

“Demands” which in average had a score of 12.3. In this section - “Do you feel that you have much work to do?” was the most scored item with 27 points. At the same section - “Do you feel unable to complete work on time?” and “Do you feel that pressure from work affects your health?” were 2nd and 3rd most scored with 20 points each.

Next significant scores were given for “Control” and “Role” where each scored 9.3. Least points were given for “Relationship” with 4.3 only.

Conclusions: People feel overwhelmed with work demand which affects their ability to work and general health at the same time. It appears that a strategy of efficiency measures can be addressed within the team whilst others need to be taken to higher management level.

P0018

A survey to assess burnout of physicians working in the Belgian pharmaceutical industry

P. Mesters¹, M. Czarka², N. Schepers³, D. Renard⁴. ¹European Institute for Intervention & Research on Burn Out, Brussels, Belgium ²Green Dragon Lifescience Consultancy, Brussels, Belgium ³University of Louvain-la-Neuve, Louvain-la-Neuve, Belgium ⁴Novartis, Bale, Switzerland

Objectives: Burnout is a state of physical, emotional and mental exhaustion. It affects talented and committed individuals working in demanding working conditions.

Although the risk of the medical community to develop the syndrome is extensively documented, this is the first study that assesses the risk of Burn Out in populations of physicians working in the pharmaceutical industry as managers, researchers or executives.

Method: The survey was performed amongst the 175 members of the Belgian Association of Pharmaceutical Physicians. The primary objective aimed to assess the lifetime prevalence of burnout.

Maslach Burnout Inventory Scale was used to assess gravity of the components of burnout (depersonalization, professional accomplishment, emotional exhaustion).

Results: Eighty members responded. Fifty percent suffered from burnout.

Marital status, solid social network are protecting factors. Stress antecedents aggravate the risk of relapse.

There is a relationship between occurrence of health problems and intensity of emotional exhaustion.

Demography, symptoms profile and the significant factors contributing to the risk are presented.

Conclusion: This snapshot reveals that pharmaceutical physicians continue to be burned out at the same rate as their colleagues clinicians, not aligning on the general employee population.

Given the significant mutual investment from pharmaceutical companies and physicians in each other, prevention should be actively pursued to provide higher job satisfaction as well as better productivity.

The authors believe this findings warrant further study, possibly longitudinally, to uncover possible coping strategies and occurrence of relapse.

P0019

Sleep spindles in kindergarten children: Relation to sleep and Hypothalamic-Pituitary-Adrenocortical (Hpa) activity

T. Mikoteit¹, S. Brand², J. Beck², E. Holsboer-Trachsler², M. Hatzinger¹. ¹Psychiatric Outpatient Department, University Hospital, Basel, Switzerland ²Depression Research Unit, Psychiatric University Clinics, Basel, Switzerland

Introduction: Sleep regulation is closely associated to HPA activity. Alterations in both systems may be precursors of psychiatric disorders like depression even at an early stage of development. So far the impact of microstructure in sleep regulation like sleep spindles is unknown. In recent studies, sleep spindles have been linked to efficient cortical-subcortical connectivity and cognitive abilities especially during neurodevelopment.

Aim: Sleep spindles in kindergarten children were analyzed and related to sleep regulation and HPA axis functioning.

Patients and **Methods:** Nine five-year old kindergarten children were enrolled in a cross-sectional examination of HPA system activity assessed by saliva cortisol measurements (morning cortisol after awakening) and sleep regulation investigated by sleep EEG-monitoring. Sleep EEG spindles were visually scored and were put into relation to macrostructural sleep and HPA activity parameters.

Results: Sleep spindles were correlated to basal morning cortisol secretion (AUC basal) (curvilinear $r = .83$, $p = .01$), though were negatively correlated to cortisol increase (AUC netto) after awakening ($r = -.77$, $p < .05$). Though not statistically significant but by trend, spindle density (i.e. number of spindles per hour of stage 2 - sleep) is negatively correlated to REM density ($r = -.57$, $p = .11$), as increase of awakening cortisol was associated to REM density by trend ($r = .63$, $p = .07$).

Conclusion: Not only sleep continuation parameters as reported before but also sleep microstructure reflected by sleep spindles may be associated to sleep regulation and HPA system functioning.

P0020

Clinical-Immunological criteria of prognosis of prolonged course of posttraumatic stress disorders

V.B. Nikitina¹, T.P. Vetlugina¹, E.M. Epanchintseva². ¹Clinical Psychoneuroimmunology Laboratory, Mental Health Research Institute, Tomsk, Russia ²Borderline States Department, Mental Health Research Institute, Tomsk, Russia

70 men have been examined – participants of military actions in Caucasus with PTSD. According to type of course and duration of disease patients have been divided into 2 groups: 1—acute-subacute course of PTSD, duration of disease not more than 3 years (36 persons); 2—prolonged course of PTSD, duration of disease 4 and more years (34 persons).

Clinical signs of secondary immune deficiency have been revealed in 58,6% of examined of group 1 and in 78,6% - group 2. In group 2, combination of several syndromes of immune deficiency is observed.

During comparison of incidence of accompanying somatic diseases pathology of various systems in group 1 has been noticed in 63,2% of combatants, in group 2, somatic pathology has been revealed in 100% of combatants. In patients with prolonged course of PTSD in anamnesis we have noticed fighting traumata and contusions - 60,0%. In patients of group 1 - 39,5%.

