

The Effect of Gender as a Modifier Variable on the Relationship Between the Results of the Constipation Diagnostic Questionnaire (Rome IV) and the Quality of Life Questionnaire (PAC-QOL)

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Abstract

Background: Constipation is a common condition that negatively affects quality of life. Accurate diagnosis enables tailored treatment for each patient. Currently, the diagnosis of constipation is based on the Rome criteria, developed by field experts. The Patient Assessment of Constipation Quality of Life (PAC-QOL) questionnaire complements the clinical assessment of individuals with constipation. As these instruments were primarily validated in female populations, and given known physiological, behavioral, and social gender-related differences associated with constipation, it is important to examine their validity across genders.

Objectives: The primary aim of this study was to examine the modification effect of gender on the relationship between constipation, as defined by the Rome IV criteria, and impairment in quality of life.

Methods: Adults aged 18 years and older, treated at a physiotherapy clinic of Maccabi

Healthcare Services, were asked to complete two questionnaires during a single session: the Rome IV criteria questionnaire and the Patient Assessment of Constipation Quality of Life (PAC-QOL).

Results: A total of 112 participants were included, of whom 58 were women (52%). A statistically significant gender difference in constipation prevalence was observed, with prevalence among women being 2.9 times higher than among men. Among seven of the eight men diagnosed with constipation, a consistent pattern of diagnostic criteria components was identified, whereas among women no common combination of diagnostic components was observed.

Analysis of the association between Rome IV components and PAC-QOL items by gender revealed that, among women, moderate positive correlations were found between all diagnostic components and quality-of-life impairment domains. In contrast, among men, some components showed no association, and where associations existed, they were weak to moderate. Moreover, the associations observed in men were significantly weaker than those observed in women.

Conclusions: These findings raise concerns regarding the validity of the Rome IV criteria and the PAC-QOL questionnaire. In light of these findings, it may be suggested that these instruments are primarily valid for use in female populations.

Keywords: Constipation, Gender, Rome IV Criteria, Questionnaire, Quality of life, Validation