



Letters to the editor

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Authors' reply

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whether a pregnant hypertonic nurse should be advised go on sick leave) seems to provide the highest levels of evidence. Apparently, however, the references on which the scientific evidence is founded are mainly based on dichotomous exposures: work or absence from work. While this approach may sufficiently satisfy other physicians, the hallmark in occupational medicine is a more detailed appraisal of the exposure and the exposure-effect relationship. It is more than likely that the blood pressure of a pregnant worker is affected differentially with various work exposures. Some jobs may have a highly significant influence, and other jobs may be irrelevant. The patient's history may also disclose nonoccupational factors that could influence blood pressure, such as anxiety, overweight, problems or stress in the home environment, and the like. The intervention in this case is not necessarily a question of work or sick leave, but rather advice based upon a thorough examination of the full story.

The authors conclude that the method of evidence-based medicine seems to be feasible also for occupational medicine. As to the question of whether evidence-based medicine is sufficient, there are no comments. Literature reviews remain important sources of evidence. However, as the examples seem to demonstrate, their yield may often be limited. Patients may not be really better informed, and health may not necessarily be improved if any action is based on evidence-based medicine only. The optimal selection and interpretation of scientific evidence deriving from the literature is highly dependent on the background, experience, and communication skills of the occupational physician. Of particular importance is the ability to ask relevant questions, to achieve patient confidence, and to identify objects for preventive activities

that may differ from those coming up from a Medline search.

Of course, we are not in favor of loose talk and ad hoc ideas, notions, or concepts. We suggest, however, that the clinician should be well aware of the possibilities of basing assistance to the patient on broader evidence, which, as brilliantly presented in a number of articles in the *British Medical Journal* (eg, reference 2), may derive from ample sources apart from the strictly scientific one. Indeed, any credible feedback to the patient and, not the least, any reassurance has to build on a more personal and committed approach.

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We thank our colleagues Anders Ingemann Larsen and Jørgen Riis Jepsen for their interest in our paper and are pleased that they have started discussion on the current topic of how to utilize evidence-based medicine (EBM) in occupational health. The main argument of Drs Larsen & Jepsen (1) is that, in addition to scientific evidence, also other sources of evidence should be used in clinical practice, such as narrative evidence and

intuition. All the authors of our paper (2) do agree on this proposition. Furthermore, we find it totally consistent with the definition of evidence-based medicine. According to Sackett et al (3) "EBM is the integration of the best (clinically) relevant research evidence with the clinical expertise of the physician and with patient values [p 1]." We agree with the authors that, in addition to scientific evidence, clinical skills, in-

cluding good communication, are needed in the encounter with a patient.

Considering the arguments that our conclusions are too modest and not very useful for the patients, we clearly disagree. One may speculate about what these patients would have wanted in addition to the questions that are stated, but that is not the relevant issue in our article. In addition, Larsen & Jepsen make some unjustified critical remarks, as they suggest that the literature cited offers only limited evidence. In our opinion, most of the sources cited offer rather convincing evidence from, for example, meta-analyses and will really prevent "loose talk and ad hoc ideas [1, p 359]."

With respect to our second case history, Larsen & Jepsen suggest that they are not interested in the evidence about vaccination in their recommendation that advice about hygienic work practices is always needed irrespective of the evidence. We agree that primary preventive measures are important. Nevertheless, the fact should be taken into consideration that protection against aerosols is not simple to implement. There is evidence from other branches that even a class P3 respiratory protection mask is not enough to prevent exposure to aerosols (4). After we had done our search, a systematic review about the hepatitis vaccination problem was published (5). In this review (5), the authors come to the same conclusion: "These results do not suggest that all workers systematically have to be vaccinated against hepatitis A Vaccination might be discussed for those workers heavily exposed to sewage [p 767]". This is the same advice given to our sewage worker.

In the third example, on burnout, Larsen & Jepsen state that we relied on one article only. However, this article was a systematic review of 64 studies comparing different approaches. Larsen & Jepsen promote interventions directed towards environmental psychosocial factors. However, according to the review by van der Klink et al (6), there is insufficient evidence in favor of these kinds of organizational interventions. From a preventive viewpoint, it is probably worthwhile to try to change work conditions, but work conditions in teaching are difficult to change in the short term. When we combine this problem with the evidence on cognitive behavioral therapy, we are of the opinion that the proposed therapy would be the most beneficial to the teacher in question. This decision does not rule out the importance of assessing the specific work conditions of the

teacher by the occupational physician and taking them into account in the therapeutic process.

The statement of Larsen & Jepsen with respect to the fourth case is exactly in line with what we advised. Considering the remark on the exposure-effect relationship of physically demanding work and pregnancy, Larsen & Jepsen have clearly not studied the meta-analysis of Mozurkewich (7), in which a dose-response relationship was demonstrated.

Finally, Larsen & Jepsen state "of particular importance is the ability to ask relevant questions, to achieve patient confidence, and to identify objects for preventive activities . . . [1, p 359]." We fully agree and would like to call the use of this ability evidence-based medicine!

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