

## Research paper

# Quality service delivery in cardiac rehabilitation: cross-cultural challenges in an Australian setting

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### ABSTRACT

**Background** Cardiac rehabilitation is an evidence-based health service model for providing secondary prevention strategies following an acute cardiac event. In spite of the benefits of cardiac rehabilitation, there are striking cultural and ethnic disparities with regard to access to and usage of these programmes.

**Objective** To investigate the challenges in providing cardiac rehabilitation to culturally diverse populations in Australia to inform culturally competent care.

**Method** This was a qualitative study using interviews with 25 health professionals from diverse professional and language backgrounds working in cardiac rehabilitation and participant observation of educational and counselling sessions in four cardiac rehabilitation programmes in metropolitan Sydney, Australia.

**Results** Providing cardiac rehabilitation to patients from culturally and linguistically diverse backgrounds presented greater challenges than did provision to the mainstream population. These challenges resulted from the interaction of multiple and complex factors such as patients, providers, structural and organisational characteristics within the treatment setting. Communication issues, reconciling health messages with culturally specific issues such as diet, social and family structure and implementation of self-management strategies are significant challenges.

**Conclusion** Strategies are needed to overcome cross-cultural challenges and ensure effective and equitable cardiac rehabilitation service delivery.

**Keywords:** barriers in health care, cardiac rehabilitation, communication, cultural and language difference

### How this fits in with quality in primary care

#### What do we know?

Cultural and language diversity increase the challenges of quality health care delivery across the world, including Australia.

#### What does this paper add?

This paper investigates the challenges in provision of multidisciplinary cardiac rehabilitation services in Australia. It highlights the need to overcome these challenges if quality and equity in cardiac rehabilitation services are to be achieved.

## Introduction

Australia is a culturally and linguistically diverse country, distinguished by demographic, socio-economic, cultural and language diversity. An active immigration policy has contributed to shaping multicultural Australia, which is now home to about 200 nationalities.<sup>1</sup> Cardiovascular disease (CVD) has a considerable impact on individuals and communities.<sup>2</sup> Little is known about the CVD risk profile or general pattern of morbidity among immigrant communities in Australia. Overall, immigrant communities are reported to have a lower degree of acculturation, a higher rate of CVD and a higher prevalence of CVD risk factors such as smoking, heavy drinking and physical inactivity.<sup>3</sup> In countries such as the UK and Australia, cardiac rehabilitation (CR) is a strategy endorsed by policy makers.<sup>4</sup>

Cardiac rehabilitation focuses on facilitating the development of skills and strategies to assist people with heart disease to return to an active and satisfying life and to prevent the recurrence of cardiac events.<sup>5</sup> These programmes provide a range of services from biomedically oriented services, such as control of blood pressure and lipid levels, through to psychosocial interventions such as psychological counselling, dietary and behavioural approaches. Health providers involved in this model of service delivery include physicians, nurses, exercise physiologists, dietitians, behavioural medicine specialists, psychologists and physical and occupational therapists.

Cardiac rehabilitation programmes are traditionally provided in three phases: beginning during hospital admission (commonly known as Phase 1); followed by a supervised ambulatory outpatient programme lasting for six to eight weeks (commonly known as Phase 2); and continuing with an ongoing minimally supervised maintenance phase (commonly known as Phase 3). Programmes generally consist of weekly or twice-weekly sessions of group education comprising discussion of risk factors and behaviour change strategies, in addition to exercise activities. Home-based and outreach programmes are also being developed in rural and remote areas of Australia.<sup>6</sup>

Dealing with such a wide spectrum of the needs of individuals, particularly in culturally diverse settings such as Australia, and the paucity of data informing this discussion and debate, calls for special attention to the challenges of diversity and potential value conflicts between patients and health providers.<sup>7</sup>

In order to obtain insight into the challenges of CR service delivery to a culturally and linguistically diverse group, the values and opinions of health providers with regard to CR services were investigated. This paper seeks to explore CR service processes in Australia related to cultural and language diversity of clients

and providers. For the purpose of the research described in this paper, the term 'culturally and linguistically diverse background' (CaLDB) refers to people who were born overseas and speak a language other than English at home. Although the limitations of the term 'Anglo-Australian' are acknowledged, it is used in this research to identify those people born in Australia who are fluent in the English language.

