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457 - PREVALENCE OF PHYSICAL COMORBIDITIES AMONG ADULTS WITH CHRONIC PAIN. A SYSTEMATIC REVIEW AND META-ANALYSIS

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Resumen

Background/Objectives: Although physical comorbidities among adults with chronic pain have been widely studied, the evidence has not been previously synthesized. This review addresses this gap by systematically reviewing the literature to synthesize evidence on the prevalence of physical comorbidities among adults with chronic pain (CP).

Methods: A literature search was conducted of PubMed, Scopus, Ovid Medline, Web of Science and Embase from January 2015 to May 2025. Articles examining physical comorbidities in individuals with CP, including those that report the prevalence data of such comorbidities, or provide sufficient data to calculate it were included. Two independent reviewers completed abstract screening, full-text review, and data extraction and rated risk of bias. Random-effects meta-analyses were applied to estimated pooled prevalences comorbidities with 95%CI. Heterogeneity was assessed using I2, Cochrane Q, and 95% prediction intervals and to assess the potential publication bias, a funnel plot, and the Egger test of asymmetry were used.

Results: A total of 4,683 initial records were identified, 164 full texts were screened and finally 94 studies were included in the review. A total of 23 primary comorbidities were identified. The most frequently reported comorbidities were diabetes mellitus (DM), hypertension (HTA), and obesity (OB), assessed in 41, 36, and 29 studies, respectively. From the meta-analyses, it is noteworthy that in studies carried out in general population with CP the prevalence of HTA was 31% (95%CI: 15-53%), DM was 14% (95%CI: 7-25%), and OB 34% (95%CI: 21-49%). In studies in clinical setting the prevalence of DM was 13% (95%CI: 5-27%). The analysis specifically of musculoskeletal conditions, showed that the prevalence of HTA and DM was in general population 38% (95%CI: 22-58%), 9% (95%CI: 6-14%) and in OB 32.5% (95%CI: 25-41%). Furthermore the prevalence obtained from clinical setting was 49% (95%CI: 32-66%) for HTA; 23% (95%CI: 13-37%) for DM. No data related to OB in this case. The funnel plots neither Egger's test suggesting no evidence of publication bias. The results of the sensitivity analysis, indicated in all cases that none of the studies included would substantially change the overall result of the summarized prevalence if the studies were eliminated from the meta-analysis.

Conclusions/Recommendations: The most common physical comorbidities among individuals with CP are HTA, DM and OB in both general population and clinical setting. This co-occurrence is a significant public health concern that need routine screening in clinical settings, equitable access to specialty care, and personalized treatment.