EDITORIAL

Job strain may precipitate clinical depression

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JOB STRAIN, A COMBINATION OF HIGH DEMAND AND LOW CONTROL, IS ASSOCIATED WITH an increased risk of subsequent clinical depression, a meta-analysis has found.[1]

Six published studies with a total of 27,461 participants were identified by a systematic literature search. A further 14 unpublished datasets with a total of 120,211 participants were obtained from the Individual Participant Data in Working Populations (IPD-Work) Consortium.

Job strain was assessed at baseline using a self-completion questionnaire. In the published studies, depression was diagnosed by diagnostic interview at the follow-up assessment. Follow-up ranged from 2 to 8 years. In the unpublished datasets, secondary care depression diagnoses were obtained from hospital records. Follow-up was 3.6 to 24.5 years.

'Doctors are not immune from work-related stress'

There were 914 cases of incident depression in the published studies and 982 in the unpublished datasets. Compared with those with no job strain, participants with job strain were at significantly increased risk of subsequent depression in both the published studies relative risk (RR) 1.77 (95% CI: 1.47-2.13) and unpublished datasets; adjusted RR 1.27 (95% CI: 1.04-1.55).

When those with baseline depressive symptoms were excluded from the unpublished datasets, the association was unchanged RR 1.25 (95% CI: 0.94-1.65). The association was lost after adjustment for the continuous baseline depressive symptoms score, RR 1.03 (95% CI: 0.81-1.32), but it is unclear whether this was due to confounding or mediation.

Some studies used the job content questionnaire, others the demand control questionnaire, either in complete or shortened forms. Studies also differed in how they defined job strain. I feel this is best measured by the demand/control ratio whereas most studies used a median cut-off (see below). The unpublished studies were only able to detect depressed participants whose illness was severe enough to require hospital treatment. As the authors suggest, the difference in risk ratios between the published and unpublished studies may be due to publication bias. However, it could reflect a stronger association between job strain and mild-moderate as opposed to severe depression.

Karasek defined job strain as a combination of high psychological demands, e.g. working very fast, insufficient time, conflicting demands, and low decision latitude.[2] There are two components to decision latitude: skill discretion, e.g. the need for a high level of skill, varied work, and decision authority e.g. freedom to make decisions. 'High' is a demand or control score above the median, 'low' is a score below the median.

Job strain is only one of several factors that determine the level of work-related stress. A third component of Karasek's model is the degree of social support at work which mitigates the effect of job strain. Stress may also result from an imbalance between high effort and low reward and there is evidence that demand-control and effort-reward imbalance may be synergistic.[3] Observational studies cannot determine the direction of causation. The authors suggest the relationship may be bidirectional.

In the UK in 2015/16 work-related stress accounted for 37% of work-related ill health and 45% of working days lost.[4] The lesson from this study is that patients who report stress at work are both more likely to be depressed and more likely to become depressed. When helping patients get back to work it is important to discuss ways of reducing job strain and the demand control support model provides a helpful framework.

Doctors are not immune from work-related stress.[5] According to Karasek, medicine is an active occupation in which high demands are balanced by a high level of control.[2] However, the balance has been progressively lost due to increasing demands and an erosion of professional autonomy. I have found that 360° appraisal is an effective way of providing support to colleagues through positive feedback.

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