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## CURRENT PSYCHOSOCIAL RISK FACTORS IN THE HEALTHCARE SECTOR

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### ABSTRACT

The increased demands of modern work practices on workers in all sectors of employment caused the emerging of various psychosocial risk factors, which can be dangerous for their health and work ability. Furthermore, while industrial working conditions are usually sector-specific, psychosocial risk factors are present in every establishment, especially in the services and healthcare. Healthcare workers are some of the most heavily exposed to various psychosocial risks such as mental and physical workload, dealing with demanding patients, high responsibility, shift work, poor work-rest balance, among others. Unacceptable behaviors in healthcare, insider and third-party violence and harassment in particular, are occurring ever so often. These adverse factors take their toll on the physical and mental health of healthcare workers in the form of increased cases of psychosomatic disorders, anxiety, depression, burnout, and suicide attempts. Novel challenges in recent times, e.g. the 2020 coronavirus epidemic, further deteriorate the work environment and strain the coping capabilities of workers. An additional issue in Bulgaria is the shortage and ageing of healthcare professionals, which leads to overworking and higher vulnerability to the negative effects of psychosocial hazards. This report aims to identify the most prevalent psychosocial factors in healthcare settings, as well as their impact on the health and wellbeing of healthcare professionals. Furthermore, some helpful tips and preventive strategies are proposed for increasing job quality in healthcare through social support and better work-life balance.

**Key words:** psychosocial hazards, healthcare

### INTRODUCTION

Psychosocial risks arise from poor work design, organization, management, and poor social relationships at work, and may result in negative psychological, physical and social outcomes. The latest Third European Survey of Enterprises on New and Emerging Risks (ESENER 3) from 2019 demonstrated that psychosocial hazards are present in a significant share of establishments in the EU28, e.g. having to deal with difficult patients, customers and pupils (61%), time pressure (44%), long or irregular working hours (23%), and poor communication or

cooperation within the organization (18%), almost all of which showed an increase compared with the previous report from 2014. 21% of EU28 companies perceive psychosocial factors as more difficult to handle, indicating lack of information or adequate tools to deal with these risks effectively (1). Exposure to psychosocial risks can lead to stress among employees, resulting in poor performance and serious health problems. Work-related stress is defined as “the response people may have when presented with work demands and pressures that are not matched to their knowledge and abilities and which challenge their ability to cope” (2). Stress is considered the main workplace health and safety risk in the EU, indicated by 53% of European workers. 27% of European workers suffered from stress, depression or anxiety caused by or worsened by work during the last

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12 months (3). During 2017, 25% of non-fatal accidents at work in the EU resulted from physical or mental stress (4).

Psychosocial hazards generate a cost for society in terms of healthcare and social security costs. Healthcare expenditures are nearly 50% greater for workers who report high levels of stress (5). EU annual healthcare costs due to workplace stress are estimated at around 20 billion Euros, while in the USA they are considered to be between 190 and 300 billion USD (3, 6).

In recent years, work has been greatly affected by the general acceleration of the pace of life leading to work intensification, constant time pressure, multitasking and the need to learn new things to keep up to date. In addition to these structural and long-term changes, the current economic crisis is placing increasing pressure on both employers and workers to remain competitive (7).

Studies continuously indicate that healthcare professionals are a professional group exposed to high levels of stress due to psychosocial hazards. Healthcare workers have elevated rates of depression and anxiety linked to stress at work, as well as higher rates of substance abuse and suicide than other professions (3, 8). This review aims to identify the most prevalent psychosocial factors in healthcare settings, their impact on the health and wellbeing of healthcare professionals, and identify some effective preventive measures.

### PSYCHOLOGICAL BASIS

The main risk factors causing stress at work can be classified into three major categories: organizational issues which include psychosocial and ergonomic hazards, environmental factors acting as non-specific stressors, and individual characteristics that determine how a person interprets and reacts to the external stressors (**Figure 1**).

