BMJ Open

Supporting implementation of interventions to address ethnicity-related health inequities: frameworks, facilitators and barriers – a scoping review protocol

Papillon Gustafson ,[1] Yasmin Abdul Aziz,[1] Michelle Lambert ,[1] Karen Bartholomew,[2,3] Rachel Brown,[4] Peter Carswell,[5] Adam Fusheini,[6] Mihi Ratima,[7] Patricia Priest,[6] Sue Crengle [1]

To cite: Gustafson P, Abdul Aziz Y, Lambert M, *et al*. Supporting implementation of interventions to address ethnicity-related health inequities: frameworks, facilitators and barriers – a scoping review protocol. *BMJ Open* 2023;**13**:e065721. doi:10.1136/bmjopen-2022-065721

► Prepublication history and additional supplemental material for this paper are available online. To view these files, please visit the journal online (http://dx.doi.org/10.1136/bmjopen-2022-065721).

Received 14 June 2022
Accepted 26 January 2023

Check for updates

© Author(s) (or their employer(s)) 2023. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

For numbered affiliations see end of article.

Correspondence to
Dr Sue Crengle;
sue.crengle@otago.ac.nz

ABSTRACT

Introduction Health inequities are differences in health between groups of people that are avoidable, unfair and unjust. Achieving equitable health outcomes requires approaches that recognise and account for the differences in levels of advantage between groups. Implementation science, which studies how to translate evidence-based interventions into routine practice, is increasingly recognised as an approach to address health inequities by identifying factors and processes that enable equitable implementation of interventions. This article describes the protocol for a scoping review of the literature relating to the equitable implementation of interventions, focusing on ethnicity-related health inequities. The scoping review aims to identify equity-focused implementation science theories, models and frameworks (TMFs) and to synthesise and analyse the evidence relating to the factors that aid or inhibit equitable implementation of health interventions.

Methods and analysis The scoping review is guided by the methodology developed by Arksey and O'Malley and enhanced by Levac and colleagues. Relevant literature will be identified by searching electronic databases, grey literature, hand-searching key journals and searching the reference lists and citations of studies that meet the inclusion criteria. We will focus on literature published from 2011 to the present. Titles, abstracts and full-text articles will be screened independently by two researchers; any disagreements will be resolved through discussion with another researcher. Extracted data will be summarised and analysed to address the scoping review aims.

Ethics and dissemination The scoping review will map the available literature on equity-focused implementation science TMFs and the facilitators and barriers to equitable implementation of interventions. Ethical approval is not required. Dissemination of the results of the review will include publications in peer-review journals and conference and stakeholder presentations. Findings from the review will support those implementing interventions to ensure that the implementation pathway and processes are equitable, thereby improving health outcomes and reducing existing inequities.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ To the best of our knowledge, this will be the first scoping review of the literature on equity-focused implementation science theories, models and frameworks and the facilitators and barriers to the equitable implementation of interventions.
⇒ The review is based on triangulation of sources, which implies the use of a range of strategies to identify potentially relevant sources, including databases, grey literature, hand-searching key journals and reviewing the reference lists and citations of included studies.
⇒ The scoping review will be limited to literature published in English and from 2011 to the present; this may bias the analysis by excluding potentially relevant sources.
⇒ The grey literature search will focus on New Zealand, which may limit the generalisability of the findings to other health systems.

INTRODUCTION

Health inequities are differences in health between groups of people that are avoidable, unfair and unjust, where these groups may be defined socially, economically, demographically or geographically.[1–3] The causes of health inequities are complex and multifactorial; historic and contemporary political, legal, social, economic and institutional structures and processes shape how power and resources are distributed, disadvantaging some groups relative to others.[3 4] Within the health system, inequities are perpetuated through its structures, policies and processes, which manifest as a lack of services that are affordable, accessible and culturally responsive and safe, and involve actors at multiple levels (eg, healthcare professionals, administrators, managers, funders).[5]

