Developing the rural health workforce to improve Australian Aboriginal and Torres Strait Islander health outcomes: a systematic review

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Abstract

Objective. The aim of the present study was to identify evidence-based strategies in the literature for developing and maintaining a skilled and qualified rural and remote health workforce in Australia to better meet the health care needs of Australian Aboriginal and/or Torres Strait Islander (hereafter Aboriginal) people.

Methods. A systematic search strategy was implemented using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement and checklist. Exclusion and inclusion criteria were applied, and 26 papers were included in the study. These 26 papers were critically evaluated and analysed for common findings about the rural health workforce providing services for Aboriginal people.

Results. There were four key findings of the study: (1) the experience of Aboriginal people in the health workforce affects their engagement with education, training and employment; (2) particular factors affect the effectiveness and longevity of the non-Aboriginal workforce working in Aboriginal health; (3) attitudes and behaviours of the workforce have a direct effect on service delivery design and models in Aboriginal health; and (4) student placements affect the likelihood of applying for rural and remote health jobs in Aboriginal communities after graduation. Each finding has associated evidence-based strategies including those to promote the engagement and retention of Aboriginal staff; training and support for non-Aboriginal health workers; effective service design; and support strategies for effective student placement.

Conclusions. Strategies are evidenced in the peer-reviewed literature to improve the rural and remote workforce for health delivery for Australian Aboriginal people and should be considered by policy makers, funders and program managers.

What is known about the topic? There is a significant amount of peer-reviewed literature about the recruitment and retention of the rural and remote health workforce.

What does this paper add? There is a gap in the literature about strategies to improve recruitment and retention of the rural and remote health workforce for health delivery for Australian Aboriginal people. This paper provides evidence-based strategies in four key areas.

What are the implications for practitioners? The findings of the present study are relevant for policy makers, funders and program managers in rural and remote Aboriginal health.

Introduction

Aboriginal Australians experience an unacceptably high burden of chronic disease.[1] For the purposes of this paper, the term Aboriginal is used to refer to Australian Aboriginal and/or Torres Strait Islander people. Chronic disease is a primary driver of the 10-year gap in life expectancy between Aboriginal and non-Aboriginal Australians.[1,2] In 2008, the Council of Australian

Governments made a commitment to close the gap in health and life expectancy between Aboriginal and non-Aboriginal Australians by 2030. At the time, the life expectancy gap was 17 years. The Australian Government subsequently agreed that, given the gravity of the health status of Aboriginal people, the Prime Minister of Australia would provide an annual report on progress to the parliament. The Closing the Gap reports provide

an annual update on progress in areas of health, infant mortality, early childhood and educational readiness and achievement.[2]

Aboriginal people living outside urban areas experience an increased prevalence of complex, chronic disease than those living in urban areas.[1,3] The 2011 census showed that 67% of Aboriginal people live outside of capital cities.[4] The demands of delivering healthcare services and maintaining clinical skills in a rural or remote context are well documented.[5–7] The health workforce is fundamental to the delivery of health care for Aboriginal people in rural and remote communities.[6,8,9]

There is considerable literature about developing and sustaining the health workforce in rural and remote communities; however, evidence about factors that positively contribute to sustaining the health workforce is limited and often inferred from the identified issues and barriers.[10–12] It is known that there are differences between health professionals in terms of what motivates them to stay working and living in rural and remote areas.[13] For example, doctors are motivated by career and service aspirations, as well as financial incentives.[14,15] Nurses are retained through relationships with colleagues and communities and management approaches,[16] whereas allied health professionals appreciate the challenge and diversity of work roles in rural communities and personal factors associated with rural living.[13] For all health professionals, access to supervision, professional support and continuing professional development are important retention factors.

There are additional factors associated with developing and sustaining the rural and remote health workforce to meet the needs of Aboriginal people and communities.[17] The cultural competence of healthcare services and professionals is associated with the likelihood that Aboriginal people will access those services.[3] Therefore, the recruitment, development and retention of a culturally competent health workforce is important in meeting the health care needs of Aboriginal people.[18] Given this, confidence and competence in working with Aboriginal people will contribute to the retention of health professionals in rural and remote communities.

The purpose of the present study was to identify evidence-based strategies in the literature for developing and maintaining a skilled and qualified workforce to meet the health needs of Aboriginal people in rural and remote Australia. The findings of this study will be significant in designing and implementing sustainable health workforce strategies that improve the cultural competence, quality and quantity of healthcare services available, and contribute to closing the gap in life expectancy for Aboriginal people living in rural and remote Australia.

