



Occupational Exposures and Symptoms of Depression and Burnout

YELLOW REPORT | A SYSTEMATIC REVIEW

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Executive Summary

The Swedish Council on Health Technology Assessment (SBU) conducted a systematic literature review of research on the association between occupational exposures and symptoms of depression and burnout.

A wide range of occupational exposures were investigated, including: physical work load, vibration, organizational and psychosocial factors, chemical and biological factors, noise, environmental factors and contagious substances.

Background

Since 2011 SBU has had a mandate from the Swedish government to systematically assess the evidence associating occupational exposures to health issues. The objective of this review was to assess the scientific basis describing the influence of occupational exposures on symptoms of depression and burnout.

Symptoms of depression are common. One in five men and almost one in two women are affected by such symptoms before their 70th birthday. Around six percent of the working population displayed symptoms of burnout, according to a Swedish study from year 2002. For affected individuals, symptoms of depression and burnout are the source of both suffering and decreased functioning. The costs to society are also considerable in terms of direct health care costs, financial support to individuals with work disability, as well as costs due to loss of production.

Method

A systematic review was undertaken following the PRISMA statement and standard methods used by SBU adapted to an occupational context. A literature search covering years 1990 to June 2013 was conducted in international medical and occupational data bases. The review assessed more than 20 000 abstracts. Studies that fulfilled strict inclusion criteria were assessed for relevance and quality, using pre-set

protocols. Relevance and quality assessments were conducted by two experts, working in an evaluation pair. After conducting independent assessments, the two experts had to agree on a mutual relevance and quality classification. Some articles required that all experts participated in discussion and made a collective assessment. A total of 59 studies on symptoms of depression and 25 on symptoms of burnout were classified as moderate or high quality, representing more than 500 000 study participants. The strength of the scientific evidence was assessed with the GRADE system.

Results

There is an association between occupational exposure and symptoms of depression and burnout. This result is based on investigations of a large variety of work environments, mainly in Europe and North America. In most studies passing the quality criteria, researchers investigated occupational exposure and such symptoms in populations consisting of both women and men with at least one year of follow up.

Conclusions

- ▶ Those who experience job strain, i.e. a work situation with low decision latitude (personal control of their own working situation) in combination with too high demands, develop more symptoms of depression over time than people who are not subjected to such exposure at work.
- ▶ Those who experience low social support at work develop more symptoms of depression and burnout over time than people who are not subjected to such exposure at work. Those who are bullied at work, or experience workplace conflicts, develop more symptoms of depression.

- ▶ Those who experience work as mentally stressful; those who experience effort-reward imbalance; or those who experience job insecurity develop more symptoms of depression and burnout over time than people who are not subjected to such exposure at work.
- ▶ In some work environments, people have less symptoms. Those who experience high influence over work-related decisions and those who experience work place justice develop less symptoms of depression and burnout than others.
- ▶ Women and men with similar occupational exposures develop symptoms of depression and burnout to the same extent.
- ▶ This systematic literature review has uncovered a substantial body of knowledge concerning occupational exposures and symptoms of depression and burnout. Future research should include intervention studies, i.e. studies that scientifically test the effect of well-defined interventions on such symptoms over extended periods of time in authentic work situations.

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