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'It's got to be another approach': an Aboriginal Health Worker perspective on cardiovascular risk screening and education

Background

Aboriginal Australians have a higher burden from cardiovascular disease. This study provides a new perspective from Aboriginal Health Workers (AHWs) working in the area of heart health in the Aboriginal community of western Sydney.

Methods

Eight AHWs and Aboriginal nurses were interviewed and thematic analysis undertaken. Analysis was refined in group and individual discussions with participants in a participatory approach.

AHW assessment was reported to differ from the biomedical model. AHWs were seen to play an important part in cardiovascular risk assessment and education due to their access and credibility to clients.

Discussion

AHWs are well placed and keen to be a part of the team that assesses cardiovascular risk. However, lack of recognition of the AHWs' skills and lack of access to formal training are current barriers to enhancing their role in the heart health team.

Keywords

Indigenous health services; cardiovascular diseases; primary prevention; health education; community health workers; qualitative research

Cardiovascular disease (CVD) is a major health concern in the Aboriginal population^{1,2} and contributes to the significant life expectancy gap between Aboriginal and non-Aboriginal Australians.³ Conventional risk factors alone do not account for the excess CVD mortality, which has foundations in the economic, social, physiological, psychological and educational disadvantage of the Aboriginal population.⁴ There is a lack of progress in reducing the disparities in health outcomes between Aboriginal and non-Aboriginal Australians.⁵ This may be because of a focus, to date, on acute care and patient responsibility rather than addressing underlying determinants of health such as living conditions and socioeconomic factors.^{6,7}

In Aboriginal communities, Aboriginal Health Workers (AHWs) fulfil a variety of roles, depending on personal interests and the needs of the community. Unfortunately, a lack of understanding of the diverse expertise of AHWs persists.^{8,9} A universal role is that of a cultural broker through which communication between Aboriginal people and non-Aboriginal healthcare providers are enhanced, thereby increasing the effectiveness of their interaction. Recognition of AHWs as an important part of the healthcare team has been suggested as a means of delivering improved healthcare to the Aboriginal population.⁸

The aim of this study was to study the perspectives of Aboriginal health professionals (nurses and AHWs) regarding cardiovascular risk and heart health, including their understanding

of cardiovascular risk assessment. Qualitative research methods can improve the understanding of perceptions of health across cultures and lead to improved health outcomes. 10

This study was undertaken with AHWs and Aboriginal nurses from the Aboriginal Medical Service Western Sydney (AMSWS) and Western Sydney Local Health District, all of whom are working in the area of chronic disease management or heart health. AMSWS is a large Aboriginal community controlled health organisation that provides multidisciplinary primary healthcare, including cardiovascular screening, healthy lifestyle education and case management to clients with heart disease. 11

Methods

Support for this project was formally given by the Board of the Aboriginal Medical Service Western Sydney. Ethics approval was granted by the Aboriginal Health and Medical Research Council of New South Wales (834/11) and the University of Western Sydney Human Research Ethics Committee (H9441).

Semi-structured interviews (Table 1) were conducted at the AMSWS by a single interviewer (TD), audio-recorded and transcribed. Participants' views on conventionally recognised risk factors, as well as the impact of socioeconomic disadvantage and psychosocial mediators on heart health risk were sought. Awareness around non-ischaemic causes of cardiovascular disease in Aboriginal Australians, such as rheumatic heart disease and cardiomyopathies, were not explored. All Aboriginal people working in the area of heart health and chronic disease within the AMSWS and the Western Sydney Local Health District were invited to participate. All eligible participants were

available and participated in this study.

Interviewees included six AHWs and two nurses, all of whom were female and aged 30-62 years. There were no eligible male participants. Their work duties included health screening and client education in heart health. Two participants also had managerial roles, which included supervision of other AHWs. The nurses expressed views relating to their roles and those of their AHW colleagues, allowing shadowing of the data provided by the other participants. 12 For the purposes of this study, interviewees recommended using the term AHW to encompass all participants.

Thematic data analysis was undertaken using an inductive, constant comparative technique. 13 Interview transcripts were de-identified and coded individually by two researchers (TD and PA). Emergent key themes were discussed and consensus achieved. The subsequent thematic framework was submitted to the interview participants for the purpose of respondent validation¹⁴ in order to increase the rigour of the findings and to include the Aboriginal participants' viewpoints in the analysis using a participatory

approach. 15 Group and individual discussions were subsequently held with all study participants. Formal consent for release and dissemination of the findings was gained from all participants and from the Board of the Aboriginal Medical Service Western Sydney, including approval of the final manuscript.

Results

The dominant themes to emerge from the interviews were that AHWs should have a strong role in cardiovascular risk assessment, AHW assessment differs from the traditional biomedical model and AHWs were interested in enhanced training in cardiovascular risk assessment.

