REPORT:

The Relevance of an Accredited Australian Diabetes Educators Association Course to Aboriginal Health Workers, Supervisors and Aboriginal People in South Australia

Merilyn Newton King

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ABBREVIATIONS

ACCHS	Aboriginal Community Controlled Health Services
ADEA	Australian Diabetes Educators Association
AHCSA	Aboriginal Health Council of South Australia
AHMAC	Australian Health Ministers' Advisory Council
AIHW	Australian Institute of Health and Welfare
AHW	Aboriginal Health Workers
AMA	Australian Medical Association
ARC	Accreditation and Registration Committee
CIRC	Curtin Indigenous Research Centre
DEC	Diabetes Educators Course
DETAFE	Department of Education, Technical and Further Education
DHS	Department of Human Services (now Department of Health, South Australia)
NACCHO	National Aboriginal Community Controlled Health Organisation
NAIDOC	National Aboriginal & Islander Day Observance Committee
NHMRC	National Health and Medical Research Council
QSR	Qualitative Solutions and Research Pty Ltd
SAAHP	South Australian Aboriginal Health Partnership
TAFE	Technical and Further Education
UKPDS	United Kingdom Prospective Diabetes Studies
VET	Vocational Education and Training
WHO	World Health Organization

EXECUTIVE SUMMARY

In 1997 Flinders University enabled Aboriginal Health Workers (AHW) to enrol as students in the accredited Australian Diabetes Educators Association (ADEA) course conducted by the university. This course was originally developed for registered nurses and allied health professionals who had previously undertaken an undergraduate health degree and now wanted to qualify as diabetes educators. Motivated both by the findings of the report *South Australian Aboriginal Health Regional Plans: The First Step* (SAAHP 1997)—which highlighted the importance of diabetes as a health problem in the community—and the opportunity for AHW to undertake specialised diabetes training, the South Australian Aboriginal Partnership (SAAHP) and other Aboriginal health services funded three cohorts of AHW (n=31) to undertake the course between 1998 and 2000.

As this was the first time in Australia that AHW in large numbers had undertaken an accredited ADEA postgraduate course, it is necessary to evaluate whether the course has met the needs of Aboriginal people. This report focuses on three research questions:

- What impact (if any) has the Flinders University accredited ADEA course had on the AHW who undertook the course and on the delivery of diabetes health services to Aboriginal people?

- What are the barriers that prevent those AHW who had completed the accredited ADEA course from delivering adequate diabetes health care to Aboriginal clients?

- What strategies might be undertaken to improve the delivery of health services to Aboriginal people with diabetes in South Australia?

This study was conducted according to the National Health and Medical Research Council (NHMRC) guidelines for Aboriginal research and with approval from both the Aboriginal Health Council of South Australia (AHCSA) Research and Ethics Committee and other ethics committees. The methodological approach used was critical ethnography, and participant recruitment was voluntary. The study was undertaken in fourteen sites in South Australia that delivered diabetes health services to Aboriginal people. The participants were available AHW (n=18) who had undertaken the diabetes course and supervisors (n=21) who were responsible for their clinical activities. Data collection and analysis took place between 2001 and 2002. The instrument used was a semi-structured questionnaire. The methods included interviewing and recording, observation and fieldwork. To ensure that the qualitative study was trustworthy, data collection and analysis was undertaken using the guidelines of recognised qualitative scholars and managed by using Qualitative Solutions and Research Pty Ltd NVivo software.

The findings indicated three main themes:

- impact of the course on AHW and its relevance to the Aboriginal community;

- barriers that prevent Aboriginal health professionals from delivering effective diabetes services to Aboriginal people; and

- strategies that may be used to improve the diabetes health status of individuals.

Significant outcomes from this research included the following: despite the Flinders University course proving a difficult task for AHW to complete, 55 per cent of them actually did pass the academic requirements of the course. The findings also indicated that the Flinders University diabetes course was challenging, motivating, interesting, satisfying and highly relevant to the clinical practice of the AHW and the diabetes health care needs of the Aboriginal community. Other positives included the fact that the course had helped to develop AHW as health professionals in the areas of maturity, confidence, knowledge, motivation and accountability. Moreover, some AHW were now prepared to initiate diabetes health promotional activities that would benefit Aboriginal people with this chronic disease, rather than wait for non-Indigenous health professionals to assume that responsibility.

Concerning barriers to practice, both the literature and the findings indicate that diabetes health care is not seriously regarded as a priority for action by governments, education providers of AHW training, Aboriginal health professionals and clients. As a consequence, governments do not adequately fund diabetes health care as a health priority, preferring instead to address the care of Aboriginal people with diabetes by using short-term funded projects. The disadvantage of this process is that once the funding is finished the continuity of care diminishes. This practice sends out a clear message to all concerned that diabetes health care is not a health priority that needs to be taken seriously. The lack of health funding also compromises the ability of Aboriginal health services to provide the essential infrastructure—facilities, resources, equipment and personnel—thus compromising the standard of health delivery to Aboriginal people.

The belief that diabetes health care is not a serious priority for action is also reflected in the curricula of AHW training. This important area of health care is only dealt with superficially and, as a consequence, does not enable graduates from these programs to care effectively for their clients. In this way AHW and, ultimately, their clients are not enlightened or empowered about diabetes issues and, therefore, are not in a position to make informed decisions about important diabetes lifestyle issues. Consequently, the diabetes health status of Aboriginal people is significantly poorer than is the case in the non-Indigenous population.

Both the literature and the findings indicate that if the specialist diabetes health worker is to be effective in the management of Aboriginal clients with this chronic disease, this health professional needs the full support of their employers. To consolidate their expertise their specialist role needs be validated by employers, they need to have access to clients with diabetes and an opportunity to access ongoing education. In this study, only 50 per cent of employers made an effort to support and use the expertise of the AHW who undertook the course. This means that those health professionals who were not supported by their employers may soon lose their diabetes knowledge, skills and confidence—the loss of a valuable resource to the Aboriginal community.

Other important barriers that compromise the effective delivery of diabetes health services to Aboriginal people are the lack of a clear career pathway for AHW to follow. There is no professional organisation that clearly outlines the role and scope of practice or salary scales for both generic and specialist health workers. This deficiency creates confusion and angst among employers who misunderstand the specialist role, scope of practice and how to remunerate the qualifications gained by the AHW. As a result, there is little incentive for AHW to undertake postgraduate studies because their qualifications and achievements are not acknowledged, supported or rewarded in any tangible way that will encourage them to pursue this

pathway to improve the health of their people. In fact, the easy solution for 50 per cent of supervisors was to continue using the diabetes specialist health worker as a generic health worker and to avoid using their expertise in a constructive way to improve the health status of Aboriginal people with diabetes.

Strategies to improve practice include the need for a substantial increase in health funding to Aboriginal health services for infrastructure and strategic planning to maximise the use of specialist diabetes health workers both in the clinic and in the community.

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RECOMMENDATIONS

From the findings of this study, I recommend that community-based action research be undertaken as soon as possible within Australia to establish:

- A national professional organisation for Aboriginal Health Workers that will describe the roles, job classifications, scope of practice, salary scales and career pathway for all Aboriginal health professionals.

- A model for practice that will show Aboriginal supervisors how to support and use, in the clinic and in the community, the expertise of those Aboriginal Health Workers who have undertaken any postgraduate course—including in diabetes, mental health, and drugs and alcohol.

- A policy and procedures manual that describes and communicates the various, and different, roles undertaken by Aboriginal Health Workers.

There is also an urgent need for increased government funding to provide the necessary infrastructure (facilities, personnel, equipment and resources) for AHW to care effectively for clients with diabetes. These include:

- culturally appropriate facilities in the clinic and community, where diabetes specialist AHW might educate clients in privacy about diabetes issues;

- access to diabetes health literature or teaching resources developed specifically for Aboriginal people and the space in the clinic or community to store them;

- a specific budget allocated to the specialist AHW to fund diabetes health promotional activities for clients; and

- funding for all AHW to undertake specialised diabetes training in locations near their communities.

REPORT

Diabetes mellitus: An Overview

Type 2 diabetes mellitus is a major health problem on a global scale. The World Health Organization (WHO) estimates that 177 million people suffer from this serious and debilitating disease and that this figure will double by 2030. There are about four million deaths attributed each year to diabetes complications, and the direct health care costs of diabetes range from 2.5–15 per cent of the annual health care budgets of nations (WHO 2003). These statistics make diabetes health care a priority on the health care agenda of most Western countries, including Australia.

Prevalence of type 2 diabetes in the Aboriginal population

The prevalence of type 2 diabetes in the Aboriginal population in Australia ranges from 10 per cent to 30 per cent (Bate & Jerums 2003). This is at least 2–4 times higher than in the non-Indigenous population (AIHW 2004, 2005; Australian Indigenous HealthInfoNet 2005). This chronic disease is a major cause of morbidity and mortality among Aboriginal people and is found at a much earlier age in this population. In the context of other co-morbidities and poor life opportunities, Aboriginal men with this disease die twenty-one years earlier and Aboriginal women nineteen years earlier than their non-Indigenous counterparts (AIHW 2003; Henry *et al*. 2004). Significantly, Aboriginal people also have the fourth highest prevalence of diabetes in the world (McCarty *et al.* 1996; Thomson 1994). As a result, Aboriginal diabetes health care is recognised as both a national and State health priority (Colagiuri *et al.* 1998; Commonwealth of Australia & DHAC 1999; DHS 1999, 2002; McCarty *et al*. 1996; SAAHP 1997; Thomson 1994).

Diabetes-related complications

Type 2 diabetes mellitus is a particularly serious health problem because it has the potential to seriously compromise the lifestyle and life expectancy of individuals through its pathological processes. Common macrovascular complications include transient ischaemic attack, cerebrovascular accident, angina, myocardial infarction, cardiac failure and peripheral vascular disease. Common microvascular diseases include diabetic retinopathy, renal disease, erectile dysfunction, autonomic neuropathy and peripheral neuropathy, osteomyelitis ulcers and amputation, as well as psychological problems such as depression (Bate & Jerums 2003; Colagiuri *et al*. 1998; Dunning 2003; Haire-Joshu 1996). These complications seriously compromise the quality and longevity of life of individuals and impact gravely on their carers, families and communities.

Implications of *First Step Report*

The *First Step Report* (SAAHP 1997) identifies key health priorities for the Aboriginal population across the eight regions (see Map 1, p.13) that form South Australia. A careful analysis of this report found that type 2 diabetes was one of the top five health priorities in seven of these eight regions, and the training of AHW was prioritised in several other regions. Thus, a submission for funding was made to SAAHP to educate AHW in contemporary diabetes management at Flinders University.

CONTEMPORARY DIABETES MANAGEMENT

The goals of contemporary diabetes management include the principles of primary health care and health promotion. To prevent and minimise diabetes-related complications, the aim is to increase the Aboriginal community's awareness of the need for a healthy diet, regular physical activity and to be vigilant about controlling weight and blood pressure. It also includes the early detection of diabetes by public screening, employing evidence-based practices to manage the condition effectively (Bate & Jerums 2003) and, if possible, empowering individuals to self-care (Bate & Jerums 2003; Colagiuri *et al*. 1998; Dunning 2003; Funnell *et al*. 1991).

