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Implementing a working together model for Aboriginal patients with acute coronary syndrome: an Aboriginal Hospital Liaison Officer and a specialist cardiac nurse working together to improve hospital care

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Abstract. Acute coronary syndrome (ACS) contributes to the disparity in life expectancy between Aboriginal and non-Aboriginal Australians. Improving hospital care for Aboriginal patients has been identified as a means of addressing this disparity. This project developed and implemented a working together model of care, comprising an Aboriginal Hospital Liaison Officer and a specialist cardiac nurse, providing care coordination specifically directed at improving attendance at cardiac rehabilitation services for Aboriginal Australians in a large metropolitan hospital in Melbourne. A quality improvement framework using a retrospective case notes audit evaluated Aboriginal patients' admissions to hospital and identified low attendance rates at cardiac rehabilitation services. A working together model of care coordination by an Aboriginal Hospital Liaison Officer and a specialist cardiac nurse was implemented to improve cardiac rehabilitation attendance in Aboriginal patients admitted with ACS to the cardiac wards of the hospital. A retrospective medical records audit showed that there were 68 Aboriginal patients admitted to the cardiac wards with ACS from 1 July 2008 to 30 June 2011. A referral to cardiac rehabilitation was recorded for 42% of these. During the implementation of the model of care, 13 of 15 patients (86%) received a referral to cardiac rehabilitation and eight of the 13 (62%) attended. Implementation of the working together model demonstrated improved referral to and attendance at cardiac rehabilitation services, thereby, has potential to prevent complications and mortality.

What is known about the topic? Aboriginal Australians experience disparities in access to recommended care for acute coronary syndrome. This may contribute to the life expectancy gap between Aboriginal and non-Aboriginal Australians.

What does this paper add? This paper describes a model of care involving an Aboriginal Hospital Liaisons Officer and a specialist cardiac nurse working together to improve hospital care and attendance at cardiac rehabilitation services for Aboriginal Australians with acute coronary syndrome.

What are the implications for practitioners? The working together model of care could be implemented across mainstream health services where Aboriginal people attend for specialist care.

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Introduction

Cardiovascular disease is a significant contributor to the difference in life expectancy of 11.5 years for males and 9.7 years for females between Aboriginal and non-Aboriginal Australians.¹ In this paper, the term 'Aboriginal' is used to include both Aboriginal and Torres Strait Islander people. Coronary artery disease, the most common form of cardiovascular disease,² often manifests as acute coronary syndrome (ACS), a spectrum of disorders resulting from the development of thrombus in a coronary artery leading to varying degrees of cardiac muscle damage due to reduced oxygen supply. Advances in acute interventions for ACS and secondary prevention medication strategies have reduced mortality from coronary artery disease² and improved quality of life.³

The reported health disparities between Aboriginal and non-Aboriginal Australians have been linked to systemic and local factors, which impact on Aboriginal patients' experience of and access to care.⁴⁻⁸ Attendance at cardiac rehabilitation services after a cardiac event is associated with a reduction in risk of cardiac mortality.⁹ Rates of referral to cardiac rehabilitation services in Australia are reported as being between 29% and 45%.^{10,11} Two studies conducted in remote locations where cardiac rehabilitation services were not readily available reveal low attendance rates for Aboriginal patients.^{12,13} Attendance rates can be influenced by the strength of the recommendation to attend, distance to service, scheduling of sessions, and work and role conflicts.^{14,15} For Aboriginal patients, additional barriers include lack of access to culturally appropriate cardiac rehabilitation services.^{16,17}

It has been suggested that, to improve Aboriginal patients' experience, hospitals should provide a culturally safe environment.⁷ Cultural safety is a subjective experience that is best described by the person experiencing it. Health service attempts to provide a culturally safe environment might best be described as a set of practices that aim to ensure awareness and responsiveness to the cultural aspects of health and wellbeing.^{18,19} The more recent history of Aboriginal Australia has had profound effects on Aboriginal health and wellbeing and it should be recognised that, for many Aboriginal people, hospitals are symbols of the very institutions that had a role in their marginalisation in Australian society. The hospital is a site where Aboriginal and non-Aboriginal Australians meet under circumstances of great stress and hospital staff often lack cultural awareness and understanding. Hospitals are places where Aboriginal people continue to experience poor attitudes, racism and limited cultural understanding.⁶

The Victorian Government's Improving Care for Aboriginal and Torres Strait Islander Patients framework advocates that Aboriginal Hospital Liaison Officers (AHLO) are fundamental to a system-wide approach to improving hospital care of Aboriginal Australians. AHLOs bring cultural expertise to health services and are key people in the facilitation of communication between Aboriginal and mainstream health services. AHLOs provide reassurance to Aboriginal patients through direct contact and help to provide a culturally safe space.²⁰ They are crucial in supporting the families of Aboriginal patients and play a key role in planning for admission and discharge, especially rural or remote patients admitted to metropolitan hospitals.²¹

