival: Prospective longitudinal analyses of epidemiological data from British Columbia**

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**Background:** The role of psychological factors for cancer survival has been studied for decades, but many of these studies have Methodological limitations and Results are inconclusive. Based on epidemiological data of the Province of British Columbia, we examined the role of depression and social support for survival in breast, prostate, and lung cancer patients.

**Method:** A routine screening program for psychosocial distress was initiated in two major cancer centres in the Province of British Columbia in 2002. The study uses data collected between 2004 and 2010. Patients were screened with the PsychoSocial Screen for Cancer (Linden et al., 2003) at the time of cancer diagnosis. Three major cancer types, i.e., breast (N=1,646), prostate (N=685), and lung cancer (N=642) were chosen and their data were merged with survival data of the Provincial Vital Statistics Agency, which provides complete death lists on a monthly basis for all British Columbians who deceased in the province. These data were requested in 2012. Cox proportional hazards regression analyses were conducted to predict survival as a function of psychological variables.

**Results:** A relationship between depression and survival was demonstrated for patients with breast cancer only. Depressed patients with breast cancer stages I-III had a 54% greater hazard of mortality (HR=1.54 (95% CI 1.06-2.25); p=0.024) compared to their non-depressed counter parts. This effect was even larger in patients with breast cancer stages I and II and also in younger as opposed to older patients with early stage breast cancer. Breast cancer data also indicate the loss of a live partner at the time of cancer diagnosis to unfavorably impact survival in patients with curable breast cancer. In lung cancer patients, gender effects for social support and survival have been shown. Men who were married or lived in a common law relationship had a 28% lower hazard of mortality than un-partnered men (HR=0.72 (95% CI 0.54-0.97), p=0.032). As well, men who expressed greater need for emotional support had a lower hazard of mortality (HR=0.96 (95% CI 0.93-0.99), p=0.013) than men with low need for support. In contrast, in prostate cancer patients’ greater support needs were associated with a greater hazard of cancer-specific (HR=1.98 (95% CI 1.19-3.31), p=0.008) and all-cause mortality (HR=2.70 (95% CI 1.38-5.29), p=0.004). Age moderated these effects such that older age and high support needs conferred the greatest mortality risk. Men with otherwise favorable prognoses but who lived alone demonstrated a twofold increase in hazard of mortality (HR=2.12 (95% CI 1.18-3.82), p=0.012) and among these, older men were again carrying the greatest mortality risk.

**Conclusion:** Results are discussed with regard to the role of disease type, prognosis and the moderating effects of sex and age.
The investigation of the effect played by demographic variables and coping mechanisms on distress and well-being in a nationally representative Romanian sample of cancer patients

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Background: The diagnosis with cancer affects the patients’ overall functioning, seriously impacting their proximal and distal environment. The correct and timely assessment of cancer-related distress and quality of life becomes imperative, these factors being significant predictors of mortality and illness progression. Our major aim was to investigate the way cancer related distress and well-being varies depending on demographic variables, and problem- and emotion-focused coping mechanisms in a nationally representative sample of Romanian cancer patients.

Method: Our research has a non-probabilistic transversal comparative repeated cross-sectional design, and was conducted in the four major oncological institutes in Romania, on a nationally representative sample of 800 cancer patients (338 male, and 462 female). We assessed: age, gender, marital status, and level of education, distress (emotion thermometer), depression (BDI), well-being (FACT-G; physical-PWB, emotional-EWB, social-SWB, and functional-FBW), and problem- and emotion-focused coping strategies (WAYS). ANOVA and linear regression analyses were conducted with SPSS 20.0 for Windows.

Results: Our study indicates that female cancer patients experience significantly higher levels of distress, anxiety and depression, and significantly lower emotional well-being than male patients. Older patients (66+), report significantly higher levels of depression and lower levels of SWB, while younger patients (18-35 years) report significantly higher levels of FBW. Patients with lower levels of education experience significantly higher levels of depression than those with higher levels of education, and significantly lower levels of PWB, SWB, and FWB. Finally, our Results also indicate that married patients experience significantly higher levels of SWB than single, divorced, and widowed ones. Although the predictive power of demographic variables is quite low (3.3% of depression, 2.8% of PWB, 6.5% of SWB, 4.2% of EWB, and 1.9% of FWB), they significantly contribute to cancer related distress. After controlling the effect of demographic variables, only emotion-focused coping predicts significantly depression (15.1%), PWB (7%), EWB (11.2%), and FWB (10.1%).

Conclusion: The investigation of the effect produced by intra-and extra-individual variables brings to light more contoured pathways that could guide the tailoring of efficient psycho-social programs in Romania, aiming to improve cancer patients psycho-social functioning.

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**Poster Sessions**

**Body Image & Eating Disorders**

**Eating disorders symptoms in female athletes**  
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**Background:** Over the last two decades, due to tragic endings of several professional sport careers, an increasing amount of research has begun to examine the issue of eating disorders in athletes. The prevalence of eating disorder symptomatology seems to be highest in sports that emphasize thinness. The aim of this study was to determine whether the results regarding prevalence of eating disorders symptoms could be replicated in Croatian athletes and to analyze potential sports-related correlates of disturbed eating habits.

**Method:** The participants were 134 non-athletes, 204 athletes from ball games that don't emphasize leanness, and 344 athletes from aesthetic sports that emphasize leanness. The age range of participants was from 10-18 years old. The questionnaire package included the presence of eating disorders symptoms, general body dissatisfaction, sports-related body dissatisfaction, desire to be leaner to improve sports performance, performance perfectionism, and social pressure for thinness.

**Results:** The results indicate that athletes performing ball games had a significantly lower level of eating disorder symptoms then aesthetic athletes, and non-athletes. There was no significant difference in general body dissatisfaction although aesthetic athletes did report higher sports-related body dissatisfaction, higher desire to be leaner to improve sports performance, and higher social pressure on body shape. Results of hierarchical linear regression analyses showed that both, socio-demographic and sports-related variables were significant predictors of eating disorder symptomatology in both sport types. Aesthetic athletes and athletes from ball games who reported more eating disorder symptoms have a higher desire to be leaner to improve sports performance and a higher perception of social pressure for thinness. Aesthetic athletes with higher performance perfectionism reported more disturbed eating habits.

**Conclusion:** The results suggest that the potential risk factors for the development of eating disorders are similar among sport types, although some potential risk factors are predominant in aesthetic sports.

**Additive dance-therapeutic interventions reduce bodyweight in obese patients more effective than only movement therapy - a controlled study**  
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**Background:** Multimodal Weight Reduction Programs are effective, life-quality improves but in half of the cases the after start euphoria does not lead to a stable enhancement of the bodyimage. It is known, that amelioration of the mood and bodily activity correlate. Here would be still something to do. Joint-friendly dancing, what entrains and creates fun, could be an approach.

**Method:** 28 Patients (20 female, BMI average 40.2, SD 7) had for 12 month a once a week program with sports, a psychological exchange group and a diet (3 Month formula 800 kcal a day, then 3 month stepwise turn to an individual healthy low fat, low carb regime continuing up to 12 months) and in addition a dance therapy built up on elements of salsa and merengue, especially joint-friendly but with a clear aim of muscle enhancement (Sarengue(R)) In a prospective Cohort study these patients were compared to matched pairs (sex, age, comorbidity, BMI at the beginning) without dance-therapy.

**Results:** Comparing intraindividual differences there was an additional significant weight-loss in the group of the dancers (minus 22 percent versus minus 19 percent), and significant improvement of the body-image and life quality.

**Conclusion:** Discontentness of the body image is a problem in long term motivation of obese patients. Aditional dance therapy can be the solution.
Subsequent in- and out-patient treatment of severe and comorbid eating disorders: a complex psychodynamic-integrative therapy between the poles of psychiatric and psychosomatic medicine

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**Background:** To present the effects and problems of community-based clinical psychiatric-psychodynamic treatment under the aspects of clinical research and education.

**Method & Results:** Evaluation of 81 consecutive in-patients with severe comorbid eating disorders according to their BMI, CGI, GAF, BDI, OPD, suicidality, psychiatric comorbidity, duration of illness and treatment revealed a severe somatic and mental impairment, which – from a psychodynamic point of view - corresponds to a severe structural regression. The multimodal individualized therapy (1 to 37 weeks, median 9, SD 11) led to heterogeneous treatment effects; a stabilization of BMI and psychopathology (e.g. depression, auto-aggression) was achieved in 75% of the cases. 25% of those with AN showed no increase in BMI and GAF. The psychotherapy focused on the structure- and conflict-based personal psychodynamic, the patients’s self-perception, introspection, regulation of emotions and self-esteem, mechanisms of psychic defense as well as interpersonal aspects by means of dialogues with the patient’s relatives. The subsequent day-care and out-patient continuation of the therapy with the same therapist facilitated the structural development in personality, even of mentally unstable patients, and increased their compliance for an eventual resumption of the therapy at a later date.

**Conclusion:** Notably the treatment of AN poses a special challenge for medical psychotherapists, because of the serious medical dangers and the risk for chronification due to ego-syntonicity resp. resistance. It therefore requires special professional relationships on the part of the therapeutic team as well as the consideration of the countertransference. Through a psychoanalytic understanding of the disease and the integration of cognitive-behavioural interventions, the therapeutic requirements oft “holding and containing” can be combined with the possibility of a symptom-based and structural development. A continuous therapeutic relationship, that is adapted to the prevailing psychiatric disorder, supports the development of structural psychodynamic aspects. This is essential for the mental improvement and therefore must be formulated as a central demand for the German healthcare system. Our intensive treatment experience and international literature prove, the psychodynamic-integrative acute psychotherapy in the community-based mental hospital with ongoing in- and out-patient treatment improves the course step by step.

**Traumatic experiences and familiar relations of two patient groups with bulimia nervosa and healthy controls**

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**Background:** Traumatic experiences as well as family relations may play important roles in the development of an eating disorder. These factors also will interact with each other. The aim of this study is to assess traumatic experiences, attachment style, emotional regulation and familiar aspects of bulimia nervosa patients and healthy controls.

**Method:** The following questionnaires are used: Eating Disorder Inventory (EDI-2), Eating Disorder Examination Questionnaire (EDE-Q) Early-Trauma-Inventory-Self-Report (ETI-SR), Experience of Close Relationship-Sort Form (ECR-SF), Family Assessment Device (FAD), Difficulties in Emotion Regulation Scale (DERS), Relation Questionnaire (RQ-1). Bulimia patients will be acquired by two different ways: On the one hand via personal contact within a inpatient treatment (N = 30), on the other hand via recruitment from specific internet platforms for eating disorders (N=30). The control group (N=40) will be comparable in age, gender and educational status.

**Results:** It is expected that patients with Bulimia nervosa have a higher rate of traumatic experiences, more family problems, more insecure attachment and more problems with emotion regulation than the members of the healthy control group. We also expect that the differently recruited patients with Bulimia nervosa will differ from each other.
Conclusion: At the moment the data collection is still running, but until June the Results will be available.

Body-relatedness in severe somatoform disorder: evaluation of the Dresden Body Image Questionnaire
Scheffers MWJ, Kalisvaart HJB, Van Busschbach JT, Van Broeckhuysen-Kloth S, Bosscher RJ, Schoevers RA, Geenen R

Background: A core feature of somatoform disorder is the troubled relation of patients with their body. Patients generally have difficulty to acknowledge and understand bodily signals and to adapt their behavior accordingly. Assessment of this complex relation to the body could be of great use in research and clinical practice. The Dresden Body Image Questionnaire (DBIQ) targets a broad range of body related aspects and measures body acceptance, vitality, physical contact, sexual fulfillment and self-aggrandizement. To evaluate the usability of the DBIQ in patients with somatoform disorder, its factor structure was examined as well as the ability of the questionnaire to differentiate between patients with somatoform disorder and a general population sample.

Method: DBIQ-data were obtained from 660 patients (age 24-69) with severe somatoform disorder from Altrecht Psychosomatic Medicine, Zeist, The Netherlands, a specialized treatment center. The original five-factor structure that fitted a German clinical sample (45% somatoform disorder) and a Dutch general population sample, was tested with confirmatory factor analysis, hypothesizing that the structure in the somatoform patients sample would be similar. The mean factor scores were compared to data from the general population. Subgroups of patients with pain disorder, conversion disorder and undifferentiated somatoform disorder were compared, using analysis of variance.

Results: The goodness of fit indices were satisfactory compared to the fit of the original five-factor model (RMSEA=.068, SRMR=.068), except for a somewhat lower CFI (.827). Patients with somatoform disorder scored significantly lower than the general population sample on all DBIQ subscales. Effect sizes were large: body acceptance: $d=1.0$, vitality: $d=2.5$, physical contact: $d=.8$, sexual fulfillment: $d=1.4$ and self-aggrandizement: $d=1.4$. Patients with conversion disorder scored significantly higher than patients with undifferentiated somatoform disorder and pain disorder on DBIQ-35 total score, vitality and body acceptance.

Conclusion: This study of the DBIQ as an assessment tool for body-relatedness in severe somatoform disorder shows satisfactory model fit and clear discrimination between the somatoform group and the general population. This indicates that the DBIQ might be of use to examine these aspects of disturbed body-relatedness in somatoform disorder, e.g. to facilitate assignment to and evaluation of therapy.

Body drawings as an assessment tool for body-relatedness in patients with severe somatic symptom disorder
Kalisvaart HJB, Geenen RMJ, Van Busschbach J, Bühring M, Van Broeckhuysen-Kloth S

Background: A core feature of somatic symptom disorder is the troubled relation of patients to their body. Efforts to assess body-relatedness have been focusing on self-report questionnaires, which may overlook important aspects of body-relatedness. Drawings of the felt sense of the body could have added value but its diagnostic usefulness is still unclear. The reliability, validity, and sensitivity of observer scores of characteristics of body drawings made by patients with severe somatic symptom disorder were examined.

Method: Drawings of the body from 180 patients in the intake phase of a tertiary care intervention were analyzed. Physical features of the drawings were scored using a 10-item observation. Arts therapists judged the severity of the dysfunctional body-relatedness. Sixty-seven patients made a second drawing after multidisciplinary treatment. Patients completed the Dresdner Körperbild Fragebogen (DBKB-35).
**Results:** Inter-rater reliabilities were excellent for 7 observation scores (ICC>.75), poor for 3 observation scores (.40>ICC>.21) and good for the severity score (ICC=.58). Categorical principal components analysis followed by principal component analysis with oblique rotation of the observation scores indicated a 2-factor structure referring to completeness (factor 1) and detailedness (factor 2) of the body drawings. Internal consistency of both factors was good (α≥.75). Factor 1 and factor 2 correlated with the severity score (r=-.39 and r=-.47). Factor 1 correlated with the ‘body contact’ scale (r=.26) and factor 2 with the ‘body acceptance’ scale (r=.31) of the DKB-35. Both the factor 2 score and the severity score showed improvement after therapy.

**Conclusion:** This first psychometric analysis of body drawings in patients with severe somatic symptom disorder indicate reliability, validity, and sensitivity to change. The Results may help to improve treatment indication and evaluation.

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**Screening for Body Dysmorphic Disorder in Acne Patients**

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**Background:** The aim of this study is to ask appearance-specific questions to screen for BDD in patients with acne vulgaris. A study of the literature reveals that the prevalence of BDD is between 9% and 12% in dermatological clinics. In our Dermatological Department these patients are not usually detected because appearance-specific questions are not asked during consultation. With this study we aim to prove the usefulness of screening for BDD with these appearance-specific questions and thereby help to detect this serious disorder in order to offer possible treatment options to our patients.

**Method:** Dermatology outpatients with acne were informed about the study and those who accepted were asked for written consent. The dermatologist completed a socio-demographic questionnaire and asked patients appearance-specific screening questions to screen for possible BDD. Patients who scored positive in the screening questions were informed about the disorder and offered the possibility of a referral to a mental health specialist.

**Results:** The sample size was 81 patients, the average age was 19, and 54% were female. Over half of the sample (53%) reported that their acne caused discomfort and/or distress. Although these patients would not meet DSM-IV-TR criteria for diagnosis with a psychiatric disorder, as they have a readily observable physical defect, their distress and impairment should be taken into consideration when implementing acne treatments and judging treatment success.

**Conclusion:** These Results show that a significant proportion of patients with acne presenting to a dermatology clinic, regardless of their acne severity, are very likely to have debilitating levels of preoccupation with real or perceived acne. Youngsters with acne represent a danger group and should be screened for possible BDD by the dermatologist.

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**Child & Adolescent C-L Psychiatry I**

**Exploring self-efficacy and attitudes among pediatricians in managing medically unexplained physical symptoms.**

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**Background:** Medically unexplained physical symptoms (MUPS) are common in pediatric practice. To physicians, treatment of patients with MUPS is often challenging and may lead to frustration. The aim of the study was to examine self-efficacy, attitudes and perceptions of pediatricians in the management of children with MUPS.

**Method:** An online distributed survey questionnaire was developed and addressed to all Dutch pediatricians in 2014 (n=1306). Self-efficacy scores in different stages of the diagnostic and therapeutic process of MUPS, aspects of communication and attitudes were expressed in 10-point Likert scales.

**Results:** Response rate was 339 (26%) and included 70% females. There was a near equal distribution over the years of experience. In general, pediatricians felt quite competent in dealing with MUPS, with mean scores just above 7 (scale 1-10). However taking a history according to the bio-psycho-social model scored substantially lower (lowest mean Likert score 5.3). There were significantly higher
self-efficacy scores in more experienced pediatricians in recognizing, history taking and diagnosing children with MUPS. The attitudes towards managing patients with MUPS varied considerably. More experience was significantly correlated with less frustration, more satisfaction and less fear of missing somatic diagnoses. Pediatricians perceived MUPS as time consuming.

**Conclusion:** These Results suggest that years of working experience of pediatricians are important in self-efficacy, attitudes and perceptions of managing children with MUPS. Taking a history according the bio-psycho-social model had the lowest self-efficacy score. We recommend specific education for pediatricians and pediatric residents on the bio-psycho-social model in children with MUPS.

**Early Intervention Programme for Impairing Post-concussional Symptoms in Adolescents and Young Adults:**

**Presentation of Pilot Data**

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**Background:** 5–15 % of patients with concussion continue to experience impairing physical, cognitive and emotional symptoms such as headache, dizziness, fatigue and concentration problems longer than three months post-injury. Currently, systematic studies on treatment for patients with persistent post-concussional symptoms (PCS) are scarce, and no standardised treatment is available.

**Aim:** To develop and in a pilot study test the feasibility and overall effect of an early intervention programme for young patients with persisting PCS three months post-concussion.

**Method:** 21 patients, aged 15 – 30 years, attended 8 weekly sessions of an interdisciplinary intervention programme based on psychoeducation, and principles from cognitive-behavioural therapy and graded exercise therapy. Treatment was delivered by a physiotherapist, an occupational therapist and a neuropsychologist. Patients completed self-report measures before the intervention and 3 and 6 months post-intervention. Patients’ opinions of the treatment were evaluated by a modified Experience of Service Questionnaire (ESQ). The overall effect of treatment was assessed by the Rivermead Post-concussional Symptoms Questionnaire (RPQ) (primary outcome), Patient Global Impression of Change (PGIC), and instruments measuring emotional distress and quality of life. Moreover, interviews regarding treatment satisfaction were performed.

**Results:** All patients rated the treatment as good and reported an overall positive impression of change. Preliminary analysis of the RPQ data from the first 15 patients indicates a high effect size of the intervention at post-treatment. 6 months follow-up data will be presented.

**Conclusion:** The early intervention programme was well received by the patients. Based on uncontrolled pilot data, it also had strong positive effects on post-concussional symptoms in the short term, and may have the potential to prevent symptom chronification and persistent disability. A RCT is currently planned to further evaluate the treatment effects.

**Health anxiety symptoms in a clinical population of children and adolescents being assessed for OCD**

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**Background:** Health anxiety (HA) involves persistent and intrusive preoccupation with fears of having a serious illness. Currently, there are no age-appropriate diagnostic criteria for severe HA in children and adolescents. Due to the diagnostic uncertainty and common features it is likely that HA is instead diagnosed as obsessive-compulsive disorder (OCD). Aims: To 1) estimate the occurrence of HA symptoms in a clinical sample of children and adolescents referred to a specialized OCD clinic at a child and adolescent psychiatric centre and 2) examine the relationship between HA and OCD symptoms in this clinical population. We expect to find a subpopulation of OCD patients with high HA symptom score that can be identified and differentiated from children and adolescents with “only OCD”.

**Method:** 21 patients, aged 15 – 30 years, attended 8 weekly sessions of an interdisciplinary intervention programme based on psychoeducation, and principles from cognitive-behavioural therapy and graded exercise therapy. Treatment was delivered by a physiotherapist, an occupational therapist and a neuropsychologist. Patients completed self-report measures before the intervention and 3 and 6 months post-intervention. Patients’ opinions of the treatment were evaluated by a modified Experience of Service Questionnaire (ESQ). The overall effect of treatment was assessed by the Rivermead Post-concussional Symptoms Questionnaire (RPQ) (primary outcome), Patient Global Impression of Change (PGIC), and instruments measuring emotional distress and quality of life. Moreover, interviews regarding treatment satisfaction were performed.

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**Conclusion:** The early intervention programme was well received by the patients. Based on uncontrolled pilot data, it also had strong positive effects on post-concussional symptoms in the short term, and may have the potential to prevent symptom chronification and persistent disability. A RCT is currently planned to further evaluate the treatment effects.
Method: In a cross-sectional study design, 100 children and adolescents aged 8 – 17 years with a first-time referral to a specialized OCD clinic in the hospital setting will be assessed for HA-symptoms by the Childhood Illness Attitude Scales (CIAS). OCD symptoms will be assessed by the Children’s Yale-Brown Obsessive-Compulsive Scale (CY-BOCS). Information on the participants’ physical health and medical contacts in the primary setting will be obtained from the Danish National Health Service (NHS) and medical records. In subsequent statistical analyses the association between the degree of HA symptoms, health care use and OCD symptoms will be examined. Further, the specific relationship between HA and OCD symptoms will be examined by testing the convergent and discriminate validity of the total CY-BOCS score as well as associations between the specific health-related items in the CY-BOCS with the CIAS score.

Results: The detailed study design and preliminary results based on the first 50 cases will be presented.

Conclusion: This study is, to our knowledge, one of the first larger clinical studies that specifically examine the relationship between HA and OCD symptoms in children and adolescents. The results can potentially help to clarify whether HA is a distinct disorder or is better regarded as part of the OCD spectrum in younger age groups. The former is the case, the data can also contribute to the development of age-appropriate diagnostic criteria for severe HA in childhood and adolescence.

Adolescents with Functional Somatic Symptoms: The influence of family therapy on empowerment and illness beliefs.
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Background: Young patients with Functional Somatic Symptoms (FSS) are common and may present in all clinical settings. Psychological treatment targeting dysfunctional illness beliefs and poor sense of empowerment has been shown effective for FSS in adults. In comparison, current knowledge about psychological treatment and the significance of illness beliefs and empowerment in children and adolescents with severe FSS is scarce. Aims: To conduct a qualitative study which aims to examine how specific illness beliefs and a sense of empowerment evolve and change during specialized family-based treatment delivered in a child and adolescent mental health services (CAMHS) setting. Further, how these affect symptom experiences and coping strategies.

Method: Data collection by semi-structured interviews with approx. 10 children with FSS and their parents followed by an interpretative phenomenological analysis (IPA).

Results: Preliminary data from a pilot study with 2 families, from interviews conducted prior to family therapy, indicate that illness beliefs and sense of empowerment may be diverging for children and their parents, and are influenced by many factors, such as health professionals, family history, media and personal experiences.

Conclusion: Increased knowledge about how family therapy is perceived, and how the treatment affects illness beliefs and sense of empowerment may be used in the further development of effective family-based treatment programmes for this patient group.

An Evaluation of Sleep Problems of Iranian Elementary School Children
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Background: The aim of this study is determination of the frequency of sleep problems in elementary school students in the city of Kashan, Iran.

Methods: This study is descriptive – cross sectional, in which 300 children (7-12 years old) of Kashan elementary school have been evaluated. Sampling was done randomly and cluster-like. Tools for data collection were questions about child age and sex and BEAR’S questionnaire which were filled by the mothers of the studied children. Data was analyzed by descriptive statistics method (mean and standard deviation). Independent sample T-test was used for comparing average...
sleep duration. Mann–Whitney U test was used for difference analysis between age and sex groups.

**Findings:** In total, 300 people participated in this study, 44.3% boy and 55.7% girl. Mean and standard deviation of children age in this study time was 9.08 ±1.67 years old. The most common sleep problems were nightmares and resistance against awakening. Relative frequency of awakening during night in boys was more frequent than girls (p< 0.05).

**Discussion:** High frequency of sleep problems in the study may indicate the importance of sleep issues in children. To promote awareness towards the subject, it is necessary to provide information regarding healthy sleep patterns through education centers and parent-teacher meetings.

**The salivary oxytocin response of severely early-traumatized children in relation to their attachment representations.**

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**Background:** Oxytocin plays an important role in social interaction, stress response and attachment behaviour (MacDonald, MacDonald, 2010). An on-going intervention study at the Dr. von Hauner Children's Hospital Munich investigates the effect of 6 months intensive in-patient psychotherapy on oxytocin response to the Child Attachment Interview (CAI, Target et al. 2003), which is thought to trigger the attachment system and measures attachment representations.

Using preliminary data, we studied: Is there a significant oxytocin release as a response to the CAI and does this response differ between attachment classifications?

**Methods:** The 20 children with applicable data (m:10 f:10) were 8 to 14 years old (M: 11.27 SD: 1.45 years) and had clinically relevant PTSD symptoms due to chronic complex PTSD and/or attachment disorders. The 4 salivary oxytocin samples were taken before conducting the CAI, immediately after, 15 minutes after (data with more than 5 minutes delay were excluded) and 30 minutes after the CAI and were analysed by RIAgnosis Munich using a highly sensitive and specific radioimmunoassay.

**Results:** We found a significant increase comparing the pre-CAI levels to a mean of the levels after and 15 minutes after, which was used in order to detect both early and delayed responses (p < 0.05 one-sided). 30 min after the CAI levels had significantly decreased again compared to this mean value (p < 0.05 two-sided, both Bonferroni corrected for repeated measurements ANOVA).

Comparing attachment classification groups did not give convincing results. The 4 boys and 2 girls classified as disorganized had significantly lower pre-CAI oxytocin levels than the group with organized attachment representations, but this was contributed to by sex inhomogeneity and lost significance when controlled by gender (p = 0.08 two-sided). In general, boys had lower pre-CAI levels (M: 1.15 pg/ml SD: 1.93 pg/ml) compared to girls (M: 1.53 pg/ml SD: 1.00 pg/ml), but this was not significant either (p 0.081 two-sided).

**Discussion:** Whether the CAI as a stressor itself, activation of the attachment system or the emotional support by the interviewer triggers oxytocin release remains unclear. Our data suggests that gender can account for differences in salivary oxytocin levels. In this clinical sample, oxytocin response was found regardless of attachment representation, but there are signs for differences in oxytocin base levels.

**playBENNO: the development and evaluation of a serious game to prevent mental stress during childhood**

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**Background:** »playBENNO« is the outcome of a two-year international research & development project, focusing on primary and secondary prevention of mental stress during middle childhood (seven to ten years) in a ludic way. »playBENNO« intends to strengthen psycho-social resources, stress response mechanisms, sense of well-being and regulation of emotions. You might call it a game for increasing mental resilience. The core elements consist of an innovative 3D SERIOUS health GAME (newly developed in
association with an interdisciplinary team of renowned experts) which is supplemented by a wide range of accessory material (interactive educational films; > 60 work sheets & group work exercises (for real life transfer). Theory of learning: SEE (in videos), TRY (to succeed exercises in the game), TRANSFER into daily life (by means of action plans-HAPA). Proven fields of application range from social learning settings (in primary schools or childcare facilities) to therapeutic interventions by health professionals.

Methods: Statistical population: 30 teachers & 600 pupils, working with »playBENNO« over a period of one school year. Qualitative interviews, quantitative psychological tests (e.g. SVF-KJ, SS-KJ) as well as HRV measurements (pre-post study) have been employed.

Results: Preliminary evaluation results showed positive impacts after the application of »playBENNO«: The participating teachers generally noticed positive changes in social behavior/social interaction, when comparing the pupils among themselves. Pupils were e.g. encouraged in independent thinking, acting & solving problems. Action competence, reflection processes & positive changes in stress response mechanisms has been noted. A growth of knowledge occurred, the repertoire of constructive strategies for dealing with stressors increased & the class atmosphere has been positively influenced.

Conclusion: Our contribution to psychology is the combination of health-psychology models with gamification concepts (serious use of digital media & games), especially within the framework of a new and innovative serious game (with multimedia-based complements). »playBENNO« intends to teach constructive strategies for dealing with daily hassles. Initial results show the potential of »playBENNO«. More studies are necessary to reveal which parts are responsible for the effects, under which conditions the effects arise & which health economic effects »playBENNO« could have.

Background: Music can be used in medicine, not only as a therapeutic aid but also as an instrument with diagnostic value in the plan of cognitive, affective and behavioral creations which are caused in listeners by the musical sonorities.

Background: The emergence of the "Mozart effect" concept triggered researchers interest on the influence of music on spatial thinking and psychomotor development of the infants. The present (preliminary) study, tried to capture some aspects of the reactions of a group of 30 kindergarten children, aged 4 to 6 years, in listening some pieces of classical music (from Haydn, Beethoven, Grieg, Korsakov, Wagner) with programmatic character, able to suggest common phenomena, easily identifiable by adults.

Method: Musical tests were heard successively by all children and everyone was asked to say or indicate, by gesture or drawing, what the music evokes or suggests. Were taken into account the following guidelines:
- general affective reaction of the group at every piece of music
- the number of those who responded to our requests
- the words expressed in response to the played music
- gestures or suggestions arising from the musical structure
- the adequacy of verbal and non-verbal reactions to the music intentions.

Results: Were referred to the five mentioned indices and their overall assessment highlighted the following issues:
- general reaction of the group was favorable but only five children expressed their constant responses. These were then taken by contagion from most other children,
- each piece of music has caused at least an adequate response from the five children (eg. running water, thunder in Pastoral by Beethoven, birds in The murmur of the forest Wagner, the clock from Haydn, the train by Grieg, etc.).

Conclusion: The study allowed a preliminary assessment of a raw of samples of introspective expression, of verbal / non-verbal, imaginative / associative products of these children, ages 5-6 years.

Conclusion: Continued study of school batch of 7-10 years will surprise the evolution of the introspective capacity and verbalization at the children, able to legitimize therapeutic effect of music in the psychosomatic plan.

Features of verbal / non-verbal responses to the kindergarten children, induced by classical music
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¹National Music University Bucharest, Keyboard, Bucharest, ²University of Medicine and Pharmacy, Medical Psychology, Bucharest, Romania

Background: Music can be used in medicine, not only as a therapeutic aid but also as an instrument with diagnostic value in the plan of cognitive, affective and behavioral creations which are caused in listeners by the musical sonorities.

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- each piece of music has caused at least an adequate response from the five children (eg. running water, thunder in Pastoral by Beethoven, birds in The murmur of the forest Wagner, the clock from Haydn, the train by Grieg, etc.).

Conclusion: The study allowed a preliminary assessment of a raw of samples of introspective expression, of verbal / non-verbal, imaginative / associative products of these children, ages 5-6 years.

Conclusion: Continued study of school batch of 7-10 years will surprise the evolution of the introspective capacity and verbalization at the children, able to legitimize therapeutic effect of music in the psychosomatic plan.
**Consultation-liaison Psychiatry & Psychosomatics in Different Clinical Fields**

**Prospective validation study of the prediction of Alcohol Withdrawal Severity Scale (PAWSS)**

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**Background:** To prospectively test and validate Prediction of Alcohol Withdrawal Severity Scale (PAWSS), a new tool to identify patients at risk for developing complicated alcohol withdrawal syndrome (AWS), in a large population of medically-ill individuals. The prevalence of alcohol use disorders among general medical units is up to 40%. Up to 20% of these patients develop symptoms associated with complicated AWS including seizures and delirium tremens (DT). AWS is associated with increases in morbidity and mortality, prolongation in hospital stays, inflated costs, and worsened cognitive functioning, and death. Thus, identification and prevention can reduce the risk of brain damage and neurocognitive decompensation, medical comorbidities, and length of hospital stay. Mild AWS do not require medical intervention and usually disappear within 2–7 days of the last drink.

**Method:** A systematic literature review (using PRISMA guidelines) identified factors associated with the development and severity of AWS used to develop a 10-item scale to predict alcohol dependent patients at risk for developing complicated AWS (i.e., seizures and DT). We prospectively recruited all consecutively hospitalized subjects to the general medicine units over a 3-mo period to test PAWSS validity and reliability. Subjects were independently and blindly assessed daily with PAWSS, CIWA-Ar, and clinical monitoring throughout their admission to determine the presence and severity of AWS.