Methods

A systematic literature review guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement[19] was undertaken using three major online databases: PubMed OVID, Medline and Cumulative Index to Nursing and Allied Health Literature (CINAHL). The search terms developed by the Lowitja Institute (Melbourne, Vic., Australia) to identify all papers relating to Australian Aboriginal and/or Torres Strait Islander people were applied as the primary search terms[20] and 9079 papers were found. The terms 'health' or 'health programs' were searched separately, and 5 289 407 papers were identified.

The term 'workforce' was then searched and 105 364 papers were identified. When the primary search terms for Aboriginal people were added to 'health' or 'health program' and 'workforce', a total of 59 papers was identified.

As noted above, 59 papers were found in the initial search. Additional sources were not accessed in the present study because the authors were explicitly seeking peer-reviewed literature and evidence-based strategies. The titles and abstracts of the 59 papers identified were reviewed. Twenty-two papers were excluded because they were duplicates. The full text of 37 papers was reviewed against the inclusion criteria, which were: published between 2000 and 2015; containing quantitative or qualitative data relating to Aboriginal people; and health or health-related services and workforce. Twenty-six papers met the criteria and were included in the study. The 26 papers were then reviewed in relation to developing and maintaining a skilled and qualified rural and remote health workforce in Australia. Four findings emerged.

Results and Discussion

Broadly, the systematic review found that there are not enough skilled and qualified clinicians to meet the needs of Aboriginal people in rural and remote Australia.[7–9,21–24] It was also found that the existing workforce distribution is uneven,[21,22] the non-Aboriginal workforce is aging,[8,23] Aboriginal people make up a small proportion of the health workforce and face significant challenges entering and staying in the health workforce[12,17,24] and the cultural competence of the existing health workforce is variable.[25,26] The primary strategies identified to address these issues are to promote rural and remote Aboriginal health practice to students; provide additional support, such as training, improved cultural competence, and peer mentoring to the existing health workforce; and develop and support the Aboriginal health workforce at a local level.

Four key findings emerged from the peer-reviewed literature: (1) Aboriginal people in the health workforce have particular challenges that affect their engagement with education, training and employment; (2) there are particular factors that affect the effectiveness and longevity of non-Aboriginal staff working with Aboriginal people in rural and remote health; (3) the attitudes and behaviours of the workforce have a direct effect on service delivery design and models in Aboriginal health; and (4) student placements in Aboriginal health in rural and remote areas affect post-graduation job choice. The number of papers relating to each of these findings is given in Table 1 and each of the findings is discussed in detail below.

Experience of the Aboriginal health workforce

Nine papers examined the experience of Aboriginal people in the health workforce and identified that they are likely to face challenges such as racism, family and community responsibilities, isolation, stress and poor secondary education.[10–12,27] At the same time, Aboriginal people in the health workforce are likely to have a positive effect on the patient experience of the healthcare service, which may, in turn, improve trust, attendance at appointments and acceptance of assessment and treatment recommendations.[11,18,24–26,28] All nine papers identified the importance of the Aboriginal health workforce and the need to

Table 1.   Summary of findings

Theme	Description	References
1. The experience of the Aboriginal health workforce	Nine papers examined the experience of Aboriginal people in the rural and remote health workforce, the particular challenges they face and the strategies for addressing those challenges	10–12, 18, 24–28
2. The rural and remote workforce in Aboriginal health	Seven papers identified factors affecting the effectiveness and longevity of the non-Aboriginal and/or non-local rural and remote health workforce and the ways to assist them to be effective in their roles	6–9, 21–23
3. Workforce and service delivery models	Seven papers examined workforce strategies used in Aboriginal health service delivery or specific programs	3, 4, 29–33
4. The effect of student placements	Three papers examined the effect of providing rural and remote placements in Aboriginal communities for students on their post-graduation employment choices	34–36

provide specific support, such as education, training, mentoring, cultural and family leave provisions, as well as peer support, to address the significant issues they face. Equally important are explicit strategies for acknowledging, preventing and dealing with racism; strategies to promote team cohesion and cooperation; recognition and respect of different knowledge (e.g. medical, cultural, community); and ongoing cross-cultural training.

There are two broad strategies in the literature to increase the representation of Aboriginal people in the health workforce. The first relates to pathways to training and qualifications, and the second relates to the inclusiveness and cultural safety of the workplace, as well as the cultural competence of the team.

Increasing the representation of Aboriginal people in the health workforce requires explicit pathways and strategies in schools and universities for Aboriginal people to gain and/or upgrade their qualifications. Although the barriers to higher education are well understood, programs are rarely designed to address them. The five enablers for tertiary education detailed by West *et al.*[28] should be independently evaluated for effectiveness in engaging Aboriginal students and the subsequent effect on retention, completion and employment.

Issues such as racism, respect of different knowledge (cultural, community, clinical), team work and family and cultural leave provisions can be readily addressed through culturally competent human resources policy and practice, backed by a strong culture and leadership of inclusion and respect.