Provision of care by specialist nurses supported by healthcare workers from a similar socioeconomic or cultural background to the patients has been identified as an effective means to improve access to mainstream health and to overcome disparities in health care, including adherence to guideline-based secondary prevention for cardiovascular disease.^{22,23} Aboriginal Health Workers are qualified health professionals who are Aboriginal and provide direct patient care to Aboriginal patients. An Aboriginal Health Worker employed in a cardiology ward improved Aboriginal patients' attendance at cardiac rehabilitation.²⁴ However, Aboriginal Health Workers in these roles can experience lack of role clarity between a support and a clinical role, and of being responsible for all Aboriginal patients.^{24,25}

This paper reports a project that developed and implemented a model of care comprising an AHLO and a specialist cardiac nurse working together, to provide care coordination specifically directed at improving attendance at cardiac rehabilitation by Aboriginal patients with ACS in a large metropolitan hospital in Melbourne. This model of care has been utilised at this hospital between AHLOs and social workers.

Methods

Setting

The study was conducted in two cardiac wards at a large tertiary public hospital situated in metropolitan Melbourne, Australia. There are over 800 admissions of Aboriginal patients to the hospital every year with 30–40 of these being to the cardiac wards. The cardiac wards receive admissions for specialist care from all over the state of Victoria. Patients are discharged home from hospital with follow-up care, including cardiac rehabilitation, being provided in their local community. Cardiac rehabilitation refers to structured, usually short-term programs that incorporate modification of risk factors, exercise programs, health educations, counselling, and behaviour modification strategies, which are often delivered to groups of patients but include some level of individualised assessment.²⁶ It is recommended that all patients have access to cardiac rehabilitation after ACS.²⁷ Referral to cardiac rehabilitation services is considered to be a part of hospital care for patients with ACS, with the first stage of cardiac rehabilitation occurring in hospital usually being delivered by a cardiac nurse.

Participants

Patients, who identified themselves as Aboriginal or Torres Strait Islander on admission and were recorded as such on the Patient Administration System, were included in the study. They were required to have a diagnosis of ACS, or have an admission for an elective angiogram, percutaneous coronary artery intervention or coronary artery bypass surgery.

Methodology

Theoretical framework

Browne *et al.* identify four areas where postcolonial theory can inform nursing practice and research, and they are: '(a) issues of partnership and 'voice' in the research process; (b) a commitment to praxis-oriented inquiry; (c) understanding how continuities from the past shape the present context of health and health care;

and (d) the colonising potential of research'.²⁸ These perspectives framed the working together model, which explicitly seeks to address issues of cultural safety by having an Aboriginal person involved in all elements of the project. It recognises that two-way learning will occur between the AHLO and the cardiac nurse: both contributing to knowledge and shared learning.

Project design

A quality improvement framework using the 'plan-do-study-act cycle' comprising literature review and consultation (plan), retrospective case notes audit (do), and care coordination informed by the findings of the audit (study) and evaluation (act), was implemented. The research team seconded an experienced AHLO from the hospital. This AHLO has worked in both the Aboriginal health service community and the hospital system. She has extensive contact with and knowledge about local Aboriginal families who have contact with the hospital. In addition to this, she is in her second year of study to become a Registered Nurse. The specialist cardiac nurse who worked on the project has extensive experience in the hospital in clinical and education roles and was employed in the nursing research centre as a Research Fellow. The AHLO and the cardiac nurse worked together to conduct all elements of the project, including data collection and follow up.

A retrospective audit was conducted on the medical record of Aboriginal patients with coronary artery disease admitted between 1 July 2008 and 30 June 2011. Patients were identified using the Patient Administration System and sorted using the International Statistical Classification of Diseases and Related Health Problems, 10th revision, Australian Modification (ICD-10-AM)²⁹ codes, I 20 to I 25, which pertain to coronary artery disease. The AHLO and the cardiac nurse reviewed the case notes together, each explaining particular contexts to the other. This sharing of specific knowledge in respectful partnership is an essential element of the working together model. They evaluated care processes, focusing on both Aboriginal cultural and cardiac clinical perspectives. One of the main areas identified for improvement from the retrospective medical records audit was attendance at cardiac rehabilitation.

In the second phase of the study, where the working together model was implemented, the AHLO and the cardiac nurse paid specific attention to increasing attendance at cardiac rehabilitation services by Aboriginal patients admitted to the cardiac wards between 1 November 2011 and 30 June 2012.