**Results:** 409 patients were tested and grouped by PAWSS score: Group A included those with a PAWSS < 4 and were considered to be at low risk for AWS; while subjects in Group B obtained a PAWSS > 4 and were considered at high risk for complicated AWS. Two patients in Group A experienced elevated CIWA scores or were treated for AWS. As predicted, all but two subjects in Group B required pharmacological treatment for AWS. The Results of this study suggest that, using a PAWSS cut-off of 4, the tool's sensitivity is 93.5%, specificity is 99.5%, positive predictive value is 93.5%, and negative predictive value is 99.5%.

**Conclusion:** PAWSS appears to have excellent psychometric characteristics and predictive value among medically-ill in-patients, helping clinicians identify those at risk for complicated AWS and allowing for timely prophylactic treatment. The use of PAWSS will minimize the excessive use of medications in those at low risk for complicated AWS, thus minimizing undesirable side effects.

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**Inhalant Use in the General Hospital. A South American Liaison - Psychiatry Perspective**

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**Background:** Volatile inhaled substances have been relegated to a secondary study field but they continue to have a great impact on adolescent population because of their easy access. Some factors like the variety of products, the lack of consensus in nosologic categories, problems in the classification of this compounds as well as a lack of attention in international agendas about this topic, may have this problem overlooked in drug abuse survey research and in the setting of national and international drug control policy. Compounds like glue contains different types of solvents and in South American countries like Colombia, toluene is the principal one, and often legally accepted. Among Bogotá school children, rates of exposure opportunity (EO) to volatile substance misuse (VSM) are (16%), lifetime VSM (10%), and transition from exposure opportunity to actual volatile substance misuse VSM (60%) are similar to those observed in Latin American and Caribbean countries where prevalence of EO to VSM ranges from 4%–25%, lifetime VSM ranged from 2%–11%, and VSM-given EO from 26%–80%. In another Colombian sample of 10,112 individuals aged 12 to 59 not living in institutions, was found that inhalants were the fourth most prevalent drug of abuse after alcohol, tobacco, and marijuana (life prevalence: 3.8%). Many people combine it with other unknown solvents for economical Backgrounds, resulting in a mixture with a potential neurotoxicity. The Background of this presentation is to exemplify some aspects related with classification, general definitions, epidemiology, patterns of use and exposition,
pharmacokinetic and pharmacodynamic aspects and medical complications of the use. 

**Conclusion:** Volatile substance misuse is common during early adolescence and adulthood especially in underdeveloped countries like Colombia. It is important to point out that its early use coincides with the time of maturation of brain structures. This review shows the significant progress that has been made in understanding the neurobiological basis for solvent misuse and reveals the challenges in the understanding of this overlooked class of drugs of abuse. This addiction must be recognized as a major public health problem.

**Distress vulnerability in patients with drug allergy compared to patients with other psychocutaneous diseases**

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**Background:** Previous researches revealed at patients with drug allergy and at patients with cutaneous diseases a high distress vulnerability and association of an important psychiatric comorbidity. Other studies revealed that, at these patients, emotional stimuli may influence the sweat secretion. 

**Method:** The design of the study was transversal and included 60 patients (mean age 49.25; SD 15.67) with drug allergy (n1=30) and with cutaneous diseases (n2=30). The control group was represented by 30 subjects with no allergies or dermatological diseases. All the subjects were administered Perceived Stress Scale (Williamson & Cohen), Hospital Anxiety and Depression Scale (Zigmond & Snaith) and underwent a musical test diagnostic (MTD; Iamandescu) containing 3 series of musical pieces as a psychosomatic stimuli inducing some changes in skin moisture which was measured with Multi Skin Test Center MC 750. 

**Results:** The average scores at perceived stress, anxiety and depression were significant increased at patients with drug allergy and psychocutaneous diseases comparing with the control group. At patients with drug allergy compared with patients with cutaneous diseases there were found higher scores of perceived stress (36 vs 32, p< 0.001), anxiety (12.5 vs 10.2 , p<0.001) and depression (6.4 vs 5.5, ns). Cutaneous perspiration was significant increased especially at the forehead and palms in both groups of patients referring to control group after the audition of the second musical fragment (sad, even tragically music pieces). It is worth to mention that there was no statistical significance between both groups of patients. 

**Conclusion:** Both groups of patients (with drug allergy and psychocutaneous diseases) have demonstrated a high distress vulnerability, including also an increased skin perspiration to sad music (as a distressing stimulus). These patients show personality traits characterized by high stress load and increased vulnerability to stress that may influence disease progression and the coping strategies. The somato-psychic recoil (revealed by the existence of high levels of anxiety and depression) may maintain the increased reactivity to stress. The similarities between drug allergy patients and psychocutaneous diseases patients may be explained by the role of the skin as a shock organ and low presence of drug anaphylaxis among drug allergy patients.

**The important role of psychoeducation in dermatology**

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Psychoeducation is among the most effective of the evidence-based practices that have emerged in both clinical trials and community settings. Because of the flexibility of the model, which incorporates both illness-specific information and tools for managing related circumstances, psychoeducation has broad potential for many forms of illnesses and varied life challenges. Many forms of psychosocial intervention are based on traditional medical models designed to treat pathology, illness, liability, and dysfunction. In contrast, psychoeducation reflects a paradigm shift to a more holistic and competence-based approach, stressing health, collaboration, coping, and empowerment. Psychoeducation in itself may take many forms, from being a phase in a treatment, to an explicit component of such a treatment, to being an intervention in its own right. Psychoeducation aims to:

1. Increase patients’ awareness and understanding of their specific disorders as well as available treatments and supports appropriate to their service needs.
2. Reduce stigma by providing factual information and making it safe for patients to talk about their disorders.
3. Provide a more inclusive and inviting treatment environment.

Psychoeducational groups focus on informing patients about their condition and inquiring about ways of coping. Current, up-to-date information is provided by the health professional and the participants share their concerns and strategies used to overcome difficulties related to their illness.

Job stress in irritable bowel syndrome
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Aim: to assess the correlation between job stress and Irritable Bowel Syndrome (IBS).
Method: The study groups undergoing clinical and laboratory examination included 76 subjects, with mean age 39.25 ±5 years. Two age and sex matched groups of IBS (38 patients) and healthy controls (38 subjects) were investigated. Stress was assessed by the standard questionnaires: Occupational Stress Questionnaire, The Occupational Stress Index. Stress was also estimated by the measurement of seric IL-6, salivary cortisol. Various parameters as age, sex, profession, social status, economic status, medical history were analyzed and compared.
Results: Job stress, assessed by specific questionnaires, was divided in five distinct categories and encountered in higher amount in IBS compared to the matched control group: calm(31.6 % vs. 65%, P<0.0001), restless(18.4 % vs. 15.8 %, P < 0.5677), moderate(28.9% vs. 14.2 %,P<0.0151),high Pressure(10.4 % vs.2.4 % ,P <0.0447), burnout(10.6 % vs. 2.6 % P <0.0098). There was a statistically significant correlation between high levels of IL-6 and presence of IBS (p =0.0001), but no relation between salivary cortisol and IBS (P = 0.6115).
Conclusion: job stress, assessed by specific questionnaires and the biological stress markers are present in IBS and correlate with the severity of IBS symptoms.

Relationship among health-related quality of life, coping strategies and dysfunctional beliefs in Irritable Bowel Syndrome
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Background: This cross-sectional study explored the relationships between coping styles, dysfunctional attitudes, and health related quality of life (HRQOL) in irritable bowel syndrome (IBS) patients.
Method: The sample was composed of 70 IBS patients (48.02 ± 13.22 years) and 55 healthy controls (46.12 ± 10.27 years). All participants completed the Brief Cope Inventory (BCOPE), the Dysfunctional Attitudes Scale (DAS), the Short Form Health Survey (SF-36) and a demographic questionnaire. T-test for independent groups was performed to explore the differences between the IBS patients group and the healthy control group on the various measurement instruments. The next step in data analysis was correlational analysis. Mediation analysis using bootstrapping followed to examine the predictions we made.
Results: Data revealed that compared to the controls, patients with IBS showed higher levels of dysfunctional beliefs and negative coping styles. All the HRQOL scores of the group with IBS were significantly lower than the HRQOL scores of the healthy control group. Moreover, the impact of IBS symptoms on HRQOL distress is mediated by irrational beliefs. Coping mechanisms correlated highly with HRQOL in bivariate, but not multivariate analysis.
Conclusion: The relation between IBS symptoms and HRQOL is not strictly a direct and linear one but works partly through patients’ general dysfunctional beliefs. Implications of this findings for understanding and investigating the dysfunctional cognitions and impact on HRQOL from a biopsychosocial perspective are discussed.
The relationship between alexithymia, depression and quality of life in patients with functional dyspepsia

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Background: Pathogenesis of functional dyspepsia (FD) involves various psychosomatic interactions. Alexithymia as a personality construct is responsive for somatic aspect of emotional reactions. Aim: To study the relationship between alexithymia, depression and quality of life in FD.

Methods: 28 patients with symptoms corresponding to Rome III criteria for FD have been examined. We determined the alexithymia scores (TAS-20), quality of life (SF-36) and depression (HDRS-21). The control group (CG) – 29 healthy individuals. Student's t test and correlation test were used to statistic analysis.

Results: The positive depressive and alexithymic scores have been reported in 75.00% and 64.29% of patients with FD compared to CG (13.79% and 20.69%). Quality of life (QL) in FD was lower than in the CG (p<0.001). A weak negative correlation between depression degree and QL in FD (r=0.33) and a low correlation between QL and the TAS scores (r=0.3) were identified. There is a strong correlation between depressive scores and 2nd TAS factor (difficulty describing feelings) (r=0.56). We found no correlation between the depression degree and QL pain factor but there is a relationship between pain and total TAS score (r=0.42), in particular with 1st (difficulty indentifying feelings) and 2nd factors (r=0.5 and r=0.5). 3rd factor (externally oriented thinking) found no correlations with the studied parameters.

Conclusion: Patients with FD are characterized by elevated depressive and alexithymic scores. Depressive symptoms coexist with somatic complaints, which determine the decline in the quality of life. We found a strong correlation between pain symptoms in functional dyspepsia and difficulty identifying and describing feelings.

Psychobiological predictors after bariatric surgery: Results of a case-control study

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Background: The aim of bariatric surgery is to prevent long-term morbidity and poor quality of life of patients with morbid obesity by reducing sustained weight. Between 30% and 40% not maintained between 12 and 24 months undergoing a weight increase thereof. Through our study we considered: determining the psychological variables (self-esteem, social support, coping strategies) and clinical personality patterns that relate to a failure and establish a "diagnostic algorithm" (psychobiological variables) which it considers a worse prognosis the outcome after surgery.

Method: Case-control study. Cases: patients with less than 50% PSPP. Controls: patients with PSPP equal to or greater than 50%. The PSPP (% of excess weight loss) measured at 12 months duration after surgery. Data collection: Bariatric Surgery Unit by tracking protocol according to the clinical history and the Unit of Mental Health through self-administered questionnaires by patients. Data analysis: the statistical program R (multivariate logistic regression model) is applied

Results: A total of 31 subjects, 20 women and 11 men. Media PSPP ds = 56.87 = 14.86. 41.9% of subjects failed the proposed percentage of excess weight loss goal. Within comorbidity (hypertension, DM II, OSA, dyslipidemia), there were significant differences in the presence of higher numbers of hypertension in the case group (p = 0.0004). The psychological variable AUC (Self-criticism) is significantly higher in controls.

Conclusion: Self-criticism includes the emotional valuations and management meaning and cognitive problems obese patients encounter in their life. Being aware of faults or defects to correct themselves can avoid coping with problems getting passive and maladaptive maintain control in eating habits. Positive Results may facilitate propose the start of a standardized psychological treatment in post-operative patients presenting these traits detected risk in order to try to avoid this failure and thus maintain a favorable outcome. The sample size is still limited but will increase
progressively strengthening both analysis Results.

**Quality of Life, Anxiety and Depression in the Medically Ill**

**Coping anxiety in patients scheduled for surgical intervention to achieve better outcome**

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**Background:** The liaison between mind and body has been much discussed. Undergoing a surgical intervention is a stressful life event. However, it seems that patients with high rates of anxiety, tend to have a poorer postoperative evolution compared to patients with lower anxiety. Gallbladder calculi is treated nowadays mainly by laparoscopic surgery. This procedure is considered much safer than the classical intervention, and the clinical outcome is better.

**Method:** We have conducted a survey on 60 inpatients from Cluj-Napoca Clinical Emergency County Hospital and Huedin General Hospital, diagnosed with gallbladder calculi that were scheduled for laparoscopic surgery. The patients’ anxiety levels were assessed using STAY 1 and 2 before and after the surgical intervention. We developed a questionnaire to collect the following data: the analgesic pharmacotherapy was evaluated; we assessed the changes in the clinical general symptoms such as nausea, vomiting, resumption of bowel movements, postoperative pain. Patients were questioned whether they asked for exhaustive information prior to the surgical intervention. The data collected was statistically analysed using SPSS20.

**Results:** Patients with preoperative high levels of anxiety reported higher levels of anxiety after the surgical intervention. They also complained more frequently of vomiting and nausea. The resumption of bowel movements appeared later for patients with high levels of preoperative anxiety. They also reported greater pain and requested larger amounts of painkillers compared to patient with lower levels of anxiety. They also requested a greater amount of information before the surgery, and explained that they needed this in order to be reassured that everything will be fine.

**Conclusion:** There is a strong connection between mind and body, the higher the levels of anxiety, the poorer the postoperative outcome is. Even minor surgical intervention can raise anxiety in people. Strategies involving the reduction of anxiety prior to surgical interventions, even minor ones, must be taken into account in order to improve the postoperative outcome. Screening instruments to identify patients at risk of developing anxiety or affective disorders after a surgical intervention should be considered a part of the preoperative evaluation.

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**Assessment of anxiety and depression in a cohort of one-year follow-up patients after heart transplantation**

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**Background:** Heart transplantation (HT) is a potentially life-saving procedure for people with terminal cardiac disease. However is also one of the more invasive and psychologically threatening of the available interventions. Rates of psychiatric morbidity of around 50% have been found in people undergoing HT, mainly depressive and anxiety disorders. Although these rates decrease in postoperative phase, around one third of HT-patients, presents psychological problems at long-term course. Assessment of anxiety and depression with Hospital Anxiety and Depression Scale (HADS) in a cohort of one-year follow-up patients after HT.
Method: Assessment of 37 adult patients enrolled between 2006 and 2013 in HT program of Hospital Clinic of Barcelona. We analyzed the following variables during waiting list phase: age, sex, years of disease progression, etiology of cardiopathy, axis I disorders applying structured clinical interview for DSM-IV, HADS, and description of psychopharmacological treatment. HADS was also measured one year after HT.

Results: Demographic and clinical characteristics: On average, the 37 patients of the sample were aged 53.65 ± 9.77 years. 26 were male (70.3%) and 11 female (29.7%). The mean of cardiac disease progression was 11.11 ± 8.15 years. A 54.1% of patients presented an ischemic cardiomyopathy and a 21.6% a non-ischemic cardiomyopathy. The clinical characteristics of our sample are similar to the overall patient profile integrated in a HT program. Psychiatric evaluation: Axis I diagnoses were present in a 27% of the sample (10 patients), all of them included in depressive, anxiety, sleep and adjustment disorders. All these patients were treated with psychopharmacological drugs at time of inclusion in waiting list. Waiting list period: the mean score of HADS was 10.68 (SD = 5.51), with a mean score of 6.08 (SD = 3.5) in anxiety subscale and 4.59 (SD = 2.83) in depression subscale. 12-month follow-up: the mean score of HADS was 7.73 (SD = 5.28), with a mean score of 4.84 (SD = 3.32) in anxiety subscale and 2.89 (SD = 2.59) in depression subscale. T-test showed statistically significant differences on the three scores of HADS between the two assessments.

Conclusion: Although scores of HADS in our sample were lower than the cut-off points for the screening of psychiatric morbidity (<12 points for total score and <8 for subscales), there was a significant decrease in anxiety and depression symptoms 12 months after HT.

Slow respiring supported by a periodical mechanic haptic stimulus reduces situative anxiety in psychosomatic patients. A randomized controlled trial.
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Background: Non pharmacological crisis intervention for immediate panic in anxiety disorders or more complex disturbances are furthermore a therapeutic challenge.

Method: In an inpatient setting in 100 consecutive crisis situations (73 patients) there were after informed consent randomly offered or 5 minutes decelerbreathing (6 circles of respiration in one minute, expiration 6 seconds, inspiration 4 seconds), using a vibrating device, or a Method of self-regulation by means of a slight swinging (SURE - somatic universal regulative exercise, derived from a Sufi-meditation-technique for 5 minutes) or standard appeasing talk by nurses or medication on demand. We asked in an cross over setting which of the procedures would be the most helpful. To estimate actual anxiety the STAI was used for state anxiety.

Results: There was a significant decrease of state anxiety in all 4 treatment conditions. With no significant differences except comparing talking down and the respiration technique with an advantage in the respiration group (Wilkoxon Test for related samples; mean of improvement 10 points, SD 8, in the Group using the medication, 8 points, SD 7, the Descelerbreather, 4 points, SD 4, in the talk-group and the SURE group.

Conclusion: The model of stepped care – in this situation - study caused - randomly – is a practicable strategy for crisis intervention. Standards are at the moment talking and if not sufficient pharmacological treatment e.g. with loracepam. We can broaden the spectrum with respiration oriented techniques – not only in the case of hyperventilation – or movement based self-centering meditation.

The quality of life of patients with poliartrite reumathoides and depressive symptoms
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Poliartrite reumathoides (PR) is a chronic artropaty, with a progresive, distructive and deformating character, associated with a lot of systemic manfestations. PR represents the most frecquent inflamatory rheumatisme, with a prevalence about 1% in general population and about 200.000 pacients in Romania. The risk of appereance of PR was idenfified in all the populations examinated till now, the prevalence vary from 0.2 till 5.3%. PR is a disease with multiple values, bio-psycho-social aspects, with the contribution of anxiety and
the risk for depression and progressive lost of the capacities to manage the social situations. The degree of activity of the disease, mood oscillations and the quality of sleep had a predictable value for development of asthenia in PR.

In our study we included 50 patients, with the age between 18 and 55 years old, diagnosed with PR, according with American College of Rheumatology criterion and had also a major depressive episode, diagnosed according with DSM IV. Assessment of quality of life of the patients with PR depending on the treatment particularities, that why our lot of study was separated in 2 groups, patients taken Conventional Disease Modifying Antirheumatic Drugs and the second group taken Biological Disease Modifying Drugs, but on a stable dose at the moment of screening.

We realized correlations between the level of the activity of the rheumatic disease, using Disease Activity Index 28, with the 17 items from the scale of depression, Hamilton and the quality of life. We will follow all the domains measured with the quality of life scale including physical function, physical role, body pain, general health, vitality, social function, emotional health and mental health (SF36 scale). The duration of the study was 12 months and the patients start to take antidepressive drugs, SSRI drugs. An earlier and certain diagnostic of a chronic disease, which is progressive and invalidant, needs a permanent monitored of the evolution, prognostic and the treatment, in the idea to reduce the evolution of the inflammatory process and their consequences, to improve the quality of life of the patients, especially at the moment when appear depressive symptoms.

Quality of life in patients with acromegaly: the preliminary Results
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Background: To ascertain the psychological profile of patients with acromegaly compared to those with non-functioning adenomas and healthy control group.

Method: A total sample of 124 participants underwent a cross-sectional assessment including the quality of life (AcroQoL, WHOQoL BREF), psychiatric morbidity (GHQ-28) and acceptance of illness (AIS). The sample consists of patients with acromegaly (n=50) divided into two subgroups accordingly to minimal GH concentration during the OGTT or profile of GH and IGF-1: controlled and cured acromegaly group (CAG n=19) and active acromegaly group (AAG n=31); patients with non-functioning adenomas group (NAG n=37) and healthy control group (CG n=37) matched according to age.

Results: The total study group had predominance of urban married females with mean age of 48.66 ± 16.26 years [range 19-87]. No significant differences were identified between CAG, AAG and NAG referring to quality of life, psychiatric morbidity and acceptance of illness. Compared with healthy controls, acromegalic in active stage of the disease suffered more from anxiety and insomnia (p=0.031) and had significantly poorer quality of life in psychological domain measured with WHOQoL BREF (p=0.004). The illness duration since diagnosis of acromegaly was identified as a negative predictor of physical domain of AcroQoL (r=-0.35, p=0.035), social domain of WHOQoL (r=-0.43, p=0.009) and acceptance of the illness (r=-0.42, p=0.011).

Conclusion: Results of the study indicated that active acromegaly and illness duration affect patients’ psychosocial functioning. Thus, concerning the diagnosis, treatment and monitoring of acromegaly an interdisciplinary approach is needed.

Monitoring of Quality of Life – Feasibility of Web-Based Home-Assessments in Elderly Palliative Patients
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Background: Radium 223 has been approved for the palliative treatment of patients with osseous metastasised prostate cancer based on a survival benefit and a quality of life (QOL) preserving effect, especially regarding the alleviation of bone pain. Therapy comprises six monthly injections of radium 223 on an outpatient basis. As usually symptoms and
QOL are assessed during hospital visits, so far, little is known about the benefits and risks of the treatment regarding symptom burden, functioning levels, or psychosocial issues during the time at home. Therefore, we are interested in trajectories of self-reported pain and QOL over the course of treatment in patients treated with radium 223, including assessments at home. The aim of this pilot study was to investigate the feasibility of a web-based home-monitoring in these, usually elderly, patients.

**Method:** Seven patients at Medical University of Innsbruck were asked to participate in the pilot study. It comprised assessing the appropriateness of the questionnaires FACT-P (Functional Assessment of Cancer Therapy-Prostate) and FACT-BP (FACT-Bone Pain), the willingness to complete weekly assessments, and the feasibility of a web-based survey. Patients received a tablet PC and login for the online completion of the questionnaires (weekly over six months). The web-monitoring was performed with the software CHES. Finally, patients were asked for their feedback concerning the online survey.

**Results:** Five patients (median age 73 years) completed weekly paper-pencil questionnaires for at least one month and then participated in web-based home-monitoring. Three were initially unexperienced with the handling of tablet-PC. All participating patients perceived the use of tablet PCs as highly diversified and appreciated the attention given to their well-being at home. There were few missing assessments and patients reported very few difficulties with the web-survey, approving the user-friendly of the software. Two of seven patients refused home-assessments but completed hospital assessments.

**Conclusion:** The web-based monitoring appeared to be highly feasible in elderly patients with prostate cancer undergoing palliative therapy with radium 223. Thus, further patients will be consecutively included into the monitoring and first data will be presented at the conference. In future the web-based monitoring may be a measure to improve the timely identification of treatment needs in palliative patients who are at home.

**Influence of coping style and resilience on the perceived quality of life at cancer patients**

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**Background:** Literature data document a substantial influence of cancer symptoms on perceived quality of life, including deterioration of self-image and impairment in performing social roles. Many cancer patients display mixed emotions and disorganized behavior, which can contribute further to a low perceived quality of life. This process is however susceptible to be mediated by individual variables, among which coping style and resilience could play a significant role, as they are proven to influence the effects of stress. This study aims to measure the amount of influence coping style and resilience have on the perceived quality of life at cancer patients.

**Method:** 50 patients (30 females and 20 males, 41-76 yrs.old, mean age 59.2) with a confirmed diagnosis of breast, lung, colon, lung, head or neck cancer and who were undergoing chemotherapy at the Oncology Unit - Coltea Clinical Hospital in Bucharest were invited to participate in the study. The Brief COPE Scale and the RS-14 Scale were administered to assess their coping strategies and resilience, whereas the Assessment of Quality of Life (AQoL) Scale was used to measure their perceived quality of life. Variables such as education, stage of cancer, time from diagnosis, number of sessions of chemotherapy, radiotherapy, surgical history were also considered as covariates.

**Results:** The resilience scores were good in general (40% moderate high, 26% high and 14% very high) with only 20% of patients (4 females and 6 men) displaying low and very low resilience. Resilience levels correlated positively to the use of more active coping strategies [such as planning (p < .01), reframing (p < .05) and seek for instrumental social support (p < .03)] and inversely with age (p < .04) and numbers of surgical interventions (p < 0.01). Problems with independent living were statistically correlated to self-blame (p < 0.01), self-distraction (p < 0.04) and low use of humor (p < 0.05). Psychological wellbeing was statistical correlated with high resilience (p < 0.05) and the global score of active coping (p < 0.03).
**Conclusion:** High level of resilience and active coping strategies are tightly correlated and seem to influence the perceived quality of life at cancer patients. This finding could have implications in selecting cancer patients with low resilience and/or dysfunctional coping strategies as priority targets of counseling and psychotherapy.

**The association of perseverative negative thinking with negative affect in long term conditions: A systematic review**

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**Background:** Depression is common in people with long term conditions (LTCs), although the effectiveness of current psychological treatments can be limited in this group. Perseverative negative thinking (such as worry and rumination) could be causally related to depression in people with LTCs, and may therefore provide a novel target for treatment. However, the majority of previous research has been conducted in physically healthy populations. This review aims to determine the strength of the association of perseverative negative thinking with subsequent depression and anxiety among adults with LTCs.

**Method:** Four electronic databases were searched. Studies had to address whether or to what extent perseverative negative thinking is prospectively associated with negative affect (or vice versa) in adults with LTCs. Prospective studies were included if they contained at least one standardised measure of perseverative negative thinking and one standardised measure of negative affect. Results have been narratively synthesized.

**Results:** 25 observational prospective cohort studies were identified in people with heart disease, rheumatoid arthritis, cancer, infertility, hearing loss, muscular dystrophy, cerebral palsy and chronic pain. Correlations largely supported an association between perseverative negative thinking and subsequent negative affect (effect sizes ranged from r=0.23 to r=0.73). Multivariable Results were more mixed although 13 out of 20 studies showed, at least partially, that baseline perseverative negative thinking predicted subsequent negative affect after controlling for confounders such as age, sex, baseline depression and other disease and demographic factors. Results varied according to LTC, type of perseverative negative thought, and study quality. Few studies assessed the impact of perseverative negative thinking on physical health outcomes.

**Conclusion:** The majority of studies identified provided some support for an association between perseverative negative thinking with subsequent negative affect in people with LTCs after controlling for other confounding factors. However, research in this area is relatively sparse and of limited quality. Further prospective research is warranted to clarify which types of perseverative negative thought are associated with depression and poor physical outcomes, and to indicate whether perseverative negative thinking is a relevant target for treatment of depression in people with LTCs.

**Models of Integrated and Collaborative Care**

**When questions are as useful as answers: using dialogical approach in cooperation of care of psychosomatic patience**

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**Background:** There has been a tradition in the Czech republic of collaboration between systemic psychotherapy and medical treatment of psychosomatic patients. As new trends within the systemic field function mostly on postmodern paradigm and collaborative practice we find it crucial to find a way how to communicate between the modern paradigm of medical care and post-modern approach of psychotherapy in a way which is not experienced as blaming or threatening by the patience or professionals involved. Based on the techniques of open dialogue (Jaakko Seikkula) we have been trying to find a way how to improve communication between clients, their families and professionals involved and amongst the professionals themselves.

**Method:** Literature review and reflection of the last 5 years experience of collaboration between medical and psychological care of psychosomatic patients in our clinic. Case study reflecting the demands of integrating polarities within the professional inner conversation enabling the patience to feel more involved with their treatment and perceive
herself as valid and resourceful for her own health.

**Results:** Hypothesis that integration of polarities within the professional inner conversation enables better coordination of medical and psychological care according the patience needs.

**Conclusion:** Based on this hypothesis we have changed same means of communication in our clinic creating a space for sharing questions and collaborative learning which is experienced as a burn-out prevention by the professionals involved. Whether this is an experience bringing an actual change into patience well-being will be question for further research.

**Curative factors in self-help groups during and after inpatient psychosomatic treatment**

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**Background:** Yalom has identified eleven curative factors in therapist-led psychotherapy groups as actual mechanisms of effecting change (Yalom&Leszcz 2005). Little is known as to what are potential curative factors in self-help groups (SHG). In SHGs, attenders provide mutual support for each other. They have the potential to enhance self-determination and promote recovery for their members (Lewis et al 2012). Aim: To assess potential curative factors in SHGs and to study whether a questionnaire designed for the investigation of therapist-led groups (WFB) may be feasible for SHGs.

**Method:** We carried out an investigation of potentially curative factors and patients’ characteristics of 4 SHGs attended by 20 former inpatients of our psychosomatic clinic, and of 3 SHGs attended by 20 psychosomatic inpatients during their current treatment. Fifteen of the post-treatment patients (with depression, somatoform disorders and anxiety disorders), and 19 inpatients (somatoform disorders, depression, and anxiety disorders) completed a questionnaire of therapeutic group factors (WFB, Modestin et al. 1988), the brief form of the symptom checklist (BSCL), the Adult Attachment Scale (AAS), and a questionnaire of perceived social support (FSozU, Sommer&Fydrich 1989).

**Results:** The WFB proved feasible for the use in SHGs. The GSI score of the BSCL was higher in the inpatient group (72.81 vs. 68.53).

In both samples and across diagnostic groups, more than 50% of the patients showed secure attachment in the AAS. The majority of patients viewed their social support as adequate. In our analysis of the WFB, the most important therapeutic factors were universality (mean score 4.15) and acceptance (3.96). Self disclosure (3.46) and insight (3.48) scored lowest. Patients with lower global scores in the BSCL (GSI ≤60) had significantly higher scores for the curative factors „interpersonal learning“, „acceptance“, „catharsis“, „guidance“ und „altruism“. This could be accounted for by an enhanced capacity of „healthier“ SHG attenders to utilise these curative factors.

**Conclusion:** The WFB in modified form can be used in SHGs. Our patients appreciate universality and acceptance of their SHG as important and beneficial. SHGs seem to be a valuable part of inpatient and post-inpatient treatment of psychosomatic patients. SHGs can be recommended for psychosomatic patients, in particular to those with sufficient ego strength.

**Disentangling health complexity among internal medicine, hospitalized patients**

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**Background:** To test in internal medicine patients the ability of INTERMED to disentangle “case” and “care” components of health complexity and to assess the value that its Results could potentially bring to the identified complex patients.

**Method:** A longitudinal, observational study was designed to comply with the Backgrounds in internal medicine patients in two National Health System hospitals in Spain. One thousand and twenty five consecutive patients were invited to participate, and recruitment stopped once the number of included patients reached the previously calculated sampling size. INTERMED was administered by trained interviewers. The Cumulative Illness Rating
Scale (CIRS) was used to document severity of illness, and standard measures were used for clinical variables.

**Results:** Six hundred and fifteen patients completed the study, and 27.6% were considered to be complex (INTERMED total score 21+) in this population with a mean age of 73 years. The main differences with the non-complex patients were observed in the non-biological domains. The prevalence ratio complex/non-complex in items indicating a need for timely intervention (scores 2 or 3 in INTERMED items) ranged 1.1 - 1.6 in the biological domain, but ranged 3.1 - 7.5, 4.3 - 10.2 and 0 - 6.2 in the psychological, social and health system domains, respectively. Complex patients had significantly higher number of medical diagnoses (p=0.002) and number of psychiatric referrals (p=0.041) but there were no differences in CIRS scores or LOS. Limitations in the study are discussed, and may suggest adjustments in the Method in relation to local characteristics.

**Conclusion:** This study confirms that the prevalence of complex patients is quite considerable. Components of health complexity have been disentangled, and the main differences between complex and non-complex patients have been observed in non-biological items, not usually included in standard medical evaluation. The Results confirm that INTERMED is a valuable instrument to detect complex patients and to eventually direct clinical and non-clinical corrective action.

**CLP in the general hospital: a review of the activities in Modena over a 14 year period**
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**Background:** The CL psychiatrist has to develop very specific skills to work at the interface between medicine and psychiatry. A constant monitoring of CLP activities in a given clinical setting, e.g. the general hospital, can guide such specific training. Aim: To describe the main features of consultations performed by the Consultation-Liaison Psychiatry Service (CLPS) at the Modena University General Hospital (Italy).

**Method:** Descriptive study. The electronic database of the CLPS was analysed (years 2000-2013), with reference to the following information: number of referral, referring wards, reasons for referral, urgency, diagnoses and outcome, psychopharmacological prescriptions.

**Results:** In the 14 years considered, 12404 referrals were performed at 22 different hospital wards. Five of them were Medical Divisions (MD) that altogether were responsible for the 48.51% of total referrals. Urgent consultations mainly came from MD (33.35%) and the ER (12.86%). Urgent referrals outnumbered routine requests in the following wards: Oral, Maxillofacial Surgery and Odontology (65%), ICU (57.95%) and Obstetrics-Gynecology (51.32%). More than one assessment was necessary mostly for referrals from: Surgery (70.85%), Jail Section (66.67%) and MD (53.03%). Most patients seen at MD were back-referred to community psychiatric services (Mental Health Centres, 43.63%, and Services for drug addictions, 37.43%), while most patients from ICU and ER were admitted to psychiatric wards (21.59 and 14.41% respectively). Psychiatric diagnoses were most frequently Major Depressive Disorder and Adjustment Disorder in all wards except Oral and Maxillofacial Surgery/Odontology, Orthopedics and Urology, where delirium was most common (21.05, 23.38 and 27.79% respectively). Antidepressants were the most commonly prescribed drug, though in some wards BDZs or antipsychotics were most commonly used (BDZs: Obs&Gyne, Oral Surgery, ER; antipsychotics: Orthopedics, Jail Section, Urology and ICU).

