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MANAGEMENT OF LOW BACK PAIN AND THE WORKING ENVIRONMENT

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How can we translate scientific evidence and knowledge about occupational back pain in effective and affordable prevention policies in the working environment? This will be the main focus of the presentation.

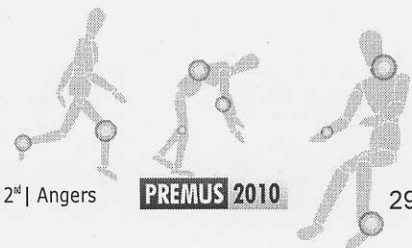
It is commonly acknowledged that non-specific low back pain (LBP) is a widespread health complaint among adults of working age, frequently affecting their capacity for work, causing loss of work time, putting sometimes in jeopardy the worker's employability and requesting from the OH services and professionals early recognition, adapted prevention and management strategies. Those unfavorable effects are mostly ascribed to the chronic or recurrent forms of low back pain (CLBP).

From a public health perspective, CLBP is the main reason of about 30 of the cases being granted permanent disability benefits in developed countries (the top cause being mental disorders) and this is a reason of concern when considering the continuous increase in early retirement for health reasons observed after 50 years of age. However from a business perspective, if occupational LBP may have negative impacts in terms of sickness absences rate or early retirement, the extent of those impacts is actually function of each country wage replacement system. When the system relies directly on the company budget, the managers have a stronger incentive for LBP management than when the financing of the system is indirect, through the taxpayer for instance.

In this context, management of LBP at the company level will be discussed in its wide sense, including all interventions aiming to prevent LBP in healthy workers (primary prevention), or to care for workers with sub acute LBP to prevent their transition to chronicity (secondary prevention) and to promote their return to work.

When considering early (or primary) prevention, policies have been based for 40 years or more on two axes : ergonomics interventions aiming at reducing biomechanical constraints through implementation of physical modifications or mechanical lifting equipment at the workplace, and workers training in "safe" handling techniques. Unfortunately, scientific studies have consistently failed in proving the effectiveness of those prevention policies. Two recent systematic reviews confirm this trend. In their review, Martimo et al (2008) concluded that there is no evidence to support the use of training in work techniques as a way to prevent LBP. On the other hand, Driessen et al (2010) showed that physical or organizational ergonomics interventions were not more effective on LBP than no intervention. Whereas more and more ergonomists stress the key influence that workers participation may have on effective improvements in working conditions, a randomized control trial (RCT) involving a substantial degree of participative ergonomics was not successful in preventing musculoskeletal disorders among kitchen workers (Haukka et al 2008). Hence is it time for leaving aside those widespread prevention practices? Is risk factors reduction a logical dead end as long as primary causative mechanisms of low back pain are not determined? Or should we question conclusions drawn from a limited number of RCT's type studies? Should ergonomists and other prevention practitioners reconsider the content of the interventions in order to design really multidimensional interventions? The presentation will bring its own contribution to this heated debate by introducing additional thoughts from a practitioner point of view.

Another option for LBP prevention strategies would be instead of aiming at etiologic factors, to focus on those prognostic factors that influence the duration and consequences (sick leave, disability, health care



consumption,...) of low back pain. Solid scientific evidence show indeed the effectiveness on disability of various interventions designed to promote an early return to work (RTW). Since the pioneering work of Loisel and co-workers (1997), workplace based RTW interventions have shown to be effective, among sub acute LBP workers and in comparison to usual care, on return to work rate and reduction of the number of days of absence from work at short and medium terms, even if improvements in functional status or pain are not often observed (Hlobil et al 2005). There is however still some controversy concerning the optimal content of a RTW program, and the balance to ensure in those programs between the medical rehabilitation component (graded activity) and the ergonomic or occupational health component to deliver at the workplace itself (van Oostrom et al 2009). Nonetheless the evidence is now sufficient to promote those RTW policies in the working environment.

The actual implementation of RTW programs in companies and businesses raises however several challenges. First, it must be pointed out that large companies, mainly multinational companies, are traditionally prone to adopt innovations that they see as cost savings measures and in fact in many countries, large companies already make use of various forms of return to work measures or programs. This positive evolution may however enlarge in the future the gap between the workforce employed in 1st class businesses and the rest of the working population, increasing thus the inequalities in health due to the working environment. Translation of scientific knowledge into practice should thus in our view imply an universal approach giving every worker, whatever the size or type of company he/she is working for, access to measures facilitating return to work. Such an universal access could be achieved through legislation and its implementation carried out either through the social insurance system, or through the occupational health system where it exists.

Modifying legislation and implementing new practices in a social insurance system implies at least two other challenges: putting on board for such a reform all the stakeholders (social insurers, employers, trade unions, ...) and modifying the common beliefs and daily behaviours of all health professionals involved in the process (general practitioners, occupational health physicians, social insurance physicians). Taking as example the implementation process of a RTW program for low back pain workers initiated in Belgium in 2005, at the country level, we will outline several key factors that may influence success or failure of a scientifically sounded program at its implementation stage. One of the most evident difficulty is to close the gap between the "prevent" and "cure" paradigms.

In conclusion, the presentation will show the interest that companies and businesses may have in integrating secondary and primary prevention of low back pain in a broad "quality of life" at work policy.

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