## Methods

Qualitative methods including in-depth interviews with health providers and field observations were used to explore and define challenges in cross-cultural CR delivery.<sup>8</sup> The interviews explored the knowledge and beliefs of health providers, while field observations provided insight into the providers' interaction with patients during assessment, exercise, counselling and educational sessions. Health providers interviewed included the CR programme coordinator, social worker, dietician, exercise physiologist, occupational therapist, nurse, diabetic educator, clinical psychologist and bilingual health worker as part of the CR multidisciplinary team. Of the 25 interviewed health practitioners, 20 (80%) were female and five (20%) were male. All health practitioners interviewed were competent in the English language and some were bilingual. Other languages spoken by health professionals were Arabic, Spanish, Tagalog, Filipino, Polish, Vietnamese, Cantonese and Croatian. This study was undertaken in two health regions in metropolitan Sydney, Australia to facilitate recruitment and to encompass diverse views and perspectives. These two areas were selected because they provide CR services to a range of people from CaLDB groups.

Study participants were enrolled using a purposive sampling strategy to ensure individuals and settings with the most relevant and valuable information were identified. Interviews and data collection were continued until no new information was offered and sufficient representation was obtained across study sites and professional groups.<sup>9</sup> The principal researcher transcribed all audiotaped interviews as well as re-writing and reorganising field notes, research journal entries and analytical memos.

Qualitative content analysis which involved reviewing textual data and classifying these into categories based on their importance and relevance to the research question was used.<sup>10</sup> A systematic and iterative review of interview data, field notes and memo writing assisted in the preliminary generation of data categories. From the data a preliminary conceptual map was developed and refined on the basis of emergent themes and concepts. Emergent categories were critically analysed to obtain an understanding of participants' views. As

part of the study protocol a number of approaches were employed to enhance data quality.<sup>11</sup> Data were gathered from different sites as a form of data triangulation and reviewed by the research team to provide a comprehensive understanding of the data. A group of expert key informants provided feedback on interpretations. A journal was maintained and used to shed light on data interpretation. Ethics approval was obtained from relevant human research ethics committees.

The researcher's stance in relation to participants has been a matter of debate among research methodologists, with the terms objectivity and subjectivity describing two extremes of this continuum.<sup>10</sup> The principal investigator came from a predominantly Persian speaking country in the Middle East; personal experience of living and working in a foreign country as well as values and beliefs might have enhanced the awareness and interest around the particular needs and difficulties experienced by immigrant groups. This may have also influenced the interpretation of the study data. Any possible biases were minimised through adopting an open and non-judgemental attitude to allow detailed exploration of new possibilities, generating new and innovative interpretations and creative connection-making.

## Results

In total, 25 health providers were interviewed. Figure 1 provides an overview of the findings, suggesting a challenging environment for all patients regardless of cultural and language background. However, data showed that these challenges are affecting CaLDB patients more than Anglo-Australians.

Although health providers reported under-utilisation of CR services in all population groups, they reported that patients from culturally and linguistically diverse backgrounds participated less in CR

programmes than those from an Anglo-Australian background. Several health providers noticed a discrepancy between the higher number of CaLDB patients present in the cardiac ward and the lower number of patients represented in the outpatient CR programme. A clinical psychologist indicated that the:

'majority of patients in classes are Anglo. We know that Vietnamese people are much underrepresented here in the clinic compared to the community ... there are more Anglos coming than non-English background people'.

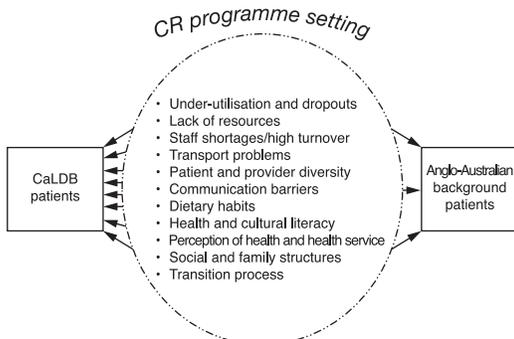
Health providers identified potential explanations for variations in attendance. These factors were lack of interest and motivation, a sense of discomfort due to cultural and language differences, lack of referral and endorsement by the treating doctor, inappropriate timing and setting of the CR programme, differences in lifestyle, transportation issues, the severity of their heart condition and treatment burden.