**Conclusion:** A detailed, structured, regular description of activities in a CLP service is mandatory to tailor organisation of service and training of professionals, particularly in an university hospital where students, residents and trainees are present, and can learn about very specific skills including: knowledge about medical and surgical diseases and psychiatric comorbidity, drug interactions, communication skills.

**Treatment of adolescent inpatients in a psychosomatic day clinic**
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Usually the treatment of adolescent inpatients in psychiatric and psychosomatic clinics ends at the age of 19. These inpatients often have a
lack of maturity and cannot profit from the adult therapy setting. In this phase of their life they also deal with other problems than the adult inpatients. Therefore we offer a special cognitive-behaviour group therapy for adolescent inpatients (18 till 25) where we focus on social competence, identity, profession-finding, frustration tolerance and familiar detachment. This contribution introduces the first experiences with our day clinic concept for adolescent inpatients that has been launched in April 2014. We also present data concerning diagnosis, comorbidity, changes of symptom impact and inpatient satisfaction.

Measurement qualities & plans for future application of the INTERMED self-assessment

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The rising impact of biopsychosocial complexity on health outcomes and medical costs underlines the importance to evaluate biopsychosocial complexity at an early stage so that care can be tailored optimally. Originally, the INTERMED (IM) Complexity Assessment Grid (IM-CAG) was developed as a valid and reliable generic interview to record patients’ complexity and its use facilitated and improved (early integrated) care. As administration of the IM-CAG requires training, and because of the turnover in personnel (in training) in care, ongoing use the IM-CAG appeared to be difficult to realize. For a more efficient and durable application of the IM-CAG, recently a version to be completed by patients themselves was designed: the IM-self-assessment (IM-SA). We will outline the feasibility, reliability and validity of the IM-SA within a large and heterogeneous international sample of hospital in- and outpatients. We will also discuss plans for application in care.

Does it work? Evaluation of a psychosomatic inpatient treatment approach for patients with severe medical comorbidity - first results

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Background: Patients suffering from mental health problems in addition to severe somatic diseases are in a dilemma: psychiatric and psychosomatic indispositions are rarely treated adequately in a somatic oriented facility. In addition, mental health clinics are often overstrained when it comes to handling severe somatic comorbidity. In 2011, an inpatient psychotherapy unit was developed based on cooperation between internists and psychosomaticians, run by the Clinic of Psychosomatic Medicine and Psychotherapy at the Nuremberg General Hospital. The 8 inpatient treatment places are integrated in an oncological ward. Besides daily ward rounds by an internal specialist as well as nurses, patients receive group and individual psychotherapy, creative therapy, music therapy, movement therapy, psychoeducation, mindfulness and relaxation therapy. This presentation focuses on the conceptual background of the approach and reports first Results of process evaluation and patient-based effectiveness assessments.

Method: All patients filled in multiple questionnaires to assess psychopathology, socio-demographic data, symptom distress, treatment satisfaction and more (e.g. Symptom Rating Inventory, Patient Health Questionnaire, Impact of Event Scale) at admission and at discharge. Somatic data and treatment procedures were collected by mental health experts, physicians and nurses continuously. All data were electronically recorded by IQ5 Cibait. For statistical analyses IBM SpSSV22 was used.

Results: Between 1/2013 and 12/2014 146 patient were treated. Average length of stay was 40.6 days (SD 13.7), range 2-77 days. First data on process evaluation and on effectiveness of treatment will be presented.

Conclusion: The integrated treatment unit is well accepted by patients and hospital staff. The data provides the first evidence that the
high effort of inter-department cooperation is justified by the success of this integrated treatment offer. Further research concerning the relation between treatment conditions and effectivity of an integrated inpatient treatment is needed.

Inpatient Psychotherapy as an Effective and Sustainable Treatment Concept

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Background: The Center for Psychotherapy and Psychosomatics at the Otto Wagner Hospital in Vienna is equipped with 20 inpatient and 24 day clinic beds and offers an elective, multimodal psychotherapy based treatment to patients with severe, often combined psychiatric and psychosomatic disorders. The Backgrounds of a study conducted from 2011 to 2014 were the description and analysis of the group of treated patients and the evaluation of treatment.

Method: 60 consecutively admitted patients (experimental group, EG) as well as a control group (waiting group) were examined at the beginning and the end of the treatment period (lasting 8 weeks on average) with BDI-II, BSI-53, SF-36, as well as with several disorder-specific questionnaires for defined subsamples of patients (TAS-20, BSL-23, IES-R PTSD, DES-II). One year after discharge 31 patients (52% of EG) took part in a follow-up examination.

Results: Results presented are those of the overall patient sample that filled in all the generic questionnaires (BDI-II, BSI, SF-36), as well as with several disorder-specific questionnaires for defined subsamples of patients (TAS-20, BSL-23, IES-R PTSD, DES-II). One year after discharge 31 patients (52% of EG) took part in a follow-up examination.

Conclusion: Multimodal psychotherapy based treatment in an inpatient and day clinic setting appears to have sustainable positive effects, even on patients with severe psychiatric and psychosomatic diseases. Due to the goal of optimizing the use of resources, additional analyses should be made to find out which patients benefit most from this therapy and which indicators are suitable for the selection of patients.

Neurobiological Aspects in Psychosomatic Medicine

Low dose aspirin reduces cardiovascular reactivity and depressed mood in acutely bereaved – a pilot study.

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Background: The death of a loved one is extremely stressful, and cardiovascular risk increases two-fold in the acute period of bereavement. The present study investigated the psychological and cardiovascular responses of those in acute grief, compared to nonbereaved healthy control participants. We hypothesized that aspirin would be protective for cardiovascular parameters, and would prevent worsening depressed mood.

Method: 7 participants who had experienced the death event of a near relative within the last 25 days had heart rate and heart variability measured in a baseline visit. 7 controls were matched for age and sex. Participants were randomized to receive low-dose aspirin (81 mg) or placebo, taken for five days. In a second lab visit, the same assessments were repeated, as well as an interview asking them to recall a time they felt alone or abandoned (a separation recall reactivity task). Bereaved participants recalled their bereavement experience.

Results: At baseline (t1), the bereaved group showed significantly more depressive...
symptoms than the control group as expected (F = 14.79, p = 0.002). To examine the effects of aspirin, bereaved and control participants were analyzed as one group. The heart rate of participants taking aspirin slightly decreased during the separation recall, whereas it increased in the placebo group (F = 5.42, p = 0.04). The heart rate variability in the aspirin group increased, but slightly decreased in the placebo group (F = 7.43, p = 0.02). For bereaved participants, the CES-D score decreased in participants taking aspirin, but increased in participants taking placebo (F = 14.63, p = 0.01).

**Conclusion:** The cardiovascular and psychological Results at baseline in bereaved participants are similar to previously reported Results in the literature. This study was the first to use the separation recall paradigm in a bereaved population. Our Results suggest that it elicits cardiovascular and psychological responses similar to “pangs of grief” and that aspirin can attenuate these cardiovascular responses. Interestingly, bereaved participants taking aspirin also showed a positive effect on self-reported symptoms of depression, suggesting that inflammation is affecting mood as well as cardiovascular health.

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**Depression induced by interferon-alpha and ribavirin during the HCV treatment is reversible and not depends on psychological factors.**

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**Background:** Depressive symptoms are frequent side effects of interferon-alpha (IFN-alpha) treatment. Basic sources of these symptoms are psychological factors and the response of the immune system. This study was carried out to determine the meaning of biological and psychological factors in formation of depressive symptoms.

**Methods:** 54 Caucasian patients receiving pegylated IFN-alpha and ribavirin treatment for chronic hepatitis C virus participated in the prospective cohort study. Symptoms of depression (Montgomery – Åsberg Depression Rating Scale, MADRS) were assessed before the treatment, at weeks 3, 5, 9, 13, 24 of treatment and 24 weeks after treatment. Ratings of neuroticism (Eysenck Personality Questionnaire – Revised, EPQ-R/N) measured just prior to treatment and immediately following treatment. Principal components factor analysis with varimax rotation was used to reveal factors submitting to total severity of depressive symptoms.

**Findings:** MADRS ratings rose from 6.7 (±4.9) before treatment to maximum 14.2 (±7.4) at week 9, and dropped to 5.5 (±6.4) at 24 weeks after treatment. Neuroticism ratings rose from 9.4 (±5.1) before treatment to 11.6 (±6.7) following treatment. From 6 assessments of depressive symptoms 3 main factors were detected: first - weeks 3, 5, 9, 13 (expl. 49% of variance), second – 24 weeks after treatment (expl. 49% of variance), and third – before treatment (expl. 21% of variance). Depressive symptoms before treatment were related to neuroticism level after treatment, depressive symptoms 24 weeks after treatment were related to neuroticism level just after treatment, depressive symptoms forming first factor were not related to neuroticism.

**Discussion:** Depressive symptoms during the HCV treatment with interferon were not related to psychological factors linked to neuroticism.

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**The Trier Social Stress Test 2.0: Using a virtual world to elicit an acute cortisol response**

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**Background:** Presenting the standard Trier Social Stress Test (TSST) through virtual reality may convey a distinct advantage over the real world, because it increases control over key elements of the stressor (e.g., confederate facial expressions and gestures). The present study investigated whether a virtual TSST produces similar acute cortisol responses and subjective measures of stress as a real-world TSST. Failure to mount an acute cortisol response to social stress is associated with negative health outcomes. Bereaved adolescents display flatter cortisol reactivity to acute social stress compared to non-bereaved controls (Dietz et. al 2013). The present study examined whether the virtual TSST could differentially elicit stress in a control vs. loss
Gonadotropin Hormones in Chronic Hepatitis

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Method: A total of 159 patients with CH (41,51% men and 58,49% women) have been investigated. The comparison group consisted of 133 healthy persons (49,62% men and 50,38% women). The levels of gonadotropin hormones such as FSH and LH were determined by highly sensitive immunofluorometric Method.

Results: An increase in LH level was found in men with CH (8,06 ± 2,07u / l) compared to healthy individuals (3,29 ± 0,54u / l, p <0,05) with unchanged FSH. Meanwhile, the FSH (20,56 ± 3,98u / l), and the LH concentration (15,43 ± 2,50u / l) among women with CH were higher than the corresponding values in the control group (7,58 ± 1,33u / l, p <0,01) and (8,48 ± 2,50u / l, p <0,05), respectively. In older patients (over 40 years) the level of both FSH (18,45 ± 2,12u / l) and LH (14,13 ± 1,75u / l) were higher than in patients younger 40 years (3,30 ± 0,85u / l, p <0,01) and (1,75 ± 0,67u / l, p <0,01), respectively. Patients who are overweight had a higher concentration of LH (17,43 ± 1,73u / l) when compared to those patients without excess body weight (10,62 ± 0,92u / l, p <0,01).

Conclusion: In women, LH stimulates ovarian estrogen and progesterone production, is responsible for ovulation, and subsequently stimulates the corpus luteum formation. FSH controls the ovarian follicle development as well as the estrogen secretion. Thus the gonadotropin hormones create the pituitary-ovarian cycle, that regulates menstrual cycle. In men, LH stimulates testosterone production from the interstitial cells of the testes. FSH stimulates testicular growth and enhances the production of an androgen-binding protein, which are necessary for high local concentrations of testosterone, an essential factor in the development of normal spermatogenesis. High levels of FSH and LH indicate that the normal restricting feedback from the gonad is absent, leading to an unrestricted pituitary FSH production, while the official statistical data of morbidity indices, provided by Health Ministry of RM, chronic hepatitis of viral etiology represent up to 52,2% of all CH, with increasing tendency over the period 2002-2012yy. This pathology significantly alters the quality of life of patients, affecting the reproductive function as well. The aim of our study was to examine the content of the pituitary gonadotropins in patients with CH in dependent on gender, age and body weight.

Method: Fifty undergraduates, represented as avatars on a computer screen, gave a job talk and performed math problems to confederates (also represented as avatars on screen). The TSST task was administered through Second Life, using a headset and microphone. Participants reported perceived stress and provided salivary cortisol samples at 4 time points (baseline, 15, 30, and 45 minutes after task onset).

Results: Mean baseline cortisol concentrations (M=4.4 nmol/l, SD=0.07) increased 39% at 30 minutes after the onset of the stressor (M=6.1 nmol/l, SD=0.14), which is comparable to the increase seen in a real-world TSST. Multilevel modeling was used to determine whether the loss group differed from the control group across time, controlling for sex and BMI. The acute cortisol response in the loss and control groups was significantly different (F = 5.69, p = .02).

Conclusion: The virtual TSST is capable of eliciting a cortisol response and psychological stress. Furthermore, the virtual TSST is also capable of differentiating between controls and those undergoing chronic stress due to loss. Control of between-subject session variability may be the greatest advantage of the virtual TSST, but this Method can also increase its portability and confederate characteristics.
Tako-Tsubo cardiomyopathy and psychiatric disorders: review of comorbidity

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**Background:** In recent times, the connections between mental health and cardiac outcomes have been under increasing investigation. Tako-Tsubo Cardiomyopathy (TTC) is also called “broken heart syndrome”, since it has been described to occur after emotionally stressful events; it presents as an acute reversible coronary syndrome due to a transient failure of the left ventricle, in the absence of obstructive coronary heart disease. It has a 10-time higher prevalence in postmenopausal women and may have a strong correlation with bio-psycho-social stress. Aim: To review existing studies on TTC in comorbidity with psychiatric disorders.

**Method:** Four PubMed literature searches performed during January 2015 (search terms: tako-tsubo AND psy*; tako-tsubo AND anxiety; tako-tsubo AND depression; tako-tsubo AND mania) provided 9 references: 4 case reports, 2 reviews, 2 prospective studies and 1 case-control study.

**Results:** Not only chronic psychological stress (present in 2/3 of these patients, on average), but also a high co-occurrence of anxiety and depression (from 50 to 70% of patients with this cardiopathy), panic attacks (diagnosed in almost 20% of women with tako-tsubo), subthreshold and full-blown PTSD (co-morbid in almost 40% of patients according to a 2-year prospective study) were associated with TTC. It has been suggested that changes in circulating levels of catecholamines combined to heart’s abnormal response to these hormones could be at the pathophysiological basis for such associations.

**Conclusion:** The present literature review confirms a high co-occurrence of comorbid conditions with increased sympathetic activity (in particular anxiety, depression and panic disorder), which could be risk factors for TTC. More studies, especially longitudinal ones, are needed to better clarify the causative pathways of this usually reversible, but potentially lethal, syndrome, especially among post-menopausal women.

**Neuroactive steroids and psychosis: a role for progesterone?**

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**Background:** Preliminary evidence point to a possible role of several neuroactive steroids in the pathogenesis of psychotic disorders, but there is still uncertainty regarding their status in the early stages of the illness.

**Method:** Thirty-two subjects (17 M, 15 F) with first-episode psychosis (FEP) were recruited from outpatient and inpatient clinics between January 2011 and November 2013 (Tarricone I. Mimmi S et al., 2012). Serum samples were analyzed by Isotopic Dilution-Liquid Chromatography–Tandem Mass Spectrometry for the determination of the circulating levels of cortisol (CORT), testosterone (T), dehydroepiandrosterone (DHEA) and progesterone (PROG). Levels were compared with those of age- and gender-matched healthy controls; furthermore, we analyzed the associations between neuroactive steroids levels and psychotic symptoms, as measured using PANSS symptom dimensions.

**Results:** Males with FEP had lower levels of CORT and PROG, while differences were not significant for other hormones. Conversely, among females, we did not find significant differences in hormonal levels. Among males, the levels of PROG were inversely associated with the severity of positive symptoms but not with other symptom dimensions.

**Conclusion:** Results suggest that PROG might have a role in the pathophysiology of psychotic disorders, consistent with other clinical and preclinical Results. Extending the knowledge on the status and role of PROG in psychosis could contribute to the understanding of the neuroendocrine abnormalities and, possibly, to...
the development of novel therapeutical application.

**Early adversity, perfectionism, and the cortisol stress response in Chronic Fatigue Syndrome**  
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**Background:** Chronic Fatigue Syndrome (CFS) is a highly debilitating condition characterized by chronic, medically unexplained fatigue and physical and/or mental fatigability in response to exertion. There is compelling evidence that CFS may result from loss of resilience of the main human stress response system, i.e. the hypothalamic-pituitary-adrenal (HPA) axis, after a prolonged period of chronic stress/overload. However, the psychosocial factors that may contribute to chronic stress and HPA axis dysregulation in CFS are not fully understood.  

**Methods:** A literature review on the relationship between early adversity, perfectionism and cortisol (re)activity in CFS.  

**Findings:** Evidence is accumulating that increased vulnerability for chronic stress and subsequent neurobiological alterations in CFS may in part result from a history of early childhood trauma (e.g., emotional neglect/abuse) and/or an achievement-oriented (overactive) lifestyle characterized by self-critical or maladaptive perfectionism.  

**Discussion:** Studies suggest that early adversity and negative perfectionism are important risk factors for HPA axis dysregulation in CFS. Future research should investigate whether early adversity and perfectionism in CFS are associated with epigenetic alterations of genes that regulate the HPA axis (e.g., the glucocorticoid receptor gene).

**Whole-body cryotherapy – possible supplementary biological approach in mood disorders**  
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**Background:** The empirical data indicate the growing prevalence of depression, as well as some treatment limitations. There is a need to search for new, supplementary therapy strategy. Few studies evaluated the effect of whole-body cryo-stimulation on the well-being of people with depression and anxiety, which showed the reduction of the severity of psychopathological symptoms (Rymaszewska 2003, 2008). Whole-body cryotherapy (WBCT) was an effective therapeutic adjuvant not only for ailments of the musculoskeletal system, but also in the context of the mental state of patients (Szczepanska-Gieracha i wsp. 2013). The relationship between concentration of neurotrophins and severity of psychopathological symptoms in the course of depression were found, while it is also known that inflammation, and increased production of pro-inflammatory cytokines in depression lowers the level of BDNF in the brain. Anti-inflammatory effects of extremely low temperatures (modification of the concentration of proinflammatory cytokines), antioxidant and the hormonal changes may also play a role in preventing or inhibiting the adverse pathophysiological processes in depression.  

**Method:** the aim is to examine the influence of whole body cryotherapy on people with depression with the evaluation of psychometric, somatic and laboratory parameters. Patients (n=40) with depressive episode (F32, F33; BDI>11; aged 18-65) were included to the study and undergoing 10 sessions of whole-body cryo-stimulation (-110°C till -160°C, 2-3 minutes each day). The WHOQOL – BREF (The World Health Organization Quality of Life – BREF), Pleasure Scale of Snaith & Hamilton, Beck Depression Inventory, TNF and BDNF levels are measured before and after WBCT.  

**Results:** The Results from previous own research support the hypotheses that after a series of WBCT, the WHOQOL-Bref and BDI scores will significantly improved and the worse the mental state of the patients is prior to the cryotherapy, the stronger its effect in comparison to the control group. The Results of currently conducted study will be presented during the conference.  

**Conclusion:** Intense cryo-stimulation of the body causes a number of neurohormonal and inflammatory modification, that can accelerate the process of regulation of biological cycles.
including sleep disorders and recovery from depressive symptoms.

**Personality Structure & Suicidal Behaviour**

**Resilience and structure of personality – is it all the same story?**
Schuster C, Zaudig M, Berberich G
Klinik Windach, Windach, Germany

**Background:** The “Structure” construct (Axis 4) of the OPD can be described as “availability of psychological functions due to the regulation of the Self and its relation to inner and external objects” (Arbeitskreis OPD 2006, S.225). The “structure of personality” can be assessed with the OPD-SFK (Ehrenthal 2014), a self-evaluation questionnaire with 12 Items, covering 3 subscales (“Self-perception”, “Contact”, “Relationship”). Due to similarities between the traits of OPD-SFK and the resilience construct, assessed with the RS-25, the aim of the work at hand was finding correlations between the questionnaires. The self-evaluation questionnaire RS-25 (Resilience Scale, developed by Wagnild & Young), has 25 Items and covers 2 Subscales (“Personal competence”, “Acceptance”) (Leppert et al. 2008).

**Methods:** We analysed retrospectively the routine assessment datas of 75 inpatients of a psychosomatic clinic (Klinik Windach) with obsessive compulsive disorder. Data collection was done from January, 2014 – December, 2014. The following statistical methods were used: Unpaired T-Tests with extreme groups of the OPD-SFK and values of RS-25 (Total), correlation analysis of OPD-SFK values and results of RS-25, including their subscales. Analysis was done with a scatter diagram, linear correlation line and Spearman’s correlation coefficient.

**Results:** We found significant correlations between OPD-SFK Total & RS-25 Total ($r=0.371, p=0.001$), “Contact”(OPD)& “Acceptance”(RS-25) ($r=-0.448, p<0.05$), “Contact” (OPD-SFK) & “Competence” (RS-25) ($r=0.397, p<0.05$), “Self-perception” (OPD-SFK)& “Acceptance” (RS-25) ($r=0.464, p<0.05$), “Selfperception” (OPD-SFK) & “Competence” (RS-25) ($r=-0.356, p=0.002$); but insignificant results between “Relationship” (OPD-SFK) & “Acceptance” (RS-25) ($r=0.158, p=0.177$) and “Relationship” (OPD-SFK) & “Competence” (RS-25) ($r=0.048, p=0.68$).

**Discussion:** The main hypothesis was confirmed due to correlation between OPD-SFK and RS-25 total values of the questionnaires. The low correlation points to other factors besides OPD Structure construct that determine resilience. The subscale “Relationship” of the OPD-SFK describes one’s possible experiences in relations with poor control and therefore seems to miss any correlation with the resilience construct. Other reasons and implications are discussed by comparing the traits of the RS-25 with international known constructs like the DSM-5 alternative model of personality disorders or the Big 5 construct.

**Differentiation of Complex Trauma vs Schizophrenia through Diagnostic Assessment of Ability and Personality Characteristics**
Kurz R
Outstanding Achievements, Research, London, UK

This poster addresses diagnostic challenges in the use of ability and personality assessments with traumatised clients. Intelligence test results at age 7, 23, 25 and 30 identified a ‘twice exceptional’ ability pattern where superior verbal intelligence (top 5%) was coupled with much poorer performance on working memory and concentration index scores. The assessments suggested a core deficit in phonological processing in particular of auditory memory and working memory commensurate with a diagnosis of specific learning difficulty commonly referred to as dyslexia. Unfortunately the interaction style associated with this ability pattern was incorrectly interpreted as ‘perseverative behaviour’.

Scores on the MCMI-III were low for all apart from three scales. Narcissistic was slightly elevated (BR 71) due to negation of 3 items scored positively for ‘Schizotypal’ and 1 item scored positively for ‘Depression’ i.e. ‘Emotional Stability’ was wrongfully turned into a mental illness, ‘Paranoid’ (BR 72) and ‘Delusional Disorder’ (BR 75) scales ‘share’ many items (thus lacking differential validity) and were slightly elevated as the client was truthfully reporting ‘real’ persecutions. Rogers, Salekin & Sewell (1999, 2000) explain why the MCMI-III does not meet the Daubert standard of validation evidence and entirely inappropriate for use in Court settings.
The Lacter & Lehmann (2008) guidelines emphatically differentiated complex trauma from (erroneous) Schizophrenia diagnosis made by mental health professionals who had found it ‘easier’ to disbelieve the tragic-chilling abuse acts disclosed in spite of the professional definition of ‘delusion’ provided in the DSM-V (American Psychiatric Association, 2013, p. 819): delusion a false belief based on incorrect inference about The poster aims to facilitate recognition of ‘Twice Exceptional’ ability patterns where extreme strengths combine with extreme handicaps to a puzzling presentation that is often mistaken as a sign of mental illness and warn against the use of MCMI-III especially in forensic settings as it has poor measurement characteristics.external reality that is firmly sustained despite what almost everyone believes and despite what constitutes incontrovertible and obvious proof or evidence to the contrary.

**Type A personality and Arterial hypertension. Psychosomatic aspects and somatopsychic.**

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**Background:** Hypertension as a disease, lasting over the years, produce significant changes in the structure of personality, both by intrinsic mechanism related to the modification of the brain into organic sense, determining consecutive emphasizing of certain personality traits, and by psychological mechanism related to secondary connotations of the disease, treatment and related limitations. Hypothesis: There is a high correlation between minimum three years evolution of hypertension and a typical personality profile, having as central features: irritability, decisional instability, radicalism, inner tension, existential dissatisfaction in relation to high standards.

**Method:** Selecting a group of 30 patients diagnosed with essential hypertension of minimum three years, in unsteady treatment or poorly controlled therapeutic scheme, which will be applied CAQ personality questionnaire, who has in its construction both clinical scales (which highlights the personality structure located within the boundaries of normality range, but highlighting accentuated tendencies) and clinical scales: depression, anxiety, suspiciousness, sensitiveness and tendencies in the sensitive - paranoiac area.

**Results:** It will outline a group profile, in which the dominant features will be from non-clinical area, to be reflected in higher scores on scales: Dominance, Self-sufficiency, Radicalism, Emotional insecurity, scores correlated with decrease in: Emotional Warmth and Ingenuity. Adjacent, in clinical are, we assume increased scores on scales of anxious depression, Depression with suicidal risk, Paranoia and Psych-asthenia. Subsequently opportunities to capitalization of Results: Emphasizing the group of patients with hypertension profile points out the importance of accurate diagnosis and treatment without discontinuous and also informs about psychological approach typicon suitable to personality structure, in order to increase treatment compliance.

**Prevention, diagnosis and healing of complex trauma: Applying the Great 8 competencies**

Kurz R

*Outstanding Achievements, Research, London, UK*

**Background:** Complex trauma is a relatively young field in the health sciences. The ground-breaking ideas of Janet regarding trauma and dissociation are starting to get some traction. This paper outlines the Great 8 competencies (Kurz & Bartram, 2002; Kurz, 2014) and the WoW model of Person-Environment Interaction in the context of prevention, diagnosis and healing of complex trauma and present some empirical data on the model.

Kurz & Bartram (2002) defined 8 competencies linked to dispositional characteristics that underpin work performance. The model is a performance oriented extension of the Big 5 model of personality which according to Kurz (2014) splits Extraversion into Sociability and Need for Power, Conscientiousness into Methodicalness and Need for Achievement and Openness into Creativity and Analysis. To ascertain the relationship between the Great 8 and the General Factor of Personality (GFP) proposed by Musek (2008) empirical study was conducted based on existing data collected by Kurz (2000).

**Method:** A group of N=250 A-level students completed a 30 scale personality measure using a 5 point Likert scale. Scores for the Great 8 competencies were calculated using...
the Bartram (2005) equations. In addition the First Unrotated Principal Component (FUPC) was extracted from the 30 personality scales as well as from the Great 8 derived scales.

**Results:** The FUPC of the Great 8 accounted for 38% of the variance with positive valence for all constructs, and 20% of the 30 scales with negative valence for four scales. Overall construct correlations were at a minimum .97. The high degree of convergence between Great 8 totals, a GFP extracted from the 8 components scores and from the 30 original scales suggest that the Great 8 total is closely related to the General Factor of Personality.

**Conclusion:** The Results suggest that a competency based approach to personality diagnosis is viable. In particular the Great 8 total seems to form the opposite pole of what MMPI2 refers to as the ‘General factor of demoralisation’ which is effectively removed from the ‘Restructured Clinical Scales’. The Results of the study suggest that the Great 8 Total provides a better measure of the General Factor of Personality than the First Unrotated Principal Component which is very instrument and sample dependent. Further research should establish the correlations of the Great 8 constructs as well as their correlation with established measured of Psychopathology.

### The impact of chronic pain on suicidal behavior.

De Heer E, Ten Have M, Van Marwijk H, Dekker J, De Graaf R, Van Der Feltz-Cornelis C

**Background:** Several population-based studies assessed risk factors for suicidal behavior, defined as suicidal cognitions and completed and attempted suicides. Psychiatric illness such as major depressive episode, dysthymia, generalized anxiety disorder, post traumatic stress disorder, schizophrenia, bipolar disorder and alcohol dependence are the most important psychiatric diagnoses associated with suicidal behavior. Although the association between chronic pain and suicidal ideation was confirmed in cross-sectional studies, the incidence of suicidal behavior in pain so far has not been explored. This study will examine the incidence of suicidal behavior in chronic patients without previous suicidal behavior at population level.

**Method:** Data from the first two waves of the NEMESIS-2 were used for this study. The study population consisted of 6646 participants. Suicidal behaviour was measured with the CIDI interview and pain was measured with the SF36. Logistical regression analysis was performed.

**Results:** Subjects with severe chronic pain (OR=3.4) are at increased risk for suicidal behaviour compared to healthy controls. When pain is comorbid with a mood disorder the risk increases, independently of whether the pain is medically unexplained or medically explained in nature.

**Conclusion:** In chronic pain, incidence levels of suicidal behavior are elevated. This warrants further research into risk assessment and treatment of suicidal behavior in clinical studies with chronic pain patients.

### SMS psychotherapy – an additional support for stabilisation and suicide prevention

Leiberich P, Nickel M, Loew T

**Aims:** Do new media like sms with mobile phones work on stabilization after psychotherapy and in suicide prevention for persons at risk?

**Method:** Psychotherapists offered fast aid by sms (feedback in at most 3 hours) to patients in psychotherapy or internet self-help, when they continuously suffer from inner worriedness or critical interpersonal conflicts. 10 women were included (age 19-50, mean 31.1) after informed consent. Messages and answers were recorded and analyzed.

**Results:** Electronic post-care was used by patients with severe mental disorders (multiple diagnoses possible): major depression (F33.2) 5, anorexia nervosa (F50.0) 4, PTSD (F42.1) 4, dissociative identity disorder (F44) 4, divorce/separation 3. Duration of help 1-119 months (34), 4 vs 6 short-/long-term treatments (<12>), number of interactions 5-310 (86), frequency nearly daily until monthly. Clinical endpoints - regain of self-responsibility with sufficient psychic stability – were reached in 7 cases, 2 continue, 1 unknown. Main topics were support of current therapy 7, prevention of suicide 6, post-care 5.
Conclusion: Sms communication in addition to direct psychotherapy or internet self-help can be effective for post-care, support of current therapy, suicide prevention. Due to the unpredictable efforts for the therapists and the nonpayment by German health insurances, indications should be restricted until better acceptance. Men, mostly known as ineloquent blocking their affects - are sparelly interested.

Gender differences in assessing suicidality risk in people with chronic illnesses attending the emergency department
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Background: To assess the diagnostic accuracy of the Risk Assessment of Suicidality Scale (RASS) in assessing suicidality risk in people with long-term conditions attending the emergency department (ED) and to test whether different cutpoints should be used for males and females.

Method: The RASS was administered to 349 patients with diabetes, COPD and rheumatic diseases visiting our ED. The MINI interview was used as the criterion standard for suicidality. Receiver operator characteristic (ROC) curve analysis was performed to determine the optimal RASS cutpoint for suicidality in the total sample and separately for men and women. The optimal cutpoint was chosen based on the value corresponding with the greatest value of the Youden index.

Results: Eighty patients (22.9%) were considered suicidal according to the MINI. At an optimal cutpoint of 270, RASS had a sensitivity of 81.3% and specificity of 81.8%, with an area under the curve (AUC) of 0.89. However, the optimal cutpoint was twice as higher for females (340, AUC=0.89) than for males (175, AUC=0.89).

Conclusion: The diagnostic accuracy of the RASS in assessing suicidality risk was moderate, in line with previous studies challenging the potential of a single scale to accurately assess suicidality risk. However, the finding that the cutpoint for women was double than that for men should be taken into consideration when assessing suicidality risk in the ED, and may shed more light on understanding the gender differences in suicidal behavior and suicide.

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When personality impacts pain- Chronic pain and attachment style in the therapeutic treatment process
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Background: Insecure attachment patterns are related to the onset and development of chronic pain. However, differential short- and long-term effects of pain therapy on patients with different attachment styles and depending on pain condition are less well documented. Insecurely attached patients seem to benefit from multimodal pain programs. However, it is not clear if they can maintain long-term positive effects in the same way as securely attached patients can.

Method: Pain intensity before (T1) and after (T2) participation in a multimodal pain therapy and at a 6-months follow-up (T3) was assessed of n=85/76/67 patients with medically unexplained musculoskeletal pain (G1). Additionally, n=89/76/56 patients with joint pain from osteoarthritis, who underwent hip joint replacement, were assessed in the same way (G2). All patients (G1, G2) completed additional measures of attachment style and attachment dimensions (only at T1), as well as physical functioning and emotional distress (depression, anxiety).

Findings: Right after treatment (T2), all patients regardless of diagnosis report a significant reduction in pain intensity compared to T1. Over the next six months, pain intensity further declines only for securely attached patients in both groups (G1, G2). Complete results will be available and are expected to identify the relative importance of additional influencing factors such as emotional distress in a hierarchical model.
**Discussion:** Insecurely attached pain patients seem to be less able than securely attached patients to maintain positive treatment results over longer time periods. Therefore, we hope that our findings will inform an attachment-oriented approach in helping to enhance the sustainability of treatment effects for all pain patients.