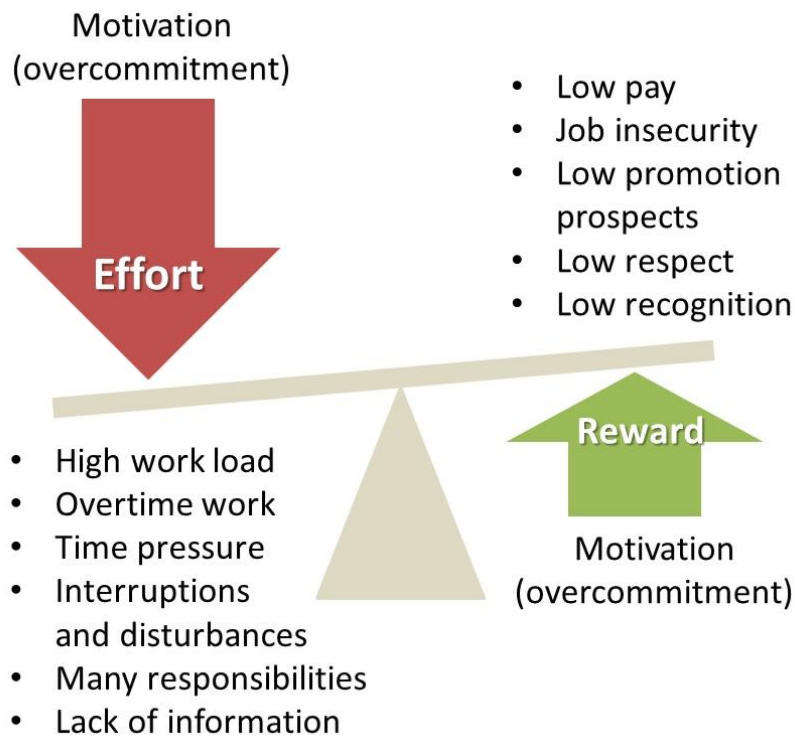


**Figure 1.** Classification of the main stress causing factors at work.

Several psychological theories have been proposed to explain the various ways psychosocial hazards at work act as stressors and lead to health damage, such as the Job Demand-Control model, the Job Demands-Resources model, and the Psychosocial Safety Climate, among others (9). The model of Effort-Reward Imbalance proposed by Johannes Siegrist asserts that failed reciprocity in the workplace, i.e. high input of effort and low reward, generates strong negative emotions and associated stress reactions with adverse long-term health consequences (10). A

visual representation of the model is shown on **Figure 2**.

A specific personal pattern of coping with demands and of eliciting rewards characterized by overcommitment may prevent people from accurately assessing cost-gain relations. Workers in healthcare, particularly those with excessive work-related motivations and attitudes are at risk of experiencing greater effort-reward imbalance and thus more severe health consequences such as burnout or depression.



**Figure 2.** Example of the effort-reward imbalance observed in healthcare settings (Siegrist, 2015).

## SIGNIFICANT PSYCHOSOCIAL HAZARDS IN THE HEALTHCARE SECTOR

### Job Strain

Job strain is usually characterized by working conditions in which workers face high demands, but have little control or influence over their work environments. Healthcare workers exposed to high job demands and low decisional latitude, low social support and effort-reward imbalance are twice as likely to suffer symptoms of depression and distress compared to non-exposed subjects (11). Significant regional and cross-country variations in the amount of job strain in healthcare have also been observed. A large European multi-country study found that hospital employees in the United Kingdom and Bulgaria reported the heaviest workloads, German and Bulgarian employees indicated working more shifts than employees in other countries, and employees in Eastern European countries (Bulgaria and Hungary) reported working overtime more often than employees in the other six participating countries (12). The same study found that hospital employees working under high levels of stress due to heavy workloads and overtime were more likely to report poor health. Furthermore, lapses in attention caused by stress and

overwork can increase the risk of serious consequences such as medication errors, failure to recognize life-threatening signs and symptoms, and other essential patient safety issues (13).

