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Collaborative Care Interventions for Patients with Multimorbidity: Protocol for a Systematic Review and Meta-Analysis with Preliminary Results

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Abstract. Collaborative care interventions have been proposed as a promising strategy for the management of patients with multimorbidity. This systematic review and meta-analysis aims to assess the effectiveness of collaborative care interventions for adult patients with multimorbidity. Furthermore, a meta-regression analysis is planned to determine if certain participant or intervention characteristics can explain variance in effect.

Keywords. Multimorbidity, Collaborative Care, Quality of Life, Systematic Review

1. Introduction

Enhanced collaboration between different types of healthcare professionals and specialties has been proposed as a strategy to improve management of patients with multimorbidity [1]. Existing systematic reviews within the field tend to focus on certain types of participants, interventions, or settings [2-4], which necessitates a comprehensive review capable of providing an overview of the effectiveness of collaborative care interventions for adult patients with multimorbidity. Therefore, this systematic review aims to systematically assess the effectiveness of collaborative care interventions in comparison to usual care among adult patients with multimorbidity.

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2. Methods

This systematic review will adhere to the PRISMA guidelines. Searches will be conducted in CENTRAL, PubMed (MEDLINE), CINAHL, and Embase, supplemented by reference and citation searching. Randomized controlled trials evaluating the effectiveness of collaborative care interventions in comparison to usual care for patients with multimorbidity will be considered. The primary outcome is health-related quality of life, while secondary outcomes encompass various patient reported outcomes and mortality. Risk of bias assessment will be performed using the Cochrane Risk of Bias Tool. To analyze the available data, a meta-analysis will be conducted, including an exploration of possible sources of heterogeneity through subgroup and meta-regression analysis. Furthermore, funnel plots will be created with additional statistical test for funnel plot asymmetry. Certainty of evidence will be assessed according to GRADE.

3. Results

Searches in PubMed, Embase, CINAHL and CENTRAL yielded 4.903 unique records. The PRISMA flow diagram, a diagram of related studies, an outcome overview, and risk of bias assessment of the primary outcome are expected to be completed by July 2024.

4. Discussion

The comprehensive coverage and exploration of factors that potentially influence the effectiveness of collaborative care interventions are considered as strengths. However, limitations are anticipated due to the heterogeneity in patient populations and interventions across the studies.

5. Conclusions

This systematic review and meta-analysis holds the potential to offer beneficial insights for clinicians and researchers regarding the effectiveness of collaborative care interventions for patients with multimorbidity.

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