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Attitudes, Beliefs and Health Literacy Impact How Patients Manage Chronic Lower Back Pain

According to a New Study Published in *PAIN*®

Philadelphia, PA, July 7, 2010 – Approximately 10% of low back pain (LBP) sufferers experience persistent pain and significant disability. In a study published in the August issue of *PAIN*, a group of Australian researchers investigating the relevance of health literacy in patients with chronic lower back pain (CLBP) found that LBP-related beliefs and behaviors affect a person's disability more than pain intensity or a standard measure of functional health literacy. However, when delving deeper into aspects of health literacy, important factors were identified which might help to explain disability associated with CLBP, highlighting important factors to consider in the delivery of information for CLBP.

Health literacy, the ability to seek, understand and utilize health information, is important for good health. Low levels of health literacy have been associated with poorer health outcomes in many chronic conditions, although this had not been studied previously in CLBP, even though CLBP imposes a significant personal and societal burden.

The health literacy of individuals with CLBP was examined using a mixed methods approach. 117 adults participated, comprising 61 with no history of CLBP and 56 with CLBP (28 with low and high disability, respectively, as determined by a median split in disability using a scoring system for characterizing disability associated with lower back. pain). The sample group consisted of Australian adults from a middle class community with a similar socioeconomic status.

Investigators collected data regarding severity of pain, LBP-related disability, fear avoidance, beliefs about LBP, and pain catastrophizing (the tendency to have a fixation about pain and feel unable to cope with it). Health literacy was measured using the Short-form Test of Functional Health Literacy in Adults (S-TOFHLA). A sub-sample of 36 participants with CLBP (with high and low levels of CLBP-related disability) also participated in in-depth interviews to qualitatively explore their beliefs about LBP and experiences in seeking, understanding and using information related to LBP.

"Although we know a fair amount about the reasons for persistent pain and disability among individuals who experience lower back pain, interventions which aim to modify these factors deliver only modest changes in outcomes. This suggests that we may be overlooking an important factor which influences treatment outcomes – and that is *health literacy,*" according to lead investigator Dr. Andrew Briggs, School of Physiotherapy and Curtin Health Innovation Research Institute, Curtin University of Technology, Perth, Australia. "Quantitative data confirmed that LBP-related beliefs and behaviours, rather than pain intensity and functional health literacy skills measured from a standard questionnaire, are important correlates of LBP disability. Less positive beliefs and pain attitudes are associated with persistence of pain and high levels of LBP-related disability. These include beliefs about the inevitable dire consequences of LBP, fear avoidance beliefs and the belief that pain results in a hopeless situation (catastrophizing). Beliefs and subsequent pain-related behaviours and coping strategies are shaped by interactions with health professionals and health information. Therefore, it is plausible that health literacy and LBP beliefs are related and that health literacy may be an important driver of LBP-related disability. We wanted to explore how people with CLBP seek, understand and utilize health information more thoroughly than information derived from a questionnaire, so we included a large qualitative arm to the study."

High-disability (HD) and low-disability (LD) groups were compared. The HD group reported a greater degree of interference with recreational activities (86%) compared to the LD group (27%). The HD group also reported significantly greater fear avoidance beliefs about physical activity, adopted a more passive coping style and was less optimistic about the future progression of their condition. While all participants with CLBP had adequate health literacy scores measured on a questionnaire (S-TOFHLA), qualitative (interview) data highlighted difficulties in seeking, understanding and utilizing LBP information.

Individuals in both the HD and LD groups identified similar perceived causes for LBP, including sports injuries, incorrect manual handling procedures, and poor posture. Individuals with CLBP-low disability also cited their work practices, in particular sitting at a computer for too long, general "wear and tear," and heritability as causes of their disability, while individuals with CLBP-high disability cited being overweight and ageing as causes for their LBP.

Participants predominantly sought information from health professionals when their disability or LBP became unmanageable, or when it interrupted their lifestyle. A strong theme that emerged across both high and low disability groups was the perception that physiotherapists and chiropractors had more expertise in the management of LBP than general practitioners and were therefore able to provide more specialized information. However, most participants stated that their understanding of LBP issues was hindered by complex medical terminology.

An important finding from this study was that individuals with CLBP-high disability tended to attribute their pain experience to an anatomic reason, while this trend was not noticed in the CLBP-low disability group. “Although anatomic reasons may be important in some cases of CLBP, international data and guidelines highlight the importance of psychological and social factors in the etiology of CLBP,” commented Dr. Briggs. “The fact that individuals with CLBP-high disability believed anatomic factors were the primary reason for their pain experience highlights that belief systems and information provided to patients are critically important in management.”

The article is “Health literacy and beliefs among a community cohort with and without chronic low back pain” by Andrew M Briggs, Joanne E Jordan, Rachelle Buchbinder, Angus F Burnett, Peter B O’Sullivan, Jason Y.Y Chua, Richard H Osborne, and Leon M Straker. It appears in *PAIN*, Volume 150, Issue 2 (August 2010) published by Elsevier. DOI: 10.1016/j.pain.2010.04.031

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NOTES FOR EDITORS

Full text of the article is available to journalists upon request. Contact Christine Rullo at 215-239--3709 or c.rullo@elsevier.com to obtain copies. Journalists wishing to set up interviews with the authors should contact Ann Marie Lim, Corporate Communications, Curtin University of Technology, at + 61 8 9266 4241 or ann.lim@curtin.edu.au or Dr. Andrew Briggs at A.Briggs@curtin.edu.au.

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