Evidence-based practice

Evidence-based practice is based on the outcomes of significant research and best practice. The United Kingdom Prospective Diabetes Studies (UKPDS), the largest and longest prospective randomised controlled trials undertaken of people with type 2 diabetes, have provided scientific information for medical practitioners to use in the management of this disease. Significant outcomes from this research are that intensive blood glucose control alone does not significantly reduce the occurrence of macrovascular complications. However, tight glycaemic control does reduce the incidence of microvascular complications. Recent research also indicated that if hypertension is treated simultaneously, the occurrence of macrovascular complications reduces significantly (UKPDS 1998; UKPDS 33 1998). Hence, an important goal espoused by diabetes health professionals is to employ evidence-based practice to motivate individuals to accept responsibility for the management of their diabetes condition (Dunning 2003; Haire-Joshu 1996).

Empowerment

Empowerment is an important concept in the management of diabetes health care (Guthrie & Guthrie 2002). The term used by Funnell, Anderson and Arnold (1991:38) is defined as 'the discovery and development of one's inherent capacity to be responsible for one's own life.' According to these authors, empowerment is underpinned by the following assumptions. There is an emphasis on the needs of the whole person within their family context, rather than just focusing on their physical treatment as often occurs in 'typical' Western medicine. Management is best achieved by establishing a relationship between the individual with the disease and the health care provider based on their shared expertise and mutual respect. This may mean that the individual and significant other(s) are invited by the diabetes health professional to identify their specific learning needs, rather than being advised by the health professional as to what they should learn. It involves the individual making decisions on how and when her or his learning should take place and how this process will be evaluated. This respectful interaction between the health professional and the individual with diabetes will involve mutual goal setting through negotiation (Funnell *et al*. 1991). Hence, there is a transfer of leadership and decision-making between the health professional and the individual with diabetes, and empowerment becomes a 'patient centred interaction' (Dunning 2003). The intention is to emphasise the personal strengths of the individual rather than to focus on failures or deficits. However, if failure does occur, the two people jointly analyse the failure as a problem to be solved, rather than a personal deficit (Funnell *et al*. 1991).

For empowerment to develop, individuals and their families need to be encouraged by health professionals to work towards achieving a healthy lifestyle in the context of diabetes management. To facilitate this, individuals are informed about the benefits of using diabetes social networks and resources that assist them with chronic self-care (Funnell *et al*. 1991).

Self-care

An outcome of empowerment is the ability of people to manage their diabetes in the context of daily life. Self-care has been described by Dorothea Orem (1995) as the ability of an individual to undertake the activities required for daily living. In the context of diabetes management, self-care may include the ability to take and record blood glucose levels accurately, to undertake an informed foot assessment, to prepare and eat a well-balanced diet, and to inject insulin and administer prescribed oral hypoglycaemic mediation (Dunning 2003; Guthrie & Guthrie 2002).

Specialised diabetes training

The ADEA was established in 1981 to ensure that people with diabetes in Australia receive a high level of care consistent with the goals of contemporary diabetes health management. One of the roles of the ADEA is to ensure that postgraduate courses offered by educational providers achieve an educational level that is consistent with the goals of contemporary diabetes management. To assist this process, the ADEA published the *Accreditation & Reaccreditation Procedures for National Diabetes Educators Courses* (ADEA Course Accreditation Sub-committee 2002). The Flinders University postgraduate diabetes course is an example of a nationally recognised and accredited ADEA course.

The benefit to AHW who have undertaken an accredited ADEA course is that they can become active members of the ADEA and participate on Indigenous committees whose goal is to improve diabetes health care for Aboriginal people. Participation at a national level is most important because it enables these health professionals to have a voice in the direction that contemporary diabetes health care for Aboriginal people should take. It also enables expert members to be selected to represent the ADEA and influence policy makers who make decisions about the care of Aboriginal people with diabetes at both national and State levels.

Rationale for specialist diabetes training

To establish that specialist diabetes training was necessary for AHW, the accredited 1995–1999 Aboriginal Primary Health Care curriculum offered in South Australia by the Vocational Education and Training sector (DETAFE SA 1996) and the more recent curriculum established by the AHCSA (2004) were examined. The aim was to establish whether the content in diabetes health care of Aboriginal people would be adequate to meet the needs of clients.

Although the curricula for AHW training did include some useful content relevant to the contemporary management of diabetes—for example, the importance of diet and blood glucose testing—it did not adequately prepare these health professionals to educate Aboriginal clients about important diabetes issues. Hence, and as is the case with other health professionals, AHW also need to undertake postgraduate specialised diabetes training to be effective carers in the Aboriginal community.

Considerations concerning specialisation

Research has found that 'formal education alone is of limited value in changing the therapeutic attitudes' of health professionals towards the effective care of clients (Anderson & Clement 1987; Cartwright 1980): support was also needed. These authors regarded support by employers as the legitimising of a particular role, exposure to relevant experience, an opportunity to consolidate expertise in the work setting through ongoing education and, importantly, the opportunity to use the expertise in a relevant setting.

Thus, if one applies the premise that formal education alone without the support from one's employer will not facilitate best practice, it is logical to conclude the following. To become competent in the clinical area, AHW who undertook the diabetes course require their specialist role to be legitimised by their supervisors, to have access to clinical experience of caring for clients with diabetes, and an opportunity to consolidate their expertise by accessing ongoing education in this area. Consistent with this, it was anticipated that this type of support and access to the relevant clinical experience would be forthcoming when the workers returned to their health agencies.

SUMMARY

Contemporary diabetes management is significant to Aboriginal health professionals for several reasons. Type 2 diabetes mellitus is a major health problem in the Aboriginal population, and it must be addressed due to its debilitating and costly effects on individuals at risk through chronic illness, premature death and related complications, and on their families, communities and governments. The UKPDS and other more recent research has demonstrated that glycaemic control, together with the effective treatment of hypertension and dyslipidaemia, significantly reduces the risk of developing diabetes-related complications. Findings from these studies strongly demonstrate to health providers and governments that type 2 diabetes could be managed more effectively. One of the strategies used by Aboriginal diabetes health professionals to improve the health of individuals is to empower people through educational initiatives towards self-care (McMurray 1999, 2004; WHO 1986, 1997). However, for this to be achieved successfully, AHW also need to undertake specialised diabetes training. In addition, they need to be supported by their employers, so that they are able to use their diabetes expertise in the clinical area to improve the health of their clients.

THE EDUCATIONAL INITIATIVE

Introduction

The aim of the 1998–2000 educational initiative was to equip AHW with the knowledge and skills to provide effective care to Aboriginal people with diabetes, by enabling the health workers to undertake the ADEA-accredited postgraduate diabetes course at Flinders University (Appendix 1). As the course had originally been developed to meet the learning needs of registered nurses and allied health professionals with a degree from a health-related discipline, it was thought that AHW, because of their different educational preparations, may experience learning difficulties related to the theoretical content of the course, medical terminology and academic assignment writing. Therefore, to enable this group to complete the academic requirements of the course successfully, the following was initiated.

University Support

A pre- and post-course workshop was held to assist AHW with their studies. The aim of the first five-day pre-course workshop was to prepare the participants for the academic requirements of university and postgraduate study. This involved teaching students how to write an academic essay, how to reference correctly, how to use library resources and how to access tutorial assistance if required. Also included was an overview both of type 2 diabetes mellitus as a health problem and of the contemporary management of the disease, and an explanation of the medical terminology that would be used during the course. During this time, AHW were also shown around the university and allocated textbooks through the funded grant to assist them with their studies.

Two-day post-intensive workshops were organised to clarify issues that had not been understood by AHW in the actual course. An evaluation indicated that the AHW who attended the workshops found the academic support most helpful. Those who did not attend found that meeting the academic requirements of the course proved to be quite difficult, and elected not to complete their assignments. Although AHW non-attendees were disappointed at this outcome, this did not impede their access to important course content that could help to improve their practice. The final results for the three cohorts are shown in Table 1 below.

TABLE 1: Aboriginal Cohorts

Year	No. enrolled in course	Course	Successful academic completion of course (no.)
1998	5	Diabetes Educators Course	4
1999	14	Diabetes Educators Course	8
2000	12	Graduate Certificate in Health: Diabetes Management & Education	5

Table 1 indicates those health workers who completed the academic requirements of the course for each year. Overall, 55 per cent of health workers successfully completed the course.

Support from the SAAHP

To further support AHW during their studies and in the clinical area, SAAHP appointed two project officers to act as mentors in the clinical setting. It was the role of these health professionals to clarify any difficulties that AHW had using their diabetes expertise or in their course. This valuable resource assisted AHW in their studies and practice.

THE STUDY

Introduction

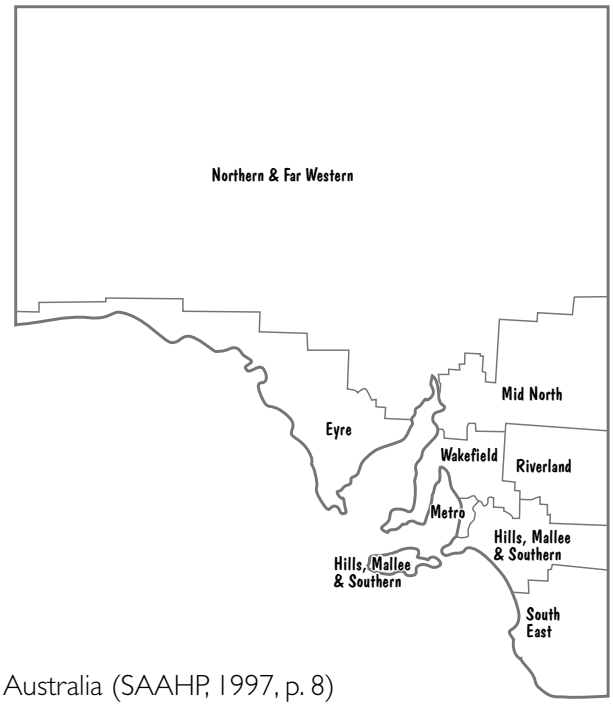
At the time this study was planned, South Australia was divided into eight regions (see Map 1, opposite). Hence, the plan was to enable interested AHW from each of the eight regions to undertake the Flinders University diabetes course. This would mean that Aboriginal people in each region would have access to a diabetes specialist health worker. This plan did not eventuate, however, because two health workers left their respective regions (Mid North and the South East) to take up employment elsewhere, leaving these two regions without access to a specialist diabetes health worker. Consequently, these two regions were not visited in this study.

Research aims

The research aims were to establish whether the ADEA-accredited diabetes course was relevant to the clinical practice of AHW and the health care needs of Aboriginal clients. The research aims also included identifying any barriers that compromised the delivery of diabetes health services to Aboriginal people and to recommend strategies that would improve diabetes health care.

