adults were based on university students and/or self-selected participants. In summary, intense or frequent mobile phone use was seen to be associated with a broad spectrum of mental health outcomes, e.g. depressive symptoms and sleep problems. Mobile phone use at bedtime was associated with shorter sleep duration and lower sleep quality. 'Problematic use', i.e., mobile phone use connected to behavioural addiction or pathological usage, was associated with several negative outcomes such as depression, anxiety, and sleep problems. **Discussion** Research studies show associations between mobile phone use and mental health outcomes. However, there is need for more studies of good quality; with longitudinal design, objective measurements, and well-defined study populations, in order to draw valid conclusions about possible causal associations between mobile phone use and mental health symptoms.

33 A CLINICAL APPROACH OF WORKAHOLISM

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Introduction To date, no definition of workaholism can be considered as consensual. Some authors propose a behavioural approach with a cognitive side (an inner drive) and a behavioural side (working excessively). But with this perspective, the place for subjectivity is rather small and clinical descriptions of workaholism are scarce. In this context, we aimed to describe case-reports of patients suffering from workaholism.

Methods We describe case-reports from patients who went to the occupational disease centre of Brest University Hospital, France between November 2013 and July 2016. Consultations were performed by a single physician, specialised in work-related mental disorders with the methods of clinical occupational medicine, as described by Davezies. Included patients were those with a diagnostic of workaholism. The diagnostic has been performed regarding Goodman's common criteria of addictions.

Results During the period of interest, 168 patients have consulted for a work-related mental trouble. Of these, 8 patients suffered from workaholism (4 female and 4 male). Mean age at diagnostic time was 44.1 years. Three clinical situations will be detailed: a 41 years old door-to-door canvasser selling goods for craft workers, a 51 years old nurse in a hospital, and a 30 years old saleswoman in a cooperative selling farming goods.

Discussion Clinical descriptions allow to highlight some characteristic elements among patients suffering from workaholism: variable remuneration linked to the worker's commercial performance, the use of a professional telephone during week-ends and free time, storage of professional stuff at home, huge ambivalence between the will to go on working while knowing that work is degrading health, addictive comorbidities (tobacco, alcohol consumption, anorexia). There is a need for a work sociopsychologic approach of the situation, associating individual healthcare and improvements on the working environment. The latter part is often lacking but it offers the best long-term efficacy.

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WHICH PSYCHOSOCIAL RISK FACTORS AT WORK CONTRIBUTE TO THE ONSET OF STRESS-RELATED DISORDERS? A SYSTEMATIC REVIEW AND META-ANALYSIS

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Introduction Psychosocial risk factors at work are known to contribute to the onset of stress-related disorders (SRDs). Evidence about work-related psychosocial risk factors is necessary to select and implement preventive workplace interventions. The aim of our review was to identify psychosocial risk factors at work which are associated with the onset of SRDs, updating a prior review with evidence up until 2008.

Methods A systematic literature search was conducted for the period January 2008 to October 2014 in Medline, Embase and PsycINFO. Inclusion criteria were: prospective study design, exposure of workers to psychosocial risk factors, and an SRD outcome. Data from the studies included were pooled with the results of a previous systematic review. The quality of the evidence was assessed using an adapted GRADE procedure.

Result The updated review consisted of twelve studies. The search yielded 5300 articles. Five articles met the inclusion criteria and were added to the seven of the previous review.

Evidence of high quality was found for the risk factors of 'effort-reward imbalance', 'high psychological demands', 'low decision authority', 'low co-worker support', 'low supervisor support', 'low procedural justice' and 'low relational justice', while evidence of moderate quality was found for 'high emotional demands' contributing to the onset of an SRD.

'Effort-reward imbalance' and 'low procedural justice' exhibited the largest association with SRDs, with Odds Ratios of 2.0 (95% CI: 1.81 to 2.22) and 1.8 (95% CI: 1.60 to 1.98), respectively.

Discussion Several psychosocial work-related risk associated with the onset of SRDs were established, confirming prior findings. Awareness of these risk factors could be the starting point for the selection of preventive interventions to reduce work-related SRDs.

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A STUDY ON JOB STRESS AND RELATED HEALTH PROBLEMS AMONG HOSPITAL NURSES IN INDIA

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Introduction Stress in nurses is an endemic problem. It contributes to health problems in nurses and decreases their efficiency. Documenting the causes and extent of stress in any healthcare unit is essential for successful interventions. This exploratory study attempted to establish the existence and extent of work stress in nurses in a hospital setting, to identify the major sources of stress, and to find the incidence of psychosomatic illness related to stress. In addition it was

attempted to examine relationship between perception of work-related stress and ill-health symptoms among the study sample.

Methods Responses from 81 nurses from three hospitals in Mumbai were studied.

