

## Editorial

## Why are job stressors relevant for psychiatry?

Čedo Savić and Karen Belkić

**Summary**

Work-related mental health disorders are a major public health problem. Consequently, psychiatrists encounter many patients whose clinical state is profoundly affected by work conditions. Psychiatrists therefore, need training in occupational/stress medicine. This would help integrate

health services for these patients, aimed at preservation of work fitness and mental health.

**Declaration of interest**

None.

Čedo Savić (pictured) served as director of Clinical Neurophysiology and Psychophysiology, Institute of Mental Health, Belgrade and attending psychiatrist, Occupational Health Services, Thermal Power Plant, Obrenovac. Karen Belkić has a long-standing clinical and research interest in the workplace and health. She is the originator of the Occupational Stressor Index.

In this Editorial we present a multifaceted rationale for a new direction in psychiatry, one that incorporates occupational medicine and stress medicine. This is scientifically justified based on epidemiological evidence together with advances in cognitive neuroscience. From a public health perspective, the role of the work environment in mental health disorders is becoming increasingly recognised. Here, our views reflect our clinical experience in caring for people with mental health disorders who have been exposed to a heavy burden of occupational stressors. Helping patients with psychiatric disorders to return to work under healthier conditions is a goal that appropriately trained psychiatrists can play a key role in.

**Strong evidence linking job stressors to adverse mental health outcomes**

A growing body of epidemiological evidence links exposure to work stressors with adverse mental health outcomes.<sup>1</sup> Empirical data, including a large number of longitudinal studies supporting this relationship, are strong and consistent. A meta-analysis including nearly 75 000 employees of various occupations from several European countries and Canada, found that job strain, effort–reward imbalance, low decision latitude, low social support, high psychological demands as well as job insecurity were predictive of mental ill health at follow-up.<sup>2</sup> With regard to specific psychiatric diagnoses, several large-scale longitudinal studies have demonstrated a significant association between exposure to job strain and depression.<sup>1–3</sup> In a case–control study from the Danish Psychiatric Central Research Register comparing 14 166 psychiatric patients with 58 060 referents, low job control was found to be associated with an increased risk of anxiety disorders in men.<sup>4</sup> An increased risk of suicide has been reported among several stressful occupations, most consistently among physicians<sup>1,5</sup> and other health professionals, with harassment/degrading experiences implicated as a contributory factor. Burnout is recognised as a major problem for physicians, notably among psychiatrists, for whom violence from patients and patient suicide are cited as precipitating factors.<sup>6</sup>

**Insights from cognitive neuroscience**

The mechanisms by which work stressors have an impact upon the human nervous system can be mapped using neurophysiological methods, most notably event-related potentials (ERP), as well as quantitative electroencephalography (qEEG).<sup>1</sup> In ERP paradigms designed to address these issues, a number of salient insights are obtained.<sup>1</sup> Among these are that P300 subcomponents indicate the counter-productivity of time pressure; increased selective attention as reflected in the P300 amplitude occurs when material incentives are imposed upon task performance; long hours of attention-demanding work are associated with attenuated P300 amplitude and occupations such as professional driving that entail a heavy burden of threat-avoidant vigilant activity are associated with heightened contingent negative variation electronegativity in anticipation of relevant imperative signals. The toll of night-shift work is reflected in increased alpha and theta activity during work, and compromised stage 2 and rapid eye movement sleep thereafter.<sup>7</sup> Although there have not yet been any published studies, to our knowledge, of how ERP and qEEG patterns associated with work processes are directly relevant to specific mental health disorders there are some striking similarities.<sup>1</sup> Clinical experience also suggests that work stressors that have an impact on neurophysiological function, as seen in ERP and qEEG, play a role in the mental health processes under examination.<sup>1</sup>

**The human and economic costs of work-related mental health disorders**

Work-related mental health disorders are recognised as a major public health problem, affecting millions of people, with enormous human and economics costs.<sup>8</sup> Lennart Levi, one of the founders of stress medicine, has stated that work-related mental health problems are among the leading causes of morbidity and premature death in many high-income countries.<sup>9</sup> Considering global trends in working life, these disorders are likely to become even more common in the years to come.

**The challenge for the psychiatrist**

In light of the above, it is clear that the psychiatrist encounters many patients whose clinical state has been profoundly affected by their work conditions. However, as is true for most specialty training outside occupational medicine (with some noteworthy exceptions, such as pulmonary medicine), clinical training in

psychiatry has afforded little attention to the work environment. Consequently, psychiatrists generally lack the expertise needed to effectively handle work-related issues.

### Our experience caring for patients with mental health disorders faced with job stressors

Over the years, in a number of contexts and in several countries, we have been called upon to provide care for patients with mental health disorders who have been exposed to a heavy load of job stressors. Because of our combined interest in mental health and the work environment, we have striven to develop effective strategies to help these patients continue or return to work under more salutogenic conditions. In our workup of patients experiencing mental health disorders, we incorporate three essential considerations: (a) is this a dangerously stressful work situation; (b) is the patient's work situation contributing to his/her disorder, and if so, how; and (c) could workplace modifications help improve the patient's clinical status and if so, how?

### Methodology for helping patients to return to healthier working conditions

In carrying out this clinical approach in practice, we use our methodology, the Occupational Stressor Index (OSI),<sup>1</sup> a comprehensive, additive burden model, developed from the perspective of cognitive ergonomics and brain research. The OSI analyses work in relation to demands on mental resources and how these demands are controlled by the individual. Key dimensions of threat-avoidant vigilance and conflict/uncertainty are included. With its emphasis on objective work conditions, the job-related information gleaned through the OSI need not be handled in a directly personal manner. Thereby, concerns about confidentiality and stigma could be somewhat ameliorated, particularly when implementing appropriate changes in the work environment.