Methodology

The methodology used in this study was critical ethnography. This approach has been acknowledged by scholars as appropriate when dealing with cultural accounts, power relations in a society, and human issues of concern (Edwards 1995). This approach also enables the researcher to consider issues related to class, patriarchy, gender, power and racism if required (Thomas 1993). Critical ethnography also allows the voices of the participants to be heard and, if appropriate, for the researcher to advocate and speak on behalf of the participants to policy makers and decision-makers, all of whom have the power to make changes that will benefit this group (Thomas 1993). All of these aspects were considered in this study.



MAP 1: Regions of South Australia (SAAHP, 1997, p. 8)

RESEARCH PLAN

The plan was to recruit and interview in their workplace those AHW who had undertaken the diabetes course along with their supervisors. It also involved fieldwork, whereby observations were made of the clinical practice of AHW to identify and establish how they were using their newly acquired diabetes expertise with clients and to identify any constraints that prevented the health workers from doing so. The plan included using critical ethnography, observation, fieldwork and journal, tape recorder and notebook.

Sites visited

With the exception of the Mid North and the South East regions whose health workers had resigned, fourteen sites were visited once. These sites, which are displayed in Table 2, were chosen because they employed AHW who had both undertaken the diabetes course and were willing to participate in the study. Eight Aboriginal Community Controlled Health Services (ACCHS) and six mainstream (those available to all Australians) health providers of Aboriginal diabetes health care were visited.

Ethics approval

This research was conducted under the terms of the Aboriginal Health Council of South Australia and the NHMRC Guidelines for Aboriginal Research (1991, 2003). The Flinders University Social and Behavioural Research Ethics Committee, in conjunction with Yunggorendi First Nations Centre for Higher Education and Research and the AHCSA Research and Ethics Committee, granted ethics approval for the study before it was undertaken.

Participant recruitment

On receiving ethics approval from all the committees concerned, the research team contacted the chief executive officer or director from each Aboriginal health service to outline the purpose of the study and seek permission to undertake the study at that organisation. When approval had been granted from the various health services, available AHW who had completed the diabetes course and their respective supervisors were contacted by letter inviting them to participate in this study. Each participant was made fully aware of the aims and the objectives of the study by personal contact and in writing. The letter was then followed by a telephone call from the researcher to discuss the study, clarify any concerns and negotiate a suitable time for the interview and visit.

Each person was advised that he/she could withdraw at any stage from the process without prejudice if they so chose. Importantly, no participant approached declined to take part in the study. Prior to interview, they were invited to sign a consent form.

TABLE 2: Regions, sites and health services

Region	Mainstream	Aboriginal Community Controlled Health Service
Hills, Mallee & Southern	Murray Mallee Community Health Services Meningie Hospital	Raukkan Community Health Services
Wakefield	Maitland Community Health Service	No service visited
Mid North	No representative	Not visited
Riverland	Riverland Regional Health Services – Barmera Campus	No service visited
South East	No representative	Not visited
Eyre	No service visited	Port Lincoln Aboriginal Health Services Ceduna/Koonibba Community Health Services
Northern & Far Western	Whyalla Community Health Centre	Pika Wiya Health Services Umoona Tjutagku Health Service
Metropolitan	Aboriginal Health Division of Department of Health	Aboriginal Health Council of South Australia Muna Paiendi Community Health Service Nunkuwarrin Yunti Incorporated

Note: Each site was visited once

Participant group

The participants (n=39) who volunteered for the research came from six of the eight regions in South Australia. They were divided into two smaller groups, the first of which involved eighteen of the thirty-one AHW who had undertaken the ADEA diabetes course conducted by the university (n=18) and who were available for interview. This represented 58 per cent of the total Aboriginal cohort who had undertaken the diabetes course between 1998 and the end of 2000. Of the available AHW, eight had attended the postgraduate Diabetes Educators Course (DEC) in 1998 or 1999: half successfully completed the academic requirements of the postgraduate course and half elected not to do so. Ten attended the diabetes course that was now upgraded to a Graduate Certificate in Health: Diabetes Management and Education in 2000. Similarly, half successfully completed the academic requirements while half elected not to do so.

The second group (n=21) included the supervisors responsible for overseeing and allocating workload and clinical practice to AHW in their service. These included project officers, team leaders and directors of health services, diabetes nurse educators, and supervisors/managers. Seven were Indigenous and fourteen were non-Indigenous health professionals.

The research instrument

The research instrument initially consisted of an open-ended, semi-structured questionnaire for use as a guide during interviewing. The tool was refined in consultation with an experienced health worker who had previously undertaken the diabetes course ten years earlier and had since worked in the area as a diabetes educator.

It soon became apparent that it was more appropriate to have separate tools to interview AHW (Appendix 2) and their supervisors (Appendix 3) because the purpose in each was slightly different. In the first set of interviews, the intention was to uncover the perceptions of AHW concerning the course and its relevance to the diabetes health care needs of Aboriginal people, It also involved identifying any barriers that might compromise their practice, and establishing strategies that could or should be used to improve practice. In the second set of interviews, the intention was to identify the beliefs and attitudes held by supervisors concerning diabetes specialisation and to identify how they utilised, in their daily work activities, the diabetes expertise of their AHW who had undertaken the course. It was also necessary to identify any barriers that compromised the ability of supervisors to deliver effective diabetes health services to Aboriginal people.

The research instruments were approved by the relevant ethics committees and subsequently piloted with the cooperation of two Aboriginal colleagues before use with participants. No changes were required.

Issues of academic rigour

As this study involved qualitative research, it was important to ensure that its findings were trustworthy. This was achieved by using the criteria espoused by Lincoln and Guba (1985) and Erlandson *et al.* (1993): credibility, transferability, dependability and confirmability. These researchers are highly regarded and reputable scholars and, consequently, their method was used in this study. For further discussion, please refer to my thesis (King 2006).

Data collection

Data collection and analysis took place between 2001 and 2002. The instrument used was a semi-structured questionnaire. The methods included interviewing and recording, observation and fieldwork. Each response was manually transcribed. Individual transcripts and recordings were kept in a locked cupboard and confidentiality ensured by individual coding.

Data analysis

The data was analysed by using Burnard's (1991) analytical guidelines, a process also described in my thesis (King 2006). To manage thirty-nine transcripts efficiently, each one was incorporated into the QSR software program NVivo.

Results and Discussion

Three major themes emerged from the findings:

- impact of the course on participants;
- barriers that impede the clinical diabetes practice of AHW; and
- strategies required to improve the delivery of diabetes health care services to Aboriginal people.

THEME 1: IMPACT OF THE COURSE ON PARTICIPANTS

Three sub-themes emerged from the participant responses:

- the perceptions of AHW to the course undertaken;
- the professional development of AHW; and
- the relevance of the course in meeting the diabetes health care needs of the Aboriginal community.

To ensure the confidentiality of the participants, and to assist readers of this report, the responses of AHW are represented by the letter A and those made by the supervisors are represented by the letter S. Both are numbered according to the order in which they were interviewed.

1.1. Perceptions of the Course

The findings indicated three minor themes: AHW responses to the course, strategies that had helped them with learning, and difficulties associated with undertaking a postgraduate course.

RESPONSES TO THE COURSE

The health workers expressed a range of responses to the course, as follows:

Challenging

I've never done a university course … that's probably the problem … the course that I did for my health worker's certificate … was clinical … hands-on … no writing … there was no specific way of writing that stuff (A37) … hell … it was really hard (A7) … I was so determined that I was going to … complete [the course] … it wasn't easy for me … the way the universities want their work done … was a whole new world for me … I kept on trying … I spent many, many hours sitting up late … even though I was tired, it was a lovely sort of tired [feeling] (A17) … it made me think (A18, A22) … I didn't know there was so much to know (A37) … we were swamped with all this information … I went, oh my God, can a person learn so much! (A34).

Motivating, enjoyable and affirming

The course got that motivation [going] … once I'd developed the skills and knew the information, I felt confident enough to go out there in the community and share … [my knowledge with them] (A5) … every time we'd finish doing a module, me and my colleagues from this region would say to each other, once we've finished we've got to do something in our region. We know we've got something moving. We met up with the MAD mob … [Metropolitan Aboriginal Diabetes] … through Flinders Uni, and they said … if you're really serious … we can come and help you, show you how to do it, instead of reinventing the wheel … we wouldn't have had them networks if we did not do the course (A6).

It was a good course (A26), it was pretty interesting (A6, A26) ... [it's given me] … the knowledge … that I needed to do my job (A37) … I thoroughly enjoyed the course … the support and everything … that made it easy for me to do (A1, A2) … it was fun. The whole way it was set up. There was so much information … it was set up in a way that there were regular breaks. Very relaxed atmosphere, Aboriginal and non-Aboriginal people mixing. And I really enjoyed doing it (A347).

STRATEGIES THAT ENHANCED LEARNING

As well as finding the course challenging, enjoyable and relevant to their practice, the findings indicated that most participants believed that AHW had been well supported through the course.

Academic support

It was good … excellent (A7, A22, A39) … the support was there (A20) … more than enough, I think (A9, A10) … [the lecturer] from Flinders uni is always on the other end of the phone if you need it (A6) … the health workers could go back on a day and go through it (A5) … I think the university was very sensitive to the way that we learn (A17) … you were there to go through what we couldn't understand (A37, A2) … we were specifically worried about the jargon … they helped us with the jargon (A7).

The findings confirmed that the supervisors also believed that AHW were adequately supported during the course:

I think they were given enough support from the university (S11, S12, S14, S16, S27, S32) … they're [AHW were] always talking to somebody from the university … from my understanding she was [supported by the university] (S36).

The findings also indicated that the health workers appreciated the teaching and learning strategies that were used during the course. Examples of these were handouts from presenters, clearly worded assignments and, if required, the opportunity to gain an extension for late submission of assignments:

The thing that helped was … the paperwork … the handouts. That was really important … you could always refer back to it (A1) … all the information was excellent (A20) … it was a good learning process 'cause the questions were structured so that you sort of knew what you were [supposed to be learning and doing] (A29) … I think it was good because you had the book [Topic Outline] … it gave examples of an essay, what it should, of how it should look like (A2).

I found that I could get extra time, which I did need to finish it all. So the support was there (A8) … I don't think we would have been able to [complete the course without extensions] (A1).

Library support

Although library assistance was available to all health workers who lived outside the metropolitan area, whereby library staff would forward texts, articles, videos and material relevant to assignments, only one health worker accessed this valuable resource:

I was forever ringing up the university [library]… can you help me, I need some information on this … they were very good about it and they actually sent me up a huge packet of books and … even marked with paper of places that they thought would be helpful to the assignment (A22).

Collegial support

The findings indicated that having the support of other Aboriginal colleagues in the classroom was important to the participants:

> *It's good that they get a few Aboriginal people together, so they don't feel like they are one little person on their own … you could at least have somewhere to go when you walk in the door. A familiar face, that's important (A8).*

DIFFICULTIES ASSOCIATED WITH LEARNING

Several minor themes emerged. These involved lifestyle issues, medical terminology, academic writing, classroom tension and lack of library facilities.