**Psychiatric Assessment in Organ Transplantation**

**Association between initial psychosocial assessment of candidates for transplantation (PACT) score and mortality among lung transplant recipients at Mayo Clinic, Rochester**

Hitschfeld MJ, Jowsey-Gregoire SG, Kennedy CC, Niazi SK, Vasquez AR, Geske JR, Schneekloth TD


**Background:** The psychosocial assessment of potential transplant candidates is an essential part of the transplant evaluation, and the U.S. United Network of Organ Sharing requires it before being listed. At Mayo Clinic, we have been using the Psychosocial Assessment of Candidates for Transplant (PACT) (Olbrisch et al. 1989) scale since 2000 for transplant psychosocial assessment. The predictive value of this instrument on survival has not been rigorously evaluated among large samples of lung transplantation patients. Our primary aim was to investigate PACT score association with survival following transplantation.

**Method:** We conducted an historical cohort study among patients who underwent lung transplantation at Mayo Clinic Transplant Center, Rochester, between January 1, 2000 and December 31, 2012. The data were abstracted from the EMR. Patients were screened for psychosocial risk at Transplant Program initial evaluation by a transplant psychiatrist using the PACT, whose final score is the evaluator’s global assessment of all items: 0, poor candidate; 1, borderline candidate; 2, acceptable candidate; 3, good candidate; and 4, excellent candidate. After transplantation, survival was assessed until December 31, 2014. During the first year following transplantation, smoking relapse, depression, anxiety disorder, antidepressant use, and acute graft rejection data were obtained.

**Results:** The study included 111 lung recipients with a pre-transplant PACT score; 58 (52.3%) were females, 102 (91.9%) Caucasians and mean ± SD age was 56.3 ± 10.7. Previous smokers were 81 (73.0%), and 22 (19.8%) had an Alcohol Use Disorder (AUD) history. Seven (6.3%) patients received a score <2 and 104 (93.7%) patients received scores of ≥2. After adjustment for covariates, to have a PACT score ≥2 was associated with lower mortality at 10-year follow-up (HR = 0.32, 95% CI: 0.13 – 0.80, p=0.0149). The PACT was not associated with post-transplant new episodes of depression or anxiety disorder, antidepressant first time use, or acute graft rejection at 12-month follow-up. Only 2 (1.8%) patients had smoking relapse at 12-month follow-up.

**Conclusion:** Pre-transplant psychosocial variables assessed by the PACT were associated with post-transplant mortality at 10-year follow-up among lung recipients. Further work is encouraged to identify PACT sub-items associated with mortality and post-transplant psychosocial outcomes.

**Mental health and behavioral barriers to completing the pre-transplant evaluation**


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**Background:** Mental health (MH) and behavioral problems have been associated with longer time on the kidney transplant waitlist, poorer health-related outcomes, and lower access to transplantation. However, there is limited literature on the specific risk factors that contribute to difficulties in successfully completing the transplant workup (WU), particularly in a Canadian context. In this study, we examine the relationship between the history of MH problems and history of non-adherence and the likelihood of completing the
WU, and obtaining a final disposition (i.e., suitability of transplant, activation to waitlist, or living donor transplant). **Methods:** This is a single-centre retrospective cohort study of adult patients referred for kidney transplantation at Toronto General Hospital from January 1, 2003 to December 31, 2013, and followed up until June 30, 2014. Only patients who completed social work assessment (n=1832) were included. Univariable and multivariable associations between the history of MH disorders or non-adherence (extracted from the social work notes) and time from referral to final disposition were explored using Cox proportional hazards models. **Findings:** The mean (SD) age was 49.0 (13.6) years, 60% of the patients were male and 40% had a history of diabetes at the time of referral. Twenty-five percent of the patients had a positive history of MH disorders and 18% had a history of non-adherence. Eighty-five percent of the patients received final disposition within four years after referral. Compared to individuals with no psychiatric history, patients with a positive psychiatric history had a 16% lower (p=0.011) likelihood of obtaining a final disposition. Patients with a history of non-adherence had a 19% lower (p=0.010) likelihood of completing the WU. These differences remained qualitatively unchanged even after adjusting for socio-demographic characteristics and comorbidity (HR 0.85 [95% CI: 0.74, 0.99] and HR 0.77 [95% CI: 0.65, 0.92] for history of psychiatric problems or non-adherence, respectively). **Discussion:** Our findings suggest that MH and behavioral problems represent potential barriers to completing the WU. Further studies are needed to determine if targeted psychosocial support for MH and behavioural problems can reduce disparities in access to kidney transplantation.

**Assessment of elderly liver transplant (LT) candidates: Mayo Clinic Approach**

Niazi SK, Keaveny AP, Vasquez AR, Taner BC, Davis SP, Picco M, Schneekloth TD, Jowsey-Gregoire S, Rummans TA

**Background:** LT is a life saving option. Increasing success has allowed extension of LT to elderly patients resulting in 10-fold increase (1.7% in 1988 to 15% in 2013). This will escalate with the soaring global aging population. Elderly patients are more vulnerable to intensive surgical procedures with enhanced morbidity. Liver disease is associated with functional compromise. Functional reserves are better predictors of surgical outcomes vs. chronological age 1. Considering the limited organ availability, optimal patient selection is paramount. Elderly LT candidates pose unique assessment challenges. **Method:** We evaluate all LT patients using our standardized protocols regardless of age. After initial cognitive screening we use Neuropsychological testing, brain imaging and specialty consultation where indicated. We are testing functional assessment tools and BTACT (Brief Test of Adult Cognition by Telephone) administered at baseline and after LT to better understand the functional and cognitive improvement in elderly patients. Institution’s experience of dealing with elderly LT candidates will be discussed. **Results:** From 1998-2014, at MCF 509 LT patients were 65 or older at the time of LT (average MELD score of 18.26; average age 68.5 years). 27.39% of all LT patients in 2013 (40/146) were 65 and older vs. 15% nationally. Despite this significant difference, 1-year survival was 91.93% vs. expected survival of 90.06%. **Conclusion:** Assessing factors associated with poor functional outcomes can help reduce the impact of chronological age on selection process. This may allow elderly patients to be considered for LT who otherwise are likely being excluded. They have comparable survival rates 2, but we need tools to determine the functional outcomes of elderly LT patients to gauge the true benefits of LT. Learning Background: Participants will be able to identify unique factors that need to be assessed in elderly liver transplant patients.
necessitating thorough assessment across several domains by well-trained clinicians. This lecture presents the consensus approach of the Mayo Clinic, a tertiary group medical practice with 3 Transplant Centers in diverse geographic locations, to standardize psychosocial screening and evaluation across organ groups.

**Method:** Each Mayo Clinic transplant center had developed site-specific assessment models for each organ group after the past 25 years. Enterprise-wide convergence of these practices presented a challenge in standardizing assessment, treatment protocols and listing criteria. The institution formed a 3-site workgroup of transplant psychiatrists, psychologists and social work supervisors with the goal of practice standardization. We will present the workgroup’s approach to multidisciplinary psychosocial assessment and utilization of screening questionnaires to capture symptoms across multiple social, psychiatric, substance use and cognitive domains. The presentation will include the institution’s experience with the Psychosocial Assessment of Candidates for Transplantation (PACT) scale in predicting patient outcomes.

**Results:** The psychosocial multidisciplinary workgroup developed a strategy for consistent screening assessment utilizing questionnaires to capture symptoms across multiple social, psychiatric, substance use and cognitive domains. The presentation will include the institution’s experience with the Psychosocial Assessment of Candidates for Transplantation (PACT) scale in predicting patient outcomes.

**Psychotherapy with the Medically Ill I**

**Experiences with "consultation liaison internal medicine" in more than 4000 psychiatric patients**

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**Background:** The Otto Wagner Hospital disposes of 1118 beds with 600 beds for psychiatric patients and is the largest hospital in the city of Vienna. The special challenge in this hospital is to provide comprehensive medical care for the large group of patients with severe mental illness. International data from large studies describe a very high prevalence of metabolic and cardiovascular diseases (30-50%) and a significant shorter expectancy of life (10-20 years) in this patient group. To overcome these serious problems a continuous, twenty four hours consiliar-liaison service for internal medicine was established in the psychiatric departments.

**Method:** During a predefined time period of one month each patient who was seen by an internist was included in the study. Consiliar liaison visits in acute cases were carried out on request by the psychiatrists and in chronic cases by presentation of the patient during the twice weekly organized internistic visit. Demographic data and the internistic diagnosis of the examined patients were documented. Average time needed for each consiliar liaison visit was 24 minutes.

**Findings:** From the 4315 psychiatric patients which were seen in 2014, a total of 388 patients was analysed for diagnosis and demographic data. Mean age was 53 years with a range from 26 to 95 years. The distribution of internistic diagnosis was as follows: 40% cardiovascular diseases, 20% metabolic diseases, 16% infectious diseases, 6% endocrinologic diseases, 5% respiratory diseases. The remaining 13% were miscellaneous with Qtc-interval prolongation, rhabdomyolysis and exsiccosis. Analysis of cardiovascular risk factors showed underdiagnosis and undertreatment of hypertension and hyperlipidemia. For patients with diabetes we could show worse metabolic control and significant lack of diabetes education compared to a control group.

**Conclusion:** Prevalence of cardiovascular and metabolic diseases is high in psychiatric patients. Although reasons for underdiagnosis and undertreatment of cardiovascular and
metabolic risk factors in patients with severe mental illness are multifactorial and not completely elucidated, regular internistic screening and consequent therapeutic interventions are essential to reduce the cardiovascular and metabolic risk of this special patient group.

**Effect of Psychotherapy on mental health in patients with heart failure**

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**Background:** Patients with heart failure are at greater risk for developing mental disorders e.g. (depression and anxiety) which can lead to limitations in the professional, family and social tasks resulting in dependency on others. Cognitive therapy is commonly used to treat a wide range of mental disorders. Therefore, this study aimed to investigate the effect of Psychotherapy on mental health in the HF patients.

**Method:** In this clinical trial study, 66 patients with HF were randomly divided into two groups using continuous sampling in Shahid-Beheshti hospital, Iran (2012-2013). The intervention group received 8 sessions of psychotherapy within 1 month and the control group only received conventional cardiac care. Data were collected using the Goldberg Health Questionnaire and then were analyzed.

**Results:** Results showed no significant difference between the two groups in mental health, but a significant difference was found in mental health between the intervention (51.56±5.41) and control (62.23±9.32) groups (P<0.0001). Significant difference was found between mental health before (58.16±10.99) and after (51.56±5.41) the cognitive therapy in the intervention group (P= 0.003), while no significant difference was found in mental health in the control group (P=0.27).

**Conclusion:** psychotherapy can improve mental health of the patients with HF. So, it is recommended as a complementary treatment, along with other medical care provided for these patients.

**The effects of classical music upon bronchial obstruction in bronchial asthma**

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**Background:** Bronchial asthma –The effects of music on the smooth musculature of the bronchioles is not a popular domain of study due to several factors, including contradictory Results and the fact that musical therapy has been used in parallel with other Method of relaxation psychotherapy. The presented study was conducted with the aim of objectifying the changes induced by music upon the bronchial caliber by measuring certain ventilatory parameters such as FEV1, PEF and MEF50, after several classical music pieces were played.

**Method:** The study was completed on 30 subjects “Lot M” (patients which musical therapy was applied on) with persistent forms of bronchial asthma (BA), and varying degrees of bronchial obstruction. This was assessed by various pulmonary function tests before and after listening to classical music on a personal device for 45 minutes. The control group, represented by 30 other subjects, asthma sufferers, on which the same ventilatory tests were conducted on before and after 45 minutes of reading a magazine of individual preference.

**Results:** The results showed a reduction in bronchial obstruction from 15% (equivalent to the effect of a bronchodilator spray) up to 43.8% of “Lot M” (Music) patients. The amplitude and frequency of respiratory amelioration obtained using musical therapy was significantly higher than those of the control group “Lot L” (lecturer).To note, 71% of asthmatics with significant bronchodilation have a higher educational degree and regularly listen to classical musical in comparison to those with a lower educational status.

**Conclusions:** In conclusion classical music, if listened daily may be used as an adjunctive therapy, in parallel with asthma medication resulting in a maximum and positive effect upon asthmatics with a high educational level as well as those who lack a musical education.

**The idiolect in the therapeutic dialogue with psychosomatic patients**

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The idiolect is the pattern of language or speech that a person uses, including all of his
phonetic, grammatical, and word choice preferences. The idiolect as the unique „fingerprint” of each person contains valuable references to the implicit knowledge of this person. Idiolectics is the methodical, painstaking, and precise handling of idiolect. The idiolectic approach is marked by the uncompromising recognition of the viewpoint of the other. The questioning technique is characterized by simple, short, and open questions, in which the idiolect of the conversational partner is taken up, is seized upon. Here special attention is given to the imagery of the language and to nonverbal signals. The method makes it possible to obtain authentic communications from one’s conversational partner, for it does not exert any force or pressure upon this person. Instead, by means of simple, open, concrete, and resource-oriented questioning, it only opens up a space, giving the patient the opportunity to explore his own implicit knowledge about symptoms, behaviours or perceptions. In this way, by concretely experiencing the attentiveness paid to his language, to his utterances, the person questioned can quickly develop a reliable foundation of trust. Subsequently he is usually able to express himself more freely and with fewer inhibitions, since he immediately experiences how his utterances are dealt with and receives feedback to them – in the form of attentive questions that are unconditionally responsive to his idiolect, that is, to his topics, tone, and tempo. Self-consciousness, self-worth and self-efficacy are improved implicitly by this way of idiolectic dialogue because the patient is appreciated as expert concerning his own implicit knowledge about symptoms, his own preferential reference to the implicit knowledge of this person. In this way, the idiolectic approach is marked by the uncompromising recognition of the viewpoint of the other. The questioning technique is characterized by simple, short, and open questions, in which the idiolect of the conversational partner is taken up, is seized upon. Here special attention is given to the imagery of the language and to nonverbal signals. The method makes it possible to obtain authentic communications from one’s conversational partner, for it does not exert any force or pressure upon this person. Instead, by means of simple, open, concrete, and resource-oriented questioning, it only opens up a space, giving the patient the opportunity to explore his own implicit knowledge about symptoms, behaviours or perceptions. In this way, by concretely experiencing the attentiveness paid to his language, to his utterances, the person questioned can quickly develop a reliable foundation of trust. Subsequently he is usually able to express himself more freely and with fewer inhibitions, since he immediately experiences how his utterances are dealt with and receives feedback to them – in the form of attentive questions that are unconditionally responsive to his idiolect, that is, to his topics, tone, and tempo. Self-consciousness, self-worth and self-efficacy are improved implicitly by this way of idiolectic dialogue because the patient is appreciated as expert concerning his unique way of experiencing his symptoms. Especially in the treatment of patients with fixed somatic disease concepts or in patients with organic diseases plus psychosomatic symptoms this improves the rapport as well as the treatment.

Outcome of cognitive behaviour therapy for patients with severe health anxiety treated in groups. Preliminary Results from the Pilot Study of The CHAG-Trial

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1 Clinic for Liaison Psychiatry, Dept. of Special Functions, Koege, Region Zealand, Denmark, were included and treated by 2 therapists in 2 groups of 7 patients. Inclusion criteria: Severe health anxiety (dominant mental disorder), score on Whiteley Index 7 (WI-7)>21,4, age 18-65 years, Danish reading and speaking, informed consent. Exclusion criteria: Another severe treatment demanding mental disorder, risk of suicide or psychosis, a serious somatic disease, pregnancy, dependency of drugs, alcohol or medication. Diagnostic assessment: A clinical interview using research criteria for severe health anxiety and diagnostic criteria from ICD-10. Outcome measures: The primary outcome measures were the self-reporting questionnaire for health anxiety, WI-7 (score: 0-100, SD=25 points) at start and 3 month follow-up and a clinical assessment for cure from health anxiety at 3 month follow-up. The secondary outcome measures were the self-reporting questionnaire for health anxiety, Health Anxiety Inventory (HAI, score: 0-54) and the global assessment of functioning (GAF-F, score: 0-100).

Results: Females=64%. Mean age=39.6 years. Mean duration of HA=9.3 years. Comorbid depressive disorders=14% (dystymia). Comorbid anxiety disorders=42% (Panic disorder = 21%, OCD = 21%). Comorbid personality disorders (PD)=64%. Dropout=7% (1 of 14 patients). Per protocol analysis: Mean reduction on WI-7=11 points (59 to 48) is non-significant on 5% level, response (1/2 SD)=62% (8 of 13), significant response (1 SD)=31% (4 of 13). Cured=46% (6 of 13). Mean reduction on HAI=7 points (35 to 28) is significant on 5% level. Mean Increase on GAF-F=9 points (55 to 64).

Conclusion: The group CBT seems acceptable for the patients with a low drop-out on 7%. The group CBT also seems effective, when 46% of the patients were cured for severe health anxiety, even though the reduction on

Background: No randomised controlled trials of the outcome of classical CBT (2.wave) delivered solely in groups for patients with severe health anxiety (hypochondriasis) has yet been conducted (The CHAG-Trial). Aims: 1) to examine with a pilot study the outcome of classical CBT for patients with severe health anxiety treated solely in a group setting using the clinical setup and the developed manual for the CHAG Trial to improve the essentials of the design for the CHAG-Trial.

Method: 14 patients referred from Medical Doctors during 2013 to the Clinic of Liaison Psychiatry in Koege, Region Zealand, Denmark, were included and treated by 2 therapists in 2 groups of 7 patients. Inclusion criteria: Severe health anxiety (dominant mental disorder), score on Whiteley Index 7 (WI-7)>21,4, age 18-65 years, Danish reading and speaking, informed consent. Exclusion criteria: Another severe treatment demanding mental disorder, risk of suicide or psychosis, a serious somatic disease, pregnancy, dependency of drugs, alcohol or medication. Diagnostic assessment: A clinical interview using research criteria for severe health anxiety and diagnostic criteria from ICD-10. Outcome measures: The primary outcome measures were the self-reporting questionnaire for health anxiety, WI-7 (score: 0-100, SD=25 points) at start and 3 month follow-up and a clinical assessment for cure from health anxiety at 3 month follow-up. The secondary outcome measures were the self-reporting questionnaire for health anxiety, Health Anxiety Inventory (HAI, score: 0-54) and the global assessment of functioning (GAF-F, score: 0-100).

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Conclusion: The group CBT seems acceptable for the patients with a low drop-out on 7%. The group CBT also seems effective, when 46% of the patients were cured for severe health anxiety, even though the reduction on
WI-7 score was non-significant, the reduction on HAI were significant.

**Depression and pain dimensions in the assessment of health-related quality of life in older adults**

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**Background:** Given the high burden of disease in the elderly population, health-related indicators and health-related quality of life (HRQoL) are central. Emotional health and pain are two main dimensions of HRQoL along with physical or functional health. Data focusing on these aspects in the elderly are scarce. However, assessment of HRQoL is crucial to evaluation research in this population.

**Method:** A cross-sectional study was conducted to assess aspects of physical and psychological health in community-dwelling adults aged ≥65 years selected randomly from population records in Switzerland. The sample was stratified by age (65-69 years; 70-74; 75-79; 80-84; 85-89; ≥90) and gender. Participants were interviewed using a comprehensive questionnaire including the EQ-5D, a validated instrument assessing HQoL. The EQ-5D consists in 3-point (1=no problems; 2=moderate problems; 3=severe problems) Likert scales assessing Mobility, Self-Care, Usual Activities, Pain/Discomfort, Anxiety/Depression, and a VAS that rates overall current health state. Univariate Chi-square and multivariate regression analyses were conducted.

**Results:** Among the 3061 elderly adults, mean EQ-5D global score was 75 (SD=20) for the total sample, and decreased with age, ranging from 79 (SD=19) in the younger group to 71 (SD=22) in the oldest. However, for Anxiety/Depression, Results showed that the effect of age was not significant, and that only the oldest groups reported more difficulties. Even in these groups, it did not involve more than 25% of the respondents while up to 65% reported problems related to Pain / Discomfort which showed a steady growth across age groups. Interestingly, the global VAS score was impacted by the severity of Pain/Discomfort and Anxiety / Depression only.

**Conclusion:** HRQoL in community-dwelling older adults is overall good although it decreases with age. Interestingly, not all dimensions are equally sensitive to age and emotional dimensions seem to be less affected by age than functional dimensions. There is a similar trend for the global score.

**Psychopharmacology in Medically Ill Patients**

**Pain in depressive disorders: a meta-analysis on dual-action antidepressants**

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**Background:** Pain is a common symptom in patients with depressive disorders and is prognostically unfavorable. However, the available data on therapy effects of dual-action antidepressants are still few to date. Above all, tricyclic antidepressants (TCA) have not been included in existing meta-analyses, yet.

**Method:** A broad pubmed-literature research on studies investigating serotonin-noradrenaline reuptake inhibitors (SSNRI) and TCA in patients with a primary depressive disorder and a comorbid pain symptomatology was conducted. Studies on pain with reactive depression were not included. Both authors assessed the quality of the studies. A random effects meta-analysis has been performed for the 2 endpoints, pain and depression, and the 2 substance groups, SSNRI and TCA. The correlation between the effect size concerning pain and depression has been assessed. Results are expressed as forest plots with combined effect sizes.

**Results:** Both SSNRI and TCA were superior to placebo in respect of analgesic and antidepressant treatment, with a slightly higher effect size of SSNRI. In both substance groups the antidepressant treatment effects showed higher effect sizes than the analgesic treatment effects. There was a positive correlation of the effect sizes concerning pain and depression, visualized in a scatter plot.
Conclusion: Compared to TCA, the data basis of SSNRI is better, but strongly connected with industrial affiliations. The meta-analysis Results suggest that both SSNRI and TCA are effective for the treatment of patients with depressive disorders and comorbid pain. The positive correlation of the effect sizes of pain and depression treatment suggests a relationship of both entities, or at least a common response on SSNRI/TCA application.

Psychopharmacological Reasoning for Prescribing Psychotropics to Patients with Medical-Surgical Disease
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Background: psychiatric and physical comorbidity is the rule rather than the exception. Depressive and anxiety disorders are very prevalent among primary care patients and carriers of physical diseases, a fact that is associated with a bidirectional relationship that perpetuates the existence and instability of both conditions. To provide a tool designed to individually customize existing scientific information, so a structured, organized and reasoned selection of psychotropics, primarily for patients with medical-surgical disease (MSD), can be achieved.
Method: directed bibliographical review and algorithm design.
Results: the psychopharmacological reasoning algorithm (PPRA) consistent with the Neurosciences based Nomenclature, is comprised of 7 steps by order of importance: During the first three, known as the phase for preparing the tentative prescription list, the scientific and clinical information and local availability of pharmaceuticals are grouped together to prepare a list of possible treatments. Steps 4 to 6 make up the phase for discarding medications. This stage consists of gradually eliminating the drugs that do not meet the patient’s clinical characteristics. Finally, Step 7, psycho-education, is an ongoing interactive process developed throughout the preparation of the PPRA. Conclusion: Psychotropic prescriptions must be based on a standardized sequence of steps that permit the selection of the most appropriate treatment for a specific patient. PPRA is applicable for patients with depression, anxiety, psychosis, delirium, agitation and somatization and virtually any psychiatric condition that also presents several MSD comorbidities such as diabetes mellitus, cardiovascular pathology, HIV, cancer, infections, polytrauma, etc. Their use is viable for inter-consultations in the general hospital, for psychiatric hospital treatments for MSD patients, for external general psychiatric and subspecialized consultations, for using psychotropics by non-psychiatric specialists and for primary care practice.

Conclusion: in the future, the goal is to validate and define the weight of each step, the acceptability and concordance in selecting psychotropics by different medical groups (psychiatrists and non-psychiatry specialists, including primary care physicians), to determine the impact on the clinical practice and management by psychiatric entities in the context of MSD patients and finally, to study its use as a teaching tool for medical students and residents in different specializations.

Agitated ICU Delirium: when antipsychotics fail
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Delirium in ICU settings is a very common, often underdiagnosed and undertreated ailment. Regardless of delirium variant-hypoactive or agitated-the main obstacle to effective pharmacological treatment of delirium is the sheer lack of evidence. Agitated delirium in the ICU patients is commonly associated with violent and aggressive behavior, accidental extubation, need for physical restraints, need for reintubation, prolonged need for artificial respiratory support, long-term cognitive impairment, and overall poorer global functional outcomes. Multiple pharmacological agents have been used to treat agitation ICU delirium and its neuropsychiatric complications, including antipsychotics, benzodiazepines, alpha-2 agonists and others. Current consensus guidelines from most professional organizations and societies recommend the use of antipsychotics as a first line treatment for agitated delirium unrelated to alcohol and sedative-hypnotic withdrawal, with haloperidol being the drug of choice, despite the near absence of clinical effectiveness trials. A substantial proportion of ICU patients with
agitated delirium do not respond to antipsychotic medication; in other ICU patients, antipsychotics are contraindicated (QTc prolongation) or poorly tolerated (causing severe akathisia and paradoxical agitation). The literature regarding alternate pharmacological agents for the treatment of agitated delirium in ICU patients is limited. We are presenting two cases of ICU patients with agitated delirium in which treatment with antipsychotics was unsuccessful and/or caused problematic side effects and alternative treatment with valproic acid was effectively utilized, without evidence of side effects.

Indications for the use of valproic acid in these patients and the valproic acid's unique role as an alternate agent in treatment resistant agitated ICU delirium are reviewed in this paper.

Pharmacological approach to mild depression in Japan
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In 2010, duloxetine (cymbalta), the serotonin noradrenaline re-uptake inhibitor, was launched in this country, and globally have the top share and highly rated antidepressant. Previously, there was no evidence that the antidepressant is effective for mild depression, however clinically many patients with mild depression were observed. In order to build the evidence toward mild depression, we have tested the following research. There must be antidepressants that are effective to mild depression, but also some are not effective. Therefore, we have created the hypothesis that duloxetine that is known as a effective antidepressant for mild depression around the world could also be effective to patients with mild depression in Japan. For our case, we have applied duloxetine for more than 600 patients, randomly pick 100 patients and checked the effectiveness, safety, tolerability retrospectively. Also the evaluating patients recovery based on their symptom severity is the first trial in Japan. In a result, duloxetine is the effective antidepressant from mild to severe patient with depression. This also mean that the duloxetine is effective not only for depressive symptom but also is effective for physical symptom. Also based on this research, withdrawal rate for 16 weeks after application of duloxetine is very low. In conclusion, Duloxetine should be used for 1st choice to the patients with Major depressive symptoms.

Does severe affective disorder affect renal function?
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Background: There is a relationship between affective and somatic morbidity. For instance, patients with bipolar affective disorder (BPAD) and schizophrenia have more diabetes mellitus and a higher cardiovascular mortality. Psychotropic medications seem only partly account for such associations. The aim of the study was to compare renal function of patients with severe affective disorders with the general population.
Method: We examined a representative sample of the population between 25 and 74 years (Northern Sweden Monica Study) and all individuals with comparable age in the Swedish county of Norrbotten with a diagnosis of BPAD, schizoaffective disorder or exposure to lithium between 1997 and 2013 as a proxy for severe affective disorder. All patients were included who consented to the review of their medical case notes and who had a serum creatinine level taken at least within one year of our analysis. We compared the most recent creatinine levels and the eGFR ascertained with the CKD-EPI formula.

Results: 955 individuals with severe affective disorder (61% female, 39% male) had a serum creatinine measured in the year of study. 1549 persons (52% female, 48% male) were in the control group. Mean age differed significantly (p<0.01) between control (mean 51.8 years, SD 13.5) and patients (mean 50.4 years, SD 13.3). 37.8% of the patients had never been exposed to lithium during the last 17 years, 14.3% less than one year, 15.2% 1-5 years and 32.7% more than 5 years. Mean eGFR for the control was 90.19 ml/min/1.73m2 (SD 15.8) and 90.89 (SD 19.5) in the patient group (p=0.33). Five people had renal function below 30 ml/min, two in the control group (eGFR 15-30) and three in the long-term lithium group (eGFR<15). There was no statistically significant difference in renal function between patients and controls as measured. But patients were slightly younger than the controls (1.4 years difference in mean age). Only if the “natural” annual decline in GFR was assumed to be 1.5 ml/min or more, the renal function between both groups would be statistically different.

Conclusion: Renal function in patients with severe affective disorders may be lower than in the general population. But, the difference is small and probably without clinical significance in most cases. This would speak against relevant other factors inherently linked to severe affective disorders apart from long-term lithium exposure. We will explore this further in forthcoming analyses.

Effects of drug guidelines on prescriptions of benzodiazepine and non-benzodiazepine under National Health Insurance System
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Background: Benzodiazepine (BZD) and Non-benzodiazepine (non-BZD) are often used to treat insomnia. However, increasing amount of uses and high annual expenses spending in sleeping drugs for national health insurance system are a severe problem for a long run in Taiwan. Although many studies have conducted in the effect of policy interventions previously, the impact of drug guidelines implemented in 2009 to monitor the prescriptions of BZD and especially non-BZD is not well understood.

Method: We conducted a retrospective longitudinal design to evaluate the effect of drug guidelines launched in 2009 on BZD and non-BZD prescriptions in outpatient care. A 2007-2011 retrospective longitudinal trend analysis for adults was performed using population-based data obtained from Longitudinal Health Insurance Database, a subset of the Taiwan National Health Insurance Research Database, containing all the medical claims from a random sample of million beneficiaries.

Results: A total of 4,545,021 prescriptions from 2007 to 2011 were identified. In patients with mental disorders, there were 1,226,788 prescriptions of BZD and 293,859 prescriptions of non-BZD; in patients with other illnesses, there were 2,538,555 prescriptions of BZD and 485,819 prescriptions of non-BZD. We found the decreasing trend either in patients with mental disorders or in patients with other illnesses after the implementation of the drug guideline (P for trend <0.05). As compared to prescriptions of BZD and non-BZD in patients with mental disorders during 2007 to 2008, the prescriptions during 2010 to 2011 decreased by 5.8% and 2.9% respectively; on the other hand, as compared to prescriptions of BZD and non-BZD in patients with other illnesses during 2007 to 2008, the prescriptions during 2010 to 2011 significantly drop by 18.1% and 14.5%, respectively.

Conclusion: Our study Results strengthen the importance of surveillance in prescriptions of BZD and non-BZD, and suggest the clinical physicians to consider the cause of difference in the decreasing trend between patients with mental disorders and with other illnesses after the implementation of the drug guideline.
Drug interaction between Imipenem and Valproic in bipolar disorder: a case study

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Background: Valproic acid (VPA) is an antiepileptic drug used for the treatment of bipolar disorder (BD). Researchers have studied the effect of valproic interactions through its inhibition of cytochrome P450, though its own pharmacokinetics can be disturbed as well. One specific interaction occurs with carbapenem antibiotics.

Method: We report the case of a patient with BD, psychologically stable for years, suffering from manic episode due to carbapenem treatment.

Results: We are called for a psychiatry assessment of an impatient 80-year-old woman in Infectious Disease Service with a history of BD. The patient has been stable for 30 years with lithium. Two months ago, during an acute respiratory failure, the patient was treated with furosemide. The lithium serum levels increased, as a result of an interaction with the diuretic treatment, leading to acute confusional state. In order to prevent new episodes the lithium was stopped. Currently the patient is under valproic treatment (1000mg per day) as a mood stabiliser. The patient consulted the emergency room for fever receiving empirical treatment with ceftriaxone and ciprofloxacin. Blood cultures were positive for ESBL-E coli, and antibiotic treatment was switched to imipenem. Four days after the onset of imipenem the patient showed hyperthymia, irritability, verbiage and sleeping hours reduction. The addition of olanzapina to the habitual treatment was needed to control the symptoms. VPA levels were 23.75mcg/ml (optimal rage is from 50 to 100mcg/ml) descending to 17.13mcg/ml in less than 24 hours. On discharge, imipenem was discontinued and olanzapina maintained. Unfortunately, the patient was last before a follow-up VPA level was drawn.

Conclusion: The present Results support studies revealing a significant and rapid decrease (70% in less than 24 hours) in VPA levels following initiation of carbapenem therapy. Increasingly VPA daily dose did not return serum concentrations to therapeutic levels while under carbapenem treatment or until a mean of 8 days following discontinuation. More research is needed to understand the mechanism of the interaction. Authors suggest that carbapenems inhibit hydrolysis of VPA-G back to VPA, increasing clearance of VPA. Others propose inhibition of VPA blood distribution and blockage of intestinal absorption. Clinicians should be aware of the possible clinical consequences of this interaction although carbapenems might be of value in the management of VPA overdose.

Communication Skills

A computer assisted class in giving feedback for medical students

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Background: Giving feedback on social interactions is an essential communication skill for medical students, because clinical training in small groups is an important part of their studies. Giving feedback on interactions needs special skills because it does not only include observable behavior, but also subjective emotional response of the observer, which needs a high degree of self-reflexion. Constructive feedback is supposed to be direct, concrete, specific, non-judgemental, verbalising observable behavior, but also includes subjective emotional response. To achieve these goals we used a computer assisted online feedback training as part of the doctor-patient communication training. Students are presented with theoretical Background in an online course including explanations, written examples and video samples. Based on the online training students then use this new skill in giving feedback on role-plays while practicing doctor-patient communication.

