

# The Relation between Fear of Movement and Pain Intensity with Physical Disability in Chronic Low-Back-Pain Patients

\*Afsharnezhad T. (M.Sc.)<sup>1</sup>, Rezaei S. (B.Sc.)<sup>2</sup>, Yusefzadeh Sh. (M.D.)<sup>3</sup>

## Abstract

**Objectives:** There is growing evidence for the idea that fear of movement may be as disabling as pain intensity in chronic low back pain patients (CLBP). The purpose of the present paper is to investigate the relation between fear of movement and pain intensity with physical disability in chronic low back pain patients and the role of pain duration, gender and age differences in these relations.

**Materials & Methods:** In this analytical and cross-sectional study, 194 patients with chronic low back pain for more than three months, referred to seven rehabilitation clinics in Rasht city during four months, were selected consecutively. Data were collected by Numerical Rating Scale, Roland-Morris Disability Questionnaire, Tampa Scale for Kinesiophobia and Demographic questionnaire and analyzed by Pearson Correlation Coefficient and Multi Regression.

**Results:** Significant correlations were found between physical disability with fear of movement, pain intensity and age ( $P < 0.001$ ) and also pain duration ( $P = 0.036$ ). These relations were not different between males and females. In first Regression model, fear of movement and pain intensity, were the strongest predictors of physical disability. No differences were found between these factors. Then, prediction model was prepared adding age, sex and pain duration. Multiple regression analyses revealed that the fear of movement and pain intensity were superior in predicting disability. Among demographic variables, only the Beta Coefficient for age was significant in predicting disability ( $P = 0.002$ ).

**Conclusion:** Fear of movement, pain intensity and age are important factors influencing physical disability in individuals suffering a chronic low back pain. Thus, for minimizing physical disability, alone with reducing pain intensity, patients showing fear of movement can be offered interventions that focus on reduction of the fear.

**Keywords:** Chronic low back pain/ Fear of movement/ Pain intensity/ Physical disability

Receive date: 10/7/2008

Accept date: 24/10/2009

1- M.Sc. of Sports Sciences, Academic Member of Shomal University, Amol, Iran

2- M.Sc. Student of Psychology, Gilan University, Rasht, Iran

3- Neurosurgeon, Assistant Professor of Gilan University of Medical Sciences, Rasht, Iran

## \*Correspondent Address:

Sports Sciences Department, Shomal University, Imamzadeh Abdollah Three-way, 5 Km Haraz Road, Amol, Iran.

Tel: +98 121 2203731

\*E-mail: afsharnezhad@gmail.com