Lifestyle issues

Several reported that various issues had compromised their ability to meet the academic requirements of the diabetes course effectively:

> *Going from a TAFE standard course to a university course, I knew it was going to be more work involved. I probably wasn't prepared for the amount of work involved in it … I struggled … to find the time … working full time and studying part time and having a family life and doing other things outside of work … it was just a bit difficult to squeeze it all in (A5) … Flinders is so far away (A37) … I know they've … [the university] … offered some support … but for some of us we probably put it … [writing assignments] … on the back burner a bit too long and … and probably didn't prepare it as well as … we would have liked (A5) … I've got two little ones … at the time they were three and five years old. So it was really hard being in Adelaide for a whole week … it's just a bit hard (A34).*

Medical terminology

Others found the medical terminology used by lecturers during the course difficult to understand:

> *We had a doctor … [who used] … medical terminology … some of us as health workers … weren't up to speed with a lot of the medical jargon (A5) … I've got a pretty good grasp of words … apart from the terminology (A39) … it was a bit over some of our heads (A13, A26) … I couldn't fault it … [the diabetes course] … other than the jargon stuff (A17).*

Academic writing

The findings also indicated that several AHW found academic writing a difficult task:

> *I found it a little bit hard because I'd never seen an assignment written for a uni … I even asked the nutritionist … if she had a copy of anything she'd written … so you could see what it looked like, what the content was and perhaps what the remarks were at the end of it, to see what she could have done to improve it. If I had have seen something like that I would have felt more like I'm not a dumb dumb and I can do this, but I just had nothing … but no one seemed to have anything (A22) … it was a matter of the right way to write it up (A7) … [and] …the time to do it (A26).*

Others reported:

> *I've got the gift of the gab, but when it comes to writing it on paper, it's a different thing ...it certainly was a challenge ... it was just putting pen to paper (A1) ... I found that a big hassle (A9) … difficulty in writing (A10, A37); it was pretty hard (A13) …being left school at an early age … I had no idea how to do an academic essay (A6) … but once I got a tutor in it was more like her getting me started and getting the ball rolling (A8).*

Classroom tension

This was an initial problem that disrupted the learning of AHW:

> *The first week that we were there, I found it was a little bit conflicting with cultures … but once the RNs [registered nurses] realised that the health workers were there on equal footing, I think things settled down and a lot of people were a lot more relaxed … the 2nd, 3rd and 4th lots of weeks that we went to Adelaide was absolutely fantastic. I made a lot of friends and networked and the culture thing didn't come into it after that first week (A22) … it felt like we were being looked down … [by the non-Indigenous health professionals] … and given a few bit too many chances … but as it went on, it wasn't too bad (A7) … you feel a bit uncomfortable (A26) … there was friction there … I think because the health workers got stuff from the Health Council [text books] … a lot of them didn't realise that we're employed through the Health Council, so it's part of our work … they were wondering why we got freebies and they didn't … that caused a bit of friction, but once that was all explained, we got on really well with them (A20) … the next time [module 2] … we went back it was a lot different (A1).*

Lack of library facilities and support

The lack of access to university library facilities proved to be a particular problem to the first cohort of AHW in 1998, and they experienced difficulties accessing library resources from their communities and local libraries:

> *We didn't have access to the library without a big cost … we couldn't come to TAFE here because we weren't a student … so when we left we couldn't take books … we didn't have the medical stuff or anything … We found that hard … we couldn't access Flinders Uni without paying a cost … so we thought we would be smart and come home and use TAFE or a public library, but we couldn't … because we weren't a student and the public library didn't have anything relevant … that was really hard, trying to get resources … a struggle (A7) … I found it difficult … because … I couldn't have the access of going into a library … because of being isolated (A2).*

Discussion

The findings indicated that the diabetes course did have an impact on the experiences of the health workers. On a positive note, the AHW found the course to be challenging, motivating, worthwhile and interesting. This was not surprising because the literature clearly demonstrates that type 2 diabetes is a major health problem in the Aboriginal population and, therefore, the diabetes course was relevant to their clinical practice.

As the coordinator of the diabetes course it was satisfying for me to learn that AHW believed they had been adequately supported while undertaking the course. This was considered necessary because no health worker in the three cohorts had completed Year 12 at high school and, in fact, several had left while still at primary school. Realising this may prove a difficulty, the pre- and post-course workshops were conducted to prepare the students for their studies and to address any difficult issues. However, not all the health workers were able to attend these workshops, and it was those students who did not complete the academic requirements of the course. To alleviate this problem, all students (Indigenous and non-Indigenous) were given an opportunity to consult about learning issues and difficulties related to their assignments. Not all the health workers accepted this assistance, but those who did went on to pass the course.

As mature aged students with family, community and work commitments many health workers experienced lifestyle difficulties while undertaking this course. This is a problem for many older students, both Indigenous and non-Indigenous. To assist them, the practice is to grant extensions to those who have legitimate reasons for being unable to complete their assignments on time. Many AHW sought extensions for their assignments and, in due course, submitted their papers.

Aware that medical terminology may also be problematic to the health workers, they were given a handout at the beginning of the course that included a description of the terminology that would be used. They also had access to a medical dictionary, which had been funded by the SAAHP grant, and so could look up the meaning of unfamiliar terms they did not understand.

Academic writing is a perennial problem to all students who have not undertaken a previous university degree. To minimise this problem during the course students were taught the principles of academic essay writing, how to reference correctly and how to compile a bibliography. To assist them with this process each student was given a booklet developed by the chief librarian. This helpful introduction was followed up by a session with a librarian who showed the students how to access texts from the library and, if required, the various databases for relevant sources. The goal was to enlighten and empower all students so they would know how to access information that would assist them both with the academic requirements of the course, and in their day-to-day professional lives.

During the initial second course, several AHW experienced classroom tension when some non-Indigenous health professionals, who were also students in the program, had openly expressed their resentment because they believed that AHW had been given 'handouts' in the form of textbooks, while they were required to purchase their own. This was made worse because some health workers complained that 'they were being regarded and treated as inferior' by particular non-Indigenous students. To address this dilemma, several AHW who were recognised leaders in their communities informed the non-Indigenous students that the course expenses and texts had been funded by SAAHP to enable the AHW to undertake the course. The AHW leaders also told them that this initiative was part of an overall plan to help improve the diabetes health status of Aboriginal people in South Australia. When the non-Indigenous students realised that AHW were trying to help improve the diabetes health status of their people by undertaking the diabetes course, the resentment and racism quickly dissipated.

The difficulties experienced by the first two cohorts of AHW when borrowing library books arose because the diabetes course offered in 1998 and 1999 was regarded by the university as a continuing education course and not as a formal award with a university qualification. This prohibited those students enrolled in the short course (DEC) from borrowing library books Aware that this was a problem, the library fees were paid from the SAAHP grant so that the 1998 and 1999 cohorts had borrowing rights. However, even though the process for borrowing books was explained to the AHW, no one used the library for this purpose. When asked for a reason why they had not utilised this source, this group replied that they had forgotten what was said about library borrowing or thought that they could find the relevant information in their health service.

Once the course was upgraded in 2000 from the DEC to a recognised university course, the Graduate Certificate in Health: Diabetes Management and Education, the AHW enrolled in that year had full borrowing rights. The library staff also assisted those students with their assignments by locating and sending relevant books and articles for them to read on specific topics. However, despite the access to this valuable resource only one health worker took up this offer; she was successfully helped by the library to complete her assignments. The others elected to use the texts that had been purchased for them through the grant or that they had borrowed from colleagues or previous students who had undertaken the course. The main reason given for not borrowing books from the library was that the process took time to access the resources required.

1.2. Professional development

The findings indicated that many participants acknowledged that exposure to the course had helped AHW develop further as health professionals. For instance, health workers had increased in confidence and gained credibility in their Aboriginal communities.

Confidence and credibility

I've picked up quite a few things at that course that I've put into practice now (A20) … I know what I'm talking about now … I actually get a little bit of a buzz in my heart when I get a phone call saying … so and so's just been diagnosed with diabetes, can you go and check them out; it's good to knock on that door and know what you're talking about and having one of your own people to look after them (A6).

I feel a bit more confident when talking to people about diabetes … and I know … when I need to get help for those people (A29) … I'm more confident in the material that I hand out and verbalise with my clients (A9) … It … [the course] … gave us the confidence and knowledge to feel comfortable to participate in it … [the development of a dietary flip chart for Aboriginal people] (A9, A 10).

Being able to do their BSL [blood glucose] checks out there within the community … to have the skills to be able to monitor them … because Aboriginal men don't like to come into health services or see health professionals but they are willing for me, if I'm out there in the community … [to assist them] (A5).

Now they [Aboriginal clients] … want to get their feet checked (A2) … so it [course experience] … has given her credibility [with Aboriginal clients] (A1) … other health professionals ask for our advice (A10) … [and] … the doctors are referring clients to us (A22).

Understanding, empowerment, responsibility

The findings also indicated that AHW gained increased understanding of diabetes health care issues and the ability to use that knowledge to assist their clients:

> *I've been working with the diabetes educator here prior to doing the course, a lot of it was sort of like, oh that's what she means or that's what they do that for or … I actually found it really … interesting because … I actually understood … what she meant by everything (A6) … [the course] … has actually given me a clearer understanding about diabetes … makes me think how can I put it across to Aboriginal people in looking at their diabetes … not just as a disease but look at it from a better perspective. Like trying … to work it around the Aboriginal person and their family … it made me think a lot because some of the Aboriginal clients … are non-compliant as well… it [course content] … makes it easier for us to be able to sit back and think of another way to be able to approach this person in a way that's not going to offend them … it's actually made me put myself into their shoes … how would they like to be given the education and try and fit that around their social life and their problems (A17).*

> *Actually being able to bring that information back to Aboriginal diabetics here and telling them that these are some of the things that can occur … that they certainly weren't aware of. That was a big benefit to me that I was bring back this information that they were unaware of … I think that's very important to give back what you learnt … [to the community] (A2).*

In addition, the health workers realised that they were now responsible for using their diabetes expertise to assist clients. Others noticed that they had now developed an ability to empathise and to be more aware of the dilemmas that Aboriginal people faced with this chronic disease:

> *Aboriginal people have got the highest … [prevalence of diabetes] … like we're dying with diabetes. I think what I enjoyed about [the course] … was actually coming back with the information that I could go out to people and feel from my heart and my soul that I knew I was giving the right information out … the whole community benefits from what we've learnt (A6) … we've been dealing with diabetic patients for a very long time and it just showed us how inadequately we were … educated … we didn't realise there was so much to it and yet we've been supporting diabetic clients for bloody years (A34) … we shouldn't have signed up if we couldn't get through (A6).*

> *I just feel knowing so much more about diabetes, I'm actually living diabetes with them and instead of just helping them. I'm helping myself too cause I'm learning from them all the time as well … it's not just straight forward and … people's lives are actually ruled by diabetes (A22).*

> *It [the diabetes course] … makes you more aware and equips you with your need to do, how you need to deal with your clients and as you're assessing them (A29) … what I learnt in the course, I was impressed with because it's enabled me to be more professional in what I'm doing in my day-to-day work (A37).*

The findings indicated that a number of health workers had benefited from undertaking this postgraduate course. Their responses demonstrated their personal satisfaction, their ability to transfer knowledge acquired in one course to another and the opportunity they now had to specialise in diabetes health.

