

Systematic review to inform prevention and management of chronic disease for Aboriginal and Torres Strait Islander Australians

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Background: Providing policy makers and healthcare practitioners with the best available evidence to prevent and manage chronic diseases prevalent in many Aboriginal and Torres Strait Islander communities will contribute to achieving health equity in Australia. Systematic reviews are acknowledged as a useful tool for translating evidence into best practice healthcare policy and practice.

Objective: To identify, appraise and describe the main characteristics of systematic reviews addressing questions of chronic disease and related risk factors for Aboriginal and Torres Strait Islander Australians in order to guide healthcare policy and practice.

Method

We conducted an overview of systematic reviews that used rigorous processes to identify, appraise and describe the systematic reviews.

Inclusion criteria

Population: Aboriginal and Torres Strait Islander Australians

Chronic diseases: All **Risk factors:** Main lifestyle

Systematic review: (i) Clearly stated review objective(s)/question(s) addressing prevalence, prevention, treatment and/or management of one or more of the risk factors/diseases; AND (ii) clearly defined inclusion criteria; AND (iii) reported search strategy; AND (iv) presentation of synthesis for stated question(s)

Search: A comprehensive electronic and hand search of commercial and grey literature was undertaken. Systematic reviews published 1990 - 31 Dec 2013 in English were considered.

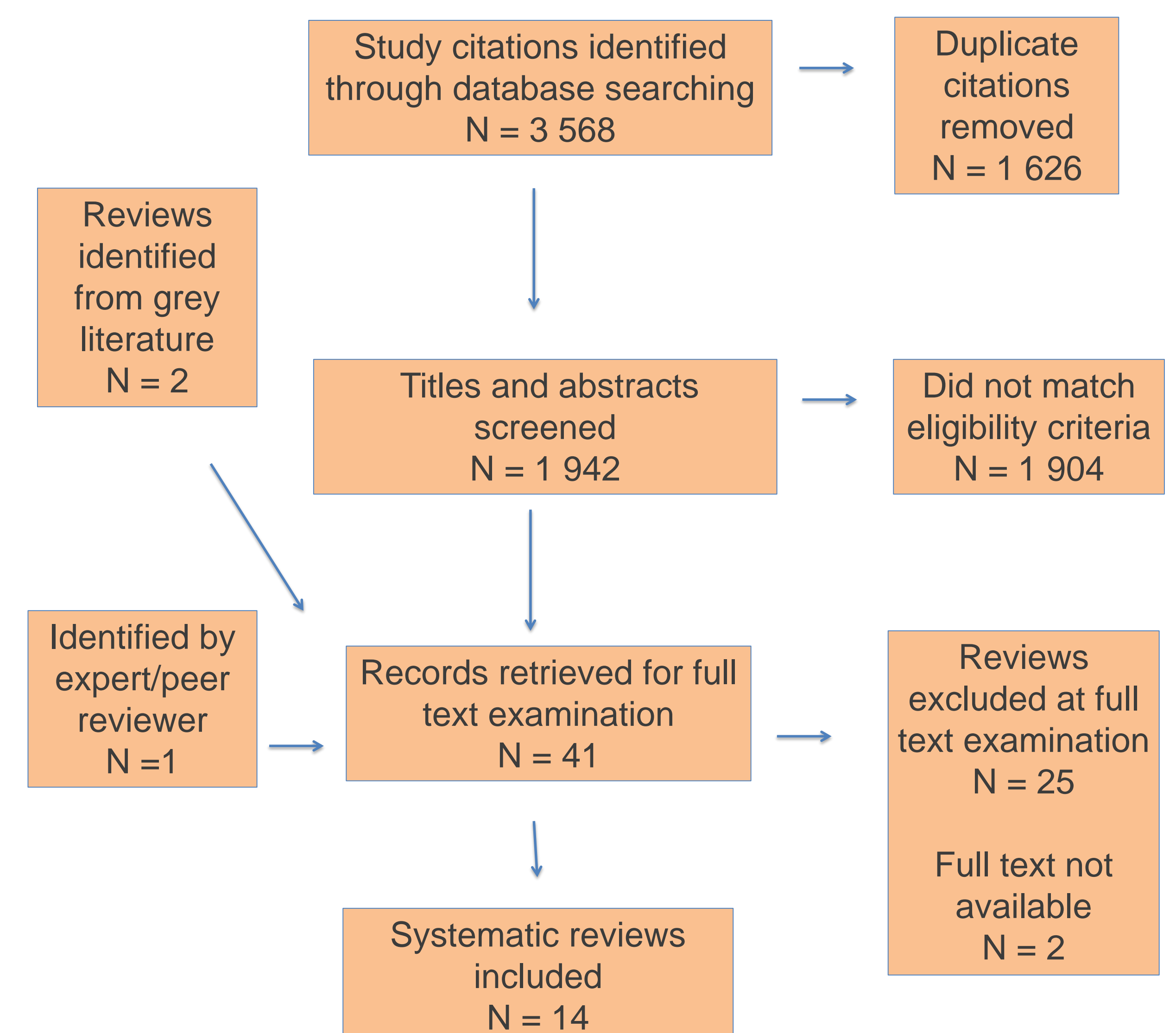
Critical appraisal: Two reviewers using the Joanna Briggs Institute Critical Appraisal Checklist for Systematic Reviews & Research Synthesis undertook the appraisal.

Data extraction: Two reviewers extracted data on the following characteristics: (i) review objective/questions; (ii) search strategy; (iii) population; (iv) type of evidence included; (v) synthesis method; (vi) main findings; (vii) steps if any to capture knowledge unique to Aboriginal and Torres Strait Islander people and/or ensure alignment with Aboriginal and Torres Strait Islander peoples' view of ethical research.

Results

- Fourteen systematic reviews of which seven synthesised evidence about health intervention effectiveness and four about chronic disease or risk factor prevalence met our inclusion criteria.
- Eight of these conducted critical appraisal as per best practice.
- Three reported steps to align the review process with standards for ethical research with Aboriginal and Torres Strait Islander Australians.
- Almost half synthesised evidence about interventions to support people to quit smoking.
- Limited coverage of the range of chronic diseases affecting Aboriginal and Torres Strait Islander Australians was found, with the majority of the systematic reviews addressing a question about diabetes or asthma.
- A wide variation in the types of studies considered for inclusion was found. The majority (8/14) have included mixed evidence while few (3/14) incorporated expert opinion.
- The majority of the systematic reviews concluded that a lack of sufficient high quality evidence prevented the drawing of strong policy and/or practice recommendations and called for more high quality research.

Fig 1: Search results & study selection



Key Findings: Conclusions and Implications

- There is a need for more high quality evidence to inform policy and practice.
- High quality primary intervention research is a priority.
- Systematic review is an underutilised tool for improving Aboriginal and Torres Strait Islander peoples' chronic disease and other health outcomes.
- Critical appraisal is important.
- Leadership by and involvement of Indigenous researchers with relevant cultural and contextual knowledge is critical.
- Reviewers should search grey and commercial literature and consider mixed evidence.
- Improved systematic review guidance, tools and reporting standards are required to ensure alignment with ethical obligations and promote review relevance.

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