Authors theorize that work related stress is largely contributing to the current nursing shortage in many countries, e.g. Bulgaria, Latvia, Romania, Greece (14). For example, in Bulgaria the percentage of employed nurses and midwives (36 780 workers total in 2019), is currently the lowest in the European Union: 1.1% compared to a 2.3% EU average (15). The human shortage in healthcare leads to even greater overworking and psychosocial stress for the employed professionals.

### Violence and Harassment

Health care workers are regularly exposed to violence, particularly front line workers such as emergency services (16). Aggressors are usually patients or their relatives (the so-called third-party violence) and mainly male (17, 18). In many healthcare establishments, there is a sense of resignation that violence is a normal part of daily work. This results in severe underreporting to work authorities and only a minor reporting to the police, causing the problem to remain unaddressed with continuous risk to the health and safety of medical employees. Several studies indicate

that lateral violence (cases of violence between co-workers) is also present among healthcare professionals and usually associated with high-stress working environments (14).

Unacceptable harassing and bullying behaviors in healthcare can include: physical or social isolation, control and manipulation of information, obstructionism, assigning dangerous or unachievable work, inferior tasks or responsibilities, unfair treatment, professional discredit, intimidation, threats, disrespect and humiliation (19). Female workers, particularly nurses, are commonly subjected to sexual harassment by third party individuals (1).

### Poorly Managed Change

In the 5th European Working Conditions Survey around 45% of workers reported some type of organizational change happening in their work environment during the previous three years (20). Among the changes affecting healthcare professionals are new payment and delivery approaches, electronic health records, patient portals, and publicly reported quality metrics (21). Studies indicate that high overall levels of psychological distress increase during the process of organizational change in healthcare settings (22). Particularly challenging to workers are pressures to reduce the cost of service and other lean economy practices (23). The constant change in the workplace, together with the trend of ageing healthcare workers who are not as susceptible to technological advancements as younger ones, provides a very stressful combination. Therefore, good management and peer support are considered vital for successfully overcoming organizational changes in the workplace (24).

### Biohazard Stressors

Caring for highly infectious patients (SARS in 2003, the 2014 Ebola outbreak, COVID-19) is a recent but highly stressful phenomenon (25). About 10% of respondents from Beijing hospitals experienced high levels of posttraumatic stress (PTS) symptoms due to the SARS outbreak (26). A study on 1257 healthcare workers in China treating patients with COVID-19 indicated a considerable proportion experiencing symptoms of depression, anxiety, insomnia, and distress, particularly women, nurses, workers in Wuhan, and front-line healthcare workers (27, 28). A systematic review of literature on the psychological damage to healthcare professionals

during the COVID-19 pandemic showed pooled prevalence of 23.2% for anxiety, 22.8% for depression, and 38.9% of insomnia, with female workers and nurses exhibiting higher rates of affective symptoms compared to male employees and medical staff respectively (29). It should be noted that healthcare workers who assist or treat patients with COVID-19 may experience stress related to:

- Fears of contracting the infection and subsequently transmitting it to others (family members and patients);
- The physical strain of wearing and the feeling of isolation caused by the protective equipment;
- The constant need for awareness and the pressure regarding infection control procedures;
- The usual daily work demands competing with COVID-19 prevention and treatment measures;
- Tension between public health priorities and the wishes of COVID patients and their families, particularly quarantine requirements;
- The need to maintain high standards in the face of constantly changing official recommendations and policies regarding COVID-19 management;
- Separation from one's family, sometimes for several weeks;
- The social stigma - people's general fear of workers exposed to COVID-19 on a daily basis.

### CONSEQUENCES

The adverse health effects of psychosocial hazards in healthcare settings can range from minor problems with performance and work ability to serious complications such as depression and burnout. Likewise, the consequences for the establishments can spread on various levels, and will eventually cause financial losses, as well as loss of reputation and decreased patient satisfaction (**Table 1**).