Benefits of postgraduate study

I thought I'm not going to do this [course]… but I did …it was so hard … and there is that sense of what an achievement once I had done it … a wonderful experience for me. To do the work, to study the work, to find the papers and put it all together … it was a wonderful sense of I've done that all by myself (A17).

If Aboriginal people have an opportunity to do the grad. certificate course … take the opportunity to do it (A1) … I think it's a good thing for anybody to be exposed to university training (A17) … You get this opinion that uni is all high and big words and all the rest of it and it's not really (A37) … there were people in our classroom of other cultures … any classroom with many cultures there is already some sort of special link with everybody. I enjoyed it … we were able to share some information and talk about Aboriginal needs and why they are different (A17) … I valued it with the nurses being there. … because of their input and in the class and in networking with each other, I found it really good (A2).

Concerning the ability to use knowledge:

I did one … [an oral presentation on diabetes management] at TAFE for my lecturers … that was part of one of the overall assignments … I brought everything into that that I learnt through the diabetes course … I came out with a distinction for that assignment (A22).

Others believed that there was a need to be better educated and an opportunity to specialise in diabetes health care:

I think health workers need to be more … academic educated in different areas of health … we're moving away from the basic health … [training to specialisation] … I'm interested in … raising the profile of the health worker. So if they … [AHW] … do the same course [as the non-Aboriginal Health Worker and] … if it's a qualified university course … the health worker comes out with the same qualification … it raises the level of the health worker (A26) … because Aboriginal Health Workers roles are very broad …[the course offered] … the first opportunity for the Aboriginal Health Worker to actually work in one area and to become a diabetic educator (A17).

The supervisors also recognised the benefits associated with AHW undertaking the postgraduate diabetes course:

The more knowledge an Aboriginal Health Worker has, the better it is for their people …. other health professionals recognise them as professionals, then you get better working relationships … the more the Aboriginal Health Worker knows the better it is for them [Aboriginal clients] (S11) … they become confident with you and relax … it's sort of like a partnership isn't it? (S4).

One health worker reported that she was now in position to help empower her clients to engage in self-care:

It's also giving them [Aboriginal clients] … control of their health. Not actually saying, you've got to do this or that. But it's actually helping them through it and making them understand … where you are coming from too … and they feel a bit comfortable as well, in talking to Aboriginal people. I think they tend to get a bit frightened with non-Aboriginal people (A18).

Confirmation of professional development

Concerning the professional development of AHW, the findings indicated that the supervisors had observed among health workers a growth in intellectual maturity, competence and newly acquired knowledge about diabetes issues, increased confidence and credibility, and a willingness to initiate diabetes health activities to benefit clients:

> *They …have …really matured (S15 & S16) … [they now have developed] … the confidence (S3) … to get out there … [in the community] … I know people in the community have already contacted her … [the Aboriginal Health Worker] … any information that the community can get up here … [a remote community] … is extremely valuable because we don't have any other professionals in that area up here (S23).*

> *They … have grown … competence … an overall perspective [about diabetes health care issues] (S3) … and because of all her knowledge that she's picked up … she is responsive to the community (S38) … you can see … their knowledge and expertise … they will talk freely about health promotion and how these people shouldn't be eating this fat and …[they have] … taken them [Aboriginal clients] into the supermarket and shown them what they should be doing … [and told them] … not to wear those sorts of shoes … they have gained knowledge (S4).*

> *Well that program … [chronic diseases] … was initiated by the Aboriginal Health Workers … they thought it might be good … so they actually initiated the whole thing … rather than sit back and wait for the crinklies … [non-Indigenous health professionals] … to do it for them or to suggest things for them. They are now being pro-active. And thinking about things that they can do for their community (S4).*

> *She's bringing a podiatrist in and they've got a dietician … I think she's re-evaluating how she does her clinics and that goes I suppose over time you know if you're doing something wrong and it's not working, then you change it (S15) … they work as a team up there (S16).*

> *[The Aboriginal Health Worker] … was talking about having a diabetes camp, that's not on the road yet, but she's talking about that. I know she's set up … every fortnight … a diabetes clinic … she's changed her clinics now … the podiatrist to come in, instead of just like three monthly, a bit more often …she's spoken to … [the diabetes nurse educator] … about and they are doing a monthly get together for diabetes (S16).*

Discussion

One of the main goals of any contemporary diabetes course is to empower diabetes health professionals with the relevant knowledge and skills to care effectively for people with diabetes (Dunning 2003; Guthrie & Guthrie 2002; Haire-Joshu 1996). This aim is also consistent with the goals of critical social theory in terms of empowerment, enlightenment and emancipation of an uninformed group, such as the AHW and their clients (Fay 1987; Freire 1972). Thus, it was greatly encouraging to discover that participants believed the AHW had developed further as health professionals in confidence, maturity, knowledge and competence.

1.3. Relevance of the course to clinical practice

The third sub-theme that emerged from the findings was the relevance of the course content to the clinical practice of the AHW and their communities. The health workers were asked if they believed that the course had influenced the way that they now assessed and cared for their Aboriginal clients with diabetes and, if so, to provide clinical examples that would demonstrate that this was the case. With the exception of three out of the five who no longer worked in this area, fifteen AHW were able to provide clinical examples that demonstrated how they applied their newly acquired expertise in the clinical area. These included undertaking a foot assessment, client support, ability to discern an important management problem, and counselling a client who was afraid of a health-related problem associated with type 2 diabetes.

Clinical evidence

With regard to assessing the client's feet, one reported:

> *I didn't even have a clue before [the diabetes course] about foot assessments, whereas now I check the pulse and sensation (A34).*

Another shared how he was now able to support his client in a positive and informed manner:

> *I actually had a client who lost eye sight, didn't lose it totally, but he had to have laser surgery … he came down from [a remote setting] … his father actually rang me about him … he started off with a home visit, then we booked him into the RAH [Royal Adelaide Hospital] and from there took him down to see a specialist at North Adelaide to get 'laser'? treatment. I was there for every appointment with him (A39).*

Experienced health workers reported they were now able to discern important diabetes management issues, to determine the correct action that should be taken and to conduct client education and counsel clients appropriately. Concerning management issues, one participant reported:

> *I had one client … his son passed away … I knew that his readings weren't good … I knew that his eyesight and things were going [wrong] because of the stress and the grief and the loss … I had a talk with the diabetes educator … she said 'what do you think needs to happen?' … I said 'well I think he needs to stop drawing up his own … [insulin] … syringes because I don't think he's drawing up … [the correct dose] … so we went out together … the diabetes educator actually watched him draw up the syringe and looked at me and gave me a nod and said 'you're right', so we actually put him on the Novalec pen where all he needs to do was dial up his dose and within a fortnight we had his diabetes management back to normal again … if I didn't know about the stress and things through the diabetes … course, I would not have even identified he was drawing up the wrong insulin (A6).*

Client education

Others shared how they were now able to educate their clients and undertake health promotional activities about diabetes health-related issues:

> *I've had to give a client their first education after they've been diagnosed … talking about what diabetes is with them … what sort of medical follow up they're going to need and stuff like that (A29) … not a lot of diabetes patients understand that … salt raises your blood pressure which affects your diabetes, that 'fats' also affect your blood flow, which affects your blood pressure. They don't realise how much fat and salt and sugar is in different foods. I've taken a few people on shopping expeditions … and pointed out the heart foundation, pointing out that's not necessarily good for you but it's the best of all of the things that are available if they've got the tick on them and like a lot of that we learnt at the uni. I wasn't aware of any of that before I did the course (A22).*

> *We've … [another colleague who had also undertaken the diabetes course]… actually had a two-day workshop … we ran one here [in our town] and one [in another town in the region] … I think we had 42 fellas … [from our region] … 30 odd in the other [town] … so that was another 70 people that we've educated over a two-day workshop within the region … the mainstream [registered nurses and allied health professionals] … were heavily involved like us … they didn't do it for us, but they were there for support … just in case there was something … that we didn't know (A6) … we also conducted a community education session, where we invited a doctor as a guest speaker … he spoke on the medical aspects of diabetes … we had professionals like podiatrists, a nurse from our local community health … we had this particular site set up at the Community Hall, where when we'd finished the session, the clients could go to the … [health professionals] … and get their feet checked and so on (A26).*

> *We have a Nunga Care diabetes advisory committee [non-Indigenous health professionals are invited to attend] … that was established after we went through the training … and one of the things that we developed out of that was a healthy living pamphlet in regard to diabetes with local Aboriginal people … we actually had it translated into our own local Aboriginal dialect (A5) …we helped the diabetes educator and the dieticians do a book for diabetes (A9, 10).*

Concerning client education, some supervisors reported that they personally used the diabetes expertise of their AHW in clinics and client educational programs, and had also observed them teaching clients about relevant diabetes issues. They reported:

> *Just knowing that they're [AHW] … now running diabetic programs, which before they weren't … the fact that they're out there running the programs now, they've obviously got the skills to do it and picked up the confidence and abilities to be able to get out and work with the clients (S12)… she's changed her clinics now. She's [the Aboriginal Health Worker] … bringing a podiatrist in and they've got a dietician … I think she's re-evaluating how she does her clinics and that goes I suppose over time you know if you're doing something wrong and it's not working then you change it (S15) … yes because if we get a new diabetic, we get her to do the education side of things and to do the follow ups and that… some [people] … do already come in and ask to see … [the Aboriginal Health Worker] (S19).*

> *When they do their clinics … I have seen them quite a few times help out a client … I recommend that you go and do this because this is what will happen if you don't do it and … quite often the clients … actually go ahead and do what they've been asked to do by the Aboriginal Health Workers (S11).*

I mean you still could see his [the Aboriginal Health Worker] … knowledge with a tool that… [he] feels comfortable with … he wants to take it to the women's group and tell so it's a skill that [he has] … picked up from the course … and using this 'felt body' … as a tool … it's about using their knowledge but with something that they can use the knowledge with (S16).

Counselling and education

The health workers were now able to counsel and educate clients as to why it was important for them to have regular health checks at their clinic. The health workers were also able to manage client referrals from other health professionals in a confident manner:

One lady … her BSL readings were very high … I suggested coming to see the diabetes educator and she said, no, she frightens me because you could get your leg cut off and all … if you don't look after yourself … I said, well basically that's what can happen and I went through everything with her and I think that sort of relieved her a bit (A9).

Client referrals

Two health workers reported that they now felt confident in undertaking client management and educational referrals:

Anybody that is diagnosed in between clinics will be referred to me by the doctors … I make appointments with ophthalmology, with podiatrists, dieticians and go as a support person if they need that as well … I do most of that (client education) on a one to one. It seems like people don't want to come into group education sessions. So I do that on a one to one (A37) … I had one [client] …that was non-compliant and I sat down with her and asked her how would she like me to help … [look] … after her diabetes … she had problems with her eyes and couldn't see how much insulin she was giving herself … so what we did to make it more easier [for the client], I drew up the insulin … and put one … [injection] … in a day container and … one …[injection] … in a night container … [and I] … drew a little picture on the containers for the day and night … they could see which one was the night and which one was the day and we had not problems after that … everything went really well (A18).