The role of AHWs in cardiovascular risk assessment

There was universal agreement that AHWs can and should have an increased role in cardiovascular risk assessment. They were considered to be in a unique position to engage with their patients because of their greater accessibility to clients and because of their increased insight into their

clients' social situations and health issues. The health education they provided to patients as part of the cardiovascular risk assessment may be more easily understood and effective due to shared understandings.

'I've grown up in this area; I don't actually have a problem with talking to anyone or anyone talking to me. Maybe when it comes to the nurse... she's not an Aboriginal person. She may have a problem sometimes with people in the community – they're not very forthcoming with their information so I'll liaise between them '

'As Aboriginal Health Workers, we are still the community. We don't escape any of what goes on with the community."

Some participants also believed that inclusion of AHWs in the clinical team assessing cardiovascular risk may increase after follow up of people at high risk.

'I can follow up; I do follow up. If someone doesn't come, you know, they'll (doctors and nurses) send them a letter, where I'll get on the phone and say, "Hey what's going on, what are you doing, I haven't seen you for a while."

Another potential advantage of an enhanced AHW role was suggested to be reduction of the burden on other health professionals through AHWs taking more responsibility and assisting with improving patient understanding when this contributed to poor adherence to recommended treatments.

'Because she didn't understand the risk factors or the prevention that the medication would do she didn't take it... You just sit down and explain it quite simple... they got the bigger picture and went back to the GP, had their aortic valve replaced in the nick of time. You don't have to talk big words or you know, just have the understanding that you speak to them on the same level so they can understand it.'

Participants expressed an opinion that the role of AHWs within the clinical team was undervalued and needed to be promoted within the health system and to other health professionals.

'I think it [cardiovascular risk assessment] can be an Aboriginal Health Worker or a nurse's responsibility as long as they're trained in it and they know what they're doing.' 'We need to get more Aboriginal Health Workers... it's about cultural [understanding]... about having that familiar

Table 1. Interview schedule	
Topic area	Initial questions
Introduction	 What is your role in the organisation? Are you involved in screening patients for health problems? What training have you undertaken?
Cardiovascular risk	4. What do you think are the most important questions to ask when someone is at an increased risk of having heart disease/stroke in the future?5. What do you understand by the term cardiovascular risk?
	Which cardiovascular risk factors (conventional) are important? In your experience, what affects cardiovascular risk?
	8. Do you think that a person's mental health affects their cardiovascular risk?
	9. Do you think that a person's social situation affects their cardiovascular risk?
	10. Do you think that a person's economic situation affects their cardiovascular risk?
Cardiovascular	11. How do you assess cardiovascular risk?
risk assessment	12. Are there any factors that are more important than the medically recognised cardiovascular risk factors?
	13. In your opinion, who should be assessing cardiovascular risk? Why?
	14. Do you think that there needs to be a specific cardiovascular risk assessment for the Aboriginal community?
	15. Do you think any improvements need to be made in the way cardiovascular risk is assessed in the Aboriginal community?
Conclusion	16. Is there anything else that you would like to add?

face that's going to be there and helping, help the patients deal with the issues they're going through.'

The differences in cardiovascular risk assessment done by AHWs

The factors considered by AHWs in their assessment of cardiovascular risk differ from the traditional biomedical model. They placed a greater emphasis on the impact of life stressors and the patient's socioeconomic situation on heart health.

'You've got to look at the big picture... a range of risk, other factors that are affecting their life, like whether they have a house, whether they have money, whether they've got family support, all that comes into play.'

Family history also featured prominently in AHW assessments. They appreciated that a strong family history not only puts their patients at higher risk from a genetic perspective but it also shapes how their patients perceive CVD and their responses to it. Participants believed that family history presented the greatest opportunity to effect change in people's attitudes to CVD.

'I think for Aboriginal people, if you have a strong family history of heart disease in your family, you just think it's going to be inevitable for you.'

'Their family history... I think that's the biggest indicator of this person's risk of developing cardiovascular disease, what the parents and siblings' health status is like. So, that's the biggest thing I look at.'

Participants did not use cardiovascular risk calculators, but cardiovascular risk assessments were widely used, often in a checklist approach. Although participants clearly understood the concept of cardiovascular risk, they did not consider the finer details of graded risk in the same way as expressed in calculators, reflecting their understanding that cardiovascular risk in Aboriginal people went beyond the biomedical model of individual risk factor calculations and was a wholeof-community, intergenerational issue.

'I think that's something that the doctors would say, but you know, as far as I'm concerned, I wouldn't like to tell a patient that they're [at high or low cardiovascular risk]. I might just suggest or make a suggestion, say, you know, it might be worthwhile joining, you know, the

gym or doing something like that'.