Ethnicity and 'race'-related health inequities have been well-documented locally and internationally.[5–10] Minoritised groups have poorer access to the social determinants of health, less access to and use of health services, poorer quality of care and worse health outcomes, including reduced life expectancy and increased morbidity and mortality associated with various communicable and non-communicable diseases.[5–10] A population study of Indigenous and tribal peoples in 23 countries, including Aotearoa New Zealand, Australia, Brazil and Canada, found poorer health and social outcomes compared with non-Indigenous populations across a range of measures, although these differences were not uniform across each country or population.[6] In Aotearoa New Zealand, there are persistent inequities in the health of Māori (the Indigenous peoples), Pacific and other minoritised groups when compared with the majority European-New Zealand population.[8 11] Often these ethnicity-related inequities are evident after socioeconomic status and geographic differences are accounted for.[12] While the implementation of evidence-based interventions has contributed to overall improvements in morbidity and mortality, inequities in access to and provision of health services and interventions (eg, cardiovascular disease risk assessment, cancer screening, diabetes screening, vaccination) has meant the health benefits of these interventions have been inequitable.[8 11 13–19]

Achieving equitable health outcomes requires approaches that recognise and account for the differences in levels of advantage between groups.[2] Implementation science is being increasingly recognised as an approach to reduce health inequities.[20–26] Implementation science is defined as the 'scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice, and, hence, to improve the quality and effectiveness of health services and care'.[27] Implementation research seeks to understand the multi-level factors influencing health intervention design and delivery.[4 21] Applying an 'equity lens' to implementation science can therefore facilitate understanding of the factors influencing the equitable design and delivery of health interventions and guide the process of equitable implementation.[4 20 26]

Implementation science uses theories, models and frameworks (TMFs) as the basis for understanding how and why implementation of an evidence-based intervention or practice succeeds or fails.[28] Nilsen outlines three overarching aims of implementation science TMFs: (a) to describe and/or guide the process of translating research into practice, (b) to understand and/or explain what influences implementation outcomes and (c) to evaluate implementation.[28] A number of implementation science TMFs have been adapted or developed in recent years to incorporate equity as an explicit focus.[20 23] To the best of our knowledge, these have yet to be comprehensively reviewed.

Optimising an intervention's ability to address health inequities requires an understanding of the factors that aid or inhibit equitable implementation. Identifying facilitators and barriers to implementation enables intervention or service design and delivery to be adapted to ensure that it meets the needs of the target population and improves health outcomes.[28] Similarly, identifying the facilitators and barriers to equitable implementation provides an opportunity to design or adapt the implementation pathway to ensure that the intervention is delivered equitably.

The aim of the scoping review is to explore the literature relating to the equitable implementation of health interventions. Our specific objectives are to: (a) identify and describe implementation science TMFs that have an equity focus, including their purpose, components and operationalisation (if applicable) and (b) identify and analyse literature relating to the factors that aid or inhibit the achievement of equity in health intervention implementation. A scoping review was identified as the most suitable methodology for the study as it is a type of knowledge synthesis that addresses an exploratory research question by identifying and mapping key concepts, evidence and research gaps in a particular field or area.[29] In contrast to a systematic review, this methodology allows exploration of the breadth of evidence from diverse sources, including grey literature, while not requiring an assessment of the quality of the evidence.[30 31] It is also critical in examining the extent, variety and characteristics of evidence on a particular topic or question by providing clarity to the concepts and identifying the gaps in knowledge to inform practice, policy and future research.[32] The scoping review will form part of the first phase of a research programme to develop an equity-focused implementation science framework and an equity readiness assessment tool appropriate for the Aotearoa New Zealand context. The results will also support health researchers, clinicians, funders and other decision-makers to implement interventions to achieve equitable outcomes.

METHODS AND ANALYSIS

This scoping review will be conducted following the methodological framework developed by Arksey and O'Malley[30] and refined by Levac and colleagues.[33] These authors outline a six-stage process for scoping reviews: (a) identifying the research question; (b) identifying the relevant studies; (c) study selection; (d) charting the data; (e) collating, summarising and reporting the results; (f) consultation.[30 33] The Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Review checklist will be used to guide the reporting of the results.[32] As the scoping review process is iterative, changes to the protocol may be required as the review progresses. Any adjustments will be clearly documented and justified in the scoping review results.

Stage 1: identifying the research question

To guide the scoping review, two research questions have been developed in consultation with the research team: (a) what equity TMFs have been developed to inform the design and implementation of interventions in the health sector? (b) what implementation factors aid or inhibit the achievement of equity in health interventions?