Working in partnership

The findings also indicated that the majority of AHW were now working in partnership with other health professionals to manage their Aboriginal clients with diabetes:

We work together as a team (A1) … we work closely with [the diabetes educator at the hospital] (A1) … we run clinics … we do screenings on weight, height … we do referrals to the eye specialists (A9, 10) … I work closely with the dieticians at the hospital … and other agencies like Diabetes Australia (A37) … the dietician … [has become] … involved … in the community … teaching the Aboriginal people about diabetes (A18) … we had a few cooking sessions down there with the dietician from the hospital … once a week we are doing …screening and weighing in and talking about diabetes (A37).

I think we've [she and the local general practitioner] … got 30% diabetics with [the region] … which is a very high number … and we needed something to keep a check on the diabetics to lessen complications (A20).

Clinical evidence confirmed by supervisors

The supervisors were asked if they could provide any further clinical evidence demonstrating that the health workers in their services used their diabetes expertise (Appendix 2). Two reported that they had observed AHW using such expertise in their day-to-day interactions with Aboriginal clients:

> *They do use it … [their diabetes training] … on a day-to-day basis … with their consultation with the client … when they do a consult, and also out in the community where they visit certain clients out in the community (S31) … I think they … [Aboriginal clients with diabetes] … just want to talk to the Aboriginal Health Workers because they're their own people and they feel much more comfortable doing that and if the person's got a diabetes qualification even better. I think they just come in and see the Aboriginal Health Workers because they feel more comfortable in talking to a Aboriginal Health Worker and if the worker cannot answer any questions then they'll just say I don't know anything about that but if you like I'll find out for you and give you a ring back or go in and see you tomorrow and let you know about it, and the clients are quite happy about that (S11).*

Several supervisors reported that, although they had not actually directly observed the Aboriginal Health Workers using their diabetes expertise in their clinics, they were aware that clients with diabetes were consulting the AHW about diabetes health matters:

> *They are always coming in to see her and have a growl (S36) … I meet them down the street and they say, 'I haven't been feeling well. I will have to see … [the Aboriginal Health Worker] … and have that three-month test done' (S32) … because of all her knowledge … she is responsive to the community. If they want it … [client education] … on a one-to-one basis she will do it. If it's in a group setting, she will do it … if there is something that she doesn't fully understand around diabetes, she has got access to GPs that she could ring up and say that this is the situation, the client, the medication; what should I be telling them (S38) … we've got the select group … mainly the elderly … [the Aboriginal Health Worker] … has to run around to get the other ones and make appointments for the diabetic clinic (S35).*

No clinical evidence

The findings also demonstrated that three of the five AHW who had undertaken the course and were no longer employed to work in diabetes health care were unable to provide any clinical evidence as to how they used their diabetes expertise. Significantly, one health worker although employed in a health service that delivered diabetes health care services was allocated other duties:

> *We've sort of been using the community health diabetes educators for most of our stuff … [diabetes health care] … we just … go with them so … the people feel a bit more comfortable (A29).*

This outcome was supported by two supervisors who had not observed any direct clinical evidence that their AHW used their diabetes expertise to care for clients with diabetes. The first reported that 'I'd like to say yes' (S3), but the fact was that she had not observed any clinical evidence of this occurring. The second reported that she was not in a position to do so because as a manager she was distanced from the clinical activities of the health worker in her service:

> *A lot of interaction could be happening on an informal basis … [and that she] … definitely hadn't noticed that clients were coming specially to consult the Aboriginal Health Worker with a diabetes qualification because that person was expected to work in a generic sense … [that is] … they handled whatever came in the door that was a health issue that needed the attention. That was the role and responsibility of the Aboriginal Health Worker (S33).*

Discussion

The majority of AHW who had undertaken the course could provide examples as to how they used their newly acquired diabetes knowledge in the clinical area to improve the health of clients. However, five of the eighteen were unable to do so and, of that number, three were no longer employed in this important area. This outcome was disappointing as it represented a waste of a valuable resource for improving the diabetes health status of Aboriginal people.

With regard to the supervisors, most could either provide evidence that their health workers used, or believed that they did use, their diabetes expertise. However, two supervisors could not give any evidence that their health workers used the knowledge gained from the course to assist clients.

1.4. Relevance to Aboriginal community

The participants were asked if they believed the course was relevant to the diabetes health care needs of Aboriginal people (Appendix 2 & 3). The findings clearly indicated that the majority of participants believed this to be the case:

> *Definitely … I think it's relevant (A9, A17, A13, A18, A20, A26, A39) ... the content … was the same for everybody (A1) ... I think diabetes [training] … is something that we've all got to start from … before we even adapt it … because we're not going to heal people with diabetes unless we stick to the proper diets and proper ways of doing things, managing it (A6). Even though some of the supervisors had not had the opportunity to study the diabetes curriculum, the majority agreed that the content was relevant to the needs of Aboriginal people. Definitely relevant (S33, S38, S4) … absolutely relevant … diabetes is really a Westernised disease … it has to be treated the same as everybody else … but the approach is different … the only way that we can get the approach … is for our staff to go in and take the tools which are offered by the Western education system … so that you will know how to adapt and readapt them when you bring them back into the community (S32) … diabetes, it doesn't matter if you are Indigenous or non-Indigenous, you've still got the same problems (S35) … very much so (S24) … It's given [the Aboriginal Health Worker] a broader base knowledge of issues with diabetes (S36) … I thought it pretty much covered what they needed to know (S3) ... I think that's excellent (S27) … it certainly sounds as though it's highly relevant to me (S23) … I've read of the course and seen all the workbooks … I thought they were quite relevant (S11) … I haven't actually seen the curriculum or I'm not really sure what they were learning about, but they certainly all seemed to take it on board and are now using the stuff that they did learn (S12) … they should come with some grounding anyway (S30).*

Supervisors were questioned as to whether they believed that AHW would be able to use their diabetes expertise to help improve the diabetes status of Aboriginal people (Appendix 3). The findings indicated a range of responses that were positive—but also cautionary. For although the majority of supervisors believed that trained health workers could help to improve the health of their clients, a minority reported that any improvement in the diabetes status of Aboriginal people could only be reached in collaborative practice with other diabetes health professionals:

> *Definitely … certainly can (S4, S31, S21) … they've already put that into practice (S11, S12) … I'm sure they can because Aboriginal people relate and they've got that confidence and rapport with them … the people in the district … will take more notice of another Aboriginal (S19) … yes … [the Aboriginal Health*

Worker] … has the confidence to get out there and … people on the community have already contacted her … it's helping the community. Any information that the community can get up here is extremely valuable because we don't have any other professionals in that area up here, we're just lucky (S23) … she has helped a lot. The hospital has referred clients to her already (S24) … at the moment they're doing it in a smaller way … [however] … they need the support of their organisation in giving them time that's dedicated to diabetes … they've certainly go the knowledge (S27 & S28) … yes … no one can do it better than black fellas themselves (S38).

Despite the optimism expressed by the majority of supervisors, two highly experienced supervisors cautiously reported that AHW could not improve the diabetes health status of Aboriginal people without the contribution of a multi-disciplinary team. The reason given was that AHW mainly had a generic role and were not focused on the care of Aboriginal people with diabetes. Consequently, the health worker would not be able to accomplish this outcome without the contribution of other diabetes health professionals:

Not by themselves … they would have to work in with other allied health professionals and registered nurses … and other parts of our Health Service too because, you can't just work on diabetes … we're talking about lifestyle and everything here … the stuff they've got from the diabetes educator course will be good experience … [but] … it's got to be a comprehensive approach and it's got to be … a collaborative approach as well (A30) … one … educator for nearly 200 diabetics is a big ask … the only diabetics we know are the ones that register with our service … and we've only got one Aboriginal diabetes educator to service [clients spread over many hundreds of kilometres] … so it's a big catchment area when you've got one diabetes educator (A36).

Discussion

The findings indicated that the diabetes course was relevant to the diabetes health care needs of Aboriginal people. This was not unexpected, because the literature conclusively demonstrates that type 2 diabetes mellitus is an important health problem to all people, including the Aboriginal community. As the diabetes course met the ADEA Curriculum Guidelines for a national course, it addressed the diabetes health care needs of all people, including Aboriginal people (Couzos *et al.* 1998; Dunning 2003; Guthrie & Guthrie 2002; Haire-Joshu 1996).

Research has also demonstrated that health professionals believe that AHW are the ideal professional to educate Aboriginal clients about diabetes issues and about the necessary lifestyle changes that need to be made (King 2001). Thus, it makes sense that this health professional is given an opportunity to undertake specialised diabetes training so they are qualified for this role. Hence, AHW were able to identify how they used the course knowledge in their daily activities. To demonstrate this, they gave many examples that included client education, counselling and support, accepting referrals from other health professionals and working in partnership with other members of the diabetes health care team. These outcomes are consistent with the elements of critical social theory and the goals of contemporary diabetes health care, which are enlightenment, empowerment and emancipation (Dunning 2003; Fay 1987; Freire 1972; Guthrie & Guthrie 2002; Habermas 1971, 1974).

In support, the majority of supervisors confirmed that their health workers were certainly using the diabetes knowledge and skills gained from the course in the delivery of diabetes health care services to clients. Examples included client referrals for diabetes assistance, client education regarding diabetes issues,

conducting camps on diabetes health matters, and taking initiative within the organisation to improve the delivery of diabetes services. Despite this, a small number of supervisors reported that they were unsure whether AHW actually used their newly acquired expertise or not.

On a negative note, the findings indicated that five health workers were no longer employed in this important area by their employers and, therefore, were unable to provide examples as to how they used their newly acquired expertise to assist clients. This was a most disappointing outcome, for without the support of their employers this expertise would soon be lost as shown by the research of Cartwright (1980) and Anderson and Clement (1987). Such an outcome is of no benefit to the Aboriginal community and nor will it help improve people's diabetes health status.

With reference to critical social theory, all AHW were enlightened (Fay 1987; Freire 1972) about diabetes health care issues through the course, but not all were empowered to use their diabetes expertise in a constructive way by their supervisors. This meant that these health workers were not able to care effectively for clients with diabetes and, consequently, neither the health agency nor the clients benefited from the educational initiative in any tangible way.

Summary of Theme 1

The findings indicated that even though AHW found it difficult to meet the academic requirements of the diabetes course, 55 per cent of the total cohorts graduated. They found the course challenging, motivating, interesting and highly relevant to their clinical practice and the needs of the Aboriginal community. Significantly, many participants noted that AHW had developed further as health professionals by growing in maturity, confidence, knowledge, motivation and accountability. Others reported that the AHW were also prepared to initiate diabetes health promotional activities that would benefit Aboriginal people, rather than wait for non-Indigenous health professionals to assume that responsibility.