Method: Students were first asked to write a spontaneous feedback (feedback 1) on a video showing a doctor-patient interaction at the beginning of their doctor-patient-communication training. Second, students participated in the online training course and were asked to repeat their feedback (feedback...
2) on the initial video sample. We performed qualitative data analysis on the two feedbacks using the categories we defined as goals and compared the answers before and after the online training.

**Results:** Students had better Results in all categories after they participated in the online training. They improved best in the categories "direct feedback" "concrete feedback" and "describing observable behavior". Only 22.8% used terms of subjective reactions spontaneously, 63.4% did after the online-training. This remained the most difficult category.

**Conclusion:** Online training improved feedback skills in medical students, but it showed difficulties in the transfer of theoretical knowledge into practical application in topics which need a high degree of self-reflection. Overall, online learning can assist in the training of communication skills, but must be supplemented with real life training in social settings to provide the necessary amount of reflexion and conclusion.

**Development of a “Four-Habits”-based communication training for German General Practitioners (CoTrain trial) – Experience with a train-the-trainer course**

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**Background:** Supported by German Research Foundation (DFG) a specifically tailored communication training for general practitioners (GPs) will be designed and developed based on the internationally established Four Habits Model.

**Method:** To adjust the Four Habits based training to the requirements of German family practices, focus groups with GPs and patients will be conducted where specific demands shall be ascertained.

**Results** will be incorporated into customised train-the-trainer courses and subsequently in a communication training for German GPs. In a triple feedback process with small groups of GPs this training will be conducted, evaluated, and refined.

**Conclusion:** Our experience with the train-the-trainer course carried out by German and Norwegian experts will be presented and compared with contents and educational Method of other train-the-trainer courses with Swiss and US American experts. In the context of this symposium, communication training experts will discuss specific demands and suitable evaluation instruments of train-the-trainer courses for communication skills trainings and recruitment strategies of participants from their point of view.

**Development of Questionnaire for the Estimation of Physician’s Communication Skills in Oncology**

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**Background:** The present study is to develop and evaluate a measuring instrument for assessing the communication skills of physicians in oncology from a patient’s point of view. The questionnaire that has been developed within this study is to evaluate which of the communication skills of the physician or within an institution have to be optimized.

**Method:** Items that reflect a solid physician-patient relationship were identified from literature. This resulted in a first version of the questionnaire that was critically revised by experts. The expert survey was to ensure content validity of the questionnaire. The revised questionnaire was completed by 162 cancer patients. Analysis regarding classical test theory and an exploratory factor analysis of the questionnaire were conducted.

**Results:** Four different factors could be extracted: Creating framework conditions, Patient-centeredness, Empathy and
Professional consulting competencies. These factors are able to serve as subscales. Unsuitable items were eliminated within the analysis. All remaining items hold an appropriate degree of selectivity, item difficulty and reliability. The final version of this questionnaire contains 36 items and is called „Questionnaire for the Estimation of Physician’s Communication Skills in Oncology“.

Conclusion: The questionnaire serves as a reliable instrument which measures the strengths and deficits within the physician-patient communication in oncology. It clearly addresses the patient’s perspective. The questionnaire can be applied for quality-assurance in health care after further optimization and external validation.

Empathy: a skill we need to focus on in psychiatric training? A short journey from philosophy to psychiatry

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Background: During the last century, psychiatry examined its practices also through the contributions of other disciplines; philosophy is one of these, which more adequately contributed to the definition of encounter and existence using a phenomenological approach, as it deals with actual human existence, and not only with its concept. In this framework, the doctor-patient relationship is an encounter between existences that live in a world and relate to others, and the psychiatric interview is its main relational tool. In such a context, empathy has a central mediating role. This paper revisits the evolution of the concept of empathy through the writings of three female Authors of the 20th century, focussing on consequent relevance in the curricula of young psychiatrists.

Method: Review of the writings on empathy by E. Hillesum (Diary, 1941-1943; Letters 1942-1943), S. Weil (Waiting for God, 1941-1942) and E. Stein (The problem of Empathy, 1913).

Results: Despite their biographic, cultural and personal differences, the writings of these three women - all “wounded-healers” - highlight some common key-points: - the difference between sympathy and empathy; - the need for psychiatry to be open to other disciplines, i.e. phenomenology, in order to fully understand Nature; - the efficacy and the specificity of clinical empathy; - the centrality of an effort towards a really holistic approach in order to “empathize” with the patient and to develop an effective second-person understanding; - the importance of the integration of academic training with personal life-experience in order to develop a truthful empathic mood.

Conclusion: Neurobiological recent discoveries, e.g. mirror neurons, have thrown new light on the old concept of empathy. The construct of empathy is an example of the usefulness of applying a phenomenological approach to psychiatry, a true trait d’union between philosophy and psychiatry. Combining these apparently distant contributions seems a major challenge for contemporary psychiatrists to a full understating and improvement of their empathic skills in clinical encounter.

Training of Consultation Liaison Psychiatrists and Nurses. Testing of a one year programme.

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Background: Various proposals for the training of CL psychiatrists have been put forward. For nurses we are only aware of one outline, a recent Competence framework of the London liaison nurses. There are scant reports of testing these programmes in practice. We describe the outline of one year training programmes for psychiatrists and nurses that we aim to test in a university general hospital.

Method: Training posts have a duration of one year for a psychiatrist and a psychiatric nurse respectively, including supervision by a senior CL psychiatrist, auscultation or participation at various departments and teams, e.g. A&E, pain clinic, perinatal, neurology, gastro, infection, oncology, addiction. For the psychiatrist it includes special training in e.g. psychopharmacology and relevant medical subspecialties, and for the nurse e.g. difficult communication tasks, and Motivational interviewing. During the year of training, specifically, the role of the nurses’ service will
be developed. Competencies will be assessed through various methods, including direct observation with checklists, standardized clinical examinations, 360-degree evaluation including input from consulting staff on medical floors.

**Conclusion:** We aim to present the content and value of different components of the training programmes and their composition.

**Psychoterapy at the edge of time. After a long journey, what is really therapeutic?**

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Psychotherapy is a Western therapeutic technique based on the use of language. In more than one context, it has replaced other approaches to illness and strategies of care, but it remains an unknown quantity. Oscillating between being an effective, evidence-based therapy, a form of manipulation, an expression of placebo effect, and an interesting exploitation/representation of symbolism, nothing seems more confused, of our knowledge. Recently we are witness to many examples of the “power of the word”: when it goes into the hands of the Media, or in producing altered states of consciousness, or also body modifications, as much as when travelling and increasing inter-cultural contacts are concerned. Are all these evidences that psychotherapy is “marking time”, as other therapies did before? An attempt will be done to explain the drifts that are emerging as alternatives to the psychotherapeutic paradigm, to understand if what is really therapeutic lies in the power of the word, as such or else.

**Child & Adolescent C-L Psychiatry II**

**Intentional Colchicine Ingestion in an Adolescent-A Case Report**

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**Background:** Colchicine poisoning is an uncommon but life threatening condition occurring in 3 phases (gastrointestinal symptoms, multi-organ failure, and recovery). In children less than 10 years old, intoxication is often accidental. In older children suicide attempt should be considered. This paper illustrates a case of suicide attempt by colchicine ingestion that was not initially disclosed by the patient, which led to an extensive medical workup for malignancy. Colchicine is an alkaloid used in the treatment of acute gouty arthritis. The risk of mortality from colchicine ingestion is dose dependent and occur 36-72 hours post ingestion due to cardiogenic collapse/myelosuppression. Treatment requires early recognition and supportive care.

**Method/Results:** KR is a 16 year old female presenting with acute onset abdominal pain, vomiting, diarrhea and was diagnosed with acute gastroenteritis. Initially, KR showed autonomic instability with leukocytosis which progressed to pancytopenia, acute renal injury, non-anion gap metabolic acidosis, and respiratory failure. Extensive blood, urine, and fecal cultures were negative for viruses and bacteria. Due to concern for hemophagocytic lymphohistiocytosis (HLH), she was scheduled for a bone marrow biopsy that was held after she revealed that she ingested her grandmother’s colchicine as a suicide attempt. KR was diagnosed with Major Depression Disorder and transferred to a psychiatric facility.

**Conclusion:** Colchicine inhibits mitosis microtubule polymerization by binding to tubulin, leading to the arrest of mitosis. When children present with signs and symptoms of bone marrow suppression, a wide differential diagnosis is imperative and should include ingestion, infectious, hematological and oncological etiologies. Further exploration of psychiatric history, especially of mood disorders, and inquiring about ingestion is essential when the etiology is not clear early in the course of the work up. The patient we presented in this case clearly had a psychiatric diagnosis that was overlooked, resulting in delay in diagnosis and treatment. Children can present with variety of symptoms consistent with bone marrow suppression and the differential diagnosis can be broad. Since colchicine ingestion can be severe and life threatening, we should not forget that children and adolescents who suffer from depression may use variety of medications to harm themselves and a thorough history of the medications available at the home should be taken and consultation with toxicology is always important.
Pharmacological management of depression/anxiety in pediatric cancer patients
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Background: Limited data is available about the prescribing practices for depression and anxiety in pediatric cancer patients. AIM: to review the types of psychotropic medications used in a population of children and adolescents with cancer.

Method: retrospective review over last 9 years.

Conclusion: There is limited data about treatment with remeron in pediatric cancer patients with depression/anxiety, even though the child and adolescent psychiatry consult service nationwide in the US mainly prescribes remeron for the reasons of appetite stimulation and sedation in addition to address the mood. Significantly more data is available for the use of SSRI's in pediatric cancer patients. One of the reasons being that SSRI's are mainly prescribed by the primary providers, being the pediatric oncologist/hematologist and the pediatricians. More studies overall are necessary to support and justify the use of remeron prescribed by the child and adolescent consult services and to educate and change the current prescribing practice by the primary teams.

Sexual abuse predicts functional somatic symptoms: an adolescent population study.
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Background: Functional somatic symptoms (FSSs) are common in adolescents and can be persistent and impairing. Sexual abuse is thought to be a risk factor for FSSs in adolescence. However, previous studies investigated the relation of recalled sexual abuse with FSSs in adult clinical populations, which may have led to biased Results. We hypothesized that: 1) Sexual abuse predicts FSSs during adolescence; 2) Anxiety and depression contribute to this relationship; 3) More severe abuse predicts higher levels of FSS; and 4) Sexual abuse is related to gastrointestinal FSSs in particular.

Method: The sample consisted of 1680 adolescents participating in the Tracking Adolescents’ Individual Lives Survey: a general population cohort study which started in 2001 (N=2230, mean age 11.1). Data were gathered at four assessment waves during 8 years. FSSs were measured with the Youth Self-Report. Sexual abuse before the age of sixteen was assessed retrospectively with a self-report questionnaire. For analyses, linear mixed models were used.

Results: Sexual abuse predicted higher levels of FSSs after adjustment for age, sex, and socioeconomic status (B=0.06) and after additional adjustment for anxiety and depression (B=0.03). While sexual abuse involving physical contact significantly predicted the level of FSSs (assault: B=0.08; rape: B=0.05), non-contact sexual abuse was not significantly associated with FSSs (B=0.04). Sexual abuse was not a stronger predictor of gastrointestinal FSSs (B=0.06) than of all FSSs.

Conclusion: Sexual abuse was related to higher levels of FSSs in adolescents. Further research is needed to clarify possible mechanisms underlying this association.

Sleep disruption in adolescents with severe functional somatic complaints: a pilot study.
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Background: Adolescents with functional somatic complaints (medically unexplained physical symptoms) often report sleeping problems. The aim of this study was to compare sleep characteristics of adolescents with severe invalidating functional somatic complaints to healthy peers, using both subjective and Background sleep assessments.

Method: Six patients with severe functional somatic complaints (14.38± 2.10) completed the Children’s Sleep Habits Questionnaire (CSHQ), a sleep diary, and wore an actimeter to detect sleep-wake patterns over seven consecutive nights. The control group consisted of six healthy adolescents (14.55 ± 2.01), matched for gender and age.

Results: Backgroundly, according to actigraphic data, patients were awake
significantly longer (p = 0.008), showed a significant longer sleep onset latency (SOL) (p = 0.010), and also suffered of significant lower sleep efficiency (total sleep time divided by sleep period time) (p = 0.003) compared to the healthy peers. All patients met the CSHQ criteria for subjective sleeping problems and four adolescents of the control group also exceeded the cut-off score. **Conclusion:** The Results of this study support a relation between chronic functional somatic complaints and sleeping problems measured by actigraphy, but do not support a relation between functional somatic complaints and subjective sleeping problems measured by the CSHQ. If these Results are also found in a larger population, it may be worthwhile to investigate whether sleep-improving interventions ameliorate functional somatic complaints.

**EPS after one dose of Haldol in an adolescent patient treated for aggression and hallucinations in delirium**
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17 year old male in his usual state of health until he developed severe diffuse muscle pain to the point that he could not walk after 2 hours long wrestling practice. He is the captain of the wrestling team and routinely had 2 hours practice daily. He was taken to the ER and found to have an CK of 39126 and was admitted to the hospital with diagnosis of rhabdomyolysis. He was medicated with various narcotics for pain and aggressively hydrated without improvement of urine output and progressive worsening of creatinin and BUN, leading to an acute renal failure and later in the day developing respiratory failure, requiring intubation. He was successfully extubated after the second time, but was confused, had hallucinations and was increasingly agitated and received one dose of Haldol 5 mg.After he was given haldol, patient had difficulty to communicate (glossopharyngeal dystonia), started to have an upward lateral gaze (oculogyric crises) and looking at the monitor next to his bed and had difficulty to move his neck (spasmotic retrocollis).Psychiatry was consulted for management of agitation and worsening psychosis. On exam patient had significant delay in response, was difficult to understand, was disoriented, had lateral gaze with difficulty to look down, a periorial tremor (“rabbit syndrome”) and neck dystonia. Psychiatry team diagnosed him with delirium and EPS post Haldol. Recommendation were given to not give any antipsychotics and to give Benadryl 50 mg iv to be given every 6 hours for next 24 hours(max daily dose 400 mg im/iv) until psychiatry team follows up. Over the next several days he showed improvement of his EPS and delirium cleared up. This is a classic example of misdiagnosis of EPS in adolescent after one dose of 5 mg Haldol .The risk of developing EPS after one dose of antipsychotics is significantly higher in children and adolescents and careful dosing or other alternatives should be considered to treat agitation.

**An integrated neuropsychiatry / paediatric clinic for children with prenatal alcohol exposure: service model and assessment outcomes**
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**Background:** Prenatal alcohol exposure is associated with neuropsychiatric difficulties (Foetal Alcohol Spectrum Disorder, FASD) and sometimes also with physical abnormalities (Foetal Alcohol Syndrome, FAS). A retrospective audit in community paediatrics from 2010 to 2013 in Peterborough, UK, (Gregory et al, submitted) found 3.5% of children fulfilled criteria for FAS or FASD; for those in care 27.2%. They did not routinely have neuropsychiatric assessment though children with complex needs are known to benefit from joint management by collocated psychiatric and paediatric staff. To assess feasibility and diagnostic outcomes in a joint neuropsychiatry/ paediatrics clinic for children exposed to prenatal alcohol. **Method:** We set up a joint clinic in 2014 for children with known prenatal alcohol exposure, with neuropsychiatrist, community paediatrician and psychologist. Children received: medical assessment and investigations; WISC-IV; Conners ADHD screening questionnaire; Social Communication Questionnaire as ASD screen; BRIEF executive function questionnaire;
neuropsychiatric clinical assessment. Diagnostic formulation including cognitive and executive function, attachment, developmental disorders and psychiatric disorders, was summarised in a report and fed back to carers and older children. Children needing specific treatment were jointly managed with the relevant team (e.g. ADHD).

**Results:** 21 children were assessed, age range 6-16 years, mean 9.5 years, 15 boys and 6 girls. Learning difficulties were found in 6/15 who had full WISC; executive function difficulties were universal. 7 children had ADHD; 2 had ASD; 3 had affective disorders; 3 had conduct disorder. 3 children were referred for inpatient assessment. Most children had difficulties in multiple domains and subthreshold symptoms were common. Carers and professionals found the process helpful, with implications for education and behaviour management as well as medical treatment.

**Conclusion:** The children in this joint service have many risk factors for poor outcomes, as well as prenatal substance exposure, and had multiple complex difficulties. The one-stop joint assessments and feedback were feasible, time-efficient, valued by families and professionals and avoided multiple referrals to other services. Future work will include: analysis of assessments of larger cohort; full service evaluation; comparison of assessments of children in care with and without prenatal substance exposure.

**Same flatuas of diagnosing depression in children at pre-puberty**

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**Background:** Hidden symptoms of depression in children can easily be mistaken for normal pre-pubertal processes or somatic and behavioral features, thus causing additional problems of recognition.

**Method:** Clinical psychopathological, neurological, and psychological features of 140 children, aged from 7 to 12 years, have been examined. Discriminant Function Method was taken as the basis of recognition of depression. 88 signs of depression such as clinical signs, psycho traumatic experience, socio demographic characteristics, features of pre- and postnatal development, mother-child relationship problems, psychopathological problems during the first year of life, micro social and milieu parameters, type of education, academic Results, family sociogram, the presence of somato neurological disorders in the patient’s history, have been analyzed. Psychological signs included personal and emotional features (Schmieschek test, Luscher test, projective drawing tests Results); severity of depression (CDRS-R), cognitive features (memory test ‘10 words to remember’); features of attention (Schulte-Platonov tables); minimal brain dysfunction (Toulouse-Pieron test) and neurohormonal parameters (the serum level of serotonin and urinary level of melatonin).

**Results:** Diagnostic coefficients obtained with Discriminant Function Method allowed us to detect 10 significant signs of depression in children. A territorial map of differentiation of the types of depression has been generated, including behavioral, somatic, anxiety phobia and asthenic depression types. The mathematical model suggested here correctly classified 95.8% of all the patients with different types of depression.

**Conclusion:** An information system of recognition of depression in children has been developed, allowing to improve the quality of medical treatment of the patients with affective pathology.

**“Mind-Body Awareness” in primary schools: gender influence on emotional awareness training based on Theory of Mind**

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**Background:** Some somatic complaints are more common in girls, and the frequency of complaints decreases with age. Somatic complaints are negatively related to emotional awareness, and positively related to maladjustment between peers (Ordónez et al., 2014).

**Aim:** To investigate variation in pain complaints and quality of life during a 5-week Mind-Body Awareness project (MBAP) in 5–7-year old primary school children.

**Method:** The MBAP comprised five sessions of facial expression skills training for emotions
and psychomotricity exercises, one per week, delivered to 5 primary school classes. A personal diary was given to assess emotions (Emoticons) pain (WBFPR) quality of life (QoL) (Kidscreen 10) and emotional awareness (LEAS-C).

**Results**: 101 children were enrolled in this study, and, overall, pain scores were lower at the end ($\chi^2=7.69; p=0.005$). No relationship was found between reported pain and emotional awareness. Girls reported a slight improvement in QoL, and boys a slight worsening (ANOVA $F=5.65; p=0.01$). Emotional awareness only influenced an improvement in QoL in girls (ANCOVA $F=5.13; p=0.02$).

**Conclusion**: These preliminary Results show that in primary school children the MBAP generated a general reduction of pain complaints and an improvement in QoL, but only in girls. This improvement in QoL was influenced by emotional awareness in girls, but not in boys.

**Chronic Pain**

**Psychological disorders as possible factors for algodisfunctional temporomandibular joint syndrome**

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**Background**: In recent years, with the transformation of the medical mode from the simple anatomo-functional the biological-psychological-social medical mode, more researchers have paid attention to the role of psychological factors in the etiology of temporomandibular joint disorders (TMD). The aim of the present study was to assess the occurrence of TMD in general population and analyze the correlation between signs and symptoms of TMD and sex, age, socio-economic status, but also to analyze the level of anxiety in TMD patients.

**Method**: A study was carried out over a period of 4 years (2010-2014) in 1772 patients who addressed to the department of prosthodontics for dental treatment. Patients with DTM diagnostic were selected. In these patients Beck Anxiety Inventory (BAI) was applied, a self-report inventory for measure of severity.

**Results**: Thirty six patients (2.03%) were diagnosed with TMD. Most of the patients were females (22; 61.1%) and 14 (38.9%) were males. The patients generally came from urban environment (31; 86.1%) and had superior education (22; 61%). The anxiety level was low in only 2 (5.5%) patients with TMD, most of them having a mild (19; 52.7%), or moderate (14; 38.8%). A single TMD patient presented severe anxiety.

**Conclusion**: Possible correlation can exist between anxiety and pain occurrence in TMD. Current life style with increased levels of stress among young adults predisposes to psychological disorders and might play a role to initiation and/or perpetuation of TMD signs and symptoms.

**Evaluation of an extended psychosomatic module in context of an orthopedic pain therapy for chronic low back pain**

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**Background**: The Klinik and Poliklinik for Orthopedics and Trauma Surgery offers in cooperation (liaison) with the Klinik und Poliklinik for Psychotherapy und Psychosomatic Medicine a well-established two-week in-patient therapy program for patients suffering chronic low back pain. In this therapy-program, the standard psychosomatic module includes a psychosomatic diagnostic interview before treatment, psychological consultation in case of need and a one-hour behavior psycho-educative group therapy two times during the first week, which is based on the principles of the biopsychosocial pain model. The psychosomatic standard module showed good effects in the outcome variables pain reduction, self-efficacy, understanding of psychosomatic pain model and motivation for psychotherapy. But the clinical impression was, that the outcome variables could be optimized with an extended psychosomatic module, including a psychosomatic diagnostic interview before treatment, psychological consultation in case of need and a one-hour behavior psycho-educative group therapy two times during the first week, which is based on the principles of the biopsychosocial pain model. The psychosomatic standard module showed good effects in the outcome variables pain reduction, self-efficacy, understanding of psychosomatic pain model and motivation for psychotherapy. But the clinical impression was, that the outcome variables could be optimized with an extended psychosomatic module, including a one-hour psycho-educative therapy during the second week (booster-group), psychological consultations once a week and a one-hour movement therapy once a week. The main research question is: Will an extended
psychosomatic module in context of the orthopedic pain therapy for chronic back pain show better effects in the outcome variables than the standard module?

**Method:** It is an explorative and descriptive survey. In a first phase data of 45 patients treated with standard psychosomatic module were collected and later, in a second phase, data of 31 patients with extended psychosomatic module were collected. All patients completed the same self-designed 13-item questionnaire twice at the beginning and at the end of the initial two-week treatment period. The questionnaire included items for measuring pain intensity via NRS and questions about self-efficacy, understanding of the biopsychosocial pain model and motivation for psychotherapy. Statistical analyses were made by non-parametric approaches for each item: Chi square, Wilcoxon-test, Mann-Whitney-U-test and frequencies analyses.

**Results:** There are no statistically significant differences in gender, age and pain intensity before treatment ($p>0.05$). In both groups pain-intensity is significant decreased ($p<0.05$). The improvement of self-efficacy and understanding of the biopsychosocial pain model is similar in both groups after treatment; there is no better improvement in the group with extended psychosomatic module. In general, more patients treated with extended psychosomatic module evaluate psychological support as helpful in comparison to standard group (30% vs. 46%), but there is no statistically significance ($p>0.05$). 48% of patients in standard module and 59% of patients in extended module were recommended psychotherapy; of which 36% in standard module and 57% in extended module evaluate psychotherapy as helpful.

**Conclusion:** Contrary to the expectations there is no better improvement in the outcome variables pain-intensity, self-efficacy and understanding of the biopsychosocial pain model in the group with extended psychosomatic module in comparison to the group with standard module. But regarding to motivation for psychotherapy more patients in extended group evaluate psychological support as helpful as in standard group. Results implicate that the standard psychosomatic module has good effects in pain-intensity, self-efficacy and understanding of the biopsychosocial pain model. In addition, an extension of the module can improve the motivation for psychotherapy. For proving higher effects in pain-intensity, self-efficacy and understanding of biopsychosocial pain model in extended module a larger sample is necessary. Further Methodological limitations of the study are the self-designed questionnaire without scales for outcome variables (each item was analyzed) and a lack of other variables for example depression and anxiety symptoms.

**How useful is Quantitative Sensory Testing in patients with neuropathic pain?**

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**Background:** Quantitative Sensory Testing (QST) is a reliable and valid adjunct measurement strategy for quantifying the neurological dysfunction associated with neuropathic pain. Recent evidence suggests somatosensory phenotyping of patients with neuropathic pain (Reimer et al., 2014). Aim: To assess the relationship between QST measures and scores in clinical assessment of neuropathic pain.

**Method:** Thermal sensory and pain thresholds were assessed via QST, and clinical pain on the LANSS Pain Scale, NRS and IPQ. Anxiety and depression dimensions were evaluated using the HADS.

**Results:** 15 neuropathic subjects with CNS lesions (CP) and 15 with peripheral nerve lesions (PP) were evaluated. Age was inversely correlated with cold pain threshold (CPT) ($z=2.09; p=0.03$) and positively correlated with heat pain threshold (HPT) ($z=1.91; p=0.05$). Females reported a higher intensity (NRS) of clinical pain than males ($z=2.18, p=0.02$). HPT was inversely correlated with LANSS section A ($z=2.08; p=0.03$). Patients with CNS lesions showed lower cold sensation thresholds (CST) ($z=2.85; p=0.004$) and higher warm sensation thresholds (WST) ($z=3.59; p=0.0003$) than those in the PP group.

**Conclusion:** A sensorial threshold is an effective means of distinguishing the subtype of neuropathic pain (central vs. peripheral). Based on our Results, the same cannot be said
for the pain threshold, which can be modified by age.

Pathogenetic psychosomatic mechanisms in chronic pain: gender differences among syndromes
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Background: Abnormal Illness Behaviour (AIB) and Somatosensory Amplification (SSAS) are two of the main conditions underlying medically unexplained symptoms. Aim: To investigate differences in the AIB and SSAS between several forms of chronic pain, and their correlations with sociodemographic and sensorial perception variables.

Method: Chronic non-cancer-pain patients were investigated using the Somatosensory Amplification Scale (SSAS) Abnormal Illness Behaviour Questionnaire (IBQ), Italian Pain Questionnaire (IPQ) and Cold Pressure Pain Test (CP) for clinical and experimentally induced pain.

Results: 550 chronic pain subjects with different forms of chronic pain were enrolled. FM (fibromyalgia) yielded the highest IBQ scores of general hypochondriasis” (GH), “disease conviction” (DC), and “affective Disturbance” (AD), and the lowest in “denial” (D), than other pain syndromes. Global SSAS scores were significantly higher in FM than in any other syndrome investigated. Females reported a greater number of tender points and a lower pain threshold than males, as well as higher IBQ DC (t=2.63, p=0.008) and AD (t=5.47, p<0.0001) and higher global SSAS scores (t=5.70, p<0.0001). IBQ D (t=3.58, p=0.0004) scores were, however, higher in males.

Conclusion: In line with literature we found strong links between female gender, psychosomatic dimensions and the low pain thresholds and central sensitization often shown in FM subjects.

Cultural Aspects/ Countrywise Developments in Psychosomatic Medicine

Lights and Shadows over Spanish CL Services and training: 2000-2015
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Background: Our goal is to gain accurate information o the state of CL Psychiatry and training in Spain comparing Results with previous information collected in 2000.

Method: Phone and mail survey on CL Psych in General Hospital with more than 300beds asking for information on existing CL Services (at least half time senior consultant), training schemes and cl programs.

Results: CL development is slighly increased: 50 CL services are identified among 106 Spanish General Hospital, mainly in teaching sites. Outpatients programs have been reduced (only present in 40% of the CL Services) and more liason activities have been developed in last 15 years. CL teams with psychologist are increasing but only in 60% of the CL Services. There is a gap between Spanish and European or USA guidelines in terms of lesser level of psychotherapy competencies and research activities for residents.

Conclusion: CL-development and training in Spain is slightly improved compared to 2000 but it is still patchy and very slow. Outpatient activities have been reduced in the last seven years. We need more collaborative studies and links between European and Spanish boards on competencies training in this field in order to not only to thrive but to grow faster.

An Overview of Consultation / Liaison Psychiatry in Kosova - future perspectives
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Significant proportion of patients seen in the tertiary clinical service with organic pathologies suffer from one form of psychiatric
reaction toward somatic disease and complications. Consultation-liaison (C-L) psychiatry, as sub-specialization of mental healthcare is not specified yet in our country. A number of small-scale surveys have, however, been carried out over the years, concentrating on particular patient groups. Inpatients attending public health service at University Clinical Center of Kosova presents high prevalence of postpartum depression in first week after delivery in 17.6% of cases, according to Edinburg Postnatal Depression scale and 15.9 % of them with smoking behavioral attitude. Prevalence of post stroke depression symptoms a month after discharge based on DSM-IV/R criteria and HADS(Hospital Anxiety Symptom Scale) was 28% while anxiety symptoms were prevalent in 21% of cases. In sample group of CHF(Chronic Heart Failure) outpatients prevalence of anxiety symptoms was 57.7%. This review was based on studies held in this main Tertiary medical service in our country. We don’t have yet the data on the other regional general hospitals.

While C-L Psychiatry services address the mental needs of people who are being treated primarily for physical health problems or symptoms these services in our country are mostly provided to patients attending general and acute hospitals, but there is also a major – as yet under-developed – role for liaison psychiatry in improving services for people with co-morbid physical and mental health problems.

According to studies the prevalence of mental illness among people with physical health conditions is two to three times higher than in the rest of the population and many of these co-morbid mental health problems go undiagnosed and untreated. This lead to poorer health outcomes, including increased rates of morbidity, mortality and health care costs. No comprehensive statistics were available at the time of writing on overall levels of activity or expenditure on Consultation psychiatry services provided in national level.

Consultation psychiatry services in the hospital setting provide two broad types of service. The first is rapid-response support for emergency or urgent cases, focusing on assessment, management of patients during their time in hospital and onward referral or signposting to community-based services. The second is the provision of psychological and other treatment interventions. The latter are generally more time-intensive and, because of the limited duration of most hospital stays, are usually provided on a follow-up basis in outpatient services.

Conclusion: Measuring outcomes should be a multi-faceted exercise that considers the needs of the different stakeholders who will benefit from the information: the clinician, the manager, the commissioner and importantly the patient. No study has been carried yet in our country, addressing important issues such as consultation rates across services, manpower, type of patients seen, communication patterns with primary care providers, types of assessment, and interventions. C-L psychiatry is a significant part of the psychiatric field which should be promoted appropriately. The recommendations of the UEMS European Board of Psychiatry with respect to training in C-L psychiatry should be implemented at national level.

Developing a model of basic psychosomatic treatment for a country so far without special structures
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Background: Psychosomatic basic care (PBC) is a proven concept for general physicians to handle this kind of patients investing weekly to monthly 20 min sessions with advantages for the patients and the doctors. It is well established in Germany, Austria and it starts to spread in other European countries (AEPM-Summer and Spring Schools).

Method: A literature research was done to find treatment models which would be enough effective to be part of a package. A stepped care model was created and calculated.

Results: PBC could be flanked by autogenic training in groups, e.g. 12 Patients, 8 meetings within 3 months, standard procedure (weightiness, warmth, respiration, cardiac sedation, etc.). Even in poorer European countries a normal medical hourly wage divided by 10 should be an affordable effort. Alternatively or complementarily there is a group-psychotherapy conceivable – psychodynamic or behavioral – closed group for one year, holidays excluded, every two weeks, because adults often have other commitments (e.g. parent’s evening) and so constant presence could be strengthen. So twenty sessions a year – concerning 10
participants – quarterly a medical hour wage, is even affordable for less wealthy people. To handle the dictatorship of the distances a e.g. quarterly Saturday-block model to teach functional relaxation could be reasonable, with the costs of a half medical hourly wage for a 6 hours seminar with 12 participants.

**Conclusion:** Even in countries without established psychotherapeutic/ psychosomatic treatments an - at least for the most common psychosomatic disturbances - outpatient adequate supply is realizable with reasonable costs for the patients. Information campaigns are needed for both physicians and patients. In these countries the legal conditions must be created which allow physicians to discount group sessions in psychotherapy, autogenic training and functional relaxation.

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**First Year of a C-L Psychiatry Training Program in a Brazilian Teaching Hospital - Trends and Challenges**

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**Background:** Although Psychosomatic Medicine is recognized as a Psychiatry Subspecialty since 2003, there is a shortage of C-L Rotation Programs among Brazilian main academic Institutions. Recife is currently the second largest Brazilian Medical Center and there were no organized C-L Rotation Programs until 2013. Barao de Lucena Teaching Hospital is a 300 bed general hospital and a reference center among Recife’s Institutions. We present the Results of Barao de Lucena’s C-L Rotation Program first year and the challenges of this endeavour.

**Method:** We designed a 1-Year C-L Rotation Program based on APA and RCP curricula. 2nd Year Psychiatry residents perform clinical rounds with a full-time C-L psychiatrist and there are two scientific sessions per week. All consultation requests are stored in a Database for future research purposes. Competencies in C-L psychiatry are evaluated at the end of rotation.