'Stress Scale' was designed with the help of two survey instruments – 'Nurses Stress Scale' developed in 1981 by Grey-Toft and 'A to Z test on the occupational sources of stress' developed by Asis K.Chakrabarti, ex-Director (Industrial Psychology) at Central Labour Institute, Mumbai.

Questionnaire method of data collection was adopted ensuring absolute confidentiality to protect identity, to ensure honesty in responding, and to obtain a reasonable response rate.

Statistical analysis of correlation was utilised to verify the results to prove the relationship between the perception of stress and ill-health symptoms among hospital nurses.

Results There exists a significant positive correlation between perception of occupational stress and psychosomatic symptoms among nurses. Psychosomatic disorders like backache, neck stiffness, and increased consumption of caffeinated products significantly increased in nurses having higher stress scores.

Discussion Moderate levels of stress were seen in a majority of nurses. It has been established that incidence of psychosomatic illness increases with the level of stress. Healthcare organisations need to urgently take preemptive steps to counter this problem in view of acute shortage of trained nurses. Without a comprehensive plan to deal with the issue, the problem may escalate into risks to patients and other consumers.

378 PREVALENCE OF BURNOUT SYNDROME AMONG SURGICAL RESUSCITATION STAFF AT THE CHU SYLVANUS OLYMPIO (TOGO)

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Introduction Burn out or burnout syndrome is a state of emotional exhaustion, dehumanisation of relationship to other, and decreased performance in response to chronic occupational stress.

Methods This is a descriptive and analytical cross-sectional study carried out among the practitioners of all the resuscitation departments of the CHU Sylvanus Olympio in Lomé.

Results The caregivers were divided into 11 physicians, 9 medical interns, 7 senior anaesthesia technicians, 1 resuscitation anaesthesia master, 50 state nurses, 1 masseur and physiotherapist. 35 (44.30%) had a high level of emotional exhaustion. Burn out was found in 69.60% of caregivers, of whom 17 (21.50%) had a moderate burnout and 3 (3.80%), a high level of burn out. The causes significantly related to the occurrence of burn out were: lack of resources (diagnostic and therapeutic tools) ($p=0.00005$), reduced staff size ($p=0.00004$), poor organisation of the service ($p=0.0004$).

Discussion In our study, the prevalence of burnout was 69.60% of the nursing staff. In Morocco, AOUNTI Lotfi found in 2014 that 79.10% of caregivers working in the resuscitation departments of the anaesthesia resuscitation department of the CHU Hassan II in Fez were burning out.

418 PSYCHOSOCIAL FACTORS IN MEDICAL STUDENTS PREDICT HIGHER BURNOUT LEVELS

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Introduction The aim of the study was to determine stress factors related to medical education as predictors of burnout in medical students (MS) in the 5th year of studying, just before entering the world of work.

Methods Actual cross-sectional study was conducted by the Institute of Occupational Health of RM, including 165 MS in the 5th year of medical studies. Medical Student Stressor Questionnaire, Maslach Burnout Inventory, and Socio-economic and Studying Conditions Questionnaire were used. Multiple regression models were tested to examine the associations of stress factors related to medical education to burnout dimensions controlling for age, learning hours/week, and interpersonal relationships with parents/friends.

Results Bivariate analyses showed significant positive correlations of burnout dimensions with all domains of MS stressors. Emotional exhaustion demonstrated significant positive correlations with learning hours/week ($r=0.234$, $p=0.003$), and poorer interpersonal relationships with parents ($r=0.193$, $p=0.014$) and friends ($r=0.343$, $p<0.001$), while depersonalization only with poorer interpersonal relationships with friends ($r=0.258$, $p=0.001$). Multiple regression analyses revealed that domain Academic related stressors (examination systems, academic schedule, getting poor marks, high-self expectation to do well, large amount of content to be studied, lack of time, etc.) (Standardised Beta= 0.359 , $p=0.006$), poorer interpersonal relationships with friends (Standardised Beta= 0.244 , $p=0.001$), and learning hours/week (Standardised Beta= 0.140 , $p=0.044$) were significant predictors of higher emotional exhaustion ($R^2=0.418$). On the other hand, only poorer interpersonal relationships with friends positively predicted depersonalization (Standardised Beta= 0.197 , $p=0.019$) ($R^2=0.159$).

Discussion Actual study shows that psychosocial factors in MS entering the world of work are related to higher burnout scores. Preventive strategy oriented towards improvement of health and safety at work in physicians should involve measures for tackling academic related stressors in MS in order to reduce later burnout development.

42 EVIDENCE THAT A STATE-WIDE PAID SICK LEAVE POLICY REDUCES OCCUPATIONAL INJURIES AND ILLNESSES

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Introduction Unlike almost all other developed countries, paid sick leave is not mandatory for employers in the United States. Several states and municipalities have introduced paid sick leave policies. The first states to introduce such a policy was Connecticut, which passed a law requiring that employers offer 'service workers' one hour of paid sick leave for every