THEME 2: BARRIERS TO PRACTICE

Four sub-themes emerged from the findings:

- diabetes health care is not regarded as a high priority;
- lack of knowledge held by Aboriginal health professionals about contemporary diabetes management;
- utilisation of diabetes expertise; and
- further barriers that affect practice.

2.1. Diabetes health care is not a priority

Type 2 diabetes is not seriously regarded as a sufficiently high priority for funding or action by governments, health services, providers of health worker training, Aboriginal health professionals and clients. This could be seen in the lack of basic infrastructure such as facilities, staff, resources and equipment.

TO GOVERNMENTS

The findings indicated that governments did not seriously regard diabetes health care as a funding priority for Aboriginal people. Instead, short-term funded projects were often granted for important health priorities, resulting in a lack of continuity of care.

Negative impact of short-term funded projects

Concerning this barrier, two participants reported:

> *We actually had a Nunga Care project … [the project was funded by the government] … for diabetes … there was enough money in that while the project was going … [to care for clients with diabetes] … it's finished now, the money funding's run out but while the project was going, I actually was designated 0.2 time to just work on Aboriginal people and diabetes (S6) … [during this time the diabetes nurse educator] … worked very closely … with the Aboriginal Health Workers … it would be good if we could find some funding to employ … to work some hours for diabetes … [when the project was finished] (A4).*

The outcome from this was the lack of continuity of care. Concerning this the AHW appointed to the project reported that if care was to continue once the funding had ceased, the project had to be undertaken outside of work hours:

> *I'm still going out Saturday mornings and Sunday afternoons to catch up on the diabetic stuff … to be honest, in my own time I would spend 4 to 5 hours on a weekend checking out different clients with diabetes (A6).*

Inadequate infrastructure

Several supervisors reported:

> *We don't have proper accommodation. We work in an extremely dangerous safety situation with regards to both clients and staff. You can see for yourself … we don't have a budget for the equipment (S32) … the problems are basically with the building size … we have encompassed the family practice and it's taken over a huge amount of the building, which is meant that the health workers have virtually had to move out of their area … they don't have an area where they can talk confidentially with clients … there's four of them in one room … the other rooms are for testing [by the doctors] … the whole building is just too cramped and too difficult and the health workers complain about it virtually on a daily basis. They can't get their clients in there and it's going to get worse if the family practice expands …. I'm worried there's going to be staff walking out all over the place (S23) … we don't have space in here … probably we are … [the Aboriginal health team] … being kicked out of here (S24).*

In support several AHW reported:

> *I'm hoping that when … we get an event room, it will make a difference and people will come up. At the moment very little [Aboriginal people] … come up to use the health services (A1) … a room on its own would be wonderful … we are sort of crowded at the moment and with the doctors coming here … they've taken up like three more of the rooms that we originally had and there's five of us lumped in one room (A22).*

Lack of vehicles and resources

> *They … [remote AHW] … have to have a car here, because 99% of the Aboriginal people have not got a telephone in their house and if you can't go to them, they don't always come to you; you need a car … [to undertake community visits] (A19) … [we have] … a lack of resources [health promotional resources for client education]… we also need the space to keep them (A14).*

Inadequate staff numbers

The lack of health funding has also meant that supervisors were unable to employ sufficient numbers of competent AHW to care for clients:

> *There aren't enough health workers … to have one especially working in that area … [diabetes health care] … there is inadequate funds [to enable this] … to employ extra people (S33) … we need more staff in the health area … you never know with staff how long they're going to stay on board, and if they leave then you have … new people and you have to train them (S23) … it … comes back to funding … we don't have the funds for the position … [AHW with diabetes expertise] (S32) … every time there's an Aboriginal client, it's always the Aboriginal health team that are … [expected to cope with the client problems] … and when you've only got two or three workers … they're supposed to do everything that is actually in mainstream is divided amongst thirty workers [non-Indigenous health professionals] (S21).*

One of the difficulties … is that [the AHW] … is a good all round worker and she's just rushed off her feet [coping with all the other health issues of people] … [she was expected to meet] … and she's probably taken on extra duties that some of the other workers could perhaps do, but she's involved in everything. So I mean really we need more staff in the health area (S23) … you're looking at efficiency of time here … once again I come back to the fact of how many workers we've got and the most efficient way to use their time (S21).

Discussion

Even though specifically related to Aboriginal workforce issues and not capital expenditure, the fact is that Aboriginal health care is under-funded by an estimated amount of more than $450 million per year (Access Economics 2004; AMAATSI Health Series 2004). This has a flow-on effect that compromises the delivery of health services to Aboriginal people and seriously affects the ability of Aboriginal health agencies to provide the necessary infrastructure required to deliver effective diabetes health services to Aboriginal people.

This lack of infrastructure causes the management of Aboriginal health services to make decisions concerning which health professionals would use those facilities and scarce resources and who would not have that privilege. Being associated with the lowest level of the health team hierarchy, AHW are often denied the opportunity to access the required physical space, resources or equipment needed to educate or care efficiently for their clients with diabetes.

The findings also indicated that having to continually apply for short-term funding for an identified health priority (AIHW 2003, 2004, 2005), which should have been funded in the first place and for the long term, was detrimental to ongoing, effective care. As far as the supervisors were concerned, it was a complete waste of their time always having to write complex funding submissions and apply, with varying degrees of success, for what should have been funded automatically. Of particular concern to them was that if funding for this important health aspect was not approved for the following year, the program would be disbanded. This outcome was not well received by Aboriginal health professionals, clients or members of the Aboriginal community. It communicates to all Aboriginal groups that governments do not seriously regard funding the care of their people with diabetes as a sufficiently high priority for action. Therefore, Aboriginal people regarded short-term diabetes promotional projects with great scepticism because, in their words, 'the project was here today and gone tomorrow'. This practice by governments does little to improve the diabetes health status of Aboriginal people. At best, it is really a token 'gift' from governments to appease the community and to allow politicians to say to their electorate that they are committed to improving the health status of Aboriginal people because they have funded this or that project. In reality, health professionals reported that very few short-term funded projects make any significant difference to health outcomes in the short or long term.

Diabetes health care is a serious and costly health problem (AIHW 2004; Colagiuri *et al*. 2003) and, as such, it must be funded appropriately if people afflicted with the disease are to live an acceptable lifestyle. Therefore, the practice of short-term funding for identified health priorities should be actively challenged by health professionals and concerned community members, because it is imperative that dedicated health dollars are allocated by governments against identified priority areas and not funded by short-term grants. As it currently stands, it is a national disgrace that boards of management and Aboriginal staff have to apply each year for short-term funding to conduct such essential services and programs for a nationally identified health priority.

With regard to the lack of competent health workers, there needs to be submissions made to relevant government departments by Aboriginal health professionals for increased funding to recruit, train and employ sufficient numbers of AHW to meet the needs of the Aboriginal community and, in particular, for the remote regions. This action would be consistent with the statement made by the Australian Health Ministers' Advisory Council in 2002: 'To increase the number of Aboriginal and Torres Strait Islander people working across all the health professions' (Standing Committee on Aboriginal and Torres Strait Islander Health 2002:6). Despite government rhetoric, this need has not been translated into action. Instead, the findings support the literature that that there is an urgent need for increased health funding to be made available to employ, educate and retain sufficient numbers of AHW (Access Economics 2004).

It was clear from the data that the participants generally believed that Aboriginal health care in their communities was not adequately funded. Such inequity affects the provision of infrastructure, recruitment and number of employed AHW, and their access to the resources needed to educate AHW, their clients and others about diabetes issues. Clearly, these factors must be addressed urgently within the Australian health system.

TO EDUCATIONAL PROVIDERS

The findings confirmed that educational providers of AHW training did not regard the diabetes management of clients as a core priority to be covered in their curricula. Confirming this deficit, two supervisors reported:

> *I guess they … [AHW in general] … don't get that much training in their primary health care certificate course to be able to provide that service at the level that's expected of them. And not every area has got its diabetic educators … so … health workers are finding that they're the ones filling in (A12).*

Discussion

An examination of AHW training curricula clearly indicates that diabetes health care is not regarded as a priority by educational providers (AHCSA 2004; DETAFE SA 1996). Therefore, it is understandable that graduates from these programs place little importance on this aspect of health care and do not know how to care effectively for Aboriginal clients with type 2 diabetes.

Drawing from critical social theory (Fay 1987; Freire 1972), to facilitate enlightenment and empowerment within the Aboriginal population in the context of diabetes management it is essential that all AHW receive sufficient training in this area. This would enable them to meet the health care needs of Aboriginal clients with this condition. Those wishing to specialise in this important area need the opportunity to undertake specialised diabetes training in order to participate as active members of the diabetes health care team. If this training does not occur, AHW and their supervisors will remain powerless to address effectively the management of clients with diabetes and will be dependent on non-Indigenous diabetes health professionals to care for their clients. Lastly, to be competent in this area specialist diabetes AHW need the support of their employers to maximise the benefit of their specialist training in the clinical area; otherwise, their skills and knowledge will quickly be lost. AHW also need the opportunity to consolidate their learning by accessing further education in this area.

To disregard diabetes health care as a priority for action contravenes the findings of the *First Step Report*, in which the members of the South Australian Aboriginal community identified diabetes as one of the top five

health problems to be addressed in South Australia (SAAHP 1997). On those grounds, and even at this late time, the first place to start is to educate Aboriginal Health Workers in this important area so that they can respond to and improve the diabetes health status of Aboriginal people. With reference to Freire (1972) and Fay (1987), this action would help enlighten and empower AHW to function as competent health professionals in the multi-disciplinary diabetes health care team.