Within the OSI, the work environment is viewed as a whole, including task-level issues, work schedule and physical, chemical and broader organisational factors that can all contribute to the total stressor burden. In other words, the OSI provides a comprehensive assessment of an individual's job conditions, akin to and compatible with the clinical approach of taking a complete occupational history. The total OSI score is our guideline for answering the first query. If that total exceeds 90, invariably the work situation is indeed dangerously stressful.

The OSI model and its operationalisation through generic and specific instruments were developed primarily by physician specialists. In clinical applications, the OSI has been repeatedly found to be useful as a diagnostic tool and for formulating and implementing workplace modifications needed for patients with stress-related mental health disorders. In our book,<sup>1</sup> the OSI is used to assess the baseline working conditions of the patients in all the clinical case studies, and then to identify modifiable work factors that could have the most impact on each patient's clinical status. This entails finding the best ways, in practice, to lower the total OSI score as a reflection of the overall burden of occupational stressors. After the workplace interventions are made via the OSI, pertinent follow-up is provided.

### The need for a new clinical paradigm: 'occupational psychiatry'

A recent editorial in the *British Journal of Psychiatry*<sup>10</sup> noting the link between the work environment and mental health disorders

such as depression, has emphasised the need for integrating occupational and mental health services. We fully agree with these authors. Our suggestion is that the success of such efforts could be greatly aided by individual clinicians with the needed multifaceted expertise. For patients with mental health disorders, the establishment of trust and rapport with the clinician, based upon empathy, is a prerequisite for effective care. Being shunted from one caregiver to another, especially when disclosing often painful and sensitive topics, is anathema for such patients.

In this regard, it is vital to take into account the potential stigma surrounding psychiatric disorders. This is particularly important for the most serious manifestations, such as risk of suicide and most especially in relation to employment. Occupational medicine specialists do not usually have sufficient training in psychiatry to provide the necessary care for patients with the more serious mental health disorders. Thus, we contend that the psychiatrist would be best suited to handle work-related mental health disorders, insofar as he or she had the needed expertise in occupational medicine and stress medicine. The latter could be achieved via subspecialty training. Thereby, we envision a new clinical paradigm: 'occupational psychiatry'. The patient together with the occupational psychiatrist would interact dynamically within the larger organisational setting. At the same time, further training in psychiatry for occupational medicine specialists would be a welcome complement, which could, in practice, promote better integration of occupational and mental health services. Overall, this approach would require developing supportive environmental conditions as part of a social ecological strategy. The practice of occupational psychiatry thus needs to be embedded in a larger framework. This new clinical paradigm can be seen as a strategy for preventing demoralisation, recognised as a critical task of modern psychiatry.

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## reflection

### On *Asylums: Essays on the Social Situation of Mental Patients and other Inmates*, by Erving Goffman

Nick Bouras

Erving Goffman's *Asylums* was first published in 1961 and a revised edition, with an extended introduction by William Helmreich, appeared in 2007.

Goffman, a Canadian sociologist born to Ukrainian immigrants, studied chemistry at the University of Manitoba before moving to the University of Chicago to continue in sociology. He became an expert on human interaction and is considered one of the most influential sociologists of the 20th century. The micro-interactions between patients and staff were a focal point of the book, which illuminated in a unique and perceptive way the social context created by St Elizabeth's, a 7000-bed psychiatric hospital in Washington DC, and its effects on patient experience and behaviour. The emphasis was on the patient's social world whereas all previous research on mental hospitals emphasised the perspectives of psychiatrists.

The book is divided into four essays based on Goffman's ethnographic study of St Elizabeth's. The first essay deals with 'total institutions' and is considered a classic in the psychiatric literature. This is followed by the essay on the 'moral career of a patient', describing the change from the status of pre-patient to that of in-patient and considering the initial effects of institutionalisation on social relationships. In the third essay Goffman examines the daily routine of a psychiatric institution. Finally, he turns his attention to the 'medical model', especially the effects on the patient-psychiatrist relationship. Goffman thought that psychiatrists lacked a 'scientific understanding' of mental illness and routinely misunderstood the behaviour of their patients.

I first read *Asylums* in 1975, while I was working on my PhD thesis, under the supervision of Jim Watson and Tom Trauer at Guy's Hospital, studying the effects of the ward environment on the behaviour of psychiatric in-patients. Goffman's observations were rich, penetrating and insightful, examining intelligently the 'inmates', staff and the interactions between them. Specifically, Goffman demonstrated how total institutions strip individuals of their formal identity and then re-socialise them in the institution's routines. He argued that an equilibrium of various improper roles prevails within the system allowing the continuation of its function, irrespective of utility to the patient.

Over 50 years since their first publication, Goffman's essays on asylums continue to attract interest in psychiatry. In January 2011, this journal published an editorial by Seamus MacSuibhne ('Erving Goffman's *Asylums* 50 years on') drawing attention to their role in humanising patients and to patterns that dehumanise them. Goffman's essays accelerated understanding of the complexities of the physical and social environment affecting the behaviour of psychiatric patients, including beliefs, values, roles, policies, procedures and rules. He has been hugely influential and was perhaps the prelude to the ideological trends that followed and eventually prevailed in psychiatric practice. Deinstitutionalisation, community care, normalisation principles, advocacy, empowerment and recovery are some of the products of sparkling sociological and ideological views and, arguably, have had more impact on the care of patients with severe mental illness and intellectual disability than molecular genetic and neurobiological research in the period since *Asylums* was published.

The current dominance of neurobiological research perspectives notwithstanding, psychiatrists need to have a deeper understanding not only of brain function but also of social factors, the environment, relationships and culture. This classic is a good point to start and one hopes that work of similar quality will be published on the experience of patients today, in the era of neurobiology and community care.

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