"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

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**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

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**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

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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 exam-ined of group 1 and in 78,6% - group 2. In group 2, combination of several syndromes of im-mune deficiency is observed.

During comparison of incidence of accompanying somatic diseases pathology of vari-ous systems in group 1 has been noticed in 63,2% of combatants, in group 2, somatic pathol-ogy 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 pa-tients 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