Stage 2: identifying the relevant studies

Literature will be identified in four phases: (a) electronic database searching, (b) grey literature searching, (c)

Box 1 Search strategy developed in MEDLINE

Research question 1

1. (implementation science or implementation framework or implementation research or implementation process or implementation effectiveness or knowledge transfer or knowledge exchange or knowledge translation).af.
2. (framework* or theor* or model* or checklist* or classifi* or categor* or concept* or tool or protocol).af.
3. 1 and 2.
4. (health intervention or health care or healthcare or evidence-based intervention or evidence-based practice or health service*).af.
5. 3 and 4.
6. limit 5 to (english language and humans and yr="2011 -Current").
7. (equity or health equity or inequal* or health inequal* or disparit* or health diparit* or inequit* or health inequit*).af.
8. 6 and 7.

Research question 2

1. (implementation science or implementation framework or implementation research or implementation process or implementation effectiveness or knowledge transfer or knowledge exchange or knowledge translation).af.
2. (health intervention or health care or healthcare or evidence-based intervention or evidence-based practice or health service*).af.
3. 1 and 2.
4. (equity or health equity or inequal* or health inequal* or disparit* or health diparit* or inequit* or health inequit*).af.
5. 3 and 4.
6. limit 5 to (english language and humans and yr="2011 -Current").
7. barrier* or hinder or obstacle* or imped*.
8. 6 and 7.
9. (facilitat* or enabl* or moderat* or influence* or impact or aid or assist or enhanc*).af.
10. 6 and 9.

hand-searching of key journals and (d) searching the reference lists and citations of studies meeting the inclusion criteria.

The MEDLINE (Ovid) and CINAHL databases will be used to search for literature relating to the research questions published from 1 January 2011 to the present. Preliminary searches revealed that discussions about equity in implementation science have occurred predominantly in the last 5years. Therefore, limiting the search to 2011 onwards will provide good coverage of the implementation science literature, as well as ensuring that the search is current at the time it is executed. The list of initial search terms was developed from the research questions and previous knowledge, and reviewed by the research team. The research fellow and a subject librarian at the University of Otago reviewed MeSH terms to ensure that the key search terms were comprehensive. Preliminary searches were conducted in MEDLINE and the search terms and strategies were refined based on screening article titles, abstracts and keywords (see box 1 for the MEDLINE search strategy). The MEDLINE search strategy will be adapted for the CINAHL database (see online supplemental file 1). The Dissemination and Implementation Models database (https://dissemination-implementation.org) will also be searched to identify any additional implementation science TMFs with a health equity focus (see online supplemental file 1). International and local literature from the database searches will be eligible for inclusion. The grey literature search will be conducted using Google and the following search terms: "health" AND "equity" AND "implementation" AND "framework or model or theory". This search will be limited to New Zealand as we are particularly interested in scoping the literature on the factors that influence whether the implementation of an intervention has an impact on health inequities in Māori and Pacific populations. The key journal titles to be hand-searched will be finalised once the database searches are completed and the most relevant journals have been identified. As with the database searches, the grey literature and key journal searches will be limited to literature published from 1 January 2011 to the present.

Stage 3: study selection

References identified through the MEDLINE, CINAHL and Dissemination and Implementation Models databases will be exported to Endnote X9.3.3 to identify and remove any duplicates. References will also be imported to Microsoft Excel V.2209 and the titles and abstracts screened independently by two researchers to determine at a broad level whether they meet inclusion criteria and do not satisfy any exclusion criteria; any disagreements will be resolved through discussion with a third researcher. Studies identified as likely eligible for inclusion through the screening process will then undergo full-text review by at least two researchers to make a final determination of eligibility for inclusion in the scoping review.

To identify potentially relevant studies from relevant journals and reference lists by hand-searching, article titles will first be reviewed to determine whether they broadly meet the inclusion criteria. The abstracts of potentially eligible articles will then be reviewed according to the process described above for references identified through the database searches. Grey literature and any literature identified by hand-searching journals, reference lists or citations will be manually added to Endnote and Microsoft Excel.

Criteria for research question 1

Studies will be included if they (a) describe an equity-focused implementation science TMF, that is, equity is explicitly mentioned in the TMF or addressing health equity is an explicit aim of the TMF or (b) use an established implementation science TMF to implement an intervention in Indigenous or other minoritised ethnic populations known to experience health inequities. Studies that describe the operationalisation of an equity-focused TMF will also be included.

