Development and implementation of strategic frameworks for polypharmacy management in healthcare organisations: a scoping review



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Introduction

'Polypharmacy management' (PM) guidelines exist (1) but there are challenges to implementation and WHO recommends theory-based organisational change strategies to address this (2).

Aim

To identify current evidence base around the development and implementation of strategic frameworks for polypharmacy management in healthcare organisations.

Methods

- The Arksey and O'Malley framework and the PRISMA Scoping Reviews extension were used.
- Search strategy including eligibility criteria, search terms and databases defined (Figure 1).
- · After title and abstract screening full text articles were reviewed.
- Included studies were charted to collate extracted information and a descriptive narrative approach to data synthesis was taken.
- All steps involved independent checks by two team members with disagreement mediation by a third.

Records identified Records identified Records identified Records identified Through business Through CINAHL Through IPA Through Medline source complete (n=244) (n=525) Records after duplicates removed (n=702)Records excluded according to Fitles and Abstracts screened exclusion criteria n=702 Conference paper (n=3) No abstract (n=29) Full-text papers assessed for Not related to research Not in English (n=1) eligibility aim (n=53) Not organisational (n=49) Conference paper (n=3) Not pharmaceutical (n=1) Not in English (n=3) Not related to polypharmacy Pediatric (n=2) Studies included in critical Protocol (n=2) review Paediatric (n=3) Total = 63 Protocol (n=11) Total (n=632) Figure 2: Search inclusion process PRISMA flow diagram

Results

As per the PRISMA flow diagram in Figure 2 seven papers met the eligibility criteria and showed that:

- Despite availability of polypharmacy guidelines in Europe, there is limited evidence on the strategic development and implementation of PM frameworks.
- The main characteristics of strategic approaches were Kotter's eight step process for organisational change, the theoretical domains framework to identify individual behavioural determinants, and a community-based medication management intervention.
- Barriers to implementation: lack of data to create a sense of urgency, time for staff and training and lack of a national plan for implementation, monitoring and evaluation, poor coordination of care, unclear allocation of tasks and responsibilities.
- Facilitators to implementation: government funding, strict regulatory environment, and presence of contextual evidence.

Conclusion

The review shows limited evidence on development of theory based strategic frameworks for organisational change. Evidence was from outwith the Middle Eastern contexts. A strength of this work is that it searched internationally but was limited by exclusion of grey literature. Further work is required on theory based strategic organisational change in PM particularly in the Middle East.

Search strategy

- Peer reviewed papers, review articles
- Inclusion: English language, organisational change strategies in polypharmacy, all countries and level of care
- Exclusion: grey literature, conference abstracts, protocols, and editorial reviews

Search terms

- Polypharmacy
- Prescribing
- Framework
- Organisational change
- Polypharmacy and prescribing AND (Framework OR organisational change)

Databases

- MEDLINE
- CINAHL
- IPA
- Business source complete

References

- Mair A, Fernandez-Llimos F, Alonso A, Harrison C, Hurding S, Kempen T, Kinnear M, Michael N, McIntosh J, Wilson M, the SIMPATHY Consortium. *Polypharmacy Management by 2030: a patient safety challenge*. 2nd edition. Coimbra: SIMPATHY Consortium; 2017.
- World Health Organization. Medication safety in polypharmacy: technical report. Geneva: World Health Organization; 2019.

Figure 1 Eligibility criteria for study selection