**Results:** Hospital Data Records showed a rate of 40 per year consultation requests for Psychiatry between 2009 and 2013. After the C-L program’s first year, this rate increased to 144 per year( An increase of 360%). Delirium and Adjustment Disorders were the most prevalent diagnosis so far.

**Conclusion:** Our experience shows that an organized C-L rotation program is possible and viable, in spite of local difficulties. We expect to increase systematic training in C-L psychiatry, which is not a reality among most of Brazilian Psychiatry Residency programs so far.

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**Ethnicity as a potential barrier to pre-transplant evaluation in a Canadian setting**

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**Background:** Kidney transplantation (KT) is the optimal treatment for most patients with end-stage renal disease. Evidence mainly from the US indicates that African-Americans have higher risk of not completing the transplant workup (WU) when compared to whites. We examined the association of ethnicity and the likelihood of completing the WU, and obtaining a final disposition (i.e., suitability for transplantation, activation to waitlist, or living donor transplant).

**Methods:** This is a single-centre retrospective cohort study of adult patients referred for KT at the Toronto General Hospital (TGH) from January 1, 2003 to December 31, 2013, and followed up until June 30, 2014. Only patients who completed a social work assessment and for whom data about ethnicity was available (n=1355) were included. Obtaining a final disposition within four years after referral was used as the primary outcome variable. Univariable and multivariable associations between ethnicity (extracted from the social work notes) and time from referral to final disposition were explored using Cox proportional hazards models.

**Findings:** The mean (± SD) age was 48.7 (± 13.6) years, 60% of the patients were male and 40% had a history of diabetes at the time of referral. Fifty-nine percent of the patients were white, 14% were black, 12% were East-Asian
and 11% of Indo-Asian origin. Eighty six percent of the patients received final dispositions within four years of referral. When comparing Caucasians with all other races, white patients were 23% more likely to obtain a final disposition (p=0.0006). When considering all the major ethnic groups in univariable Cox analysis, black patients had a 19% (HR 0.81; 95% CI 0.68-0.96) lower likelihood of completing the WU. The difference was not significant for East Asian (HR 0.90; 95% CI 0.77-1.10) or Indo-Asian (HR 0.85; 95% CI 0.70-1.04). These results remained qualitatively unchanged after adjusting for socio-demographic characteristics and comorbidity.

Discussion: Ethnicity is a potential barrier to completing the WU in a cohort of Canadian patients. Patients of African heritage have a higher risk of not completing the WU compared to whites. East-Asian and Indo-Asian patients were not significantly different, although this might be related to insufficient power. We are currently initiating further studies to identify the specific barriers that contribute to these disparities in access to KT.

A cultural competent model of psychiatric care for migrants in Bologna, Italy
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The mental health of migrants is to be considered today in Italy and in Europe one of the major problems of individual and public health. Besides the problem of the increased risk of mental disorders in migrants, there is that of the difficult access to care, which causes a greater number of emergency accesses compared to natives. The presence of the family and the arrangements for the involvement of the same in the caring relationship is known as a crucial variable in the process of care and requires care and cultural competence from the first access of the patient. From clinical experience and research conducted in Bologna, it is clear that migrants in access to mental health services often have characteristics of higher social functioning, but at the same time more social vulnerability than natives. We offer in this work a thought on the impact of socio-cultural variables and of the migration history in the relationship between migrant patients, families and mental health services.

Cardiovascular Comorbidities Associated with Major Depressive Disorder and Anxiety Are a Major Burden for the Romanian Health System
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Background: The biological stress responses relevant to cardiovascular disease include a complex matrix of haemodynamic, neurohumoral, inflammatory and haemostatic changes against a substrate of genetic, physiological and lifestyle risk factors. Stress-related processes contribute to a range of cardiovascular outcomes. The aim of this retrospective, non-interventional study is to evaluate de cardiovascular comorbidities associated with depression and anxiety among the patients admitted between 01-01-2011 and 30-11-2014 in “Prof. Dr. Alexandru Obregia” Hospital, Bucharest.

Method: We have evaluated the charts of 21,022 patients admitted in our hospital in the last 4 years, diagnosed with either depressive or anxiety disorders using DSM IV TR criteria and ICD 10 encoding. In the same time, we have evaluated the comorbidities associated with these disorders using the ICD 10 encoding for medical disorders: obesity, increased cholesterol, increased triglycerides, mix dyslipidemia, diabetes, cardiomiopathy and hypertension.

Results: 45% of these patients had more than 1 admission in the hospital. 73, 5% are patients with at least 1 comorbidity. From these patients one third has hypertension and in an almost equal proportion they have diabetes, mix dyslipidemia and cardiomiopathy. Smoking is a risk factor present in 11% of our patients. 17, 19% have other comorbidities.

Conclusion: Almost two thirds of the patients with depressive or anxiety disorders have at least 1 cardiovascular risk factor. Most of them have hypertension. The data we have obtained is concordant with the international literature. There is a reciprocal connection between stress (defined in this study by major depressive
disorder and anxiety disorders) and cardiovascular risk factors. The vicious circle - psycho-somatic - that maintains both types of symptomatology increases the burden for the health system. Thus, we can appreciate that the next step for reducing costs and obtaining a proper diagnosis is to implement screening instruments as a current practice for any physician to differentiate between psychosomatic symptoms, somatic diseases and psychiatric disorders.

Management of depression in the British South Asian and British White patients with long-term conditions in primary care: A cross sectional study
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Background: The rates of depression in people with long-term conditions (LTCs) are two to three times higher compared to healthy controls. Depression is associated with poor quality of life, reduced self-care, high mortality and higher cost in primary care. British South Asians (BSAs) have higher rates of LTCs such as Diabetes Mellitus and Coronary Heart Disease (CHD) than the British White (BW) people. The aim of this study was to compare the prevalence and management of depression between the British South Asians and British White within primary care setting.

Method: A cross-sectional study was conducted during the period 1/4/2006 to 31/3/2014 by using the primary care computerised database at a practice in the Blackburn area of the UK. The data were extracted for patients with Diabetes Mellitus and CHD. Whooley’s questions and Patient Health Questionnaire (PHQ-9) were used for detection of depression. Data about the management of depression was also extracted from the records. Logistic regression analyses were performed with depression as the dependent variable. Independent variables were ethnicity and age, gender, LTCs and Whooley question screening.

Results: A total of 425 BSAs and 135 British White patients with a diagnosis of diabetes and/or CHD. The prevalence of depression in BSAs and BW was 6.6 % and 13.3% respectively (p<0.018). British Whites are twice as likely to get depression (OR: 2.093, 95% CI: 0.95-4.60, p=0.066) but after the Odds ratio adjusted for age, gender, and diabetes and/or CHD Results show that ethnicity is not significant. Advance age appears to reduce the odds of having depression (adjusted OR: 0.965, 95% CI: 0.942-0.988, p=0.003). Females have greater odds of having depression compared to males (adjusted OR: 2.609, 95% CI: 1.358-5.012). Patients with CHD alone had almost 5 times the odds of having depression compared to patients with diabetes alone (adjusted OR: 4.813, 95% CI: 1.925-12.030, p=0.001). A total of 8.7% (46/560) patients had depression; there was no relationship between ethnicity and being treated with antidepressants. Only one third (15/46) of the depressed patients were prescribed antidepressants (BSAs 32.1% vs WB 33.3%) and no patient was referred for psychological treatment.

Conclusion: British White are more likely to develop depression compared to the British South Asians with diabetes and/or CHD but once diagnosed with depression, there is no difference in receiving treatment between the two ethnic groups.

Gender Specifics in Psychosomatic Medicine

Psychosomatic aspects in women undergoing breast reconstruction with latissimus dorsi flap
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Background: Breast reconstruction after mastectomy not only gives the aspect of an natural looking breast, but also has major psychological benefits and re-raises the self-esteem and self-conscious in patients. The aim of the study was to investigate the psychological implications in women who benefitted from breast reconstruction.

Methods: A total of 25 patients that were operated in our department in 2013 were included in the study. The reconstructive technique used for the included lot was either latissimus dorsi flap or a combination between latissimus flap and silicone endoprosthesis. A questioner was taken before the surgery as well as 12 month postoperative. We investigated the life quality and cosmetic satisfactions in patients.

Findings: 100% of the patients were satisfied
with the end result. There were no major satisfaction difference between the patients that benefited only from the autologous flap reconstruction compared to the patients that benefitted from silicone implant plus latissimus flap technique. All the patients reported an increased life quality and better perception of their own body image. The donor site morbidity was reduced, not causing significant functional and aesthetic inconvenience.

Discussion: We consider that breast reconstruction after mastectomy is a highly recommended procedure. It helps with a better quality of life and self-esteem. The psychological distress, 12 month after operation was dramatically reduced. Some of the patients reported emotional side effects because of the known long postoperative rehabilitation.

The Effects of Vitamin B1 on the mental and behavioral symptoms related to Premenstrual Syndrome
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Background: The premenstrual syndrome (PMS) is a series of physical, mental, and behavioral symptoms with various severities, and disturbs social and personal relationships. The syndrome appears during luteal phase of the menstrual cycle and is a common disorder of reproductive age. Different treatments have been introduced for the syndrome due to its unknown complicated causes. Vitamin B1 (Thiamin) may reduce symptoms of the syndrome through affecting the performance of coenzymes in the metabolism of carbohydrates and main branch of amino acid that plays an important role in appearance of physical and mental symptoms of the PMS. Vitamin B1 is the first water-soluble discovered vitamin. As it is effective in neural activity and muscle tonus in different body activities, including hematopoiesis, metabolism of carbohydrates, activities of the central nervous system and neuromuscular system, etc., it can be effective in this dysmenorrhea that is a disorder resulting from uterine muscular contraction. There are no enough studies and research on the effect of vitamin B1 on the symptoms of PMS, therefore, this study was conducted to determine the effect of vitamin B1 on the mental and behavioral symptoms of PMS in students residing at dormitories of Jahrom University of Medical Sciences in 2013.

Method: In this double-blind placebo-controlled clinical trial, 80 students with PMS residing at dormitories of Jahrom University of Medical Sciences were divided randomly into two groups, vitamin B1 and placebo. The students recorded the severity of the symptoms of PMS in two cycles before and during the intervention. The data was collected using an information collection form, PMS provisional diagnosis form, daily status record form, Beck Depression Inventory. The data were analyzed using descriptive and inferential statistics.

Results: There was no significant difference among the studied variables in terms of confounding variables. The comparison of vitamin B1 group before the intervention with that after the intervention showed that vitamin B1 reduced mean mental (35.08%) and physical (21.2%) symptoms significantly (P < 0.0001). Moreover, there was a significant difference between vitamin B1 and placebo groups in terms of mean mental and physical symptoms, as mean symptoms in vitamin B1 group was significantly lower than that in the placebo group (P<0.0001).

Conclusion: It seems that vitamin B1 is effective in recovery of mental and physical symptoms of PMS. Therefore, this vitamin can be used to reach a major goal of midwifery, that is, reduction of symptom severity of PMS, without any side effects.

Childhood trauma and postpartum depression
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**Background:** Studies on the impact of childhood trauma on postpartum depression show inconsistencies and methodological limitations. The present study examines the effect of childhood trauma on depression 12 and 24 weeks after childbirth, while controlling for history of depression, depression symptoms during pregnancy and type D personality.

**Method:** During the third trimester of pregnancy, 210 women completed self-report questionnaires assessing depression (current and/or past episodes), childhood trauma and type D personality, of whom 187 participated in the postpartum follow-up, with depression symptoms being reassessed at 12 and 24 weeks after delivery with three depression outcome measures.

**Results:** Eventually, 183 participants were retained for analysis. Results indicated no predictive value of childhood trauma on postpartum depression in the univariate analyses, nor after controlling for previous depression, depression symptoms during pregnancy and type D personality. However, past depression and depression symptoms during pregnancy did independently and convincingly predict postpartum depression, especially at 12 weeks and to a lesser extent at 24 weeks following childbirth.

**Conclusion:** Overall, we found no significant association between childhood trauma and postpartum depression. Past depression and depression symptoms during pregnancy are more relevant factors to assess before childbirth.

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Oxytocin response to an attachment-related stressor in women with respect to depressive symptoms

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**Background:** In attachment research, there is a huge interest in oxytocin as a stress related hormone, which seems to alter stress reactions in such a way as to promote more pro-social coping strategies (Striepens, et al., 2013). However, in prior research, little attention was given to possible modulating factors playing a key role in oxytocin response to attachment-related stressors. Therefore, by administering the Adult Attachment Interview (AAI, George, Kaplan & Main, 1985), the attachment system was triggered in subjects in order to answer the following questions: Does the oxytocin level increase after conducting the interview with at least small effect size? Does the presence of at least mild depressive symptoms lead to a lower oxytocin increment?

**Method:** Data was collected as part of an intervention study at the Dr. von Hauner Children’s Hospital in Munich between 2013 and 2014. A subsample of N=14 women (34 to 55 years, m=46.3 years, SD= 5.9 years) were asked to participate in the AAI in order to activate their attachment system. Framing the AAI, subjects were provided 4 saliva samples: before, immediately after, 15 minutes after and 30 minutes after the AAI. Saliva oxytocin was extracted and quantified by a highly sensitive and specific radioimunoassay (RIAgnosis, Munich, Germany). To control for possible effects, all women compiled the BDI-II to screen for depressive symptoms, by which they were split into two groups: one without and one with clinically relevant depressive symptoms (Beck, Steer & Brown, 1996).

**Results:** A repeated measures t-test showed a significant difference between the oxytocin levels before and immediately after the AAI with an effect size of d=.6 (medium effect). Moreover, an ANCOVA revealed that for those with at least mild depressive symptoms, the increment of oxytocin was significantly lower (after adjusting alpha to sample size using G*Power) with an effect size of partial $\eta^2 = .18$, denoting a strong effect.

**Conclusion:** The Results of this pilot study should be interpreted with caution. Data supports the hypothesis that the AAI is an attachment stimulus strong enough to provoke a significant endogenous oxytocin response in non-depressive women. One plausible explanation for the lower increment of oxytocin in depressive women is the effect of a suppressed attachment system on endocrine function.
Psychological morbidity in breast cancer survivors: Prevalence-rates and determinants


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Background: The number of breast cancer survivors (BCS) is steadily increasing due to improved treatment options, early detection and younger age at diagnosis. Thus, it is increasingly important to determine and better understand the psychological outcome following a cancer diagnosis and treatment in long-term. This might contribute to meeting the long-term health care demands of cancer survivors. We aimed at investigating levels and determinants of anxiety and depression (AD) in BCS.

Method: BCS who have been treated with endocrine agents (aromatase inhibitors of tamoxifen) were included in the study. AD was determined as part of a comprehensive patient reported outcome (PRO) assessment (Functional Assessment of Cancer Therapy-G/B/ES, Eating Disorder Examination-Questionnaire, Sexual Activity Questionnaire and Body Image Scale) using the Hospital Anxiety and Depression Scale (HADS). Prevalence rates of AD and sample characteristics are presented descriptively using percentages, means and standard deviations. Predictors of anxiety and depression are identified by means of regression analysis.

Results: A final sample of 743 breast cancer survivors who were on average 2.9 years post diagnosis (range: 0.1-11.3 years) participated in the study. Mean patient age was 56.4 (SD 11.5), 2/3 of patients were postmenopausal. 22.5% of patients reported clinically relevant levels of anxiety and 11.2% of depression. Older age (β=0.012, t=2.53, p=0.05), higher endocrine symptoms (β=-0.037, t=-8.89, p=0.01) and reduced functional well-being (β=-0.034, t=-7.73, p<0.01) were predictive for anxiety and depression in the regression model. The model explained 39.3% of the variance of anxiety and depression.

Conclusion: A distinct proportion of BCS report clinically relevant, long-term psychological morbidity. Especially older BCS, experiencing higher levels of endocrine symptoms and reduced functional well-being seem to be at risk for psychological morbidity. A routine PRO-screening for psychological morbidity including the assessment of associated risk factors in this patient population might contribute to the identification of those women in need for psychological/psychiatric treatment and in conjunction improve cancer care.

Human papilloma viruses infection and male infertility

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Background & Aim: Infertility in a couple is defined as the inability to achieve conception despite one year of frequent unprotected intercourse. Male factor is responsible for 23 percent of couple infertility. A relationship between the human papilloma viral infections and male reproductive health is of importance to both theoretical and practical medicine. Human papillomaviruses (HPV) are the most frequently sexually transmitted viruses and etiological agents of several human cancers. This infection in men is also a problem for partners. Controversial results of the role of HPV in infertile population on sperm parameters have been published. The aim of this study was to determine the role of HPV infection on sperm function and male infertility.

Materials & Methods: This Review article is collected of more than 25 published papers in valid sites such as Pubmed, Google Scholar, Proquest, SID, Science Direct and etc., during 2008 to 2015.

Results: HPVs are agents of the most common sexually transmitted disease and can lead to warts and cancers both in men and women. A high incidence of HPV infection has been demonstrated in sperm from sexually active men with and without risk factors for HPV and from infertile patients. Semen infection is associated to an impairment of sperm parameters suggesting a possible role in male infertility. Interestingly, it has been demonstrated that when HPV is present in semen only a percentage of total cells are infected and the virus can be localized in
sperm or in exfoliated cells with different impact on sperm motility. Moreover, infected sperm are able to penetrate the oocyte, to deliver HPV genome in the oocyte and HPV genes can be actively transcribed by the fertilized oocyte. Recently an increased risk of pregnancy loss has been demonstrated in couples undergoing in-vitro fertilization and particularly when HPV DNA was present in semen samples of male partners.

**Conclusion:** Co-infection with HPV has a significant role in decreasing male fertility, in particular with regard to sperm motility and morphology. Growing evidence suggests that semen infection may cause infertility and early miscarriage, more attention should be paid to male HPV infection. It is recommended for couples with male infertility done screening HPV tests on the first visit and, if necessary, appropriate treatment should be initiated for male HPV infection.

**Sex-specific differences in pruritus perception modulated by placebo and nocebo instructions in relation to the experimenter’s sex**

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**Background:** Pruritus is considered to be highly suggestible. But until now, there is little knowledge about placebo or nocebo effects in general and particularly concerning sex-specific differences. Further, there are no pruritus studies examining the influence of the sex of the examiner on itch perception. This is the first study examining the effect of placebo and nocebo instructions on females and males under consideration of the experimenter’s sex.

**Method:** We examined 100 participants in four groups - 25 female and 25 male participants paired with either a male or a female experimenter each. We performed four runs including two control conditions (nocebo and placebo control) and two experimental conditions (nocebo and placebo) using either cutaneous histamine or saline injection. After each run, the wheal and flare reaction were measured 5 min after the injection and the highest intensity of itch, the highest urge to scratch and the highest unpleasantness of itch were recorded by a numeric rating scale from 0 (no itch/urge to scratch/unpleasantness) to 10 (highest itch/urge to scratch/unpleasantness imaginable) during the 5 min period.

**Results:** Males reported higher itch intensity ratings, while females only reacted with more extended wheals and flares during the nocebo and placebo conditions. The female examiner lead to more extended skin reactions and to higher itch intensity ratings in both conditions, the male examiner only to higher itch intensity and unpleasantness ratings during the placebo condition.

**Conclusion:** Females and males react differently on placebo and nocebo instructions during experimentally induced itch. Females might be higher stressed leading to a more extended skin reaction, while males might be more susceptible to suggestion. The female sex of the experimenter leads to higher intensity ratings and more extended skin reactions probably due to psychosocial factors.

**Neuropsychiatry & ADHD**

**Emotional intelligence, personality and quality of life: a comparison between newly diagnosed MS patients and a healthy control group**

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**Background:** Multiple sclerosis is a progressive inflammatory demyelinating disease of the central nervous system which mostly affects people aged between 20-40 years. MS patients suffer from widely clinical symptoms such as fatigue, painful muscle spasms, sphincter dysfunction and cognitive impairment. The disabling progression of the disease causes multiple psychological distresses concerning their physical activity, employment opportunities and family or social relationships. So far, numerous studies have shown that negative emotions play a big role in modifying the course of inflammatory conditions. Especially in Multiple Sclerosis, the perceived stress has been linked to the disease relapses and the development of new lesions in the CNS.

According to Mayer and Salovy, Emotional Intelligence is depicted as “an ability to
recognize the meanings of emotions and their relationships, and to reason and problem-solve on the basis of them.” Positive effects of higher degrees of functions in emotional intelligence on health outcomes have been discussed a lot in the researches in the recent years. Similar Results are synchronized with the five-factor model of personality which consists of neuroticism, extraversion, openness to experience, agreeableness and conscientiousness which predict patterns of consequences such as subjective well-being, mental and physical health, quality of familial and peers relationships, members, and occupational performance and satisfaction. This is why we decided to assess the differences between MS patients and matched healthy subjects in the mentioned domains.

There are various Results suggesting that the personality and emotional function in MS patients changes along with the progression of the illness; so in the current study we decided to enroll the newly-diagnosed patients to reduce the confounding effects of disease progression on the patient’s personality and emotional intelligence. This led into a cross-sectional study conducted to compare the trait EI and personality profiles of newly-diagnosed MS patients against controls and also defining their association with quality of life.

**Method:** The participants were recruited via referral patients to MS clinic of Sina Hospital (affiliated to the Tehran University of Medical Sciences) and two other outpatients clinics in Tehran between January 2012-August 2014 and then they were compared with a matched control group. We included the patients whom had been diagnosed with MS in the last 6 months. Exclusion criteria was past or recurring mental/physical illnesses other than MS which could affect personality and emotional intelligence, substance abuse or dependence, moderate to severe cognitive dysfunction interfering with psychometric testing, MS relapse or corticosteroid use within the past 4 weeks. We also excluded the patients whom had MS-associated symptoms before the diagnosis. The research has been conducted in accordance with the Declaration of Helsinki and has been approved by the local Ethics Committee. Informed consent was obtained from all participants. We used three sets of instruments in addition to demographic assessment, consisting of Farsi versions of the Multiple Sclerosis Quality of Life Questionnaire (MSQOL)-54 NEO-Five Factor Inventory (NEO-FFI) and Emotional Intelligence Scale-41 (FEIS-41) which is a modified version of The Emotional Intelligence Scale devised by Schutte et al. (1998.) All the questionnaires have been validated in Persian language. Statistical analyses were performed using SPSS version 16. We used mean and standard deviation to describe continuous variables. Frequencies and percentages were used for nominal and ordinal variables and chi-square test for qualitative variables. Evaluating differences between non-categorical data and comparing means in the questionnaires’ subscales was conducted by Mann-Whitney U test, multivariate analysis of variance and stepwise regression. All significance tests were two-tailed and P<0.05 was considered significant.

**Results:** The sample comprised 120 volunteers (42 males), with a mean age of 30.37 ± 7.01 (N=48) in the patients and 6.96 ±28.95 (N=72) in the healthy subjects. There were no significant differences in gender, education levels and marital status between the cases and the control group. Between the factors of Quality of Life, the average of criteria on physical health, emotional and physical problems, cognitive function, health distress, sexual function showed a notable contrast between the patients and the healthy subjects; the aforementioned criteria were significantly lower in the patients’ group (p<0.05). Results showed higher scores in the aspects of neuroticism and conscientiousness in the patients compared with controls. On the other hand MS patients had lower levels of extraversion than in healthy subjects. With regards to emotional intelligence, no differences in any of the EI domains (Regulation of Emotions, Utilization of Emotions and Appraisal of Emotions) were find between two groups.

**Conclusion:** The Results of this research in terms of personality and quality of life are similar to other conducted researches concerning the same matter between MS patients. We were expecting that EI levels would be significantly different between MS patients and controls. In a comparison done between healthy subjects and MS patients in Iran (using the Bar-On questionnaire), in some contexts, the EI of the MS patients was lower than that of the healthy controls. One explanation about our different Results is that there may be no differences in emotional intelligence in the early stages of the disease.
between MS patients and the healthy ones. The factor structure of Bar-On which is more ability-based may interfere with the Results. Our small sample size also could affect the Results. However the paucity of research on this subject makes interpretation difficult. For better depiction and further exploring, more researches are needed.

EEG – Correlates as biomarkers in chronic fatigue syndrome
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Background: The two central symptoms of chronic fatigue syndrome (CFS) are severe, disabling fatigue and cognitive impairment. To date, neuroimaging and neuropsychological studies have produced mixed Results when trying to locate the structural changes responsible for these two cardinal symptoms. Our goal was to evaluate the relationship between fatigue and electroencephalographic (EEG) peak alpha frequency (PAF) in CFS as compared to age- and sex-matched controls.

Method: Fatigue was measured by the Multidimensional Fatigue Inventory (MFI-20) and Fatigue Severity Scale (FSS) scores. MFI-20, FSS and a 19-channel quantitative EEG were obtained in 50 CFS patients and 50 healthy matched controls. EEG was performed during a 3-minute eyes closed condition using a resting-state only, in a case-control design.

Results: Mixed ANOVA Results found decreased PAF over 58% of the entire cortex in CFS patients when compared to controls, Wilks’ Λ = .66, (F(18, 80) = 2.424, p=.006, partial h2 = .31). Bonferroni-corrected follow-up indicated significant differences in PAF at the following electrode sites: C3, C4, Cz, F3, F4, FP1, FP2, Fz, P3, Pz and T3 (p<.05). Two hierarchical multiple regression models found the best linear combination of predictors to predict fatigue: analysis #1 used the MFI-20 as the dependent variable, [R2= .897, F(5,1894) = 3287.76, p =.000]; analysis #2 used the FSS as the dependent variable, [R2 = .887, R2 change = .865, F(5, 1894) = 3058.93, p=.000]. To assess fatigue levels between groups, we used the Mann-Whitney U Test, first with MFI-20 (z = -37.474, p < .000) then the FSS (z = -37.757, p < .000).

Conclusion: Our Results of widespread decreased PAF in patients with CFS are consistent with lowered levels of arousal and could assist in understanding the syndrome’s etiology. Global reductions in brain activation, if replicated could provide one vehicle to understand the wide variety of cognitive problems seen in CFS. Functionally deviant EEG rhythms may reflect neurodegenerative processes in CFS and may be useful in staging of the disease. When integrated to a clinical interview and fatigue measures, the use of qEEG–PAF measurement may have both diagnostic and prognostic value, may facilitate the early identification of patients suffering from CFS, and serve as a surrogate to assess response to therapy.

Neuropsychiatric complications of disulfiram intoxication – a case report and a brief review of the literature
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Background: The most frequent signs of the disulfiram intoxication are neurological, including choreoathetosis, catatonic signs and Parkinsonism caused by lesions at the level of basal ganglia, putamen and globus pallidum, or peripheral and central sensory motor polynuropathy and optic neuropathy, but a variety of psychiatric symptoms like confusion, delusions, memory impairment, and attention deficit also can be present, making difficult to establish the correct diagnosis. Comorbidities such as Wernicke’s encephalopathy or malnutrition appear often in association with alcohol dependence and in case of disulfiram intoxication hinder rehabilitation or lead to severe neurological sequels such as tetraparesis. We report the case of self-poisoning with disulfiram presenting with complex neuropsychiatric symptoms.

Case report: Ms A, was admitted to the toxicology ward after a suicide attempt with approximately 20 g of disulfiram. Because of disorientation, intense confusion and psychomotor agitation, she was transferred to an acute psychiatric ward. Beside the psychiatric symptoms, increasing somnolence and confusion appeared over the next 24 hours, and finally a comatose state developed. Repeated CT scan revealed bilateral emollition of 1.5 cm diameter in both nucleus lentiformis at the level of the 3rd ventricle. After 19 days at the intensive care unit, Ms A was transferred to rehabilitation facility, where she benefited of complex neurorehabilitation. Over the
subsequent 6 weeks, the previously experienced low limb numbness and weakness subsided. However as she voiced persecutory delusions she was transferred back to the psychiatric department. Quetiapine and as she had lower mood, paroxetine treatment was introduced. After 19 days, her psychic condition was compensated. Repeated neuropsychological tests revealed only transient mild cognitive impairment.

**Conclusion:** Intoxication with disulfiram is an unusual form of the suicide attempt. Arriving to a tentative diagnosis is challenging, as the intracerebral lesions appear with delay and the clinical picture is usually miscellaneous nevertheless patients can be in a very serious, sometimes life-threatening condition. In the presented case after setting up a diagnose, an adequate treatment could be started, followed by complex neurorehabilitation, that finally resulted nearly complete recovery. As a conclusion we underline the importance of the adequate diagnosis and complex neurorehabilitation in the treatment of disulfiram intoxication.

**Auditory Release Hallucinations in Hearing Impairment**

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Sensory phenomena after cessation of afferent stimuli have been described in different modalities. Visual release hallucinations are well described and have been seen in patients with impaired vision. Other deafferentation sensory phenomena have also been seen with phantom limb syndrome and deafferentation pain. There are limited reports describing verbal auditory hallucinations with hearing loss, although musical hallucinations are described more frequently. Additionally, visual release hallucinations with impaired insight have been described in patients with previous cognitive impairment. In this case presentation, we describe a 68 year old male with intellectual disability who presents with new-onset verbal auditory hallucinations with impaired insight coinciding with hearing loss due to hearing aid malfunction. After a medical admission to rule out sinister causes of new-onset auditory hallucinations, his hallucinations were abated with olanzapine. We also review the literature on reports of auditory release hallucinations and discuss possible etiologies, as well as discuss release hallucinations in other modalities. In this case report, we underline the importance of examining other etiologies of psychotic symptoms that are not primary psychiatric illnesses. Additionally, we extend the concepts of visual release hallucinations to auditory stimuli.

**Influence of depressive symptoms on QbTest performance in adult ADHD patients**

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**Objectives:** Comorbid depression is frequently reported by patients suffering from adult ADHD. Furthermore, depression is well known to cause impairment in a variety of cognitive domains, amongst others speed of information processing and attention. The aim of our study was to investigate the impact of depressive symptoms on QbTest performance.

**Methods:** The QbTest is a computer-assisted instrument which combines a continuous performance task with a motion tracking system to assess the core symptoms of ADHD (i.e., hyperactivity, inattention, impulsivity). A total of 69 outpatients with definite diagnoses, who were screened for adult ADHD in our clinic in 2014, were selected from a larger sample of 157 persons. 31 patients were diagnosed as suffering from adult ADHD, 38 patients did not meet the diagnostic criteria. We further subdivided this sample into subgroups of patients suffering from no or only mild depressive symptoms and patients with moderate to severe depressive symptoms as assessed by the BDI II. The resulting four subgroups were compared with respect to the following QbTest parameters - distance, area, omission and commission errors, mean reaction time, normalized reaction time variance - using parametric analyses of variance.

**Results:** When comparing ADHD and no ADHD patients, five out of six QbTest variables showed significant differences or at least a tendency towards significance. After introducing depression as a grouping factor, significant differences (p < .05) between the 4 sub-groups were only found for commission errors and normalized reaction time variance. Post hoc analyses revealed that in the presence of comorbid depression only commission
errors, but not activity measures or reaction time, discriminated between patients with and without ADHD.

Conclusions: The majority of the QbTest parameters assessed in the present study were sensitive to ADHD core symptoms, but discrimination between ADHD and no ADHD patients was modulated by self reported depression. Therefore, depressive symptomatology should be considered when interpreting QbTest results.

Postoperative delirium incidence, risk factors and outcome
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Background: postoperative delirium (POD) is a common and serious complication after cardiac surgery and numerous studies have confirmed this in occurrence from 10% to 60%. The aim of this study was to identify the incidence and risk factors of postoperative delirium (POD) after cardiac surgery and to evaluate clinical outcome.

Methods: data on 292 patients after elective cardiac surgery on cardiopulmonary bypass (CPB) were prospectively analyzed. The patients were assessed and monitored preoperatively, during surgery and in the early postoperative period. The Confusion Assessment Method for the Intensive Care Unit (CAM-ICU) delirium assessment tool was conducted.

Findings: the incidence of POD was 28% and it most common on 2.14(±0.73) post-operative day. Average age of delirious patients was significantly higher than non-delirious patients 69.84(±10.01) vs 65.83(±10.61) yr, p=0.003. The analysis showed that previous strokes was significantly more frequent delirious patients than non-delirious patients 17.1 vs 6.7%, p=0.006, average duration of CPB 111.29(±41.05) vs 100.8(±36.87) min, p=0.003, intraoperative use of sodium thiopentali were lower 220.49(±151.66) mg, p=0.008, but use of fentanyl were not significant 0.76(±0.44) mg, p=0.489, post-operative sedation 7(8.5) vs 21(10)% p=0.711 and post-operative pain control with opioids 41(50) vs 115(54.8)% p=0.464 were not significant.

POD treatment with haloperidol was adequate, p<0.001. The analysis showed that POD prolonged the length of the ICU stay 5.8(±2.89) vs 3.86(±1.91) days, p<0.001 and length of stay in the hospital after ICU 14.51(±11.67) vs 11.10(±9.07) days, p=0.016; patients after POD more frequent was required re-intubation (OR: 13.169, CI 1.456-119.087, p=0.022). Multivariate analysis remained as an independent predictors for POD: age > 70 yr (OR: 2.227, CI 1.325-3.742, p=0.003), previous strokes (OR: 2.897, CI 1.314-6.386, p=0.002, duration of CPB > 86 min (OR: 2.068, CI 1.182-3.618, p=0.009) and postoperative atrial fibrillation (OR: 2.244, CI 1.158-4.347, p=0.007).

