

Editorial

Non-Specific LBP of Working Populations is a Big Economic Burden in Japan-Need for Restriction or Minimum Exposure to LBP Associated Factors-

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Received: August 03, 2017; **Accepted:** August 16, 2017;

Published: August 24, 2017

Keywords

Non-specific low back pain; Industrial workers; Economic loss

Abbreviations

LBP: Low Back Pain; QOL: Quality of Life; BMI: Body Mass Index

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LBP is defined as a pain within the past month that was felt anywhere from the L2-3 interspace through the gluteal area and lasted longer than 24 hours [1], but it seems to be a kind of ambiguous syndrome which has a high prevalence in musculoskeletal disorders. Globally, LBP is one of the most common health problems. In 1999, Anderson reported that 50.9 to 69.9% of people have experienced LBP at some time in their lives [2]. LBP also affects a huge number of industrial workers, and results in reduced QOL, absence due to sickness/illness, loss of workers' productivity, and finally high health care costs. In terms of medical and social economics, it is undeniable that LBP's influence on working generations is a very heavy burden on many industrialized countries. In the United Kingdom alone, the upper estimated economic loss associated with LBP is over £12.3 billion annually [3]. Furthermore, it is reported that LBP is the most common reason for filing worker's compensation claims, and the second highest cause of sick leave in the US [4].

I often care for industrial workers with non-specific LBP in my institute. They have no neurological defects except pain. No symptomatic lesions are usually detected on their radiograms, MRI, and by symptom reproducible tests in the lumbar spine [5]. In my experience, the pain does not respond to standard conservative therapy or even to surgical intervention including fusion surgery, and the patients persistently complain of chronic LBP. As a result, prolonged sick leave continues and costs of treatment increase especially when they are associated with occupational illness or worker's compensation. In Japan, 83.4% of 65,496 people claimed that they had experienced LBP, and 24.6% of them took sick leave because of LBP at some point in their lives according to a large internet research project [6]. Matsui et al. reported that the lifetime prevalence of LBP was 60.5% (63.7% in men, 47.6% in women), and the point LBP was 29.9% (30.6% in men, 26.9% in women) in various physical

workers of Japan [7]. Unfortunately, there are few reports about economic loss due to LBP in Japanese workers. But Shinohara et al previously demonstrated that 5,556 victims suffered from accidental LBP as an occupational illness in 1994, and estimated that a patient treated for non-specific LBP needed approximately 530,000 yen for worker's compensation. Their averaged sick leave and recuperation durations were 2.7 ± 0.5 and 1.2 ± 0.4 months [8]. Ito et al. showed that Japanese annual medical costs of work-related LBP were estimated at 82.14 billion yen in 2011, and it accounted for 9.8% of the entire medical cost of LBP in Japan [9]. This leaves little doubt that LBP of working populations is a big economic burden in Japan as well as in other industrialized countries.

There are a huge number of reports analyzing predictors of LBP, especially, modifiable associated factors, which are very closely related to lifestyle and employed status of workers. In literature, smoking in young generations, alcohol intake, obesity (BMI>30), working hours spent on repeated activities, depressive symptoms and so forth are considered modifiable risk factors of LBP. Interestingly, in Austin J Musculoskelet Disorders of 2016, Fadhli MZK et al reported ergonomic risk factors and prevalence of LBP among bus drivers. The authors recommend prevention of any bad health effects of the drivers [10]. The article is very intriguing from the view point of industrial health. I personally suggest that restriction or minimum exposure to LBP associated factors could lead to improvement of workers' productivity, QOL and many other benefits.

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