



# Interprofessional collaboration between pharmacists and community health workers to improve medication adherence: a systematic review

Carole Bandiera<sup>1</sup>, Ricki Ng<sup>1</sup>, Sabuj Kanti Mistry<sup>2</sup>, Elizabeth Harris<sup>3</sup>, Mark F Harris<sup>3</sup>, Parisa Aslani<sup>1</sup>

<sup>1</sup>School of Pharmacy, University of Sydney, Sydney, Australia, <sup>2</sup>School of Population Health, University of New South Wales, Sydney, Australia, <sup>3</sup>International Centre for Future Health Systems, University of New South Wales, Sydney, Australia

## Aims

To explore the impact of interprofessional interventions involving pharmacists and community health workers on patient medication adherence.

## Introduction

- Community health workers (CHWs) serve as a liaison between health and social services and the community they serve[1].
- Social determinants of health may act as a barrier to medication adherence (MA) in underserved populations[2].
- Little is known about the collaboration between CHWs and pharmacists.

## Methods

- Systematic review inclusion criteria: the research i) involved pharmacists and CHWs and ii) was an intervention aiming to improve MA, one of the outcomes being a component of MA.
- The English and French language scientific literature published in Embase, Medline, Web of sciences, CINAHL, Scopus and the grey literature were searched in October 2024.
- Two independent reviewers (CB and RN) screened and selected eligible articles in the software Covidence.
- The quality of the studies was assessed with the Effective Public Health Practice Project quality assessment tool.
- PROSPERO CRD42024526969

## Results

### Study characteristics

- Eight studies met the inclusion criteria (Fig 1)[3-10], including a total of 1577 participants. Seven were conducted in the USA and one in Kenya.
- Clinical, hospital or specialty pharmacists were involved in 6 studies, and academic pharmacists in 2 studies.

### Methods to measure MA

- Solely subjective measure: Patient self-report **n=5** studies
- Solely objective measures: Pharmacy refill records **n=1**
- Both subjective and objective measures:
  - Self-report + Pill counts **n=1**
  - Self-report + Proportion of days covered **n=1**

*NB: The questionnaires were not always validated.*

### Studies quality

- Four studies were considered to be of weak methodological quality[3,5,7,10] and the other 4 of moderate quality[4,6,8,9].
- Main reasons: study design (mostly observational), lack of reliability in the data collection methods (i.e., questionnaires)

### Impact on MA

- 3/8 studies showed a significant improvement in MA[3,7,8]
- 3/8 studies did not reach statistical significance[4,5,9]
- 2/8 studies were descriptive and did not conduct statistical analyses on MA outcomes[6,10]

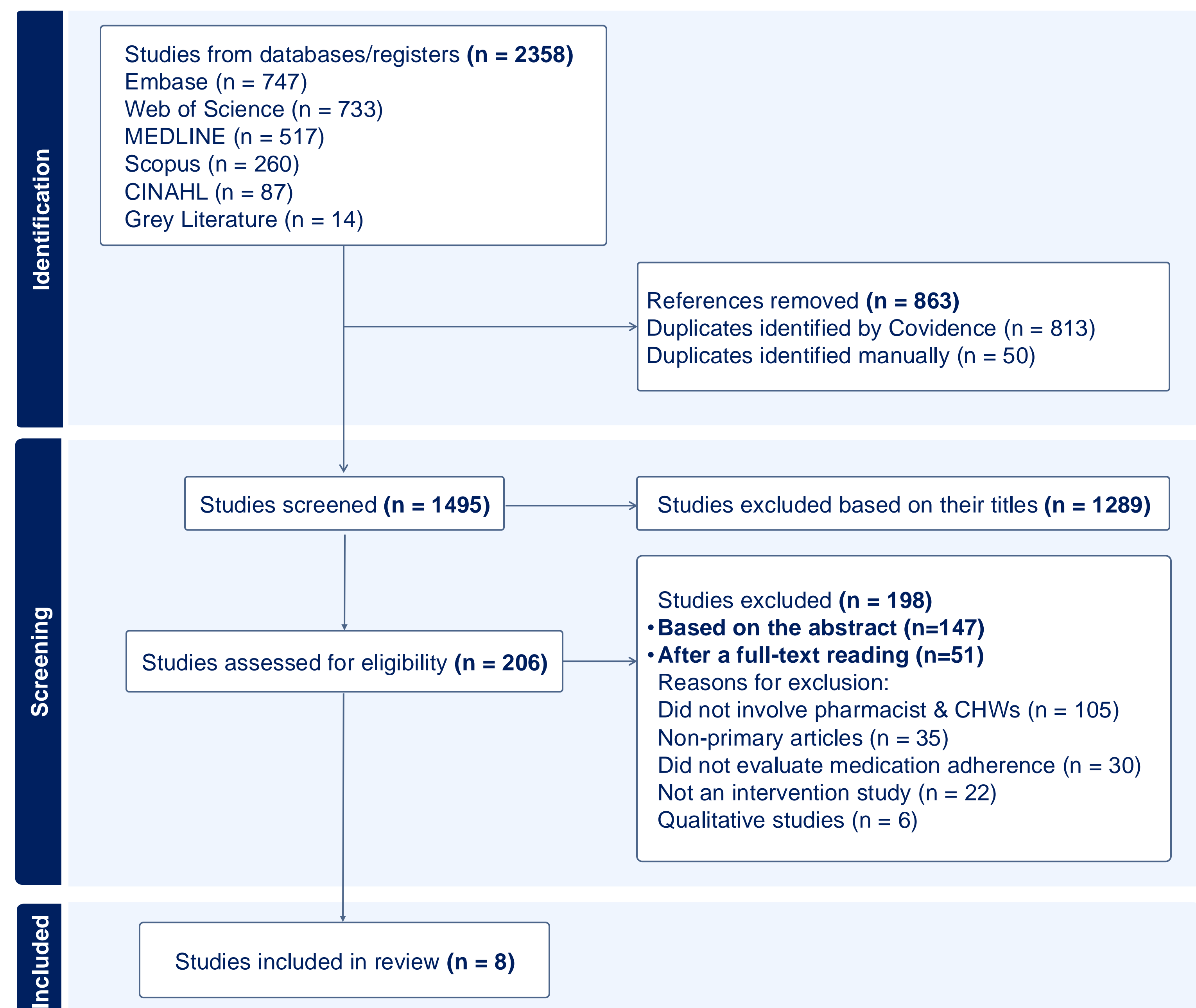


Figure 1. PRISMA Diagram showing the process for article selection.

## Conclusions

- The evidence of the impact of interprofessional interventions involving CHWs and pharmacists on medication adherence was limited.
- Future high-quality studies are needed to better evaluate the impact of such collaboration on medication adherence and patient health outcomes.