Discussion: our data suggest that early POD is a common complication and worsen patient outcome following cardiac surgery. POD may affect the many reasons and a multifactorial risk model should be applied to identify patients at an increased risk of developing POD. Suggest that many factors cannot be changed or avoided but some can be modified and it depends from us: if increasing the amount of thiopentali during the maintenance of anaesthesia >140mg, risk of POD can be reduced (OR:2.226, CI 1.226-4.232). By the way, a large prospective randomised study in this regard is needed.

Impact of delirium in the morbidity, survival, and functioning of lung transplant patients
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Background: Delirium is a common neuropsychiatric disorder, affecting medically ill patients with incidence of up to 82% in mechanically ventilated patients; and adversely affects patients’ morbidity, mortality, and hospital stay length. The purpose of our study is to investigate the influence of delirium in our larger lung transplant sample.

Method: We studied patients transplanted from 7/18/2011 through 3/18/2013. The electronic medical record were retrospectively examined by a psychosomatic medicine specialist.

Results: All patients transplanted during the study period and surviving the surgery were included (n = 163). Seventy two patients (44.2%) were found to have delirium during their post-transplant hospitalization or within the first 30 days, whichever was shortest. On
average, patients developed delirium on postoperative day 4.1 (SD 4.2) lasting on average 6.9 days (SD 6.6). Patients with delirium as compared to those without had higher BMI (mean 26.1 (SD4.9) versus 23.5 (SD 4.4), p=0.0003) and had a trend towards older age (mean 52.9 (SD12.5) versus 48.4 (SD 16.2), p = 0.056), but did not differ in LAS, gender, or indication for transplant. The development of delirium had significant adverse consequences including longer ICU (18.6 days [SD 29.1] versus 4.2 days [SD 4.5], P<0.001) and hospital stay (32.7 [SD 42.5] versus14.0 days [SD 10.4], P<0.001), time to extubation (16.9 hours [SD 39.0] vs 1.7 hours [SD 2.0], P<0.001), and in-hospital mortality (13.9 % vs 1.1%, P=0.001). Patients with delirium also had greater mortality within first year post-transplantation (19.4% vs 8.8%, P=0.048), had few days survived in the first year (317.5 (SD 106.6) vs 347.2 (SD 65.7), p=0.031), and were more likely to have psychiatry consult services (36.1% versus 6.5%; P<0.001). Moreover, patients who became delirious within the first 5 days of the hospital stay (n=59), were much more likely to have higher LAS (p<0.001); and had higher BMI at transplant (p=0.01). There remained impressive and statistically significant differences in in-hospital mortality (12.3% vs 1.9%, p=0.001), time to extubation (17.5 (SD 42.3) vs 3.4 SD (8.6) p=0.001), and length of ICU (17.8 (SD 29.5) vs 6.4 (SD 12.4), p<0.001) and hospital stay (29.5 (SD 44.8) vs 17.7 (SD 17.1), p=0.02).

**Conclusion:** The Results highlight the occurrence, potentially negative consequences and significance of developing delirium after lung transplant surgery.

**Psychiatric comorbidity in persons living with HIV**

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**Background:** Highly active antiretroviral therapy (HAART) has significantly reduced morbidity and mortality among persons living with HIV infection (PlwHI). However, the higher prevalence of psychiatric comorbidity and HIV- associated neurocognitive disorders (HAND) gained importance and represent actually a significant public health problem, since it has been associated with decreased adherence to HAART. Despite clear diagnostic criteria that take into account confounding or contributing diseases, most of HAND prevalence studies exclude patients with comorbidities, since cognitive symptoms due to a general psychiatric disorder (i.e. mood disorder) could overlap or worse those of HAND.

**Method:** In order to study the prevalence of psychiatric diseases and its association to HAND, 57 PlwHI without history of head injury trauma or opportunistic infections of the CNS were recruited from the HIV clinic and examined using the structured clinical interview for DSM IV-TR. Until now 42 of them underwent a thorough neuropsychological testing using the Cambridge Neuropsychological Test Automated Battery (CANTAB). Clinical diagnostics were defined in a conference using the guidelines proposed by the National Institute of Mental Health and the National Institute of Neurological Diseases and Stroke.

**Results:** 61.4% were diagnosed with a Major depressive Disorder. 12.3% with substance abuse or dependence, 10.5% with anxiety disorder and 6.25% with adaptative disorder. 40.5% of examined PlwHI were diagnosed as cognitive healthy, while HAND were diagnosed in 59.5% of examined subjects (26.2% with asymptomatic neurocognitive impairment and 33.3% with mild neurocognitive disorder). In subjects with HAND 60% had a psychiatric or somatic comorbidity at the moment of the diagnosis, but only in 20% of them this was considered a contributing condition to the cognitive disorder.

**Conclusion:** The presence of psychiatric comorbidity in our sample of PlwHI was 3 times higher than the reported in our country for persons without HIV. HAND prevalence was similar to reported studies elsewhere and concomitant psychiatric diseases did not confound the diagnosis in most of the cases. Due to presence of cognitive symptoms in general psychiatric diseases, the diagnosis of HAND considering concomitant or confounding comorbidity is of first importance. Studies examining this issue are
necessary for future development of specific treatment strategies.

Primary Care

Cognitive-behavioural intervention in primary care for undifferentiated somatoform disorder

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Background: Cognitive-behavioural (CB) interventions decrease undifferentiated somatoform disorder (USD) symptoms and improve functioning in secondary care, but the effectiveness in primary care is unknown. The main aim of this study is to investigate the (cost)effectiveness of a CB intervention carried out by mental health nurse practitioners in GP practices compared to usual care.

Method: In a cluster randomised controlled trial, 240 USD patients will be assigned to either intervention or control group. The intervention group will receive a short-term CB intervention in addition to usual GP care. The treatment rationale is the “consequences model” focusing on consequences that arise due to USD. In 6 sessions, patients will receive problem solving techniques to learn to cope with problems. The control group will receive usual GP care. The primary outcome measures are physical functioning (physical component summary score of the RAND-36) and quality of life (EQ-5D). Costs will be assessed with the Tic-P. Secondary outcomes are somatisation (PHQ-15), and depressive and anxiety symptoms (HADS). Assessments will be taken at 0, 2, 4 and 12 months.

Conclusion: We expect physical functioning to improve and the intervention to be more cost-effective than usual GP care. If so, more patients are likely to be treated within the primary care setting, decreasing the number of referrals to medical specialists. Patients’ symptoms are likely to diminish and costs might be reduced.

Is low blood pressure always healthy? Evidence of an inverse association between depressive symptoms and arterial blood pressure in a primary care sample


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Background: Common mental health problems, such as anxiety and depression, have been related to the imbalance of the autonomous nervous system, also involved in blood pressure regulation. Low blood pressure readings have mainly been regarded as positive, but recent studies suggest low blood pressure is correlated with depression. The aim of the present research was to investigate the relationship between symptoms of anxiety and depression and blood pressure measures in a primary care sample.

Method: We conducted a cross-sectional study that received the approval of the local Ethical Committee. All consecutive patients undergoing a GP consultation in a Northern Italy practice were evaluated, with the following exclusion criteria: age <40 or >80; use of antidepressants or antipsychotics medication; psychosis or major depression; previous stroke or heart attack; type I diabetes mellitus; obesity related to hereditary conditions; pregnancy. The psychometric assessment was done by HADS (Hospital Anxiety and Depression Scale). Arterial blood pressure was measured twice using a stethoscope and a sphygmomanometer at the right upper arm after 5 minutes of seated rest; the mean measure was considered. High Blood Pressure (BP) cut-offs: systolic BP ≥130 mmHg and/or diastolic BP ≥85 mmHg, according to IDF 2005 guidelines. The statistical multiple linear regression analysis was performed using STATA.

Results: 209 subjects were enrolled in the study (125 women and 89 men). 122 subjects (58.1% of the whole sample) suffered from high blood pressure, and 98 of them (46.7%) followed an antihypertensive pharmacological therapy. A statistically significant inverse correlation between high diastolic BP and symptoms of depression at the HADS-D scale (β=-.28, p=.01) was found in the whole sample. The association was maintained in the male subsample, also after stratification by
age, especially in the 40-60 years’ group of patients ($\beta$=-.53, p=.04). On the contrary, no significant association was found between anxiety and BP measures.

**Conclusion:** This study confirms an inverse association between high diastolic BP and depression at epidemiological level in an outpatients sample; longitudinal studies are needed in order to examine temporal occurrence and to explore the pathophysiology and the molecular mechanism at the basis of this association. Further researches should also investigate whether our results are generalizable to other populations.

**Cough variant asthma patients are more depressed and anxious than classic asthma patients**

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**Objective:** Many recent studies have indicated that depression and anxiety are more common in asthmatic patients than in the general population and psychological stress can lead to asthma exacerbations, but no study specifically targets cough variant asthma (CVA) patients. The purpose of this study was to evaluate depression and anxiety levels in CVA patients compared with classic asthma patients and to identify the psychological features of CVA patients.

**Methods:** Fifty-nine outpatients with CVA and 128 outpatients with classic asthma were interviewed about psychosomatic and psychiatric symptoms, and they underwent three psychological tests: Self-rating Depression Scale (SDS) and State-Trait Anxiety Inventory (STAI). They were ultimately screened for major and minor depression, dysthymia, panic disorder, generalized anxiety disorder, social anxiety disorder, and other anxiety disorders.

**Results:** CVA patients showed higher SDS and STAI scores than classic asthma patients, and mood disorders and anxiety disorders were more common than in classic asthma outpatients.

**Conclusion:** CVA patients are on average more depressed and anxious than classic asthma outpatients. Though CVA appears pathologically to be just an early stage of typical asthma, the psychological stress may often be more serious than in asthma controlled by medication, which may explain why CVA cannot be controlled by a bronchodilator alone and patients often require no less intense therapy than severe asthma.

**Believes and opinions of primary care patients in long-term medication treatment for anxiety and/or depression**

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**Background:** Use of antidepressants in primary care for anxiety and depressive disorders has considerably increased in the latest twenty years. This increase is related not only to increased number of diagnoses but also to prolonged duration of drug treatment. Aim – to study duration and features of antidepressant treatment in comparison to level of anxious and depressive symptomatology, believes and opinions of patients about their disorders and therapies.

**Method:** electronic case files of 79 primary care outpatients undergoing continuative antidepressant medications in the period between 1.9.2010 and 31.12.2011 were analysed; BDI, STAI, Believes about Medicines Questionnaire (BMQ) were administered to all 79 cases.

**Results:** SSRIs were used by 82% of patients, 14% of which have been taking medications for more than 10 years. More than two thirds of the sample had been never referred to psychiatric or psychological consultation. No depressive symptoms were found in the 68% of sample, whereas anxiety state or trait symptoms were appreciable among 62 and 54% of patients respectively. Most patients expressed preference for a psychopharmacologic approach to their disorder, which is frequently associated to problems in family or job, and declared to be willing to learn how to cope effectively with challenging life situations.

**Conclusions:** extremely long duration of antidepressant treatment emerged from the study (even more than 10 years, sometimes without formal diagnosing of depression or
specialistic referral). It is also suggested that duration is related to some sort of “adjustment”, not necessarily to persistence of clinical symptoms.

Is hyperglycemia associated with anxious-depressive symptoms? An Italian study in primary care setting

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Background: Recent researches exploring the relationship between impaired glucidic tolerance, hyperglycemia or frank type II diabetes mellitus and symptoms of anxiety and depression, mostly conducted on in-patients or highly selected samples and on foreign populations, have reported conflicting Results. Nevertheless, these medical and mental conditions are often comorbid in clinical practice. Chronic and systemic inflammation could represent the trait d'union between these conditions. Primary care represents an interesting setting for exploring this comorbidity, given the high prevalence of psychiatric symptoms displayed by patients. The aims of this research was to measure the association between hyperglycemia and symptoms of anxiety and/or depression in out-patients, and to fill the lack of studies on comorbidity between depression and anxiety disorders and medical conditions in Primary Care services.

Method: The present was a cross-sectional study. We evaluated all consecutive patients undergoing a GP consultation in a Northern Italy practice. Exclusion criteria: age <40 or >80; use of antidepressants or antipsychotics medication; psychosis (schizophrenia, schizoaffective, bipolar, organic, or tall as psychotic disorder by DSM IV-TR) or major depression; pregnancy; previous stroke or heart attack; type I diabetes mellitus. The psychometric assessment was done by HADS (Hospital Anxiety and Depression Scale). Blood Glucose measurements (BM) in the last 6 months were considered in our analysis. Hyperglycemia cut-off: blood glucose > 100 mg/dl. The statistical analysis was performed using STATA with multiple linear regressions.

Results: 209 subjects were recruited in our study (84 men and 125 women). Of those, 48 (22.9%) were affected by hyperglycemia: 22 were men and 26 women. Hyperglycemia was related to HADS-D score in the men sample ($\beta=.44$, $p=.01$). No association was found between hyperglycemia and HADS-A, neither in men or in women.

Conclusion: The presence of hyperglycemia, well-known cardiovascular risk factor, may have a clinical value in predicting the presence of depressive symptoms, especially in men. Further studies should examine whether our Results are generalizable to other populations and whether they are applicable to clinical depression. Molecular researches could focus on clarifying the pathophysiological reasons for such association, also exploring reasons for sex differences.

Providing advice on Complementary and Alternative Medicine through oncologists – a qualitative analysis

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Background: Discussing Complementary and Alternative Medicine (CAM) with patients is regarded as an essential part of oncology treatment \cite{Frenkel2010}\cite{Schofield2010}. However, in Germany no designated institution provides advice on CAM, nor is CAM part of oncology training. In consequence, patients’ considerable information needs are confronted with uncertainty among oncologists. This has most recently been also acknowledged by the Clinical Oncology Society of Australia (COSA) who have published explicit guidelines on giving advice \cite{Braun2014} . Although these guidelines address important aspects such as openness and respect towards patients, as well as the limits to our understanding of CAM, knowledge of the informal role played by oncologists with regard to CAM is lacking.

Method: As part of a larger study (Kompetenznetz KOKON, funded by the Deutsche Krebshilfe), we conducted interviews with oncologists using a semi-standardized interview guideline. The questions concerned
their CAM information needs and addressed issues like the most significant challenges oncologists face when providing advice on CAM. We performed a qualitative analysis in accordance with the principles of Content Analysis and Interpretation Pattern Analysis {Oevermann #4529}. The research question guiding the analysis was: Which patterns emerge as being significant when oncologists talk about providing advice on CAM to their patients?

**Results:** We found three relevant concepts underlying communications about CAM by oncologists. “CAM is something different”, “advice on CAM is a service I provide to patients”, “the role of scientific studies”. In this presentation I will focus on “CAM is something different,” as this seems to profoundly shape oncologists’ advice. The interviews show that the notion of CAM as “something different” stems from several peculiarities of CAM and the medical system in general. The peculiarities are: The lack of a definition of what CAM is, patients’ desire to supplement standard care with “something else”, and a lack of formal training in medicine.

**Conclusion:** Advice on CAM is an informal service oncologists provide to their patients shaped by the notion that CAM is “something different”.

**Psychosomatic Medicine in Cardiology**

Psychological factors associated with change in chest pain level following treatment of panic disorder in emergency department patients with non cardiac pain.

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**Background:** Panic disorder (PD) is one of the conditions most frequently associated with noncardiac chest pain (NCCP). Our team recently demonstrated that evidence-based treatments of PD reduced pain scores in patients with comorbid NCCP. This study aimed to identify factors that explain this reduction in order to guide efforts to increase the effectiveness of these treatments in patients with comorbid PD and NCCP.

**Methods:** Fifty emergency department patients with NCCP were randomly assigned to a one-session panic management intervention, a brief seven-session cognitive behavioural therapy (CBT) or pharmacotherapy. PD and other disorders were assessed with the Anxiety Disorder Schedule for DSM-IV (ADIS-IV). Patients also completed the following questionnaires: the Cardiac Anxiety Questionnaire (CAQ), the Anxiety Sensitivity Index, the Beck Depression Inventory II, the Agoraphobic Cognition Questionnaire and the Body Sensation Questionnaire (BSQ). Chest pain was assessed using a version of the Short form McGill Pain Questionnaire that specifically evaluates chest pain. Change scores were assessed with the difference between the pre-test and post-treatment scores.

**Findings:** Chest pain significantly decreased at post treatment (n² = 0.25). The differential impact of the three treatment condition was not statistically significant. Changes in cardiac anxiety (CAQ) and fear of bodily sensation (BSQ) scores were significantly associated with treatment efficacy, explaining 40% of variance in pain reduction (p < 0.001).

**Discussion:** The impact of evidence based-treatments for PD on NCCP seems to be explained its impact on fear of bodily sensation and cardiac anxiety. Greater focus on cardiac anxiety and fear of bodily sensation outside the context of panic attacks is warranted in the treatment of PD in patients with NCCP.

**Emotional well-being of patients before and after implantation of a left-ventricular assist device**

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**Background:** Patients treated with continuous flow left ventricular assist devices (CF-LVADs) generally demonstrate improvements in functional capacity and quality of life from weeks to months after surgery. However, research on emotional well-being before and after LVAD implantation is scarce. Results on depression and anxiety in these patients point towards improvement from pre-implantation to post-implantation and further stabilization up to one year. We will investigate emotional
well-being and quality of life in patients receiving a CF_LVAD before and after surgery and up to 24 months. We expect a decrease in anxiety and depression scores pre to post surgery, and further decrease 5 months after surgery. After that, we expect stabilization of depression and anxiety levels at 12 and 24 months. Furthermore, we expect an increase of quality of life from pre to post to 5 months after surgery accordingly, while we expect a plateau effect for 12 and 24 months post-surgery.

Methods: We investigate patients undergoing implantation of a LVAD shortly before and after surgery and at 5, 12, and 24 months follow-up. Patients fill out questionnaires on depression and anxiety (Hospital Anxiety and Depression Scale, Cardiac Anxiety Questionnaire), traumatic experiences (Impact of Event Scale), and quality of life (EQ-5D, Minnesota Living with Heart Failure Scale), as well as demographic variables. Medical variables are derived from patient files.

Results: Data collection is ongoing. Preliminary data of approximately 15 patients at three time points (pre-surgical, post-surgical and 5 month follow-up) will be presented. Data will be analyzed using repeated measures ANOVA.

Discussion: Impaired emotional well-being is associated with lower quality of life and lower treatment adherence. This study therefore has important implications for preventive and therapeutic efforts.

Anxiety symptoms can predict HRQoL decline among outpatients with Chronic Heart Failure
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Background: The purpose of this study was to determine the prevalence of anxiety symptoms and it’s relationship with HRQoL in outpatients sample with CHF and to examine eventually predictive role of anxiety at baseline on HRQoL decline.

Methods: 104 outpatients with CHF and New York Heart Assessment (NYHA) class I-IV were enrolled in the ambulatory service within a period of 12 month, between January 2013 up to December 2013. Outpatients included in the study were of both gender, age \(\geq 18\), NYHA class I-IV, LVEF \(\leq 40\%\), without prior psychiatric history from outpatients Service Department of Cardiology were asked to complete questionnaires HAM-A and HAM-D to assess anxiety respectively depression, HRQoL status using KCCQ, MMSE, socio demographic, co morbidity and disease information.

Results: Anxiety symptoms were prevalent in 57.7% of total sample and both groups showed significant p-value < 0.001 of differences in anxiety and HRQoL measures. One way ANOVA-test between all NYHA classes showed significant differences with p-value <0.01 in physical functioning while didn’t showed in mental functioning. The Pearson’s correlation analysis between anxiety and HRQoL measures showed significant strong negative correlation, higher anxiety was related to worse HRQoL. The multiple linear regression analyses confirmed hypothesis that anxiety symptoms at baseline were strong predictors of physical and QoL impairment of HRQoL after adjusting independent of NYHA class , age ,gender and other associated clinical risk factors.

Conclusion: As hypothesized anxiety predicted HRQoL decline in CHF outpatients .QoL was significantly more restricted on all subscales of the KCCQ in group with anxiety symptoms. As improving HRQoL for itself is a valuable goal, patients with CHF should be routinely screened for anxiety.

Clinically significant complaints of noncardiac chest pain in emergency department patients: prevalence and associated characteristics
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Background: Noncardiac chest pain (NCCP) accounts for 2.5% of emergency department (ED) visits. Whereas such pain can persist over time in 70% of cases, a recent study estimated
that about 43% of patients with NCCP in the cardiology setting present clinically significant complaints (CSC). A CSC of NCCP is defined by Jonsbu et al. (2010) as at least one episode of pain per week for more than 6 months causing at least moderate impairment on family life, social life, work or physical activity. This study aimed to establish the prevalence of CSC and identify the biopsychosocial characteristics associated with this type of complaint in ED patients with NCCP.

**Methods:** Patients with NCCP were consecutively recruited in two EDs. Sociodemographic characteristics, medical history, NCCP and anxiety disorders were assessed by a telephone interview that included the Anxiety Disorder Schedule for DSM-IV. Patients were also asked to complete self-report questionnaire that assessed illness perception, alexithymia, depression, social support, gastrointestinal symptoms and anxiety.

**Findings:** The prevalence of CSC was 19% among the 407 patients with NCCP. Patients with panic disorder and generalized anxiety disorder were respectively 3.8 and 2.5 times more likely to present CSC than those without theses disorders. Higher levels of anxiety, alexithymia, cardiac anxiety and negative illness perception were associated with CSC (p ≤ 0.05).

**Discussion:** Interventions aimed at treating patient CSC or to prevent its development in patients with NCCP could be implemented in the ED setting. Psychological factors, such as anxiety and negative illness perceptions, seem particularly associated with CSC of NCCP and are potential clinical targets.

**Base rates of depressive and anxious symptoms in patients with coronary heart disease**


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**Background:** Depression and anxiety disorders are frequent in patients with coronary heart disease (CHD) and are independent risk factors. Clinically, the diagnoses are challenging as somatic and functional symptoms often overlap in this patient population (e.g., fatigue, sleep disturbance, etc.). Normative data on the distribution of depressive and anxious symptoms could facilitate clinicians’ judgement of individual’s symptom severity and abnormality, and, thus, could give valuable insights into which symptoms CHD patients suffer most. As prevalence rates of the overall diagnoses are well studied, the aim of the present study is to determine the base rates of depressive and anxious symptoms.

**Method:** In total, 1337 in- and outpatients with CHD were consecutively assessed with the Patient Health Questionnaire-9 and Generalized Anxiety Disorder Scale-7. The frequency and distribution of the nine depressive symptoms and seven anxious symptoms were analysed with respect to socio-demographic data (i.e. gender, age, education) but also cardiac factors (i.e. NYHA, CCSC, history of myocardial infarction or bypass, hospitalisation and setting).

**Results:** The frequency and distribution of depressive and anxious symptoms varied widely. Sleep difficulties (69%) and loss of energy (75%) were the most frequently indicated depressive symptoms. In contrast, feelings of worthlessness (22%) and suicidal ideations (14%) were least frequent. In terms of anxiety, nervousness (51%) and irritability (53%) were most frequent. Not being able to stop worrying (38%) and restlessness (38%) were less frequent. Female gender and age were correlated with increased severity of anxious and depressive symptoms. Cardiac symptom severity showed the strongest association with symptoms of anxiety and depression, however, no correlations were indicated for other cardiac factors.

**Conclusion:** Depressive and anxious symptoms were very prevalent but ranged widely in frequency and in terms of socio-demographic and cardiac symptom severity. Presented base rates allow clinicians to easily categorize individual patients according to their symptom profile and judge abnormalities. A symptom based approach could overcome the challenge of diagnosing depression or anxiety disorders in patients with CHD.
Integrated care in cardiology: needs, demands and therapeutic strategies
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Background: Psychosocial factors play an important role in the pathogenesis of coronary artery disease (CAD). Because of limited resources in the current health care environment it is important not only to identify patients with psychosocial risk load but also to single out those, who are motivated to engage in additional therapy and therefore most likely will benefit from further treatment. An obvious way to identify patients with a potentially high level of commitment is to assess the patients’ request for treatment. Our study aimed to assess patients’ request for psychosomatic counseling (PC) with a patient self-administered questionnaire (ADAPT).

Method: 233 patients (age: 54.5±13.4, 57.5% male) referred for exercise stress testing to the outpatient cardiac care unit of Hanusch hospital answered the ADAPT. The SF-36 Quality of Life and the Hospital Anxiety and Depression Questionnaire (HADS) were used to investigate if the request for PC is consistent to impairment of generic quality of life and the presence of mental distress.

Results: 31.8% of the patients expressed moderate or strong demand for PC. They reported significantly lower scores in all SF-36 domains than the norm population except for General Health. Request for PC was strongly associated to positive indicators of mental distress: compared to patients without demand for PC patients demanding PC showed significantly more often SF-36 MCS-scores <42 (55.0% vs. 17.4%; OR: 5.8), SF-36 Mental Health-scores <53 (47.8% vs. 18.8%; OR: 4.0), HADS-Anxiety-scores >7 (59.7% vs. 26.4%; OR: 4.1) and HADS-Depression-scores >7 (32.8% vs. 14.3%; OR: 2.9).

Conclusion: Our study shows that the patients’ request for psychosomatic (PC) reflects impairment of generic health status and the presence of mental distress. Screening for patient’s subjectively perceived demand for PC is an adequate method in order to select patients with a psychosomatic need, to optimize the allocation of health care resources and to improve therapeutic strategies in a patient-centred way especially integrated psychocardio-logical care in hospital.

Psychosocial and psychosomatic aspects of young adult well-being after pediatric heart transplantation
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Background: Young patients undergoing heart transplantation in early childhood or adolescence are confronted with typical developmental problems. We will compare young adults after pediatric heart transplantation with healthy controls, focusing on social support and relationships, health related quality of life and academic performance.

Methods: Preliminary data of approximately 25 young adults after pediatric heart transplantation and 25 healthy controls will be presented. The patients underwent heart transplantation between the age of 1 and 18 and are now between 16 and 25 years old. All participants answered open-ended questions about their relationships to family and friends, achievement in school and career entry. These data will be analyzed with ATLAS.ti software. Furthermore, both groups received the following questionnaires: The Short-Form Health Survey (SF-36), Giessen Subjective Complaints List (GBB) and Health Questionnaire for Children and Young People (KIDSCREEN-27). These data will be analyzed using multivariate procedures. The data collection is ongoing and designed for one measurement point independent of post transplantation period.

Results: Differences and similarities between both groups in the psychosomatic and psychosocial domain will be presented.

Conclusion: Especially in infancy and young adults, the exposure to heart transplantation and the corresponding mental handling may have impact on further mental, emotional and psychosocial development. This has important implications for psychological treatment and preventive efforts.

PHQ-2 and GAD-2 scores predict mortality in patients undergoing oral anticoagulation
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Background: The typical patient needing long-term oral anticoagulation is elder and highly comorbid. Elevated symptoms of depression and anxiety are highly prevalent in chronic medical conditions. However, studies are sparse investigating the impact of elevated depressive symptoms on patients undergoing long-term oral anticoagulation (OAC). Therefore, we examined in outpatients with long-term oral anticoagulation (OAC) whether symptoms of depression and anxiety are associated with all-cause mortality.

Method: For determining depression and anxiety we applied the PHQ-2 and GAD-2 respectively. The sample comprised n=1,384 patients from a regular medical care setting receiving long-term OAC with vitamin K antagonists. At baseline, symptoms of anxiety and depression were assessed with the PHQ-2 and GAD-2. The past medical history was also taken. The outcome was all-cause mortality in the 24 months observation period.

Results: The mean follow-up period per patient was 15.8 months with a standard deviation of 7.9 months. The death rate was 13.8%; 191 patients from n=1,384 died. Clinical significant depression as determined by PHQ-2 $\geq 2$ was associated with a 51% increase in mortality (hazard ratio [HR] 1.51, 95% confidence interval [95%CI] 1.12 2.04) after adjustment for age, sex, high school graduation, partnership, smoking, obesity, frailty according to the Barthel Index, Charlson Comorbidity Index and CHA2DS2-VASc score. Anxiety as determined by GAD-2 $\geq 3$ increased mortality by 65% respectively (HR 1.65, 95%CI 1.08-2.52) in the fully adjusted regression model. In contrast with current symptoms of depression and anxiety a past medical history of any mental disorder did not predict excess mortality.

Conclusion: The ultra short screening instruments, PHQ-2 and GAD-2, provide valuable prognostic information. These Results emphasize the need for implementing regular screening procedures and the development and evaluation of appropriate psychosocial treatment approaches for OAC patients.

Psychotherapy with the Medically Ill II

Addressing unhealthy lifestyle in psychodynamic psychotherapy
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Background: Patients with mental disorders frequently manifest unhealthy behavior such as physical inactivity, smoking unhealthy dietary habits, which are significantly contributing to their increased risk for chronic somatic diseases as well as mental disorders, and consequently their excess mortality rates of 10 years and more. Their unhealthy behavior directly impairs their well-being and also the course of mental disorders in the longer term. Despite the relevance of lifestyle for the health of the individual, psychodynamic psychotherapy has not yet systematically addressed health behavior in therapy.

Method: We reviewed the literature 1) on the role of unhealthy behavior for mental disorders, 2) on the role of lifestyle risk factors in psychodynamic theory, and 3) on barriers to the integration of addressing lifestyle in psychodynamic psychotherapy.

Results: Smoking, unhealthy dietary habits, and physical inactivity constitute dysfunctional attitudes and behavior, resulting from maladaptive self-representations and an impairment of emotion-regulation capacities. In psychodynamic psychotherapy this maladaptive behavior can be addressed and treated as a kind of defensive behavior and resistance. Specific interventions for targeting unhealthy lifestyle in psychodynamic psychotherapy are demonstrated.

Conclusion: We are convinced that addressing the unhealthy lifestyle of our patients is a crucial task for psychodynamic psychotherapist today.

Attachment representation in the AAI during inpatient psychotherapy
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Background: To date, little is known about the changes of attachment representations through psychotherapeutic inpatient treatment and their relationship to depressive symptomatology. We expect (1) insecure attachment to be overrepresented in our clinical sample (compared to nonclinical populations) (2) a significant decrease in depressive symptomatology after inpatient treatment (3) a significant increase in attachment security after inpatient treatment. We further hypothesize that decreases in depression are significantly associated with increases in attachment security.

Method: The total sample consisted of 85 premenopausal women aged 19-52. The clinical sample consisted of 43 depressed patients. Inclusion criteria were the diagnosis of Depression and/or Dysthymia (SKID-Interview). The control group consisted of 42 healthy control subjects who were matched for age and education. Average length of hospital stay in the patient group was 8 weeks. Depressive symptomatology was measured via self-report by means of the PHQ-9 at time of admission (T1) and discharge (T2). Attachment representation was also assessed at T1 and T2 with the Adult Attachment Interview (AAI, George et al., 1985). All Interviews were verbatim transcribed and afterwards coded with the four-way (secure, insecure dismissing, insecure-preoccupied and unresolved state of mind) coding system according to the Main et al. (2002) by trained and reliable coders. The ‘Coherence of Mind’ Scale was used as dimensional interpretation of Attachment Security. Our study was approved by the local Ethics Committee of the State Board of Physicians and all participants provided their written informed consent to participate in this study.

Results: To present, data analyses are still running. Preliminary Results on a sample of 20 depressed women showed that only 4 out of 20 depressed patients were classified securely attached at time of admission. Further, depressive symptomatology significantly decreased after 8-week inpatient psychotherapy, and decreases in depressive symptomatology were significantly associated with increases of attachment security (AAI Coherence).

Conclusion: Our preliminary Results suggest that, during psychotherapy, decreases of depressive symptoms are linked to increases of attachment security. Further, these Results advise that including attachment history and representations of caregivers in the treatment of depression may contribute to symptom reduction.

Emotion modulation in mental disorders – who needs psychoeducation in handling with music media?
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Background: In the course of a continuous medialization music plays an enormously increasing role in psychological and psychosocial processes and therefore especially in mental disorders. In fact, patients with mental disorders show a strengthened use of music for emotion modulation in everyday life. If the use of music should deteriorate the illness, a specific music psychoeducation might be indicated. Therefore, we explored potential indication factors for music psychoeducation.

Method: Cross-sectional examination in 190 adult patients using the instruments “Inventory for the assessment of Activation and Arousal modulation through Music” (IAAM), “Selbstkonzept-Inventar” (SKI) and including retrospective data on sociodemographic and therapeutic aspects. An exploratory statistical approach was applied.

Results: Most patients reported a positive subjective valence of music and positive effects on the illness. Thus, music has primarily a mental state improving character. Nevertheless, psychoeducation in handling with music media might be indicated if one or more of the following variables are present: a negative subjective valence of music, a reduced use of music for emotion modulation and low ego-strength and orderliness as personality traits. The following variables might be related with a dysfunctional use of music, as well: young age, female gender, being single, low personal relation to music, diagnosis of a personality disorder and a low psychosocial functioning level.

Conclusion: The use of music can be helpful for emotion modulation in the everyday life of patients with a mental disorder. However, patients with specific criteria might benefit
from instructions to use music in everyday life in a helpful way.

