

**Penny Abbott**

MBBS, MPH, FRACGP, is a general practitioner, Aboriginal Medical Service Western Sydney, Mt Druitt, and Researcher Development Program Fellow, University of Sydney, New South Wales. pennyab@amsws.org.au

**Joyce Davison**

Senior Aboriginal health worker, Aboriginal Medical Service Western Sydney, Mt Druitt, New South Wales.

**Louise Moore**

EN, is an Aboriginal health worker, Aboriginal Medical Service Western Sydney, Mt Druitt, New South Wales.

# Too many of us have gone early

## Priorities in heart health education for Aboriginal people

Aboriginal people have a higher burden of cardiovascular risk factors and heart disease and poorer outcomes after heart attacks when compared with other Australians. Indigenous status is also a risk factor for delayed response to heart attack symptoms. A community DVD about preventing and managing heart disease was made at the Aboriginal Medical Service Western Sydney in 2005. The aim of this article is to reflect on the process of making the DVD as a community driven health promotion activity and to explore questions raised and insights gained about heart health education for Aboriginal people in the context of the existing literature. The importance of education about heart attack symptom recognition and prompt hospital presentation, as well as risk factor management, by general practitioners and other health practitioners working with Aboriginal people, is highlighted.

■ **A generation of leaders and grandparents is being lost. Life expectancy of Aboriginal people is nearly 20 years less than that for non-Aboriginal Australians.<sup>1</sup> Cardiovascular disease (CVD) is the single greatest cause of premature death in Aboriginal people.<sup>2</sup> Prompt presentation to hospital with heart attack symptoms is critical, given the importance of early reperfusion treatment in ensuring optimal survival after heart attack.<sup>3</sup> Indigenous status appears to be a risk factor for delayed response to heart attack symptoms and the reasons for this are unclear.<sup>4</sup>**

Health education in Aboriginal communities is more effective if the principles of self determination are followed and Aboriginal health workers (AHWs) and culturally appropriate resources are used.<sup>5</sup> A 'healthy heart yarn up' was held to seek community advice on priorities and strategies to improve the cardiovascular health of the Aboriginal community of western Sydney. Community members at the meeting expressed great anxiety that they or their family members would have a heart attack and wanted to know how to prevent this. They suggested that a DVD be made so that Aboriginal people with heart disease could share their experiences with their community (*Table 1*). DVD participants highlighted the need for community recognition of the symptoms of heart attacks and the importance of early hospital presentation. Strikingly, they did not identify risk factor management as a key heart health message for their community.

### Early symptom recognition and hospital presentation

DVD participants highlighted the importance of early hospital presentation. Before this project, this had not been a strong focus of our heart health programs at the Aboriginal Medical Service Western Sydney (AMSWS).

A recent review showed that, compared to other Australians, Indigenous Australians have 1.4 times the likelihood of dying from a heart attack before reaching hospital, twice the likelihood of dying in hospital, and less chance of undergoing revascularisation

Table 1. Development of 'Heart aches: personal stories of heart disease': a community DVD

In 2005, five Aboriginal heart attack survivors made a DVD with our project team comprising two AHWs and a GP from the AMSWS. The aim of the DVD was to present the health messages the heart attack survivors felt were most important for the prevention and management of heart disease in their community. The project team filmed interviews with three men and two women aged 35–67 years who had survived heart attacks

Key messages from DVD participants:

- Community members need education about recognition of the varied symptoms of heart attacks and the importance of prompt hospital treatment
- Early death from heart disease robs the community of the people they need
- Heart disease causes stress on social and emotional wellbeing and relationships
- Support from family and from peers who had heart disease is beneficial and important

Despite their personal experience of heart attacks and risk factor education, DVD participants did not highlight CVD risk factor management as an important heart health message for their community. With prompting, two participants stated that people with heart disease should strive for a healthy lifestyle. This lack of identification of the importance of risk factor management was surprising to the team as it had been a strong focus of the health care received by participants since their heart attacks. Scripted messages about risk factor management delivered by school children and an AHW were subsequently incorporated into the DVD

The process of making the DVD resulted in our project team reflecting on and modifying the heart health program we deliver at the AMSWS. Our awareness of the need to communicate effectively with patients about the benefits of CVD risk factor management was heightened. We also increased our educational focus on heart attack symptom awareness and the importance of prompt hospital presentation in the event of a possible heart attack