Criteria for research question 2

Studies will be included if they (a) describe a health intervention implemented in target populations experiencing ethnicity-related health inequities, or (b) describe a health intervention implemented in whole populations,

Table 1 Preliminary data charting forms for data collection from studies meeting the inclusion criteria for research questions 1 and 2

Research question 1	Research question 2
► Study characteristics ► Aims ► TMF characteristics ► Description/s of TMF operationalisation (if available): – Study demographics – Setting – Methodology – Outcomes	► Study characteristics ► Aims ► Description of the intervention ► Facilitators and barriers to implementation

but where ethnicity-related inequities are explicitly considered as part of the implementation process; and (c) refer to facilitators or barriers to implementation.

Exclusion criteria

Commentaries, discussion and working papers, policy documents, editorials, expert opinions, letters, conference proceedings, case reports, quantitative research that does not otherwise meet the inclusion criteria for research question 1 or 2, and studies in non-English languages or that describe interventions conducted in non-healthcare settings will be excluded. As this review focuses on ethnicity-related health inequities, interventions implemented in populations experiencing other types of inequity are beyond the scope of this study.

Stage 4: charting the data

Studies will be charted in Microsoft Excel using a data charting form; separate charting forms will be developed for the two research questions (table 1). The data charting forms will be piloted on 5–10 studies by two researchers independently. The researchers will then meet to review the data charting process, make any necessary revisions to the data charting form and check for consistency between the two researchers. Data charting will be completed by two researchers, with cross-checking by a third researcher.

Stage 5: collating, summarising and reporting the results

A descriptive summary of the equity-focused implementation science TMFs and the literature describing the facilitators and barriers to equitable implementation will be provided. An analysis of the findings in relation to the research questions will be presented, including how well equity and system-level factors influencing implementation are incorporated into the implementation science TMFs and a thematic analysis of the implementation factors aiding or inhibiting the achievement of equity in health interventions.

Stage 6: consultation

Consultation with experts and stakeholders is recommended throughout the scoping review process.[29 34] It is also a critical aspect of the Kaupapa Māori research methodology (Kaupapa Māori (literally, a Māori way) research 'assumes the existence and validity of Māori knowledge, language and culture' (Smith, p48)[35] and is underpinned by a set of principles that guide research by, with and for Māori[35 36]) that informs the wider research programme.[37] The research team includes experts in the fields of health equity (SC, KB), implementation science (PC) and Māori health (SC, RB, MR) who will review the search findings and identify any potentially relevant literature that is missing. A Kāhui (group) comprising experts in Māori health research and service provision, Iwi (tribe) representatives and health service consumers will also be consulted to identify any potentially relevant local resources that are not identified through the grey literature search. The Kāhui will also review and provide feedback on the findings of the review as it progresses.

Patient and public involvement

No patients were involved in the protocol design.

ETHICS AND DISSEMINATION

Ethical approval will not be required for this scoping review as all data reviewed and collected will be obtained from publicly available sources. Dissemination of the scoping review results will include publication in a peer-reviewed journal and presentations to stakeholders and at conferences.

Author affiliations
[1]Ngāi Tahu Māori Health Research Unit, University of Otago Division of Health Sciences, Dunedin, New Zealand
[2]Te Whatu Ora - Health New Zealand Waitematā, Takapuna, New Zealand
[3]Te Whatu Ora Te Toka Tumai Auckland, Auckland, New Zealand
[4]National Hauora Coalition, Auckland, New Zealand
[5]Synergia Ltd, Auckland, New Zealand
[6]Preventive and Social Medicine, University of Otago Dunedin School of Medicine, Dunedin, New Zealand
[7]Taumata Associates, Hāwera, New Zealand

Twitter Sue Crengle @tiekemanu

Acknowledgements We thank Christy Ballard, the subject librarian for the Department of Preventive and Social Medicine at the University of Otago, for her assistance in the development of the search strategy. We also thank Associate Professor Nicole Rankin, Unit Head for the Evaluation and Implementation Science Unit at the University of Melbourne, for her guidance in developing the protocol methodology.

