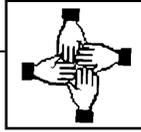


<i>Preventing overuse injuries...</i>	<i>RSI and Overuse Injury Association of the ACT, Inc.</i>	<i>... reducing their impact</i>
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Submission to the Strategic Review of Health and Medical Research

The RSI and Overuse Injury Association of the ACT, Inc recommends to the Strategic Review, the following priorities with respect to work-related upper limb disorders (WRULDs) in Australia:

- **The need for accurate statistics on the prevalence and incidence of WRULDs**
- **the need for further research targeted to treatment;**
- **the need for improved dissemination of research; and**
- **the need for integration and dissemination of research from different fields**

BACKGROUND

Definition

Work-related upper limb disorders are defined by the European Agency for Safety and Health at Work as “impairments of bodily structures such as muscles, joints, tendons, ligaments, nerves, bones and the localised blood circulation system, that are caused or aggravated primarily by work and the environment in which work takes place”.¹

Occurrence

These disorders are very common. According to the Lancet, five to ten percent of the adult working population has an overuse injury that limits daily activity.² In Australia, research has shown that neck and upper-limb musculoskeletal problems are prevalent in:

- 95 percent of hairdressers³
- 58 percent of university staff and students⁴
- 80 percent of APS staff⁵
- 90 percent of sonographers⁶

Furthermore, approximately 50 percent of all sports injuries are due to overuse.

¹ The European Agency for Health and Safety at Work, 2007

² Van Tulder, M., Malmivaara, A., Koes, B. (2007). Repetitive Strain Injury. *Lancet*, 369: 1815-22.

³ Best, M, 2002

⁴ Sawyer, J. (2004). Knowledge of ergonomics and computer use of post-graduate students and academic staff. *Journal of Occupational Health and Safety*, 20(2), 139-153.

⁵ Strazdins, L. Bammer, G. (2004). Women, work and musculoskeletal health. *Social Science & Medicine*, 58, 997-1005.

⁶ Mason, B. & Gregory, V. (2006). 2006 ASA Survey Results. *Sound Effects*, 3, 12-15.

Consequences

The consequences of work-related upper limb disorders are severe. Research shows that they often lead to chronic pain, unemployment or insecure employment, financial stress and poverty, social isolation and family problems. Many with the condition suffer from stigma, isolation and loss of self-esteem. For those in the workers' compensation system, severe stress is very common.⁷ All the above consequences of overuse injury can lead to long-lasting mental health issues, especially depression.⁸

For example, a survey of 427 Australian sonographers showed that 91 percent had an overuse injury in at least one part of the body.⁹ Twenty-four percent described these symptoms as constant pain. Of those surveyed, the condition:

- interfered with work for 84 percent
- interfered with other activities for 80 percent
- interfered with sleep for 65 percent
- reduced work hours for 26 percent
- required time of work for 30 percent

While 87 percent of those surveyed found that the symptoms improved with treatment, only 25 percent had complete resolution.

Cost of work-related upper limb disorders

Figures for Australia are not available, however, studies done in the EU provide a relevant and comparable picture of the cost of work-related upper limb disorders. These have estimated that these disorders cost between 0.5 and 2 percent of Gross National Product (GDP).¹⁰

RESEARCH PRIORITIES

The need for statistics on the prevalence and incidence of WRULDs

There is currently very little data on the incidence and prevalence of work-related upper limb disorders in Australia. Both Safe Work Australia and the Australian Bureau of Statistics use the term "body stressing" which is not used by any other jurisdiction internationally and thereby precludes international comparisons. This term is not easily broken down into disease categories such as low-back pain and work-related upper limb disorder.

⁷ Lippel K. Workers describe the effect of the workers' compensation process on their health: a Quebec study. *Int J Law Psychiatry*. 2007 Jul-Oct; 30(4-5): 427-43. Epub 2007 Aug 10. From <http://www.ncbi.nlm.nih.gov/pubmed/17692917>

⁸ Sluiter JK, Frings-Dresen MH. Quality of life and illness perception in working and sick-listed chronic RSI patients, *Int Arch Occup Environ Health*. 2008 Feb; 81(4):495-501 from <http://www.ncbi.nlm.nih.gov/pubmed/17638005>

⁹ Mason, B. & Gregory, V. (2006). 2006 ASA Survey Results. *Sound Effects*, 3, 12-15.

¹⁰ European Agency for Safety and Health at Work, (2010) *'Work-related neck and upper limb musculoskeletal disorders.'*18.

The need for further, good quality research

Through animal and other research studies, especially in the sports field where overuse injuries are very common, the basic biology of WRULDs is reasonably well understood. The evidence base for treatments, especially for the different 'stages' of the condition, is, however, lacking and we submit that this is where research should be focused.

People with work related upper limb disorders often undergo "a merry-go-round" of treatments in order to find one that works, frequently suffering harm and wasting a good deal of money in the process. Therefore, establishing a high-quality evidence base for treatment of the condition is a high impact area for research, with potential for harm reduction, saving money on useless treatments and returning people in the prime of life to work and full participation in home and community life.

In particular, it is very important that longitudinal research be carried out to determine the effects of different treatments. Such research requires long term funding.

Improved dissemination

We support efforts to disseminate more widely research results to treating professionals. For example, even though experts agree that inflammation is only briefly present at the beginning of the condition, anti-inflammatories are a very commonly prescribed remedy. In view of their serious side effects and the expense to Medicare and the PBS, we believe it is very important that ways be found to inform medical professionals about research on treatments that are effective and appropriate.

Integration of research from different fields

Many leading researchers on the treatment of overuse injury work in the field of sports injury; it is our observation that this research does not inform the treatment decisions of doctors working with work-related overuse injuries. In fact, there are still doctors who work within the 'somatisation' paradigm of the 1980s, which is unhelpful and highly stigmatising to patients. Moreover, it is contradicted by a large and growing body of animal research on overuse injuries.

Consumer input into research priorities

We welcome opportunities for consumer input into research design and setting research priorities. However, we note that consumer organisations representing people with work-related injury of all kinds are lacking in Australia. In particular, we are the only organisation representing people work-related upper limb disorders and we know of no organisation representing the very large number of people suffering from lower back injuries. We are, of course, an ACT-based organisation with very limited funding and therefore, very limited ability to contribute to research. We believe a system similar to the Dutch model of funding in which patients are entitled to government support to establish and run self-help groups for any condition, would benefit Australians with a wide range of conditions who do not have access to adequately funded self-help groups.

Ann Thomson

Director