'[CV risk assessments] are purely medical types of measures; for Aboriginal people you've got to take in those social determinants of health issues as well. You can't separate them from them and their health. And, as well as that, you know, past government policies and their impact.'

Enhanced training in cardiovascular risk assessment

A barrier to undertaking more formal cardiovascular risk assessment was an awareness for some that they did not have any formal training in the area of cardiovascular risk assessment, resulting in both a lack of confidence themselves and the risk that others might see them as working outside their designated role. Most of the AHWs were keen to increase their knowledge and skills in the area of heart health.

'Because they'd get a certificate and they'd be recognised... not just learn it in-house. I think something formal with a certificate and everything is excellent.'

Some of the participants expressed disappointment at the paucity of available training opportunities, which would give formal recognition of their skills and role. Other reported barriers to increasing their skills included poor promotion of available resources and educational opportunities. Preference was expressed for training to be delivered in a small-group setting, allowing for interactive learning and different perspectives to be heard, thereby creating a richer learning environment.

Discussion

AHWs participating in this study believed they brought an important and complementary cultural perspective to assessment of cardiovascular risk in Aboriginal people. This was seen as enhancing assessments performed by doctors and other members of the healthcare team. Furthermore, their cultural understanding often led to improved communication with clients and could assist in ongoing education and management of Aboriginal people with or at risk of CVD. They felt the skills of AHWs in heart health were under-utilised in healthcare teams, particularly outside the Aboriginal community controlled health sector. They recommended provision of more training opportunities leading to recognised qualifications,

as well as increased recognition by health professionals of the benefits of including AHWs as part of the healthcare teams.

Congruent with these views, Taylor et al¹⁶ reported that including an AHW in the clinical team led to improved management of cardiovascular disease in Aboriginal patients through facilitation of culturally appropriate care, enhanced communication, provision of culturally appropriate education and improved follow up. Barriers identified to making effective use of the AHW included poor role definition and limitations in training. Although this study was carried out in the context of inpatient care and cardiac rehabilitation in a tertiary hospital, these themes are similar to those identified in our community study. Participants in our study often described themselves as communication conduits between their clients and doctors. The AHWs reported providing clients with additional information, as they felt less well able to relate with the doctors when discussing their cardiovascular risk. Effective risk communication is defined as the 'open two-way exchange of information and opinion about risk, leading to better understanding and better decisions about clinical management'.17 Aboriginal clients place a strong emphasis on trust; without adequate trust, delivering effective healthcare is impossible. 18

AHWs are ideally placed to improve assessment of cardiovascular risk. It is critical to ensure that risk is communicated in an appropriate manner to the client. 19 Participants identified that complex and jargon-laden language often left their clients frustrated and patronised. AHWs placed a greater emphasis on family history and their clients' social situation over the biomedical risk assessment model and believed this corresponded with their clients' views as well. Additionally, it was recognised that repeated reinforcement of risk could lead to improved uptake of the messages. 19 AHWs have the opportunity to interact with their clients regularly and thus facilitate timely reinforcement of CV risk.

Lastly, improved educational opportunities would enable AHWs to contribute more to the healthcare team. This study found similar barriers were faced by AHWs in the pursuit of educational advancement as those identified by Felton-Busch et al.²⁰ Davidson et al²¹ have shown that a collaborative approach to CVD education can improve AHW confidence and skills in the area of cardiovascular assessment. AHWs need

to be supported in accessing further training. Participants in our study felt training that was currently available was often ad hoc and would be better delivered as formally recognised training and qualifications in order to increase their ability to work as confident and recognised members of the heart health team. National bodies with an interest in cardiovascular health of the Aboriginal peoples, including the Cardiac Society of Australia and New Zealand and the Royal Australian College of General Practitioners, should be encouraged to support the development of formal qualifications for AHWs 22

Strengths of this study were increasing reflexivity in the research process through acknowledgement and consideration of the researchers' and the study participants' varying backgrounds and expertise¹³ and increasing the validity of the findings through a participatory research process, which included involvement of participants in the thematic analysis and checking of the research findings.

Limitations

The small number of participants and the fact that all participants were drawn from one particular area could be considered a limitation of this study. However, we have interviewed all of the Aboriginal staff members with designated roles in heart health in the local area, including those working in an Aboriginal community controlled health service and those in the local health district, and the interviews explored the issues to thematic saturation.

Conclusions

AHWs bring a unique and holistic perspective to the assessment of cardiovascular risk in Aboriginal people, which can enhance the usual biomedical cardiovascular assessments through better engagement and increased focus on the psychosocial aspects of heart health. Involvement of AHWs in healthcare teams working in the area of heart health is likely to increase the effectiveness of cardiovascular risk assessments and subsequent health education and management of Aboriginal people. However, lack of recognition of the AHWs' skills and role, including through formal training and qualifications, and recognition by other healthcare professionals, is a current barrier to utilising AHWs more fully in the heart health team.