Process

The AHLO made the initial contact with all patients and asked if they were willing to meet the cardiac nurse. This introduction was vital, as establishing a relationship between the patient and the cardiac nurse was essential to all elements of the model of care. Together, the AHLO and the cardiac nurse assisted with referrals and arrangements for admission or discharge, where needed, taking into account the cultural and clinical perspectives that informed their practice. Patients were informed about the benefits of cardiac rehabilitation and risk factor modification before discharge. The cardiac nurse, with the support of the AHLO, sought to minimise blame and shame in these interactions and to focus on the positive benefits for the patient and their family.

Patients were contacted at least 2 weeks after discharge to check if they had received an appointment to attend cardiac rehabilitation. If patients missed, or had not received an appointment, the AHLO and the cardiac nurse rescheduled these. It was common practice that missing several appointments resulted in patients being discharged from cardiac rehabilitation programs. However, in this project, the nurse contacting the cardiac rehabilitation coordinator and requesting another appointment and following up with the patient facilitated attendance.

Ethics

The Human Research Ethics Committee at the hospital reviewed the project proposal and granted permission for the project to proceed. A multidisciplinary steering committee oversaw the project. A number of members of the steering committee were Aboriginal. Written consent was not required as the project was considered to enhance normal care. However, patients were asked if they agreed to follow-up calls and care coordination when they were first visited by the cardiac nurse. In developing the guidelines for this project, the National Health and Medical Research Council's Values and Ethics: Guidelines for Ethical Conduct in Aboriginal and Torres Strait Islander Health Research were incorporated into the project plan.³⁰

Results

The retrospective medical records audit revealed that there were 68 Aboriginal patients admitted to the hospital with coronary artery disease between 1 July 2008 and 30 June 2011. Reading the medical records from an AHLO perspective and a cardiac nurse perspective revealed cases where gaps in care occurred, in particular follow-up care. A referral to outpatient cardiac rehabilitation was recorded for 42% of the patients whose records were audited. It was found through evaluation of the Patient Administration System appointment records, that 10 patients (15%) had been referred to the study hospital's cardiac rehabilitation service; however, none of them had attended.

During the implementation of the model of care, 15 Aboriginal patients were admitted to the cardiac wards. Thirteen (86%) patients were referred to cardiac rehabilitation and eight of these (62%) attended. The two other patients were referred to heart failure programs and one of them completed this.

Discussion

The AHLO and the cardiac nurse implementing the working together model sought to improve the in-hospital care of the Aboriginal patients with ACS and to initiate engagement in the cardiac rehabilitation process in a culturally safe manner. An increase in attendance at outpatient cardiac rehabilitation was one of the important outcomes of the project.

The two clinicians provided a level of expertise that neither could provide on their own. The processes adopted to conduct the project, in particular, the secondment of the AHLO to work on the project from its inception, ensured that the AHLO's perspective was considered in all phases of the project. It was imperative to have an experienced cardiac nurse on the project to negotiate and interpret the sometimes complex clinical terrain.

While the strategies employed were local and specific to the particular setting and patient group, it is clear that there is potential

here for impact in other healthcare organisations. The quality improvement framework allowed for the implementation and evaluation of changes to practice by the AHLO and the cardiac nurse. The working together model explicitly empowers the AHLO and the cardiac nurse in a model that is praxis based. In their work, the AHLO and the cardiac nurse considered together the implications of the history of Aboriginal people and their potential negative experiences of institutions and hospitals, and also the implications of the project itself. These elements have been recommended as strategies for reducing disparities in health care for Aboriginal and marginalised people.^{22,23} As both practitioners were involved in all phases of the project, the choice of cardiac rehabilitation as a priority and the changes to practice, which were aimed at increasing Aboriginal patients awareness of and attendance at cardiac rehabilitation, were appropriate both culturally and clinically.

This is a small study, which involved local and specific interventions to improve in-hospital cardiac care and to influence attendance rates at cardiac rehabilitation. Implementing the model required both the AHLO and the cardiac nurse to use their considerable local knowledge and contacts in the Aboriginal and clinical communities to effect change. This might limit the applicability of the model to all settings. Further research is needed to evaluate the working together model in other settings such as mainstream specialist cancer care or renal dialysis. In particular, the model should be evaluated from patients' perspectives; more community engagement could be sought in the development of the working together model. Extending the data collection strategy to include outcomes in terms of mortality and morbidity would also be useful.

Conclusion

This case study report describes an approach to care coordination and system changes that led to improved attendance at cardiac rehabilitation in a small group of Aboriginal patients admitted with ACS to a metropolitan hospital. The principles of partnership, respect and shared learning offer health services a model of care especially appropriate where Aboriginal patients are accessing mainstream care for specialist services like cardiac care.

Competing interests

None declared.

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