

# Cross-sectional health literacy profile of Australian regional adults using the Health Literacy Questionnaire<sup>©</sup>

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## Introduction

Health literacy is “The skills and resources of a person to access, understand and use information to make decisions, and take action on their own health and healthcare”<sup>1</sup>. Established impacts of low health literacy include poorer medication adherence, high mortality and higher likelihood of emergency presentations and re-hospitalisation<sup>2, 3</sup>. detailed health literacy audits of an individual or population provides barriers and facilitators which can be used to plan responsive interventions<sup>4</sup>. The aim of this review is to synthesise peer-reviewed literature concerned with health literacy and primary prevention of cardiovascular disease (CVD).

## Methods

A librarian-informed search strategy was conducted on 12 January, 2023 of the following databases: Medline, Global Health, Pub Med, Embase, PsycINFO & CINAHL. Search strategies were adapted to each database, but are summarised in figure 1. Included studies were published in English, concerned with primary prevention of CVD and included a measure of health literacy in their analysis. A second author screened 10% of all studies included in abstract and full-text stages, as well as extracting 10% of included articles to confirm acceptable inter-rater agreement. Study characteristics and summary of results were collected in Covidence software, and thematically analysed.

## Results

Table 2 provides a Preferred Items for Systematic Review and Meta-Analyses (PRISMA) diagram of the screening process. Of the thirty-eight articles included for review, twenty-six investigated health literacy’s association with CVD risk, eight delivered health literacy interventions to populations at risk of CVD and four described the health literacy profiles of at-risk populations.

Of the studies investigating health literacy’s role in CVD prevention, thirteen explored attitude, knowledge or beliefs toward CVD. These were most

commonly hypertension knowledge and willingness to change lifestyle behaviours. Seventeen explored objective markers of CVD risk, most commonly including blood pressure BMI, presence of diabetes or hypertension and lipid levels. Six studies used risk-prediction tools, most commonly Framingham risk scores.

Of the eight intervention studies, four were group-based education programs, two were clinic-level quality improvement programs, and two provided personalised information to participants. Outcome variables measured were diet quality, weight loss, heart attack knowledge, knowledge of own CVD risk, blood pressure, medication adherence and clinic-level recording of cardiovascular risk factors. Seven of eight studies showed improvements in outcome variables.

Four studies described the health literacy of participants with one or more cardiovascular risk factor. Three studies used multi-dimensional health literacy assessments, and one used a unidimensional measure alongside open-ended questions of medication comprehension. Health literacy areas that were identified as barriers included social support for health, navigating the healthcare system and judging how to prevent or manage conditions like being overweight, high blood pressure or high cholesterol.

## Conclusion

This study synthesised peer-reviewed literature concerned with health literacy and primary prevention of CVD. Findings indicate that health literacy may be a useful consideration when attempting to mitigate CVD risk; future studies should build upon these findings with robust intervention trials, or conduct detailed audits of barriers and facilitators to health literacy in specific populations.

