LETTERS TO THE EDITOR

Working conditions and sickness absence: a complex relation

EDITOR,—A recent article¹ in this journal has commented on the part played by working conditions, especially psychosocial risk factors, in causing sickness absence, and two editorials have encouraged the need for research calling for action to improve the work environment and to assess its impact upon sickness absence.^{2,3}

While we entirely agree with these views, the paths through which working conditions will lead to sickness absence are not clear. Sickness absence episodes are often medically certified as attributable to "common diseases"; that is, not work related diseases. In Spain, for example, we found that approximately three of four sickness absence episodes were medically certified as attributable to common diseases.⁴ This issue is important because it might partly explain the associations found in a number of studies between working conditions and sickness absence.⁵ If so, the impact of workplace preventive measures on sickness absence could be lower than expected. Alternatively, it could be that many sickness absence episodes medically certified as common diseases were attributable to work related diseases. Newman, however, found that 83% of patients of a primary medical centre declared that their diseases were not related to working conditions.⁶ Similarly, we found that around 85% of sickness absences certified as common diseases were assessed by two experts as probably not work related diseases.⁷ A different approach would be that working conditions operate through two different ways to produce sickness absence either attributable to common diseases or work related diseases.

To further study sickness absence as an appropriate indicator of workplace prevention we propose to test a simplified theoretical model of the natural history of sickness

Figure 1 Simplified theoretical model of natural history of sickness absence.

absence (see fig 1) where working conditions are associated to sickness absence following two different pathways: (1) the development of work related disease (including work injuries), which would lead to sickness absence, and (2) the development of common diseases that, after interacting with working conditions, would lead to sickness absence. For instance, a worker with a minor respiratory disease may ask their general practitioner to certify sickness leave if physical and psychosocial work requirements aggravate their health problem. We have to keep in mind that a sick leave provides an opportunity for recuperation after illness because sickness absence is also a coping strategy to prevent more serious ill health.⁸

According to a recent report, the majority of European Union countries show a separate regulation of the two types of sickness absence in terms of their social security systems (that is, certified needed, waiting days, level of benefits, maximum duration, etc.).⁹ However, at the firm level both types of sickness absence are frequently accounted together because of management reasons. So far, no research has assessed the associations between working conditions and sickness absence distinguishing between sickness absences attributable to work related diseases and those attributable to common diseases.

Furthermore, working conditions interact with other social and personal factors in the causality of sickness absence episodes. Sickness absence could actually be more an indicator of functioning rather than a pure ill health indicator,¹⁰ and we probably will be able to understand more of its significance if we take into account both productive and reproductive working demands¹¹ along with the classic working conditions variables.

Clarification of those complex relations may be a useful tool to both increase action oriented research and to establish priorities for prevention and evaluation programmes.

FERNANDO G BENAVIDES
JOAN BENACH

Occupational Health Research Unit, Department of
Experimental Sciences and Health, Universitat
Pompeu Fabra, Barcelona, Spain

SALVADOR MONCADA
Occupational Health Unit, CCOO Trade Union,
Barcelona

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Authors' reply

EDITOR,—Benavides *et al* note an interesting potential explanation for the association between psychosocial work environment and sickness absence. They suggest that this association reflects to a large extent the relation between common diseases and sickness absence that is dependent on working conditions. We believe that this may be a partial explanation but that there are also potential pathways through which working conditions may be linked with risk of health problems. Poor working conditions are a source of allostatic load and cumulated stress, which can lead to pathophysiological consequences.¹ These include suppressed cellular immunity found to increase vulnerability to infections and common cold, increased likelihood of chronic musculoskeletal tension, a risk factor of musculoskeletal problems, and behaviours involving risk to health.^{1–3} Through such mechanisms, poor psychosocial work environment may be hypothesised to contribute to infections, musculoskeletal disorders and injuries that have been found to account for 60% to 80% of all spells of sickness absence in men and women.^{4,5} Continued exposure to poor psychosocial work environment has also been found to predict other stress related problems, such as increased ambulatory blood pressure and increased progression of atherosclerosis.¹

Taken together, the evidence available is compatible with the hypothesis that improvement of working conditions may not only reduce the consequences of morbidity (for example, sickness absence) but also the risk of morbidity.

JUSSI VAHTERA

Finnish Institute of Occupational Health, Turku,
Finland

MIKA KIVIMÄKI

Department of Psychology, Division of Applied
Psychology, University of Helsinki, Helsinki, Finland

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