Access to resources, in particular interpreters and translated materials, influenced CR utilisation among CaLDB patients and seemed to vary across facilities. One of the main issues raised by health providers was timely access to the interpreter service and translated materials. Some providers reported good access to direct or telephone interpreting and information in different languages, but a greater number were concerned with the lack of interpreters, translated materials or other resources, including gym equipment and staff. Another issue raised by health providers was that of culturally inappropriate CR environments. It was raised by two participants that for some female patients from particular cultural groups, it is not acceptable to exercise simultaneously in the same place as men. As it was not possible to provide women with the privacy they needed many women from that particular cultural group dropped out of the programme.

Workforce shortages were claimed to be one of the impediments in delivering CR services to patients, yet these challenges were amplified for CaLDB patients. Several CR programme coordinators pointed out high rates of staff turnover and inadequate clinical, clerical and allied health staffing, particularly bilingual providers and community healthcare workers.

Transport issues were seen as a difficulty for all patients regardless of cultural group, but more so for CaLDB patients who had difficulties in finding their way around the city and/or using public transport, less access to private cars and lower ability to drive in comparison to their Anglo-Australian counterparts.

Health providers interviewed were from a diverse cultural and language background including Arabic, Spanish, Tagalong, Filipino, Polish, Vietnamese, Cantonese and Croatian. Hospital discharge data and interview extracts also reflected a diversity of CR participants: 71 different countries of birth were



**Figure 1** The challenging environment of cardiac rehabilitation programmes in Australia

reported, and nearly half of cardiac patients were born outside Australia. A bilingual health worker explained her observation of patient diversity as a:

‘massive cluster of Arabic speaking people around 40 to 50%, Asian Vietnamese ... some refugees (from) time to time come through ... Italian, Greek and Macedonian’.

Communication challenges were perceived as one of the major obstacles for attendance and concordance of CaLDB patients to comprehensive CR programmes. Language barriers were one factor. CaLDB patients were more inclined to use aspects of the CR service that required less communication and interaction with health providers, or services where non-verbal communication was possible such as participating in exercise activities or blood pressure control. Across all study sites, group discussion sessions were only provided for English-speaking patients since these were difficult to conduct with interpreters, so the capacity to participate in group discussions was limited.

Health providers also commented that they had communication difficulties with CaLDB patients even when they used translated materials or interpreters. For example, a dietician said that:

‘the biggest problem I have is I don’t know much about a lot of those traditional diets and foods. My basic Australian guide to healthy eating and Australian recommendation that we give to patients is based on typical Australian style diet’.

Issues of privacy varied with patients’ cultural backgrounds. The differences in perceptions and requirements regarding privacy undermined discussions during stress reduction activities in CR programmes. Providers reported that some CaLDB patients refused to discuss personal issues in group sessions, undermining the purpose of such a session, whereas this was not usually a problem with Anglo-Australian patients.

Dietary habits and traditions of patient groups emerged as one of the main impediments to behaviour change. Providers claimed that CaLDB patients differed from Anglo-Australians in the types of food consumed as well as the means of preparation and presentation. A bilingual dietician claimed that:

‘I am going to make a generalisation here, the typical Anglo-Australian meal is ham, meat, potato and three veggies dinner, always every night so you just work in changes in type of meat, it becomes complex when they put everything together. A dietician counts carbohydrate and they will say okay for dinner you have to eat two small potatoes and a piece of bread, ... but 99% of (the) ethnic population in this area will not do that because they don’t eat separate potatoes’.

Health providers perceived that these differences made it difficult for CaLDB patients to adopt the dietary recommendations of CR, which are mainly based on typical Anglo-Australian cooking and diet.

CaLDB patients were perceived by health practitioners to have less knowledge compared to Anglo-Australian patients regarding a heart-healthy diet. On the other hand, concern about lack of knowledge and training about CaLDB traditional dietary habits was raised by some health practitioners.

Several providers commented on the greater resistance and lower motivation to behaviour modification among CaLDB patients. Possible explanations given by health providers were varying cultural perceptions of health and illness, family roles, dietary habits and lifestyle and attitudes towards health services and medical treatment.

Health providers described certain medical conditions as having a different significance and meaning among various cultural groups. A social worker stated that CaLDB patients:

‘don’t really have a lot of faith in those sorts of methods or mechanisms like mediation, Tai Chi, etc. compared to the broader community’.