AHWs are in a unique position to understand their community's needs and their viewpoint is critical in development of policy and practice. AHWs can to be said to have 'their hand on the pulse' of their community's needs and expanding their role within the healthcare team can lead to improved cardiovascular outcomes for Aboriginal people.

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References

- Australian Bureau of Statistics & Australian Institute of Health and Welfare. The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples (cat. no. 4704.0). Canberra: ABS, 2008. Available at www.abs.gov.au/AUSSTATS/abs@.nsf/ Lookup/4704.0Main+Features10ct%20 2010?OpenDocument [Accessed 8 May 2014].
- Australian Institute of Health and Welfare. Cardiovascular disease and its associated risk factors in Aboriginal and Torres Strait Islander peoples 2004-05 (cat. no. CVD 41). Canberra: AIHW, 2008. Available at www.aihw.gov.au/ publication-detail/?id=6442468095 [Accessed 8 May 2014].
- Brown A. Bridging the survival gap between Indigenous and non-Indigenous Australians: priorities for the road ahead. Heart Lung Circ. 2009;18:96-100.
- Brown AD, Morrissey MJ, Sherwood JM. Uncovering the determinants of cardiovascular disease among Indigenous people. Ethn Health 2006;11:191-210.

- Department of Health and Ageing. Development of a National Aboriginal and Torres Strait Islander Health Plan, Canberra: Commonwealth of Australia: 2012. Available at https://consultations.health.gov.au/oatsih/natsihp-1/ supporting_documents/Discussion_paper_ final0912.pdf [Accessed 8 May 2014].
- Lloyd J, Wise M, Weeramanthri T, Nugus P. The influence of professional values on the implementation of Aboriginal health policy. J Health Serv Res Policy 2009;14:6-12.
- Reilly RE, Doyle J, Bretherton D, et al. Identifying psychosocial mediators of health amongst Indigenous Australians for the Heart Health Project. Ethn Health 2008;13:351-73.
- Abbott P, Gordon E, Davison J. Expanding the roles of Aboriginal health workers in the primary care setting: Seeking recognition. Contemp Nurse 2007;26:66-73.
- Mitchell M, Hussey LM. The Aboriginal health worker. Med J Aust 2006;184:529-30.
- Willows ND. Determinants of healthy eating in Aboriginal peoples in Canada: the current state of knowledge and research gaps. Can J Public Health 2005;96 (Suppl 3):S32-36, S6-41.
- 11. AMSWS. Aboriginal Medical Service Western Sydney. 2011. Available at www.amsws.org.au/ [Accessed 8 May 2014].
- 12. Morse JM. Using shadowed data. Qual Health Res 2001;11:291-92.
- 13. Pope C, Ziebland S, Mays N. Analysing qualitative data. BMJ 2000;320:114-16.
- 14. Kitto SC, Chesters J, Grbich C. Quality in qualitative research. Med J Aust 2008;188:243-46.
- 15. Hughes I. Action Research in Healthcare. In: Reason P, Bradbury H, editors. Handbook for Action Research: Participative Inquiry and Practice. London: Sage, 2008. p381-93.
- 16. Taylor KP, Thompson SC, Dimer L, Ali M, Wood MM. Exploring the impact of an Aboriginal Health Worker on hospitalised Aboriginal experiences: lessons from cardiology. Aust Health Rev 2009;33:549-57.
- 17. Edwards A, Elwyn G, Mulley A. Explaining risks: turning numerical data into meaningful pictures. BMJ 2002;324:827-30.
- 18. Shahid S, Finn LD, Thompson SC. Barriers to participation of Aboriginal people in cancer care: communication in the hospital setting. Med J Aust 2009;190:574-79.
- 19. Fagerlin A. Zikmund-Fisher BJ. Ubel PA. Helping patients decide: ten steps to better risk communication. J Natl Cancer Inst 2011;103:1436-43.
- 20. Felton-Busch CM, Solomon SD, McBain KE, De La Rue S. Barriers to advanced education for indigenous Australian health workers: an exploratory study. Educ Health (Abingdon) 2009;22:187.
- Davidson PM, Digiacomo M, Abbott P, et al. A partnership model in the development and implementation of a collaborative, cardiovascular education program for Aboriginal Health Workers. Aust Health Rev 2008;32:139-46.
- 22. Jeremy R. Tonkin A. White H. et al. Improving cardiovascular care for Indigenous populations. Heart Lung Circ 2010;19:344-50.

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