The project team and the community members involved found the making of the DVD to be an interesting and useful process and plan to evaluate the effectiveness of the DVD as a health promotional tool in the future

procedures.<sup>6</sup> Late presentation to hospital is likely to contribute to these suboptimal outcomes and geographic barriers are not enough to explain this. In a Northern Territory study, indigenous people sought hospital care for heart symptoms much later than nonindigenous people (10 vs. 3.26 hours) regardless of whether they were from urban or remote communities.<sup>7</sup>

Other studies have looked at causes of delayed hospital presentation in the general community. In Australia, a substantial number of heart attack patients present first to their GP, causing unnecessary delay.<sup>8,9</sup> Studies have shown a lack of knowledge of symptoms and the correct course of action is associated with low education, low income and language barriers. In addition, social and emotional factors are important, with embarrassment and not wanting to bother others cited as common reasons for late presentation. Having known risk factors for myocardial infarction, or even a history of heart disease, does not appear to improve response time.<sup>10–14</sup>

The main causes of delayed hospital presentation of Aboriginal people with heart attack symptoms are lack of symptom recognition, failure to act despite knowledge that a heart attack is probably occurring, and taking inappropriate action.<sup>4</sup>

Mass media campaigns, including that of the National Heart Foundation of Australia, have had mixed results<sup>5,14</sup> and are generally less effective in reaching marginalised communities.<sup>15</sup> However, there is evidence that health professionals can make a difference through individual patient education, particularly by highlighting to patients that they are at high personal risk of a heart attack and that symptoms are not always dramatic, and promoting the correct course of action in the event of heart attack symptoms, including the use of action plans.<sup>5,16</sup>

### Vascular risk factor education

It is simplistic to focus only on reduction of vascular risk factors when thinking about the disproportionate burden of heart disease in Aboriginal people. Psychological, economic and societal risk factors also contribute strongly to the heart health disadvantage.<sup>17</sup> Focus on the physical and behavioural determinants of heart disease and other chronic disease must not prevent clinicians from recognising and incorporating understanding of the effects of the social determinants of poor health into health promotion and clinical management.<sup>18,19</sup>

Nevertheless, Aboriginal people have a much higher burden of all vascular risk factors.<sup>20</sup> Reduction of these biomedical and behavioural risk factors will help prevent premature heart disease<sup>21</sup> and is a strong focus of Aboriginal heart health programs.<sup>22,23</sup> Current CVD risk calculators underestimate risk in Aboriginal people.<sup>24</sup> Aboriginality is itself a recognised risk factor for CVD, decreasing the thresholds for initiating medical management of other risk factors such as hypertension and hyperlipidaemia.<sup>25,26</sup>

Cultural differences can contribute to varying understandings of the relationship between heart disease and vascular risk factors.<sup>27</sup> Many people with heart disease do not appreciate the causative importance of risk factors despite attempts at intensive education.<sup>28</sup> This is not necessarily a failure of their general practitioners or other health care providers to raise the issue. In addition, it is unclear whether beliefs as to the causes of coronary heart disease affect heart attack survivors' ability to change their risk behaviour. Studies are contradictory on this point.<sup>29</sup> Cultural differences can affect understandings of the relationship between heart disease and vascular risk factors.<sup>27</sup>

One study of urban Aboriginal people's perception of diabetes found that the people interviewed saw diabetes as a series of acute illnesses that needed to be dealt with when they happened, rather than as a preventable or manageable chronic disease.<sup>30</sup> However, there is little published information about Australian Aboriginal people's beliefs of the causation of heart disease or the relationship between vascular risk factors and heart disease.

Further research is warranted. It is possible that cultural understandings about the relationship between risk factors and heart attacks may contribute to some of the practical challenges encountered in improving Aboriginal heart health, such as decreased adherence to prescribed risk factor medication and lower attendance at cardiac rehabilitation.<sup>31,32</sup> Exploration of Aboriginal people's perceptions of the causation of heart disease and what they can do to prevent it may improve the quality of heart health education for Aboriginal people.

## Conclusion

Aboriginal people bear a significant burden of heart disease and risk factors for heart disease, and they present later to hospital with acute coronary symptoms. It is important for health professionals to discuss how to recognise and act on possible heart attack symptoms with high risk Aboriginal patients. In addition, risk factor education by GPs and AHWs is vital.

Investigation of the reasons behind delayed hospital presentation by Aboriginal people with heart attack symptoms, and effective strategies for CVD risk factor education are required. Better knowledge of cultural understandings about heart disease and CVD risk factors may increase the effectiveness of heart health education programs for Aboriginal people.

Conflict of interest: none declared.

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