Data indicate that medical professionals are prone to compassion fatigue, depression and suicide at a greater rate than the general population, with surgeons reporting up to three times more thoughts of suicide than other specialists (30). Another report found that nurses who experienced a higher degree of job stress were 80% more likely to have suffered a major depressive episode in the previous year (14). A high prevalence of depression has also been observed in medical students and medical residents, indicating that psychological problems in healthcare start very early along the career path (31, 32).

**Table 1.** Possible adverse outcomes caused by psychosocial workplace hazards

For the workers	For the establishment
<ul style="list-style-type: none"> <li>• Decreased work ability and performance</li> <li>• Acute and chronic stress disorders</li> <li>• Musculoskeletal disorders</li> <li>• Injuries due to workplace accidents</li> <li>• Chronic fatigue</li> <li>• Anxiety and depression</li> <li>• Burnout syndrome</li> </ul>	<ul style="list-style-type: none"> <li>• Reduction in productivity and efficiency</li> <li>• Absenteeism</li> <li>• Increase in sickness absence</li> <li>• Increase in employee turnover</li> <li>• Increase in accidents and injuries</li> <li>• Decline in quality of social relationships</li> <li>• Increased healthcare costs</li> </ul>

A large number of studies suggest that work-related stress often leads to burnout and job dissatisfaction among workers in healthcare (33-35). Burnout is nearly twice as prevalent among physicians as workers in other fields after controlling for work hours and other factors. Due to the number of psychosocial hazards in their field of work, as previously stated, physicians in the front lines of care (emergency medicine, family medicine, internal medicine) have some of the highest risk of burnout and depression (36,37). Studies on nurses and other medical professionals report similarly high prevalence of burnout (38).

Computerized work processes, excessive workloads (long work hours, night shifts, nurse-patient ratios), organizational issues (poor management culture, lack of collaboration in the professional team, low advancement opportunities and social support), low decisional latitude, devalued meaning at work, and work-life imbalances have been determined as causes of burnout among physicians and nurses (39-42).

Psychosocial adverse effects pose several negative implications for healthcare workers. Psychological disorders (anxiety, depression, and burnout) cause a high proportion of sick leave days in the sector (43). Cross-sectional studies of physicians have found burnout to be independently associated with job dissatisfaction and increased odds of intent to leave the current practice for reasons other than retirement (44).

Still, there are significant gaps in knowledge regarding the various consequences of high-level stress on both healthcare workers and their patients. Longitudinal study designs and measured healthcare indicators are needed for elucidating the professional effects of burnout and other forms of distress. Research should

also focus on the relationships between healthcare workers' physical and mental wellbeing, and referral patterns, test ordering, prescribing practices, and other professional decisions that affect health care quality, safety and costs (44).

### PREVENTION STRATEGIES

In their Global Framework for Healthy Workplaces the World Health Organization defines the healthy workplace as "one in which workers and managers collaborate to use a continual improvement process to protect and promote the health, safety and wellbeing of all workers and the sustainability of the workplace"(45). WHO sets four major determinants of healthy workplaces with a positive psychosocial environment playing an important part (**Figure 3**). Therefore, in order for workplace psychosocial hazard prevention to be effective, it should focus on two areas: modifying the work and social environment and increasing the worker's physical and mental capabilities to cope with external stressors (46).

General interventions could target all types of healthcare workers, while some prevention programs could address the specific needs of each professional group (physicians, nurses, midwives, ergotherapists, pharmacists, etc.). The workplace risk assessment will determine the working conditions and individual factors necessary for successfully implementing prevention strategies that improve performance and wellbeing. Efficacy studies and assessments would be beneficial in determining the effects of anti-stress programs on workers' health and wellbeing, patient outcomes, patient access and cost of care (44). Some preventive measures against stress, depression, and burnout in healthcare settings are proposed in **Table 2**.