According to one social worker, some CaLDB patients believed that medical care resolved their problems so there was no need to attempt lifestyle and behavioural changes. These differences in health beliefs may have impacted on individuals’ motivation to attend a CR programme.

Differences in social and family structures among different cultural groups seemed to be both beneficial and detrimental. Health providers described patients who were inclined to over-exert themselves physically after a heart attack compared to others who tended to sit back and be taken care of by their family. An occupational therapist explained her experience of working with a female patient ‘who was unsafe at home ... and refused to go to a nursing home’, because culturally it is the duty of family to take care of her but her family members were busy with their own jobs and lives.

CaLDB patients were perceived to have more extended families than Anglo-Australians. This was perceived by some health providers to impede behaviour change, since it was the whole family that needed to change not just the individual. Conversely, family support and social networks among some cultural communities also had positive attributes. It was pointed out that patients with good family support usually had better home experiences, received more help with transport or communication issues and were also less likely to live alone and be socially isolated.

Gender roles were also believed to influence care delivery and patients’ abilities to comply with CR recommendations. This issue was believed to be more prominent among CaLDB patients compared with Anglo-Australian patients. Generally, it was believed that in many culturally diverse communities

that women were in the charge of the kitchen. Gender roles were believed to influence male patients' motivation and concordance with dietary modifications and energy conservation techniques. As stated by a CR coordinator:

'generally with Arabic (background patients), women are seen as the carers and men are seen as providers, so women need to know about men's health care because they are the person who has to keep the husband well enough to go to work, but women should deal with their own care'.

An occupational therapist also commented that:

'in some communities, the husband has a very passive role in terms of home management, so the main difference when you are talking to a husband about "How do you sleep?" or "How do you arrange the kitchen?" or how to actually conserve energy is that he does not do much activity'.

Risk modification and lifestyle change is a long-term process, however, the CR programme model is not supposed to be a life-long programme. Concerns were raised that there is a gap in the transition of CaLDB patients from secondary/tertiary prevention to community based primary cardiac risk prevention. Data suggested that current leisure facilities often do not fit with the social and leisure habits, lifestyles and preferences of CaLDB patients. These differences were echoed in accounts provided by several patients. An explanation offered was that CaLDB people are not used to the leisure activities and hobbies of Anglo-Australians, such as cricket or tennis. These barriers may preclude CaLDB patients engaging in long-term behaviour change, thereby undermining the ultimate goal of CR programmes.

## Discussion

The findings suggest that there is a challenging environment for delivery of CR services for all patients regardless of language or cultural background.<sup>2-13</sup> The challenges arise from the interaction of multiple and complex factors including patients, providers, structural and organisational characteristics affecting CR. The multidisciplinary nature of CR programmes, complexity of service delivery and requirement to deal with patients and their families coping with life-limiting disease is inherently challenging. Findings from this study identified that the challenges of participation in CR were amplified by the cultural and language diversity of patients and providers. It is important to consider that these challenges are accompanied by significant benefits such as a broader and less biomedical approach to care. As such, these

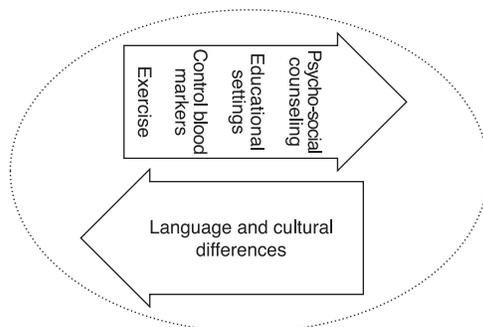
challenges call for special attention to ensure that CR delivery is effective.

Some factors emerged as specific to CaLDB patients. The most common difficulties with CaLDB patients were identified as communication barriers, reconciling health messages with culturally specific issues such as diet, social and family structure and the implementation of self-management strategies. As a result, the CR services most commonly under-utilised by CaLDB patients were those that required a high level of communication, such as education sessions, psychological counselling and social work (see Figure 2).

The accounts of health providers showed great cultural and language diversity among patient groups and to a lesser extent among healthcare providers, leading to differences in perspectives on both sides of the clinical encounter. The arrival of new waves of immigrants and changing patient demography increases these challenges. One strategy to address these challenges is for the health workforce to reflect the demography of the community.<sup>14</sup> It is likely that this will be achieved over the next few generations in Australia.