Significant differences have been identified between parameters of the immunity in patients of examined groups. Immune status of combatants with prolonged course of PTSD as compared with the group 1 was characterized by lower values of number of T-lymphocytes - CD3+ ($p < 0,05$), natural killers - CD16+ ($p < 0,05$); higher values of

number of B-lymphocytes and activated T-lymphocytes HLADR+($p < 0,05$), level of circulating immune complexes ($p < 0,01$).

Revealed differences of indices of immune status between examined groups of combat-ants, presence of clinical signs of immune deficiency and accompanying somatic pathology allow considering complex of these factors as predictors of prolonged course of post-traumatic stress disorders.

P0021

Is psychiatry such a stressful profession?

B. Pejuskovic, D. Lecic Tosevski, O. Toskovic. *Institute of Mental Health, Belgrade, Serbia and Montenegro*

Background and Aims: The burnout syndrome is a state of physical, emotional and mental exhaustion caused by long term exposure to demanding work situations. It has been suggested that different personal factors, such as gender, age and daily number of patients have influence on the development of this syndrome. The objectives of this study were the following: 1) to assess and compare expressiveness of the dimensions of burnout in psychiatrists; 2) to assess correlation with potential etiological factors (gender, age, number of patients).

Methods: The sample consisted of 50 psychiatrists working in health care institutions on the territory of Belgrade. Assessment has been carried out by the Maslach Burnout Inventory and sociodemographic questionnaire.

Results: The score of the burnout syndrome was different between the three dimensions. i.e. dimension of emotional exhaustion was the most prominent, but moderately increased. Dimension of depersonalization was very low and the lack of personal accomplishment was also moderate but with lower values. We could not find significant correlation with gender, age, nor with number of patients.

Conclusions: Some of potential causative factors associated with the burnout syndrome were investigated. It is important to further explore the correlation between this syndrome and various variables, such personality characteristics, coping strategies and organizational characteristics.

References

[1] Lecic Tosevski D et al: Burnout syndrome of general practitioners in post war period. *Epidemiologia e Psichiatria Sociale*, 15 (4): 307-10, 2006.

P0022

Burnout among physicians

N. Pranjic. *Department of Occupational Medicine, Medical School of University of Tuzla, Tuzla, Bosnia and Herzegovina*

Objective: High rates of occupational burnout syndrome have been found among health service professionals. Our objective was to measure the prevalence of burnout and explore its social demographics and occupational predictors among physicians in Bosnia and Herzegovina.

Methods: Answers to the Occupational stress questionnaire (OSQ) were used to assess predictors for burnout and the Maslach burnout inventory were used to categorize respondents into low, moderate and high level of burnout.

Results: 534 physicians responded to the survey (76% response rate) and 511 questionnaires could be analyzed. 27.0% of respondents had a high score for emotional exhaustion, 23% had a high score for depersonalization/ cynicism and 23% had a low score for personal accomplishment was found in 29% of physicians. Female physicians were reported more likely than male high level of work related stress and burnout. The predictor of personal accomplishment was only marital status (to be single vs not single; $\beta_2 = -1,02$, $P = 0,01$). The main predictors of emotional exhaustion were: work is mentally strenuous and low level of friendly communication at work. High feeling of stress, loss of control over the working ambient and possibility to use knowledge at work were associated with high score of depersonalization.

Conclusion: Intervention program in health care organization to prevent stress at workplace and promotion of staff and patient health should be implemented.

P0023

Suicidal behavior and stress related disorders

P. Pregeelj¹, M. Tomori¹, J. Balazic², T. Zupanc². ¹ *University Psychiatric Hospital, Ljubljana, Slovenia* ² *Institute of Forensic Medicine, Ljubljana, Slovenia*

In retrospective study we characterize the suicidal behavior in 413 patients with stress related disorders as assessed by psychiatrists in Psychiatric Emergency Clinic at University Psychiatric Hospital. These patients were compared with 482 patients with anxiety disorders attending the same institution. We observed that 76 patients (18,4%) with stress related disorders had suicidal thoughts at the time of their evaluation and 21 patients (5,1%) had documented suicide attempts just before the evaluation. In the group of patients with anxiety disorders we observed that 50 patients (10,4%) had suicidal thoughts at the time of their evaluation and only 4 patients (0,8%) had been referred to UPOC after suicide attempt. Difference was significant ($p < 0,05$). The aim of our next study was to evaluate negative life of suicide victims in a month before suicide. On the other hand aggression and impulsivity of suicide victims was evaluated. In the three-year period 90 suicide victims (28 women and 62 men) in the central region of Slovenia were examined using the method of psychological autopsy. We compared subgroups of suicide victims with or without previous aggressive behaviour. We observed that suicide victims with previous aggressive behaviour have higher number of negative life events in a month before suicide and have expresses higher impulsivity then others. We also observed that suicide victims with previous aggressive behaviour directed toward others have more often previous suicide attempts than suicide victims without previous aggressive behaviour. These data support the hypothesis that suicidal behaviour is also influenced by previous stress events.

P0024

Psychosocial distress as a risk factor for diabetes mortality

Y.E. Razvodovsky. *Grodno State Medical University, Grodno, Belarus*

Background: Diabetes melitus has become an epidemic from a global perspective. Diabetes is a classical example of the biopsychosocial model of disease and like most diseases, it has a multifactorial origin. Several lines of evidence support the role of psychosocial distress in promoting the development of diabetes.