hypercortisolemia, in addition to cytokine storm (IL-6, TNF- $\alpha$ , TGFB1, IFN $\gamma$ /IL-4) present the endocrine and inflammatory basis for development of depression. Fatigue, insomnia, cognitive dysfunction, spasticity, neurogenic bladder, pain, and sexual dysfunction have shown to be additional precipitating factors in development of anxiety and depression in MS patients.

Key words: multiple sclerosis, depression, anxiety, comorbidities

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## MENTAL HEALTH CARE PROFESSIONALS AND STRESS MANAGEMENT

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**Introduction:** Mental health and addiction prevention Introduction: Mental healthcare is one of the most stressful professions and staff are exposed to stress in their everyday work. Chronic stress or excessive strain at work can have serious mental health consequences that directly impact productivity. Repeated negative experiences in the workplace can lead to a sense of estrangement, which only heightens the negative impact on health and well-being. By taking care of professionals' mental health and wellbeing we increase the quality of care for patients also. To determine levels of stress and their underlying causes among staff in the Department of Mental Health and Addiction Prevention who directly care for 3.451 patients with mental health problems.

**Methodology:** Two self-administered, validated questionnaires were completed by staff members during May 2019.

**Results:** Staff members reported high levels of general stress in the past month, while levels of work stress were not as high, but increased statistically significantly over time due to work organization and financial factors according to the Work Stress Questionnaire. Employees who worked in the Department for more than 5 years found shift work more stressful than those with regular work hours. Men reported significantly more Risk and harm at work then women. Unrealistic expectations and communication difficulties with patients or family members are occasionally a source of greater stress. Some employees showed a very high level of perceived stress on all measured factors and indicators. These findings suggest that stress monitoring and mental health protection for the employee is essential.

**Conclusion:** Work can indeed be a risk factor for mental health, but it has also been proven that work can be a source of mental strength and contribute positively to overall mental health and well-being. With good leadership and a supportive work environment, work serves as a "health resource". It is important to proactively support the mental health of employees to ensure prevention in the workplace. Promoting mental health is a core element of a group's health, safety and well-being strategy and should be an integral part of work organization. In the development and implementation of stress prevention programs we need to talk openly about problems and challenges at all levels, and empower staff through continuous stress management training so that they can adequately manage sources of stress.

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## THE RADIOLOGIST WORKLOAD INCREASE; WHERE IS THE LIMIT? MINI REVIEW AND CASE STUDY

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**Introduction:** Radiologist workload had increased significantly within the past three decades. In 2006-2007, the average annual workload per FTE radiologist was 14,900 procedures, an increase of 7% since 2002-2003 and 34.0% since 1991-1992. Annual RVUs per FTE radiologist were 10 200, an increase of 10% since 2002-2003 and 70.3% since 1991-1992.

**Subjects and methods:** The study included worksheets data of three radiology specialists in their first three years as specialists. Data were collected and analyzed retrospectively for the period frame January 1<sup>st</sup> to September 21<sup>st</sup> 2018. The total data of imaging procedures by one radiologist had been collected and then separated by different imaging procedures as followed.

**Results:** Average total number of imaging procedures per radiologist was 2785. Separately, there were: 850 bone X ray images, 550 chest X rays, 250 ultrasound examinations, 860 CTs and 256 MRIs. Daily average of analyzed imaging procedures per radiologist was as followed: 7.4 bone X ray images, 4.8 chest X rays, 2.2 ultrasounds, 7.5 CTs and 2.2 MRIs. Total working time per radiologist in the analyzed time period was 684 hours. Average time spent for analyzing per one imaging procedure was 14 minutes and 45 seconds spread in total 114 working days.

**Conclusions:** The conclusion is that current workload for a radiology specialist obviously represents a necessity to be thoroughly explored. This case study and previous literature results indicate that a well constructed large scale study represents a potential in resolving the previous studies limitations and providing relevant data, so correct measures and guidelines could be developed.

Key words: radiology - workload - relative value units

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## SEXUAL DYSFUNCTION IN PATIENTS WITH EPILEPSY

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**Background:** Patients with epilepsy commonly report sexual dysfunction (SD) and reproductive difficulties. This study aimed to evaluate the relationship between epilepsy, antiepileptic drugs (AEDs) and SD, and its association with the quality of life and depressive symptoms.

**Subjects and methods:** This was a prospective study carried out in a tertiary healthcare centre. SD was evaluated using the internationally acclaimed questionnaire Arizona Sexual Experiences Scale (ASEX) that was successfully translated into Croatian and validated for this purpose. Depressive symptoms and quality of life were evaluated using the Hamilton Rating Scale for Depression (HAM-D17) and Quality of life in epilepsy-31 inventory (QOLIE-31).

**Results:** Of 108 patients (68 (63 %) women, 40 (37 %) men, mean age  $39.54\pm15.91$  (range18-80) years) with epilepsy, 16 (14.8%) had focal, 38 (35.2%) generalized and 44 (40.7%) both types of epilepsy. Mean overall total score on the ASEX questionnaire was  $11.94\pm5.61$  (mean total score women  $12.85\pm6.00$ , mean total score men  $10.4\pm4.55$ ), with 48 reporting that they had sexual activity in the past week. Nine (8.33%) patients (7 (6.48%) women, 2 (1.85%) men, mean age  $47.66\pm19.33$  (range 25.80) years) had a score 19 and above, 38 (35.18%) patients (27 (25%) women, 9 (8.33%) men, mean age  $46.82\pm17.78$  (range 19-80) years) individual score 5 and above on any one item, and 33 (30.55%) patients (26 (24.07%) women, 7 (6.48%) men, mean age  $48.87\pm17.8$  (range 19-80) years) had an individual score 4 and above on any three items. Significant correlations were found between SD and older age (p=0.001) and between more pronounced symptoms regarding SD on ASEX and female gender (p=0.000). There were no significant correlations between the type of epilepsy and SD, nor between the AEDs (old generation vs. modern) and SD. Significant correlations were found between the SD and more pronounced depressive symptoms (p=0.003) and between the SD and a lower quality of life (p=0.001).