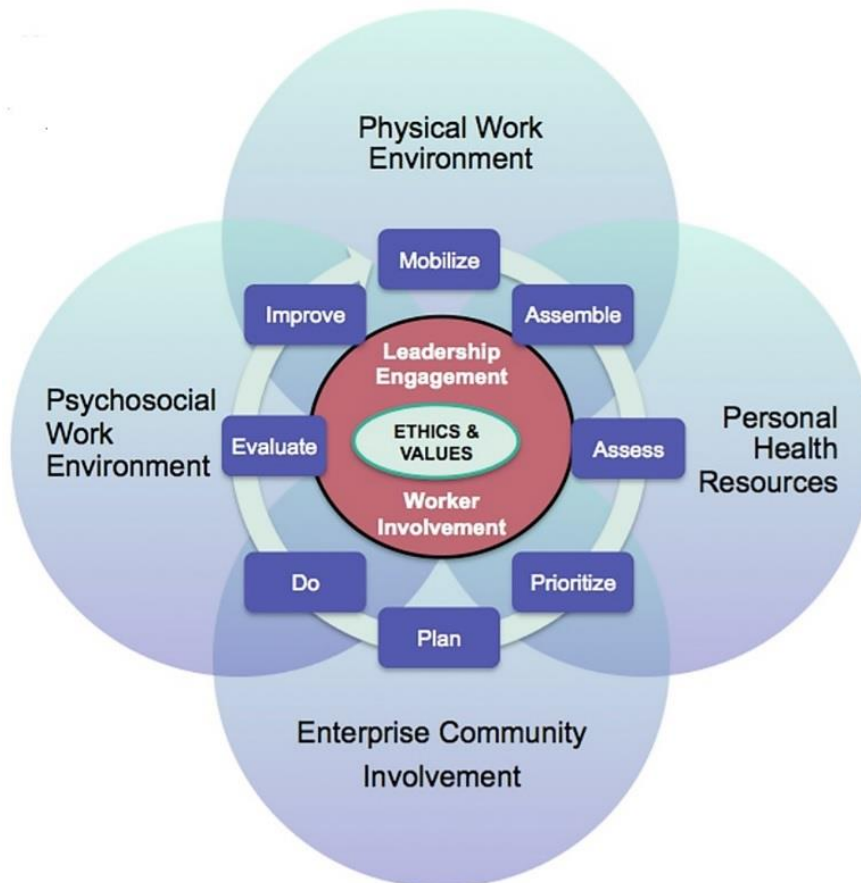


Figure 3. The WHO healthy workplace model (WHO, 2010).

Table 2. Preventive measures against psychosocial workplace hazards in the healthcare sector

Organizational measures	Personal/individual measures
<ul style="list-style-type: none"> <li>• Providing adequate human resources, incl. governmental measures</li> <li>• Management and leadership training</li> <li>• Continuous education</li> <li>• Socially acceptable work time</li> <li>• Anti-stress action plans</li> <li>• Violence and harassment policies</li> <li>• Mental health promotion</li> <li>• Medical surveillance and screening</li> </ul>	<ul style="list-style-type: none"> <li>• Training in efficient work organization and work-rest planning</li> <li>• Teamwork training and team building</li> <li>• Training in healthy coping strategies</li> <li>• Psychological counselling</li> <li>• Employee assistance programs</li> <li>• Healthy habits – sleeping, eating, physical exercise</li> <li>• Measures against substance abuse</li> </ul>

Studies indicate that successful implementation of stress-reduction programs can lead to improved communication, change in attitudes to stress and mental health, reduced sickness absence and lower financial costs within the organization (47-49).

**CONCLUSION**

Based on a massive body of scientific evidence, it is clear that psychosocial hazards are some of the most important occupational factors causing decreased work ability and poor health in healthcare professionals. Only a serious commitment by stakeholders towards proper risk assessment and effective prevention programs can successfully control

and minimize psychosocial risks in the workplace.

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