## References

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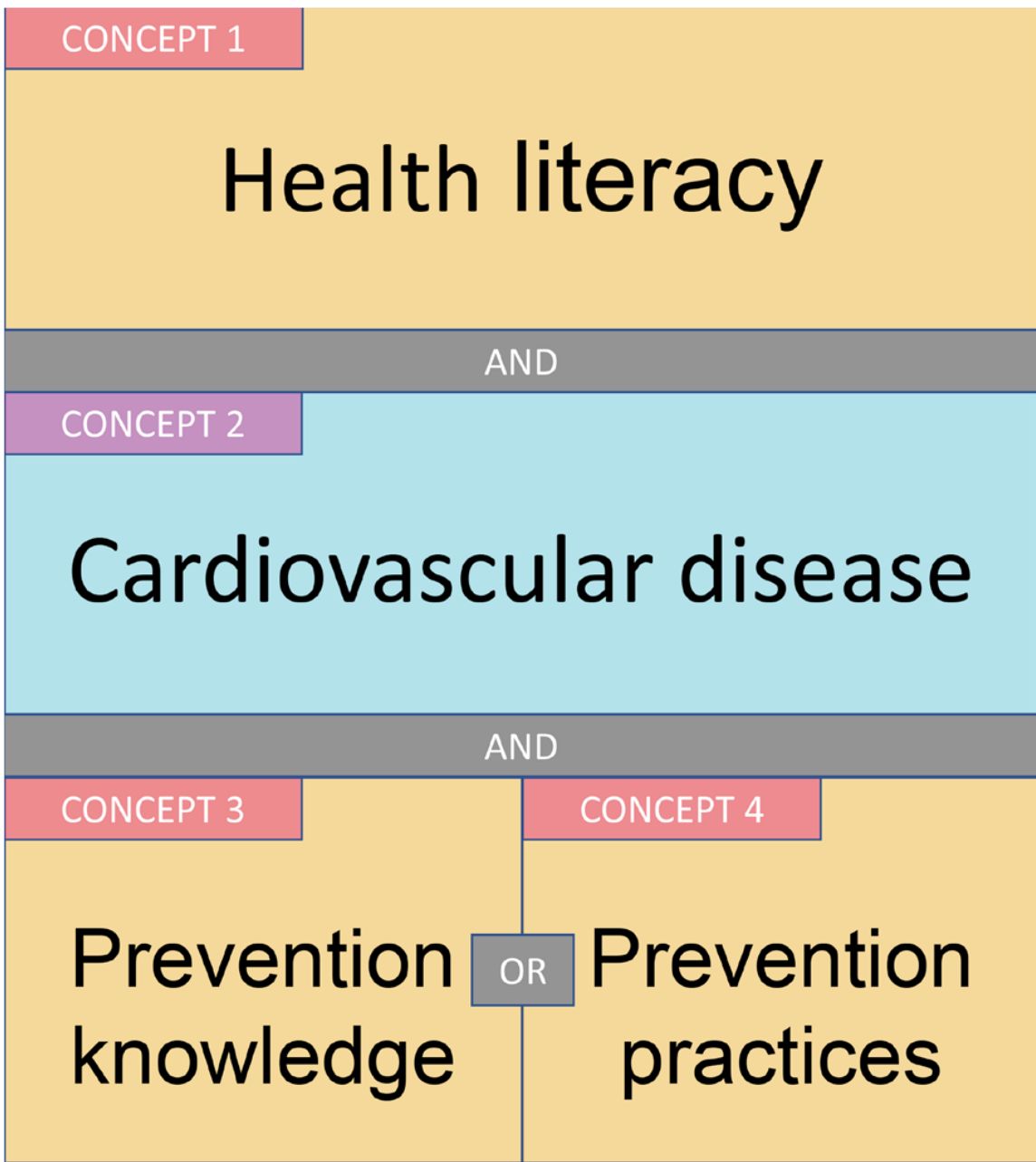


Figure 1: Overview of search strategy utilised

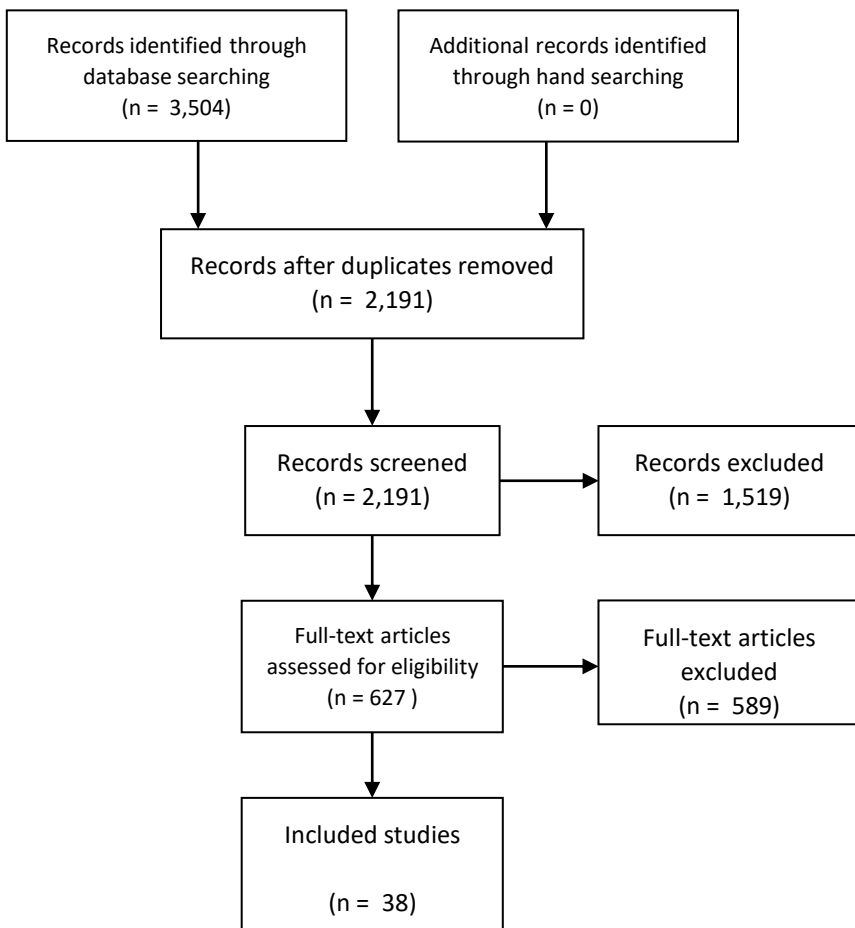


Figure 2: PRISMA diagram of screening process