Contributors SC, KB, PC, PP and AF conceptualised and designed this study. SC, ML, PG and YAA developed the search strategy; KB, AF and PP contributed to methods design. PG, YAA and ML drafted and edited the manuscript and SC, KB, PC, PP, AF, RB and MR provided critical revisions. The final version was read and approved by all authors.

Funding This work was supported by a Healthier Lives National Science Challenge grant number HL-T32CR-08.

Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

Supplemental material This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0/.

ORCID iDs
Papillon Gustafson http://orcid.org/0000-0001-8645-8490
Michelle Lambert http://orcid.org/0000-0002-0439-7557
Sue Crengle http://orcid.org/0000-0001-9367-1492

REFERENCES

1 Whitehead M. The concepts and principles of equity and health. *Int J Health Serv* 1992;22:429–45.
2 Ministry of Health. *Achieving equity in health outcomes: summary of a discovery process*. Wellington, NZ: Ministry of Health, 2019. Available: https://www.health.govt.nz/system/files/documents/publications/achieving-equity-in-health-outcomes-summary-of-a-discovery-process-30jul2019.pdf
3 World Health Organization. Health equity. 2022. Available: https://www.who.int/health-topics/health-equity#tab=tab_1 [Accessed 3 Aug 2022].
4 Baumann AA, Cabassa LJ. Reframing implementation science to address inequities in healthcare delivery. *BMC Health Serv Res* 2020;20:190.
5 Institute of Medicine (US) Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care. *Unequal treatment: confronting racial and ethnic disparities in health care*. Washington, DC: National Academies Press, 2002: 1.
6 Anderson I, Robson B, Connolly M, *et al*. Indigenous and tribal peoples' health (the lancet-lowitja institute global collaboration): a population study. *Lancet* 2016;388:131–57.
7 Kapadia D, Zhang J, Salway S, *et al*. *Ethnic inequalities in healthcare: a rapid evidence review*. London, UK: NHS Race and Health Observatory, 2022. Available: http://www.nhsrho.org/wp-content/uploads/2022/02/RHO-Rapid-Review-Final-Report_v.7.pdf
8 Ryan D, Grey C, Mischewski B. *Tofa Saili: A review of evidence about health equity for Pacific Peoples in New Zealand*. Wellington, NZ: Pacific Perspectives, 2019. Available: https://www.pacificperspectives.co.nz/publications
9 Reid P, Robson B. Understanding health inequities. In: Robson B, Harris R, eds. *Hauora: Māori Standards of Health IV: A study of the years 2000–2005*. Wellington, NZ: Te Rōpū Rangahau Hauora a Eru Pōmare, 2007: 3–10.
10 Tribunal W. *Hauora: report on stage one of the health services and outcomes kaupapa inquiry*. Wellington, NZ: Waitangi Tribunal, 2019. Available: https://forms.justice.govt.nz/search/Documents/WT/wt_DOC_152801817/Hauora%20W.pdf
11 Health Quality & Safety Commission. *He matapihi ki te kounga o ngā manaakitatanga ā-haoura o Aotearoa 2019. A window on the quality of Aotearoa New Zealand's health care 2019*. Wellington, NZ: HQSC, 2019. Available: https://www.hqsc.govt.nz/assets/Uploads/Window_2019_web_final.pdf
12 Ministry of Health. *Unequal impact II: Māori and non-Māori cancer statistics by deprivation and rural-urban status 2002–2006*. Wellington, NZ: Ministry of Health, 2010. Available: https://www.health.govt.nz/publication/unequal-impact-ii-maori-and-non-maori-cancer-statistics-deprivation-and-rural-urban-status-2002-2006
13 Lawrenson R, Seneviratne S, Scott N, *et al*. Breast cancer inequities between Māori and non-Māori women in Aotearoa/New Zealand. *Eur J Cancer Care (Engl)* 2016;25:225–30.
14 Gurney J, Campbell S, Jackson C, *et al*. Equity by 2030: achieving equity in survival for Māori cancer patients. *N Z Med J* 2019;132:66–76.
15 Ministry of Health. *National and DHB immunisation data*. Wellington, NZ: Ministry of Health, 2021. Available: https://www.health.govt.nz/our-work/preventative-health-wellness/immunisation/immunisation-coverage/national-and-dhb-immunisation-data