**Inpatient Psychosomatic Medicine for the whole family – An example from Germany.**

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The Psychosomatic clinic Waldmünchen is Germany's only psychosomatic hospital with a treatment plan for families. Admitted are parents with psychosomatic diseases with their children or viceversa or both being burdened from age of 3 and older. In addition to the specific patient population the specialized hospital Waldmünchen offers a unique treatment of attachment disorder being one of the psychological diagnoses. The presented survey shows in the period 01/2013 to 06/2014 both somatic and psychological diagnoses according to ICD-10 of the total of 820 hospitalized patients aged 3-73 years. The division of different age groups allows the monitoring of age-related change of somatic and psychological diagnostics in the context of the stationary psychosomatic treatment. So dominate in over 90% of the children and young people up to the age of 14 in the psychological diagnosis "disturbances of the social behavior" as the first diagnosis. In the age group of 14-18 year old young people shows a "transition phase" of the "disturbances of the social behavior" (20 %) to major depressive disorders" (70 % ). From the age of 19 up to the highest age group of 51 to 73- year-old adults already over 90% receive as first diagnosis "depressive disorders". Approximately half of the adults from the age of 19 are according to the classification criteria of ICD-10 like “personality disorders” as secondary diagnoses, especially 'Emotionally unstable personality disorder". The Results relating to diagnosis in childhood and adolescence suggest that behind the diagnoses of the social behavior disorder a beginning or existing affective and/or personality disorder is hidden. Both the special behavior of children and young people with psychological symptoms and special behavior of adults with psychological symptoms can be rather inadequately covered. Children show other specific, sometimes eccentric emotions and behaviors typically not existing in the classification criteria for the diagnosis of personality disorders and affective disorders for adults. The manifestation of personality disorders in children and adolescent are often neglected (Kernberg, Weiner/Bardenstein, 2005).

**Importance of psychosocial approach to diabetes treatment**

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**Background:** Numerous studies showed that personality structure affected patient’s motivation to accept diagnosis of diabetes, education about disease and advised treatment and behavioral changes. The aim of this study was to determine connection between personality type and traits, manifested depression and anxiety and quality of metabolic control.

**Method:** We followed 90 patients with both types of diabetes, age 20 to 75 years, during six months. At the beginning we collected social-demographic data and information about diabetes and determined patients' personality types (Persona test) and personality traits (Eysenck Personality Questionnaire). During the study we followed plasma glucose concentrations, HbA1c, body weight/height and BMI. We also estimated the presence of depression and anxiety (Hamilton anxiety and depression scales) and acceptance of advised therapeutic procedures (author’s test).

**Results:** Almost all patients (96,67%) had trait of neuroticism (p<0,01). Most patients (51%) had facilitator personality type (p<0,01). The presence of depression and anxiety didn’t depend significantly on patient’s personality type. The duration of diabetes highly influenced on manifested depression and anxiety, especially in patients with diabetes type 1 (p<0,01). The number of highly anxious patients decreased in group type 2 (p<0,05) but remained the same in group type 1 diabetes (p<0,05). The positive correlation between depression and anxiety expression was found (p<0,01). At the end of this study glyceregulation was improved in all patients (p<0,01), especially in group of facilitators and promoters.

**Conclusion:** Education and treatment should be adjusted according to individual needs, psychosocial structure and psychological
Effects of stress management program on mental Health of patients with coronary heart disease
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Background: Cardiovascular diseases such as coronary heart diseases (CHD) are among the leading causes of death both in most countries. Patients with CHD are confronted with several psychological problems such as depression and anxiety which can lead to unpleasant outcomes. The aim of this study was the effect of stress management program on mental Health in these patients.

Method: This randomized clinical trial study included 70 patients with coronary heart disease in Kashan, IRAN (2014) which were assigned into two groups randomly. The experimental group received 8 sessions of stress management program and control group took routine care. Data were collected with Goldberg mental Health Questionnaire (GHQ) and were analyzed using independent and paired t-test in Spss16.

Results: The means of overall GHQ scores were significantly decreased at post-test in the intervention group so that the different in the two groups were statistically significant either in the overall GHQ scores (P= 0.0001). Significant difference was observed between the mean GHQ scores of the intervention group prior to and after the SMP intervention (30± 4.66 vs. 20.50±3.30) (P=0.0001). While, no significant changes were observed in the control group, before and after the study (P=0.07)

Conclusion: stress management program cause to improved mental health of patients with coronary heart disease. Therefore, it is recommended that this approach be performed as a complementary, effective, non-invasive, low cost nursing intervention to decrease the psychological problems of these patients.

Social Environment and Psychosomatic Disorders

Evaluation of a Salutogenetic Concept for Inpatient Psychosomatic Treatment
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The increase of psychosomatic disorders due to cultural changes requires enhanced therapeutic models. This study investigated a salutogenetic treatment concept for inpatient psychosomatic treatment of a psychosomatic clinic in Germany. The clinic aims at supporting patients’ health improvement by fostering values such as humanity, community, and mindfulness. Treatment effects, their sustainability, and the relationship with ethical values were analyzed based on data from more than 11000 patients. ICD-10 self-ratings, transpersonal trust, mental and physical health changes and ethical values were assessed with questionnaires before and after treatment and in a one-year follow-up assessment. Most of patients found the ethical values realized in the clinical environment. With respect to different diagnoses, symptoms improved in self-ratings with average effect sizes between 0.60 and 0.98. About 80% of positive changes could be sustained as determined in the 1-year follow-up survey. Patients with a lower concordance with the values of the clinic showed less health improvement. The strong dependency between symptom reduction and value rating and the total score of health changes confirm the importance of salutogenetic factors in the clinical environment. The data suggest that a successfully implemented salutogenetic clinical treatment concept not only has positive influence on treatment effects but also provides long-term stability.

Referral patterns to inpatient consultation liaison service in a general hospital (Singapore)
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Background: Inter-departmental psychiatry consultations for inpatients allow the primary team to obtain advice from psychiatrists in the management of patients with psychiatric
Loneliness in the elderly is associated with the use of psychotropic drugs
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Background: The aim of this study was to evaluate the association between loneliness in elderly people with the use of psychotropic drugs.

Method: A subsample of 3111 participants (ages 55-85) of the large population-based German ESTHER study was included in the study. Loneliness was measured by using a three-item questionnaire. Two subgroups were defined according to their degrees of loneliness. Psychotropic drugs were categorized by study doctors. Logistic regression analyses were conducted to determine the association between loneliness subgroups and the use of psychotropic drugs adjusted for psychosocial variables, multimorbidity, depression, anxiety, and somatic symptom severity.

Results: 14.1% (95%-CI= [12.9; 15.4]) of the participants were estimated to have a high degree of loneliness (women>men). 19% (95%-CI= [17.6; 20.4]) of the participants used psychotropic drugs, 8.4% (95%-CI = [7.5; 9.5]) antidepressants. Logistic regression analysis showed that more lonely participants had significantly higher odds for using psychotropic drugs (OR: 1.495; 95%-CI= [1.121; 1.993]). Depression severity, somatic symptom severity, and female gender were also positively associated with the use of psychotropic drugs.

Conclusion: A high degree of subjective loneliness in the elderly is associated with the use of psychotropic drugs, even after adjustment for somatic and psychological comorbidities and psychosocial variables.

A realistic therapeutic goal of elderly patients with hypochondriac patients—In terms of Outpatient Morita Therapy
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Background: We see many hypochondriac patients in a general hospital. They often have strong desire to find their cause of suffering and wander from one hospital to another to find acceptable explanations. It is an important theme to treat these patients effectively for us.

Method: We reviewed clinical courses of 3 elderly hypochondriac cases, extracted the clinical features, and discussed the therapeutic goals.

Results: Case A was a 71 year–old man who was suffering from the fear for penis cancer. He came to our hospital 12 years ago complaining that he was sure to have malignant disease and he was destined to die soon. In spite of being checked up in many clinics of urology, dermatology and internal medicine, he was not able to accept the examination Results. Case B was a 72 year-old
A housewife woman, who had a fear about some cancers in the digestive organ system. She had already been checked up in the former hospital where she was operated but she couldn’t help worrying about another cancer. Case C was a 72 year-old woman engaged in real estate business. She came to our hospital 15 years ago complaining with lower abdominal pain. She was under good control for many years but she exacerbated her symptoms after her retirement.

**Conclusion:** Many hypochondriac patients want to know the reason why their symptoms occur and want physical examinations repeatedly. It reflects their desire for life (Morita S), which is natural and positive idea for life. As for the former 2 cases, we could find the psychological mechanisms as a cyclical self-aggravation effect and “ideational contradiction”. However, we could not detect them in Case C. We are able to say that the therapeutic goal of some elderly hypochondriac patients should be set where they live constructively with their symptoms (Morita S). This approach provides us the way patients live more constructively even with symptoms or anxiety. We should also recognize that seeing doctors itself is a therapeutic meaning for these patients and continue to see them consistently for some period (Sumathipala A). Such a therapeutic goal makes it more flexible when doctors encounter patients.

The Assessment of Decisional Capacity in Advanced Age: Medical and Psychiatric Characteristics and the Ability to make Health Care Decisions
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**Background:** Studies on decisional capacity primarily focused on cognitive disorders, the impact of age as a sole confounder remains understudied. The purpose of this study was to assess decisional capacity across age.

**Method:** More than 2,500 consecutive consults were screened for decisional capacity and 336 consults were reviewed at Bellevue Hospital Center. Sociodemographic and medical variables, medical and psychiatric diagnoses, as well as decisional capacity assessments were recorded and analyzed in respect to advanced age.

**Results:** The prevalence of cognitive disorders and dementias was expectedly higher in the elderly, in contrast to substance use and mood disorders in the younger. Among decisional capacity tasks, the younger requested to leave the hospital and the elderly disagreed with placement. Surprisingly, the elderly retained decisional capacity to a higher extent than the younger. Only 27% were deemed not to have decisional capacity, whereas in the younger, decisional impairment reached 62%. In younger patients, delirium, psychosis and neurological disorders more commonly caused decisional impairment. However, cognitive disorders including dementia were the strongest confounder for decisional incapacity. Among decisional capacity tasks, in the younger, requests for signing out against medical advice were denied, whereas in the elderly, placement issues prevailed.

**Conclusion:** Cognitive disorders remained the main confounder for decisional incapacity in particular in the elderly. In the younger, in addition, psychosis, substance use and neurological disorders caused decisional impairment. Interestingly, the impairment in decisional capacity was greater in younger patients, thus, age by itself did not predict decisional incapacity.

Prevalence of psychiatric disorders in a homeless population
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**Background:** Prevalence of psychiatric disorders in homeless population is high and it can increase the risk of criminal behavior. In Hungary no systematic study was performed in this field until this time. This study aimed to survey the prevalence rate of psychiatric disorders among people living in homeless shelters and explore its correlations with demographic variables. Investigating the correlation between psychiatric disorders and criminal behavior was also among the aims of the study.

**Method:** Data concerning medical and forensic history was collected in a structured interview and then SCID-I and SCID-II diagnostic interview was performed in
voluntary persons living in 3 homeless shelters.

Results: 86% of the sample had a diagnosable psychiatric disorder. Personality disorder and alcohol dependence were the most common diagnoses in males, while personality disorder and anxiety disorders were the most common diagnoses in females. Comorbid conditions were present in 72% of the cases. Only 37% of those who had a DSM diagnosis were currently in psychiatric care. The lowest rate was found in patients with major depression (31%). Only drug and psychopharmacon dependence showed significant correlation (p=0.023 and p=0.024) with violent and non-violent offending out of the diagnostic subgroups. Comorbid conditions were present in 72% of the cases. Only 37% of those who had a DSM diagnosis were currently in psychiatric care. The lowest rate was found in patients with major depression (31%). Only drug and psychopharmacon dependence showed significant correlation (p=0.023 and p=0.024) with violent and non-violent offending out of the diagnostic subgroups.

Conclusion: Prevalence of severe mental disorders among homeless persons is high in Hungary too. Low rate of homeless persons being in psychiatric care indicates that traditional structure of care is not suitable for them; they need a tailored complex approach. This survey confirmed that criminal behavior is not more frequent among those homeless persons who have psychiatric disorders neither in terms of violent nor in non-violent acts except those having drug or psychopharmacon dependence.

Somatic Symptom/Somatoform Disorders

Differences in psychodynamic diagnostics between patients with burnout-syndrome and patients with somatoform disorders

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Background: This study investigates differences between patients with burnout-syndrome and patients with somatoform disorders regarding the psychodynamic structure and mental conflicts.

Method: Consecutive patients in two inpatient/day hospital treatment units for burnout patients and for patients with somatoform disorders were investigated with the OPD. OPD is a multiaxial diagnostic system describing psychodynamic characteristics based on five axes: (1) experience of illness, (2) interpersonal relations, (3) conflict, (4) structure, and (5) ICD-10 diagnosis. After an initial interview, the researcher evaluates the patient's psychodynamics according to these axes and enters them in checklists and evaluation forms provided. The OPD-axes "structure" and "conflict" were rated for an overall clinical sample of 53 patients and then compared between burnout-patients and patients with somatoform disorders.

Results: A t-test for independent samples (p=.007, d=0.78) found a higher structural integration level for burnout patients (M=1.78, SD=0.29) than for patients with somatoform disorders (M=2.08, SD=0.46). A variance analysis showed similar results for the structural skills (p=.04, η²=0.30): burnout patients showed less pathology than somatoform patients on the dimensions "inner communication" (M=1.80, SD=.34 vs. M=2.04, SD=.51, p=.034, d=0.61), "attachment to inner objects" (M=1.85, SD=.37 vs. M=2.06, SD=.40, p=.021, d=0.26) and "attachment to outer objects" (M=1.63, SD=.32 vs. M=1.96, SD=.33, p=.001, d=1.05). As to psychodynamic conflicts, a variance analysis showed more elevated values for burnout patients (p=.003, η²=.49) than for patients with somatoform disorders, especially for the self-worth conflict (M=2.59, SD=0.51 vs. M=1.43, SD=0.87, p<0.001, d=1.63) and the oedipal conflict (M=1.29, SD=1.11 vs. M=0.48, SD=0.87, p=.015, d=0.81). The conflict that was most rated as 'main conflict' was the self-worth conflict for the burnout sample (30.8% vs. somatoform 4.8%). The 'main conflict' for the somatoform sample was the conflict between wishes for autonomy versus dependency (28.6% vs. burnout 7.7%).

Conclusion: Patients with burnout-syndrome showed a higher level of psychological structure ("ego-strength") than patients with somatoform disorders and, thus, can be seen as mentally healthier than patients with somatoform disorders. The OPD may help to determine the appropriate focuses of treatment and develop appropriate treatment strategies.
Cognitive Rehabilitation Treatment for mental slowness in Conversion Disorder. A case report.
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**Background:** Patients with Conversion Disorder (CD) suffer from neurologic symptoms without a definable organic cause that disrupt daily life extensively. Exploring cognition and treating cognitive impairment might be beneficial in treating CD and cause decrease of mental and somatic symptoms. Cognitive impairment is also present in Major depressive disorder (MDD). Cognitive impairment and MDD are associated with poor psychosocial functioning, making it a core feature of depression. Exploring treatment options considering cognitive impairment in patients with CD and comorbid MDD is therefore of high clinical value.

**Brief case description:** This case report describes a 54-year old female patient with CD involving speaking, motor function and pain, and comorbid MDD. She developed both conditions after stressful life circumstances. She experienced severe inactivity and widespread pain throughout the week. The Results of an extensive neuropsychological assessment (NPA) showed mental slowness, impaired working memory and memory (respectively, scores ≤ 6th percentile on Symbol Substitution, Digit Span and Rey Auditory Verbal Learning Test (RAVLT). During the course of treatment depression and physical complaints were monitored by using respectively the Patient Health Questionnaire-9 (PHQ-9) and the Physical Symptom Questionnaire (LKV).

**Results:** After treatment with TPM for 12 sessions the severity of symptomatology decreased significantly on PHQ-9 (7) and on LKV (47), compared to respectively 15 and 87 during the course of treatment. NPA showed improvement of mental slowness and (working) memory to non-symptomatic levels. Patient reported to experience (manageable) pain for only one day a week, stated to regain her life, initiated more activities (visiting friend/parties) and restarted to do sports.

**Conclusion:** This case report suggests that improvement of mental slowness, physical symptoms and MDD can be achieved by TPM in non-organic cognitive impairment in CD with comorbid MDD, a finding so far not described in the literature. Further research is needed to explore the efficacy of TPM in CD in a randomized clinical trial.

Patient-tailored modular treatment for patients with multiorgan bodily distress syndrome: A pilot study with focus on heterogeneity
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**Background:** Various psychological interventions have been found effective in the treatment of functional somatic syndromes (FSS) and somatoform disorders (SFD). However the efficacy of these treatments on symptoms and associated impairment in patients with FSS and SFD is limited. At the same time, there is a large variability in outcomes. Current psychological treatment models often focus on single FSS. It is questionable, though, whether the large heterogeneity in outcomes is primarily due to a patient’s most disturbing symptoms. Other sources of heterogeneity, such as illness duration, precipitating events, and underlying cognitive and behavioural features, may be more important. We therefore aimed to develop a patient-tailored modular treatment program for patients with a range of severe FSS and SFD, and to test its feasibility in an uncontrolled pilot study.

**Method:** From Spring 2015 to Summer 2016, up till 100 patients with severe FSS and SFD (captured under the research diagnosis of multiorgan bodily distress syndrome, BDS) will be recruited from primary and secondary care. Patients will receive web-based questionnaires before and after each treatment module and a follow-up questionnaire 12 months after initial assessment. Main outcome measures are: physical health (SF-36), Visual Analogue Scales for pain and symptoms, and illness worry (Whiteley-8). Moreover, process measures focusing on hypothesized illness mechanisms such as illness perception (IPQ-R), perceived stress (PSS), and behavioural...
response to illness (BRIQ) will be obtained at all time points.

**Results:** A number of focussed, time-limited intervention modules have been developed and are currently being tested. These include 1) A bio-psycho-social assessment that aims at identifying a number of specific problems related to a patients BDS 2) a ‘BDS school’ (psycho-education) as a 3-hour group session, 3) 2-3 months group therapy programmes based on either a) Acceptance and Commitment Therapy or b) Mindfulness Based Stress Reduction, 4) regularly focussed individual monitoring consultations with a contact physician. As data collection will still be running at the time of this presentation, our focus will be on the study rationale and on first data regarding feasibility and patient satisfaction.

**Conclusion:** This study focus on how to design treatment programs that target challenges that are common for this otherwise heterogenic patient group as well as underlying patient-specific problems of BDS.

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**Functional limitations in functional somatic syndromes and recognized somatic diseases. Results from the general population cohort LifeLines.**

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**Background:** Functional somatic syndromes (FSS), defined as physical syndromes without known underlying organic pathology, are sometimes regarded as less serious conditions than recognized somatic diseases (RSD). The aims of this study were to evaluate functional limitations in FSS, and to compare the Results to RSD patients.

**Method:** This study was performed in 91,153 participants (age: 44.4±12.3 years, 59.0% female) of the general-population cohort LifeLines. Quality of Life (QoL) and work participation were examined as indicators of functional limitations. QoL was assessed with two summary scales of the RAND-36: the physical component summary (PCS) and the mental component summary (MCS). Work participation was assessed with a self-reported questionnaire. QoL and work participation were compared between FSS and RSD patients, using Chi-squared tests and ANCOVA-analyses, adjusted for age, sex, and educational level.

**Results:** FSS patients reported lower QoL than RSD patients (73.1±17.4 and 73.8±17.2; p=0.005). The PCS was lower in RSD patients than in FSS patients (70.1±21.3 and 72.8±20.4; p<0.001), whereas the MCS was lower in FSS patients than in RSD patients (73.4±18.9 and 77.4±16.9; p<0.001). FSS patients worked less hours per week (26.7±13.4 vs 27.9±14.4; p<0.001), and reported equal days of sick leave (1.1±5.1 vs 1.1±3.9) than RSD patients. Lastly, FSS patients retired less often due to health-related reasons (6.9%) as RSD patients (9.3%; p<0.001).

**Conclusion:** Functional limitations in FSS patients are common, and as severe as those in patients with RSD when looking at QoL and work participation, indicating that FSS are serious health conditions.

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**Neuroticism and maladaptive coping among patients with functional somatic syndromes**

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**Background:** The etiology of functional somatic syndromes (FSS) such as fibromyalgia, chronic fatigue syndrome, and irritable bowel syndrome is considered multifactorial consisting of predisposing, precipitating, and perpetuating factors. In this study, we sought to investigate three questions that can be drawn from the cognitive-behavioural model of FSS: 1) Do patients with FSS show higher levels of neuroticism than healthy individuals? 2) Does neuroticism affect physical health and illness worry, either directly or indirectly through coping strategies? 3) Does more adaptive coping mediate the effect of CBT on physical health and illness worry?

**Method:** We used data from a randomized controlled trial in which 120 patients with a range of FSS were randomized to group CBT or enhanced usual care. Patients completed questionnaires at referral, baseline, and 4, 10, and 16 months after randomization. Our hypotheses were explored through a series of cross-sectional (linear regression and structural
equation models) and longitudinal (multiple mediation) analyses.

**Results:** Patients with FSS had significantly higher levels of neuroticism than the general population, Cohen’s d=1.13 (95% CI: 0.87; 1.38), and neuroticism was cross-sectionally associated with more illness worrying and higher catastrophizing. Mediation analyses at baseline found catastrophizing to mediate the association between neuroticism and illness worry and between neuroticism and poorer physical health. Finally, decreased symptom catastrophizing and increased experience of control partially mediated the long-term effect of CBT on both improved physical health, SIE = 1.994 (BCa 95% CI: 0.435; 3.983) and reduced illness worry, SIE = -0.214 (BCa 95% CI: -0.423; -0.053).

**Conclusion:** The results support a cognitive-behavioural model of FSS. Targeting symptom catastrophizing may be an essential component in CBT for patients with a range of FSS.

**Physical comorbidity in patients with severe functional somatic syndromes. A register study**

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**Background:** Patients with severe functional somatic syndromes (FSS) such as irritable bowel syndrome, chronic fatigue syndrome, fibromyalgia and related diagnoses (e.g. somatisation disorder) show markedly reduced functioning without having clinical signs of organic disease. Whilst the high comorbidity of FSS with mental illness is well-known, knowledge about physical comorbidity and mortality of FSS is scarce.

**Aim:** To compare physical comorbidity in patients with severe FSS with that of the general population by means of two different methods, focusing on 1) all physical disease and 2) severe physical disease known to increase mortality, respectively.

**Materials and Methods:** 239 patients with a range of severe FSS were compared to a sample of 5975 gender and age matched individuals from the general population in two ways: Firstly we estimated the burden of physical disease during a 4-year period by means of register-based diagnoses in relation to hospital-admissions, counting all well-defined physical diagnoses and subtracting unspecific diagnoses. Secondly we calculated the Charlson comorbidity index (CCI) of medical diseases associated with increased mortality on the basis of register diagnoses from the same period. The CCI includes 17 medical conditions assigned to weighted scores that are added up to a total of 0-29 which comprises the index of a specific person.

**Results:** According to the first method the FSS patients had a significantly higher occurrence of overall physical comorbidity than controls. (On average patients had 1.14 (0.97; 1.31) more diagnoses of physical disease than controls, p < 0.0001 which was almost a 3-fold increase (2.79 (2.51;3.08), p < 0.0001) whereas the CCI was similar for patients and controls (Wilcoxon Mann-Whitney test: p = 0.23). FSS patients’ CCI was generally very low indicating that their mortality risk does not differ from that of the general population.

**Conclusions:** Although FSS patients showed increased rates of physical diseases according to public health registers, their index of severe mortality-associated medical conditions was not elevated. Further research is needed to clarify the impact of the increased prevalence of comorbid physical diseases diagnosed in FSS patients.

**Medically Unexplained Symptoms are related to entry into care, but not to number of treatment contacts for mental problems: a NEMESIS-2 study.**

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**Background:** Our aim was to gain insight into the mental health care utilization patterns of subjects with medically unexplained and medically explained symptoms.

**Method:** Data were derived from the Netherlands Mental Health Survey and Incidence Study-2 (NEMESIS-2), a nationally representative survey among the adult general population. We selected subjects with Medically Unexplained Symptoms
(MUSonly, n=177), subjects with explained physical symptoms only (PHYonly, n=1952), subjects with both MUS and PHY (MUS+PHY, n=209), and controls without physical symptoms (NONE, n=4168). Entry into mental health care and number of treatment contacts for mental problems, in both primary care and specialized mental health care, were studied compared to controls. Analyses were adjusted for relevant sociodemographic characteristics and presence of any 12-month mental disorder.

**Results:** In primary care, MUSonly, PHYonly and MUS+PHY showed significantly more entry into care for mental health problems. At specialized mental health care level, more entry into care was seen in MUSonly subjects. Both in primary and specialized mental health care, there were no significant differences in number of treatment contacts between the four groups.

**Conclusion:** Physical symptoms, especially MUS only, are correlated to entry into mental health care use but not to number of contacts. This warrants further research aimed at the content of the treatment contacts.

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**Supportive Care & Outcome in Organ Transplantation**

**Psychological Support for Patients and Donor Families**

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**Background:** Hands affect us physically and psychologically to a degree which is disproportionate to their size, and deciding whether to undergo VCA is a complex and difficult decision.

**Method:** It is therefore important to address psychosocial issues and support patients through the decision making process, the subsequent surgical process and the later rehabilitation process. For the donor family there are all also issues to consider, that do not apply in solid organ transplantation. This has had to be considered as part of an MDT approach to VCA.

**Results:** Issues to consider and the protocols and experience of the Leeds team is described.

**Conclusion:** The Results of this in the first few years of the Leeds VCA team is discussed.

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**An update on organ transplantation in Hungary**

Gazdag G  
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**Background:** Organ transplantation has started 53 years ago in Hungary and is a dynamically developing field nowadays. This lecture is dedicated to give an overview on the present state of organ transplantation in Hungary.

**Method:** Data about solid organ transplantation in 2014 were reviewed together with the relevant legal regulations and protocols.

**Results:** There were altogether 203 deceased donors with 487 organ donations and 48 living donations in 2014. These numbers represents a 31% increase in the total number of donations comparing with the 2013 numbers. Lung transplantation is not practiced in Hungary, thus those patients who need lung transplantation undergo the operation in Vienna. For lung transplantation organs of Hungarian donors are used. Kidneys alone or together with pancreas, liver, and heart transplantations are practiced in Hungary. There are 6 transplantation centers in 4 cities of the country. All except one center are affiliated to medical universities. Hungary is a member of the Eurotransplant Foundation since 2012. In 2013 60 organs have arrived to the country with Eurotransplant coordination. The length of waiting lists for kidney and liver transplantations were about 150% of the yearly number of transplantations, and equaled the yearly number for heart transplantation. The legal Background of Hungarian organ transplantation will also be shortly reviewed.

**Conclusion:** From psychological/ psychiatric point of view the most important goal is to
increase the participation of these professionals in the mandatory pretransplant evaluation as well as in decision making.

Update on Vascularized Composite Allotransplantation
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Background: The first Chauvet Workshop convened in March 2014 in Paris. The Chauvet Workshop was developed as a means of bringing stakeholders together to foster a collaborative and global approach to psychosocial issues in composite transplantation. Included in the meeting were roundtable Conclusions on pretransplant screening, domains of the evaluation, quality of life, post-transplant follow-up, psychiatric complications, ethics, the media, and delineation of team members’ roles. The workshop attendees agreed that the workshop format would be ongoing with an iterative process to develop universally agreed upon screening instruments and an approach to collaborative research.

Method: Review of Results of first ever collaborative meeting on the psychosocial aspects of VCA.

Results: The attendees of the Chauvet meeting reviewed key areas related to VCA including the psychosocial evaluation of candidates, common psychiatric comorbidities, use of screening tools, quality of life domains for VCA, role of team members, ethical issues and role of the media.

Conclusion: Future Chauvet meetings to further develop our understanding of psychosocial factors in VCA have been proposed and the development of a collaborative research process will be incorporated into future Chauvet meetings.

The facial transplantation experience through the eyes of the patient and the partner: Preliminary Results of an interpretative phenomenological study
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Background: To investigate the experiences of the facial transplantation from the patient’s and the partner’s perspective.

Method: In-depth interviews, exploring different experiences throughout the facial transplantation process, were separately conducted for the patient and the partner. The interviews were audiotaped and transcribed verbatim. They were further analyzed using Interpretative Phenomenological Analysis (IPA).

Results: The qualitative analysis resulted in different themes including necessity of surgery, a positive outlook, gratitude towards donor and medical team, needing information and communication, loss of choices, preserving integrity and dignity, ambivalence and uncertainty, facial transplant as self-evident.

Conclusion: The Results of this study provide an understanding of the facial transplant recipient and partner experiences. These insights are valuable to educate transplant professionals and to guide supportive interventions.

Psychiatric and medical adverse events for kidney transplant recipients with lithium induced kidney disease
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Background: The purpose of this study is to describe post-transplant psychiatric and medical adverse events for kidney transplant (KT) recipients with a history of lithium induced kidney disease. According to the United Network for Organ Sharing (UNOS) as of January 2015 there have been 208 kidney transplantsations done in the USA for this condition and 227 are currently waiting for a kidney. Considering the evidence that decompensated psychiatric conditions may interfere with post-transplant outcomes, there is a concern about the risk of post-transplant adverse events in this population. To our knowledge, at this time there is no information about medical or psychiatric course post
transplantation for kidney recipients with a history of lithium toxicity.

**Method:** retrospective study of patients who received kidney transplantation for lithium induced kidney disease at Yale Transplantation Center. The following electronic documents were reviewed: discharge summaries, admission assessments, clinic visits notes, social work evaluations, psychiatric evaluations, counts of hospitalizations and clinic visits, laboratory tests (immunosuppressant levels). We are presenting the descriptive analysis of this information.

**Results:** We identified a total of 12 patients who received a KT for a primary diagnosis of lithium induced kidney disease at our center between 1/1/2004 and 12/31/2014. Eight (66%) were male and all were Caucasian. The most common co-occurring medical condition was hypertension 8 (66%) followed by hypothyroidism 4 (33.3%). Six (50%) had received hemodialysis before transplantation and 2 (16.5%) had received peritoneal dialysis, for an average dialysis duration of 2.35 years (±2.81). The post KT follow-up was 3.11 years (± 2.26). Eleven (91.6%) had a diagnosis of Bipolar I disorder. The most commonly prescribed psychotropic medications were Lamotrigine (4 cases), followed by Quetiapine, Aripiprazole and Divalproex (3 cases each). One patient was continued on Lithium through dialysis and after transplant. There were a total of 3 psychiatric hospitalizations corresponding to 0.08 hospitalizations per patient per year (PPY), 25 medical hospitalizations (average 2 per patient ± 1.9) or 0.66PPY; infections 0.08 PPY, rejection 0.02PPY); instances of sub therapeutic medications level 0.21PPY. There was one death in the group. There were no instances of graft loss.

**Conclusion:** post-transplant exacerbations of psychiatric illness, psychiatric hospitalizations, graft loss, infections, death were rare in patients receiving KT for lithium induced kidney disease at our center. Studying a higher number of patients with longer post-transplant follow up, possible through multicenter registry, would provide more accurate information about the psychiatric and medical course of this group of KT recipients.

**Living donor outcomes following recipient graft loss or death**

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**Background:** The emotional well-being of donors has recently been extensively studied and donors whose recipients have had adverse outcomes (graft loss or death) reported the need for more professional assistance following donation (ref. Jowsey 2014). Little is known about the rates of psychiatric morbidity in donors with adverse recipient outcomes. Our aim is to determine the psychiatric pathology following adverse recipient outcome in living donors.

**Method:** This is a chart review of liver and kidney donors who donated at the Mayo Clinic between 2010 and 2014 and whose recipient had graft loss or died.

**Results:** A total of 9 donors were identified who had signed research authorization for chart reviews. Subjects were followed from 4 days to 3 years after donation. 4/9 were contacted by social work staff for monitoring of symptoms or supportive counseling. 1 donor was seen by a family physician in follow up and 1 donor was seen by the donor team psychiatrist. 8/9 experienced recipient death and 1/9 recipient graft loss. 4 were liver donors and 3 were kidney donors. The age range was 24-63 with 6 male and 3 female donors. 5/9 were adult offsprings of recipients. Two were friends. One was a nephew and one was a daughter-in-law. The loss occurred 0-3 months after donation. 3/9 donors reported bereavement, pain or frustration with donation related to expectations about services covered following donation. 2 (22%) reported new onset of psychiatric symptoms (panic disorder and depression, anxiety NOS). Both were treated with psychopharmacologic agents. Neither had preexisting psychiatric pathology.

**Conclusion:** Recipient graft loss or death poses an increased risk for new psychiatric pathology in living organ donors. Currently there are no guidelines for increased monitoring following donation for donors with adverse recipient outcome or for the provision of mental health services for donors whose recipient dies or experiences graft loss. Strategies for monitoring for symptom emergence and mitigating the impact of adverse recipient outcomes are needed and
these results support future research in this area.
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