QUALITY OF LIFE AND MENTAL DISTRESS IN PATIENTS WITH CHRONIC LOW BACK PAIN

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Abstract: This study aimed to assess health-related quality of life (HRQoL), pain intensity, and mental distress among individuals with chronic low back pain (CLBP). It also examined how HRQoL differs based on mental distress levels and explored correlations among the measured variables. A total of 25 patients participated in the study, with data collected using the SF-36 Health Status Questionnaire (SF-36), the Clinical Outcomes in Routine Evaluation–Outcome Measure (CORE-OM) questionnaire, and the visual analog scale (VAS) for pain assessment.

Keywords: chronic pain; low back pain; quality of life; SF-36; pain assessment; CORE-OM.

Introduction

Chronic pain (CP) is a widespread issue that affects various aspects of life, including physical health, psychological well-being, and social interactions. It can lead to depression, feelings of hopelessness, loneliness, a diminished sense of identity, and a lower quality of life. Studies estimate that about 20% of adults in Europe suffer from chronic or recurring pain, and globally, one in ten adults is diagnosed with CP annually.

For over two decades, the International Association for the Study of Pain (IASP) has defined CP as pain persisting beyond the normal tissue healing period, typically considered to be three months. It is described as both a sensory and emotional experience, often linked to actual or potential tissue damage. Until May 2019, CP was not systematically classified in the International Classification of Diseases (ICD-10). However, with the adoption of ICD-11 by the World Health Organization (WHO), CP is now recognized not just as a symptom but as a disease in itself. Classifications of CP follow a biopsychosocial model, which acknowledges the complex interactions between biological, psychological, and social factors.

Chronic low back pain (CLBP) is among the most prevalent chronic pain conditions, imposing a significant burden on individuals and society. It can severely impact an individual's HRQoL, leading to intense pain, disability, reduced mobility, and an inability to work.

Materials and Methods

The study was conducted at the ASMI clinics in the departments of neurology, vertebrology and neurosurgery. Participants were selected based on specific criteria: they had to be at least 18 years old, diagnosed with chronic low back pain (CLBP) lasting three months or more, free from cognitive or mental disorders. Of the 25

individuals screened, 20 met the inclusion criteria and voluntarily agreed to participate after being informed of the study's objectives. Written consent was obtained from all participants. Researchers distributed questionnaires, which participants completed and returned to the Clinical Department of Pain Management. Of the 20 distributed questionnaires, 18 were returned, but nine were excluded due to incomplete responses.

CORE-OM Questionnaire

The Clinical Outcome in Routine Evaluation—Outcome Measures (CORE-OM) questionnaire was used to assess general mental distress. This questionnaire consists of 34 statements, and participants rated how often they experienced the described feelings over the past week on a scale from 0 to 4 (where 0 means "never" and 4 means "almost always").

The Visual Analog Scale (VAS) was used to assess pain intensity. This scale consists of a straight line with numerical values ranging from 0 to 10, where 0 (on the far left) represents no pain, and 10 (on the far right) represents unbearable pain.

Results

This study involved 25participants. The median age was 57.5 years (interquartile range from 49 to 65 years) in a range of 28 to 79 years. Furthermore, we recorded socio- demographic characteristics such as gender, age, education, employment, and marital status (Table 1).

The distribution of scores for each scale of the SF-36 Health Status Questionnaire showed the highest median score for psychological health (56.0) and the lowest median score (0.0) for both physical limitations and emotional limitations. The median score for the CORE-OM total was 1.24, which is below the borderline value of 1.38, while the median score for the well-being (1.75) and problems (1.79) subscales were above the borderline value.

A statistically significant difference in the SF-36 Health Status Questionnaire subscales considering a high and a low level of mental distress (CORE-OM) was found between the groups of participants. The participants who had high levels of mental distress noted significant emotional limitations ($p = 0.003$), lower energy ($p < 0.001$), poorer psychological health ($p < 0.001$) and social functioning ($p < 0.001$), stronger pain ($p = 0.007$), and poorer general health ($p < 0.001$) in comparison with participants who had low levels of mental distress (Table 3).

A moderate negative correlation was found between the well-being dimension of the CORE-OM and all subscales of the SF-36 Health Status Questionnaire, except for physicalfunctioning and limitation. A moderate negative correlation was found between the CORE- OM problems and functioning dimensions and all of the subscales of the SF-36 Health Status Questionnaire, except for physical limitation and functioning. The CORE-OM total had a significant weak negative correlation with the SF-36 Health Status Questionnaire subscales of emotional limitations, energy,

psychological health, social functioning, pain, and general health. Moreover, a weak negative correlation was found between the VAS and SF-36 physical functioning (r = −0.28), between the VAS and SF-36 physical limitations (r = −0.19), and between the VAS average and the SF-36 Health Status Questionnaire pain subscale (r = −0.34) (Table 4).

Implications for practice

By confirming trends observed in international literature, our study serves as a crucial foundation for raising awareness among healthcare professionals. It also underscores the administrative and logistical measures required to ensure adequate, multidisciplinary treatment for individuals with CLBP.

Conclusion:

This study confirmed that participants with chronic low back pain (CLBP) experienced poorer physical health compared to their mental health, as assessed by the SF-36 Health Status Questionnaire.

Findings from the Clinical Outcome in Routine Evaluation—Outcome Measures (CORE-OM) questionnaire revealed that health-related quality of life (HRQoL) varied based on the level of mental distress among participants. Additionally, CLBP was found to be significantly associated with physical functioning and physical limitations.

Overall, the study highlights a strong connection between mental distress and nearly all aspects of HRQoL in individuals with CLBP.

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