16 Huria T, Palmer S, Beckert L, *et al*. Inequity in dialysis related practices and outcomes in Aotearoa/New Zealand: a kaupapa Māori analysis. *Int J Equity Health* 2018;17:27.
17 Te Karu L, Dalbeth N, Stamp LK. Inequities in people with gout: a focus on Māori (Indigenous people) of Aotearoa New Zealand. *Ther Adv Musculoskelet Dis* 2021;13:1759720X211028007.
18 Gu Y, Warren J, Kennelly J, *et al*. Cardiovascular disease risk management for Māori in New Zealand general practice. *J Prim Health Care* 2014;6:286–94.
19 Disney G, McDonald A, Atkinson J, *et al*. New Zealand census mortality and cancer trends study data explorer. 2016. Available: https://nzcms-ct-data-explorer.shinyapps.io/version8/ [Accessed 25 Feb 2022].
20 Brownson RC, Kumanyika SK, Kreuter MW, *et al*. Implementation science should give higher priority to health equity. *Implement Sci* 2021;16:28.
21 Chinman M, Woodward EN, Curran GM, *et al*. Harnessing implementation science to increase the impact of health equity research. *Med Care* 2017;55 Suppl 9 Suppl 2(Suppl 9 2):S16–23.
22 McNulty M, Smith JD, Villamar J, *et al*. Implementation research methodologies for achieving scientific equity and health equity. *Ethn Dis* 2019;29:83–92.
23 Odeny B. Closing the health equity gap: a role for implementation science? *PLoS Med* 2021;18:e1003762.
24 Watkins C, Hornack R. *A review of implementation science theories, models and frameworks through an equity lens*. Chapel Hill, NC: National Implementation Research Network, University of North Carolina, 2022. Available: https://nirn.fpg.unc.edu/practicing-implementation/review-implementation-science-theories-models-and-frameworks-through
25 Woodward E, Adsul P, Shelton R, *et al*. *Bringing a health equity lens to implementation science frameworks*. St. Louis, MO: Institute for Public Health, Washington University, 2021. Available: https://publichealth.wustl.edu/bringing-a-health-equity-lens-to-implementation-science-frameworks/
26 DuMont K, Metz A, Woo B. *Five recommendations for how implementation science can better advance equity*. Washington, DC: Academy Health, 2019. Available: https://academyhealth.org/blog/2019-04/five-recommendations-how-implementation-science-can-better-advance-equity
27 Eccles MP, Mittman BS. Welcome to implementation science. *Implementation Sci* 2006;1:1.
28 Nilsen P. Making sense of implementation theories, models and frameworks. *Implement Sci* 2015;10:53.
29 Colquhoun HL, Levac D, O'Brien KK, *et al*. Scoping reviews: time for clarity in definition, methods, and reporting. *J Clin Epidemiol* 2014;67:1291–4.
30 Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology* 2005;8:19–32.
31 Rankin NM, McGregor D, Stone E, *et al*. Evidence-practice gaps in lung cancer: a scoping review. *Eur J Cancer Care (Engl)* 2018;27:e12588.
32 Tricco AC, Lillie E, Zarin W, *et al*. PRISMA extension for scoping reviews (PRISMA-scr): checklist and explanation. *Ann Intern Med* 2018;169:467–73.
33 Levac D, Colquhoun H, O'Brien KK. Scoping studies: advancing the methodology. *Implement Sci* 2010;5:69.
34 Peters M, Godfrey C, McInerney P, *et al*. Chapter 11: scoping reviews (2020 version). In: Aromataris E, Munn Z, eds. *JBI Manual for Evidence Synthesis: JBI*. 2020.
35 Smith LT. Kaupapa Māori research- some kaupapa Māori principles. In: Pihama L, South K, eds. *Kaupapa Rangahau A Reader: A Collection of Readings from the Kaupapa Māori Research Workshop Series Led*. Hamilton, NZ: Te Kotahi Research Institute, 2015: 46–52.
36 Cram F. Kaupapa Māori health research. In: Liamputtong P, ed. *Handbook of Research Methods in Social Sciences*. Singapore: Springer Singapore, 2019: 1507–24.
37 Cram F. Talking ourselves up. *AlterNative: An International Journal of Indigenous Peoples* 2006;2:28–43.