Rural and remote health workforce in Aboriginal health

Seven papers in the study identified factors affecting the effectiveness and longevity of the non-Aboriginal and/or 'non local' rural and remote health workforce. 'Longevity' is used herein as a catch-all term. The literature uses a range of terminology, including retention, turnover, churn and attrition. The factors that promote longevity in the present review fell into three broad categories: (1) clinical experience, qualifications and skills; (2) access to professional development, supervision and peer support; and (3) interpersonal communication, cultural competence and perceived connectedness with the rural or remote community.[6–9,23] The first set of factors can be readily determined through the job design and the recruitment process. The second and third sets of factors can be developed if there is willingness on the part of the employee and employer, and with timely and on-going access to training and professional

development.[8,21,22] The literature on this issue emphasises the importance of the relationships between the health worker and the local community, including local Aboriginal communities, as well as the relationship between the health worker and his or her peers, including Aboriginal peer mentors, to ensure that the worker is supported professionally and culturally in his or her role. All the papers identified the need to improve the supply, distribution and support of skilled health clinicians and workers in order to improve the availability of Aboriginal health services in rural and remote Australia.

The finding relates to the effectiveness and longevity of the non-Aboriginal/non-Local workforce, and that this is consistent with the broader research on retention of the rural and remote health workforce.[13] Relationships between the worker and the community, Aboriginal peers and/or mentors and clinical networks all effect the longevity of the Aboriginal health workforce and this is strongly evidenced in the literature.

Workforce and service delivery models

Seven papers in the study examined workforce strategies used in Aboriginal health service delivery or specific program outcomes, including mental health, chronic disease management, family violence and health promotion. All the papers in this area identified the significance of the relationships and engagement between Aboriginal and non-Aboriginal staff, as well as the importance of an empowered, supported and skilled Aboriginal health workforce.[3,5,29–33] In addition, the papers in this area explored the special training and support needs of particular groups of workers to effectively implement health programs. For example, Kowanko *et al.*[31] detail the importance of training the entire health team in mental health and safe medication management, as well as the specific issues associated with medication adherence and risks for Aboriginal people. Lauw *et al.*[32] detail a family violence prevention and treatment training program for health workers and the importance of acknowledging participants' potential history as a victim of violence within the training process itself. The importance of designing and delivering training that targets both the needs of the health work force (i.e. specific skills and knowledge related to the health program) and the intended patient group (i.e. what are the particular characteristics of the target patient group and how can their needs be best met by the health worker) is highlighted.

The papers in this area traverse domestic violence, chronic disease management, mental health and health promotion, yet all detail the criticality of working together as a team, valuing the different skills workers bring and understanding the target patient group in order to implement the program effectively for Aboriginal people.

Effect of student placements

Three papers included in the present study examined the effect providing rural and remote placements in Aboriginal communities for students on their post-graduation employment choices. All three papers found that placing students in a Aboriginal rural and remote health context was likely to impact positively on their learning, and may contribute to the rural and remote health workforce supply over time.[34–36] All three papers emphasised the importance of student placement being properly established, supported, resourced and supervised.

The three papers that examined the effects of providing rural and remote placements in Aboriginal communities on post-graduation employment choices are consistent with the broader literature about the value of student placements in rural and remote health services.[37] In the same way that well-planned, supported and supervised student placements impact positively on the likelihood of a graduate choosing to work in rural and remote health, they also increase the likelihood that students will choose to work in rural and remote Aboriginal health if they have had a positive experience. The additional benefit of placement in Aboriginal health is the increase in cultural competence of the graduating student.

The four key findings and the associated literature are summarised in Table 1.

The evidence-based strategies identified in the present systematic review are relevant for funders, policy makers and program managers seeking to develop and sustain an effective health workforce in rural and remote Australia, and close the gap in life expectancy for Aboriginal Australians.

The present systematic review only examined literature from Australia, and this may be seen as limiting. However, the uniqueness of Aboriginal culture and Australian history and context is such that focusing only on the Australian literature was deemed by the authors more likely to identify strategies relevant to the Australian rural and remote context and Aboriginal populations.

Conclusion

The rural and remote health workforce in Australia is declining and urgent action is required to address the current uneven and insufficient supply.[7–9,21,22] This is not a new issue. Four findings emerged in the present study, each of which details the barriers to and strategies for improving the quantity, quality, stability and longevity of the rural and remote health workforce for Aboriginal communities. The literature provides evidence-based strategies that are likely to increase the number of qualified, skilled and effective staff to provide much-needed health services for Aboriginal people in rural and remote areas. A sustainable and highly skilled rural and remote health workforce is fundamental to closing the gap in life expectancy for Aboriginal Australians. Strategies are evidenced in the peer-reviewed literature and should be considered by policy makers, funders and program managers.

Competing interests

None declared.

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