



## Pain Syndrome and Depression: an overview study

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### ABSTRACT

Musculoskeletal Pain Syndrome (MSPs) majorly consists of a wide range of degenerative inflammatory conditions, affecting the muscles, tendons, ligaments, joints, peripheral nerves, and supporting blood vessels [1]. This syndrome is one of the most common disorders of developed and developing countries that may develop at any age and may cause dysfunction and disability, medical and social problem and decreased quality of life [1,2].

It has been argued that MSPs are pain symptomatology's which is due to damage to the locomotive system that produced by external factors, high biomechanical exposure, or psychosocial or labor-psychological factors [3]. These disorders are observed as acute or chronic problems and can lead to many consequences for the suffered individuals, high costs for health systems especially in the case of chronic pain [3].

Musculoskeletal Pain Syndrome is one of the most common disorders among developed and developing countries that is seen at any age group and could cause dysfunction and disability, medical and social problem and decreased quality of life. [1, 2, 4]. This syndrome account for a majority of chronic pain and is an

important reason of persistent disability in all over the world [5]. Musculoskeletal Pain Syndrome impacts on all aspects of health such as physical and mental health. The association between chronic pain and mental health has been verified in many evidences [1, 6]. These association can be biological, psychological, and social level and could be related to environmental factors like work-related factors and social support [1]. This Syndrome may have a determined or undetermined reason. In the case of unknown reason MSP there is no diagnosed factor after careful examination [7]. According existed evidences psycho-social factors such as emotional and behavioral disorders have also been argued to be linked with MP [8]. Depression, anxiety, negative affect are all associated with lower pain thresholds in healthy individuals and exacerbated in chronic pain including musculoskeletal disorders [9]. It has been reported that negative affect is major cause of chronic musculoskeletal pain and disability [10]

It has been estimated that about 37-41% of individuals around world and nearly 20% of the United States population are suffered from chronic pain [11].

Previous studies conclude that patients with chronic pain are usually suffered from psychosocial problems that may decrease their self-efficacy to control their pain. A majority numbers of cognitive and affective psychosocial factors cause individuals' vulnerabilities and decrease their ability to manage pain themselves [12].

Nowadays, there has been an important increased pain among young adults and university students which may cause adverse effect on their physical and mental and their health-related quality of life. However, the etiology of comorbid of mental health disorders and pain is not clearly linked with depressive, anxiety and substance use disorders. However, the relation between persistent pain and psychopathology is reciprocal and need to be studied more in future [13].

Emotional disorders are also common comorbid factors that cause the severity and persistence of chronic pain. Furthermore, depressive symptoms can cause a longer duration and more severe pain [14]. Among chronic pain, osteoarthritis is a prevalent chronic degenerative musculoskeletal disease that causes articular damage and chronic pain among individuals with age more than 60 years old. Individuals with chronic pain, also suffer from anxiety or depression [15].

The relationship between pain and depression is discussed to be bidirectional. However, why this comorbidity occurs is not well diagnosed. The debate that if depression is an antecedent or a consequence of chronic pain is not clearly responded. Previous study on chronic pain suggests that depression is likely a consequence. On the other hand, with primary depression there is evidence of conversion to chronic pain like low back pain. A large longitudinal cohort study has reported that the presence of depression symptoms predicts low back pain, neck-

shoulder pain, and other musculoskeletal symptoms compared with those who do not have depressive symptoms at baseline. Another study verified that low back pain is more than two times as likely to be reported by individuals with depressive symptoms compared with those without [16].

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