As found by Yeo,<sup>15</sup> this study identified that communication barriers in clinical encounters, often due to cultural and language differences, were a major factor contributing to non-participation and non-adherence of patients in services and self-management strategies.

CaLDB patients who were less fluent in English were disadvantaged in accessing services involving information transfer, mutual aid activities or psychosocial counselling. It should be emphasised that aspects of CR services such as group discussion and counselling sessions play an important role in normalising patients' illness through interaction with other patients, alleviating anxiety and depression and restoring self-confidence. Further, the inability to participate in group discussion sessions may increase a sense of marginalisation among CaLDB groups.



**Figure 2** Contrasting communication barriers and types of service usage within cardiac rehabilitation programmes

Another barrier to delivering services is health and cultural illiteracy (see Figure 3), which may exist even when language barriers have been addressed via translations or interpreters.<sup>16</sup> Health providers had difficulty exchanging and processing information in clinical encounters over and above the language difficulties related to issues of culture and cultural competence.

This highlights the need for health education and promotion of health literacy among CaLDB patients. There is also a need for health providers to become familiar with culture-specific knowledge and the language commonly used by their patient groups.

The long-term goal of CR is to provide patients with the necessary knowledge and skills, and to motivate them to resume and sustain physical activity and lifestyle modifications outside the clinic or hospital facilities, which include community centres and the home.<sup>5</sup> As patients progress through CR phases from inpatient to outpatient and maintenance (see Figure 4), the focus shifts towards self-management as a necessary tool for life-long secondary prevention strategies.

The results here strongly indicate a need to address the challenges CaLDB patients face in sustaining

secondary prevention strategies after discharge from the CR outpatient phase. At the community level there is a need to implement culturally appropriate and accessible programmes for both primary and secondary prevention. Some groups may not view mainstream sporting facilities and gymnasiums as appropriate.<sup>17</sup> Further research is needed to explore and advise alternative ways of maintaining CR provision to CaLDB people. For example, aligning health programmes with community based facilities such as religious or other cultural venues and events may be advantageous.

## Limitations and strength of the study

This study has some of the limitations associated with qualitative, inductive studies. The study approach limits the generalisability of the findings. Another limitation is that retrospective accounts gathered through interviews with patients and providers are subject to recall bias. Also, due to current positive public and organisational discourse on multiculturalism and non-discriminatory care, providers might have felt pressure to appear culturally competent, therefore overstating their positive views and actions. The use of multiple data sources aimed to compensate for the limitations of a single data collection tool.

## Conclusions

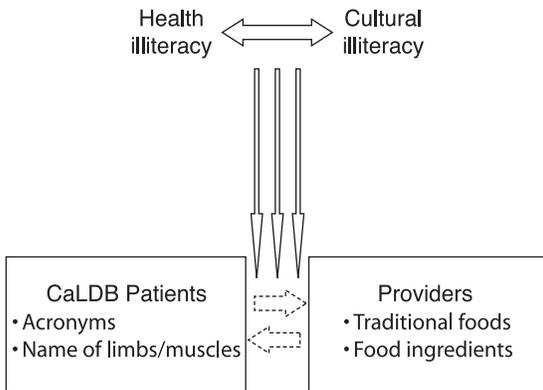
The findings suggest that, in parallel with mainstream health services, CR service delivery in Australia faces challenges related to cultural and ethnic diversity, which are affected by individual values and the beliefs of patients and their families as well as those of health providers. Service-wide strategies are needed to overcome cross-cultural challenges and ensure equity in CR service delivery.

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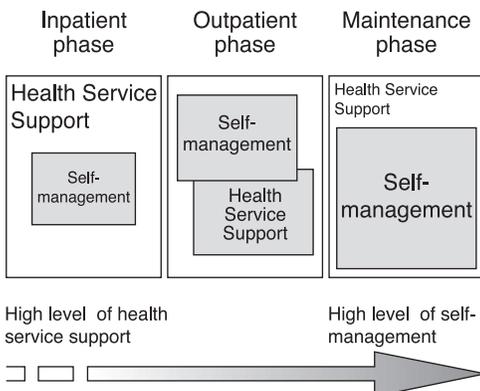
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**Figure 3** Health and cultural literacy: challenges of information exchange at CR Program



**Figure 4** Comparing level of health service involvement and self-management in the cardiac rehabilitation process

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