Reviewer's report

Title: Prevalence of low back pain and associated occupational factors among Chinese coal miners

Version: 6 Date: 14 December 2011

Reviewer: Tapio Videman

Reviewer's report:

I could not agree with authors’ conclusions. There are several challenges in all studies on ‘epidemiology of reported pain’. It is true that physical activity can trigger pain. Yet, physical activity usually is beneficial for spine structures, although it may aggravate symptoms from pathology underlying back pain. There is no need at all to have a prospective study, as declared by the authors, to confirm that abnormal posture produces back pain; such studies have been reported as early as in the 1950s. Moreover, so-called “abnormal postures” are experienced daily in everyday life, and the need for breaks in all jobs is known, which does not require additional epidemiologic studies.

Isn’t it confusing that physical activity, the main suspected risk-factor, is included in most preventive and therapeutic interventions targeting spinal disorders? In real life, most working and non-working people have had ‘discomfort or pain’ in the back, but why did 1/3 of subjects in the current study not report having back pain? There are numerous other factors, such as cultural, psychological and social factors that can modify pain reporting. It is unclear which factor the Nordic Musculoskeletal Questionnaire ‘measures’, and there are limitations and significant error to using dichotomous scale (in this and other studies). In addition, it is not clear that the surface workers’ jobs are similar enough to the underground “miners” to warrant considering them in the same group. Why did they not analyze the underground miners and surface maintenance workers separately? Yet, we don’t need to simply repeat ‘pain epidemiology studies’ in different countries. Greater attention and efforts could, for example, be paid to the better understanding of spinal illnesses underlying back pain symptom, with new ideas and better measurements of both suspected ‘risk’ factors and pathologies.