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Polypharmacy and quality of life in older people: where do we stand? A narrative review

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Introduction

By 2030, the World Health Organization predicts as many as 1 in 6 people will be aged ≥60 years worldwide.[1]

Ageing has been identified as a considerable risk factor for multimorbidity (the presence of two or more chronic conditions) due to their shared underlying mechanisms.[2] Multimorbidity results in the use of multiple medications (polypharmacy) in older people to manage and treat each condition.[2,3]

Health is a known contributor to how quality of life (QoL) is perceived by older people.[2,4]

This review aimed to explore the effect polypharmacy has on QoL and health-related QoL (HRQoL), determine the QoL/HRQoL measurement tools employed and understand the polypharmacy definitions used in included studies.

Methods

Searches performed on MEDLINE and Embase. Additional databases searched included The Irish Longitudinal Study of Ageing (TILDA), and the English Longitudinal Study of Ageing (ELSA).

→ Once duplicates were removed, title and abstract screening was performed by one reviewer.

→ Full text articles were retrieved and screened for eligibility by one reviewer.

→ Data extracted from eligible articles, by one reviewer and managed in Microsoft Excel.

A narrative synthesis was conducted.

Examples of search terms used:

- Polypharmacy OR hyperpolypharmacy
- AND older person* OR elderly OR older adult*
- AND quality of life OR health-related quality of life OR medication-related quality of life

Eligibility criteria:

- ✓ Any study investigating the relationship between polypharmacy and QoL/HRQoL, with the focus of this relationship primarily, in older people.
- ✓ Randomised controlled trials (RCTs) investigating medicines optimisation interventions in older people with polypharmacy, with number of medicines and QoL/HRQoL as an outcome.

Findings

55 articles were eligible for inclusion.

The most common definition of polypharmacy was the use of **five or more** prescribed medications.

24 different QoL measurement tools, including those used to measure HRQoL and medication-burden QoL, were found throughout the included studies.

There was **great heterogeneity** in the findings of the association between polypharmacy and QoL/HRQoL. The results ranged from **no association to a significant negative clinical association**.

This heterogeneity was reflected in the findings from the limited number of RCTs included in this review. These ranged from **no association to a significant, positive association between HRQoL and the intervention group.**

Qualitative studies highlighted the **relationship between patient and healthcare provider, clear benefit to medication, adverse events** and **ability to manage medicines** as factors that impact QoL.

Conclusions

In qualitative research, the negative impact of polypharmacy on QoL is often highlighted; however, this isn't always reflected in quantitative research.

The range of associations could be due to the responsiveness of the tools used, the specific populations studied, or the entangled nature of the relationship between polypharmacy and QoL.

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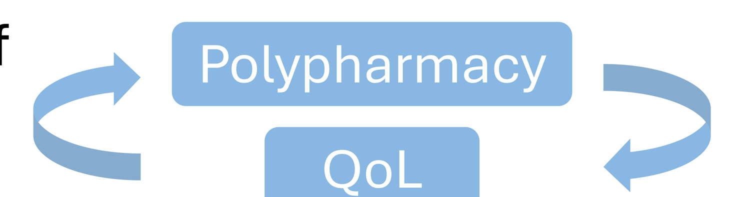

References and acknowledgments

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