TO ABORIGINAL HEALTH WORKERS AND CLIENTS

The research findings indicated that many AHW and their clients do not regard diabetes as an important health priority for action. One experienced non-Indigenous supervisor reported that for some years she had supervised the clinical practice of two health workers who were diagnosed with type 2 diabetes. Despite counselling and educating them about the serious nature of the disease, and the consequences for their health if it was not managed effectively, her colleagues were reluctant to make the lifestyle changes required to manage their condition successfully:

> *We've got two former staff that used to work here that are both diabetics … I … got onto them and said, drinking Coke and eating all this junk stuff with your sugars. One was insulin controlled and the other one was on medication. I said, you are going to end up in serious problems if you continue to do it. Now one of them is actually on haemodialysis … and the other one is on peritoneal-dialysis. And they've both got heart problems. They are both now on disability pensions and they are young people … it made me feel bad because I had actually said to them in the early days, over ten years ago, if you keep this up … they said we will be right, we will cut down … they are both two qualified health workers … one of them was actually working in diabetes (S35).*

Many Aboriginal clients also did not regard diabetes health care as a priority for action, and there were several reasons for this. Aboriginal clients placed more importance on other immediately urgent priorities, such as basic survival, housing and employment rather their health. Moreover, they did not readily accept that they had been diagnosed with type 2 diabetes because, unless some crisis occurs, they did not often feel unwell and were unaware of the insidious nature of the disease and its serious implications for their health. Consequently, Aboriginal clients, their families and communities apparently lacked motivation to focus on and address diabetes issues or make the lifestyle changes needed to facilitate healthier living:

> *People … don't see it [diabetes health management] … as important because they don't feel unwell until a crises happens … that's the biggest problem … they tend not to look at … [diabetes health care as] … really serious … if they don't feel sick, then it's alright. They don't realise that it's doing damage over the years when it's out of control and … they get really unwell and requires them to be hospitalised … and even then, we've got young people who have been diagnosed … and put on insulin, they don't manage that very well … and then they end up in crises in hospital … as soon as they got their sugars back down and they are starting to feel okay, it was … we are going home now. You can't educate them … they don't feel unwell. We've got clients that walk around with sugars at twenty-six, twenty-seven [mmol/L) … and we say, we have to put you into hospital. Why?… [the clients ask] (S35).*

Basic survival a priority

One experienced rural AHW who worked closely with Aboriginal clients with diabetes expressed why she thought the disease was not regarded as an important priority by this group:

> *How can … [the Aboriginal client] … worry about what's going to happen …in twenty years time when … [he or she is] … flat out surviving today … [the client] … can't see … that this is going to happen …in twenty years time. Most people don't live long enough to suffer complications … some people can only survive one day to the next. So and so gets her pension on Thursday. So there's a house full of food Thursday night. Friday all the visitors come from up north and all the food is gone and they're going to starve for a week (A37).*

She continued:

> *Grandmother has got three kids with their own families. Their three kids are out drinking, smoking or gambling. Grandmother ends up with the grandchildren. How is she going to worry about what's going to happen to her in twenty years time when she got to worry about feeding these kids. It's just really difficult (A37).*

> *If I was on a low income and I had my grandchildren and … [only] … $5 and I needed a syringe, but I had my kids there and they needed bread and milk, I know what I would be paying for. This is realistic, real-life stuff that a lot of non-Aboriginal families wouldn't have to do (A37).*

In support of the above, one supervisor reported that she believed that Aboriginal clients with diabetes thought that other priorities were far more important to them that just focusing on individual health issues:

> *We used to run diabetic workshops and we would have the same people coming to them and it was the elderly. The ones that really needed the help didn't come. They don't feel like they needed to. And I guess because health in an Indigenous person's eyes isn't a priority. The priority mainly is their housing, finances and all … that sort of stuff. Health is down low on the scale. They … [Aboriginal people with diabetes] … have some horrific problems and still be walking around … really high blood pressures … they still walk around and they don't worry about it (S35).*

Discussion

Through a combination of having more important priorities and a lack of education, diabetes health care is not seriously regarded as the most important priority to AHW and their clients. This attitude is not unexpected when one considers the Aboriginal experiences of trauma associated with European invasion, colonisation, appropriation and dispossession of land, the breakdown of Aboriginal culture, resettlement, racism and so on.

2.2. Lack of knowledge

The findings indicated that many Aboriginal participants lack accurate knowledge concerning the effective management of people with type 2 diabetes. Now realising the value of being able to access accurate information about diabetes issues, one participant reported:

> *Even just from module one … [the first topic offered in the diabetes course] … the information we got out of that I think all health professionals [Aboriginal] … even in other areas, need to know. We've been dealing with diabetic patients for a very long time now and it just showed us how inadequate we were resourced and educated. Just some of the things we found out … [in the course] … we didn't realise there was so much to it and yet we've been supporting diabetic clients for bloody years … I reckon that it should be part of the primary health care certificate [in the TAFE course] …. all health workers have the opportunity to be able to access that education (A34).*

Emphasising their general lack of knowledge about this important aspect of health, two health workers reported that their clients also lacked knowledge concerning the actual pathological effects of diabetes on their bodies. To clients, diabetes was a hidden disease and, therefore, not taken seriously until a diabetes health-related problem occurred. Furthermore, clients were unaware of the relationship between a healthy diet and glycaemic control, which is critical to adequate self-management. The health worker reported:

> *You sit with the doctors and so and so will come in with numb feet. What's wrong with my feet doctor? And the doctor will ask … what are you sugars like? I didn't come about my diabetes … I think generally [Aboriginal] people do not see … diabetes as a sickness because they can't see it (A37).*

> *Not a lot of diabetes patients understand that … salt raises your blood pressure, which affects your diabetes … they don't realise how much fat and salt and sugar is in different foods (A22).*

Discussion

The findings indicated that AHW and their clients lack knowledge about diabetes as a disease and its management. This was not surprising because, as mentioned previously, this topic is only minimally dealt with in the basic training. Consequently, without an opportunity to undertake specialised diabetes training or to learn about the importance of diabetes health care, AHW will not become enlightened, empowered and emancipated about diabetes issues. As a result, health workers will be unable to educate Aboriginal clients effectively about the disease and how to make behavioural changes for healthy living. Both health workers and clients, therefore, will remain dependent on the dominant non-Indigenous health system to care for Aboriginal people with this serious disease. This outcome is not consistent with the principles of primary health care and health promotion, and is of no obvious benefit to the health and welfare of the Aboriginal community (WHO 1978, 1986, 1997).

2.3. Utilisation of diabetes expertise

The supervisors were asked how they used the diabetes expertise of AHW in their clinical area, and to give a rationale for their decisions regarding this use (Appendix 3). The findings indicated three minor themes: the influence of the *First Step Report* on the thinking of supervisors, the utilisation/under-utilisation of diabetes expertise and negligence.

Influence of the *First Step Report*

Several supervisors believed that the specialised training for health workers was consistent with the recommendations of the *First Step Report* (SAAHP 1997):

> *The First Step [Report] … and evidence that communities were telling us that the issue … [of diabetes management] … was important (S25) … we are actually getting more Aboriginal Health Workers through the diabetes educators … [course because] … there was only one trained Aboriginal diabetes educator in the State in 1997 … and I look at it now in 2002 … there were a number of people that were actually talking about that has actually undertaken this diabetes educators course and I just think it has opened the doorway. So I support it as much as I can (S38).*

Consequently, they supported the diabetes specialist training provided by Flinders University and undertaken by AHW:

> *Our organisation supports our staff … particularly in significant areas of their work … they want their Aboriginal Health Workers doing courses if it's going to benefit the Aboriginal Health Workers and … the organisation is getting some benefit out of it … they're very committed … as long as there's not too much disruption in the daily routine (S11) …we've certainly always encouraged Aboriginal Health Workers to go on and do further studies … particularly in significant areas of their work (S12) … I think it's very useful skill for our health workers (S30) …. our organisation is very … keen on professional development (S4) … ultimately will have spin-offs to progressing good Aboriginal health (S34).*

Significantly, many supervisors expected the Aboriginal health services to use the diabetes expertise of AHW to help improve the diabetes health status of their clients:

> *It costs us time, and money … [and as a result] … there needs to be that commitment on the part of the organisation to support the Aboriginal Health Workers, and then by the same token, there needs to be the commitment … on the part of the Aboriginal Health Worker too … [to] … deliver the goods (S30) … because remember both DHS [Department of Human Services] and the Partnership [South Australian Aboriginal Partnership] … paid for those twenty. So we had a bit of an investment … in making it work! (S25) … if an organisation is really committed to doing something, then they will reallocate the existing resources they've got and give some real emphasis to services in a particular area [like diabetes health care] (S25).*

Use of diabetes expertise

To establish whether the utilisation of diabetes expertise was an important consideration, the supervisors were asked if they had allocated time to the health worker who had undertaken the diabetes course for this purpose (Appendix 3). The findings are reflected in Table 3 below.

TABLE 3: Use of diabetes expertise by supervisors

Activity	Number of sites (n=14) & %
Continued to use the diabetes expertise of the AHW in the clinic	4 or 29%
On the basis of having undertaken the course, time was allocated for AHW to care for people with diabetes	3 or 21%
Did not allocate time for AH W to care for people with diabetes	7 or 50%

Table 3 indicates that only 50 per cent of the supervisors used the diabetes expertise of their newly educated AHW. However, four of these supervisors reported that they had already provided diabetes clinics before the course and would continue to do so by using the expertise of the health worker.

No allocated time

Fifty percent of supervisors also reported that they did not specifically allocate time to specialist diabetes AHW to care for clients with diabetes, because this activity was part of the generic role of every health worker with or without a diabetes qualification. Therefore, this group believed that it was not necessary to allocate time specifically to the specialist diabetes AHW for this purpose:

> *No, not really [allocation of time] … [diabetes health care is part] … of their normal everyday work routine (S11) … at the moment the organisation hasn't got specific time [allocated for this purpose] (S24).*

Consequently, the expertise of specialist diabetes AHW was not used in any constructive way to benefit clients. Justifying this practice, common responses from the supervisors were:

> *We haven't got the money to do it [to employ the AHW as an educator] (S30).*

> *[Some Aboriginal agencies do not] … allocate time for the Aboriginal Health Worker to care for clients with diabetes, because that isn't seen as their role at all. They have a diabetes nurse educator who is there. Even though the Aboriginal Health Worker has done the course … [she] … deals with the client that comes in the door … finds out what the health problem is and then refers them on (S33).*

Even though some supervisors agreed that not allocating time to AHW to use their newly acquired diabetes expertise was a barrier to the effective care of clients, they rationalised their decisions by stating:

> *YYeah … it is a barrier … [not using the diabetes expertise of the AHW, however,] … round the State … people [are] saying that they're … [the AHW is] … not employed to do that … [to focus on diabetes health care] … or they're not paid enough money to do that … that is a barrier (S30) … it would be so nice if would could just employ people as an Aboriginal diabetes educator (S38). … the health worker … totally responsible and accountable for the diabetes [health care of clients] … I'm not convinced that that would … be a huge benefit anyway [because diabetes management is the role of the diabetes nurse educator] (S31).*

They continued:

> *It's just tough for organisations … I mean you're just one, diabetes, but we also have asthma … drug and alcohol (S21) … we do everything in here (S24) … how can we concentrate on one area when we have to be generalist … we look at health … holistically (S31) ... they … can't concentrate … solely on diabetes, because they have to do other things (S14) … they are… generic health workers … they can't just look at diabetes (S4) … Aboriginal Health Workers are … everything to everybody … [employers, Non-Indigenous health professionals and members of the Aboriginal community] (S21) … [the expectation that the Aboriginal Health Worker] … got to be a holistic … you can't just work on diabetes, … the stuff they've got from the Diabetes Educator Course will be good experience, and they'll have that knowledge, because like we're moving into chronic disease self-management (S30).*

Uncertainty

Other supervisors reported that they were uncertain how to use the diabetes expertise of the AHW in a constructive way to improve diabetes services to clients, and that it was a future plan:

> *The team leaders don't really know what they're [the AHW] … allowed to do, and some of them … I've discovered, don't even have a background in health, and if you've got a team leader who hasn't got a background in health … [they do not know how to direct the health worker to use that expertise] (S15 & S16) …I think that we [Group 2] … haven't begun to address how they [AHW] … deliver health messages in a community (S27).*

> *It's a little sensitive I suppose in that we've got the two Aboriginal Health Workers … and [the AHW with less standing has] … got qualifications … these are very sensitive issues between those two workers in particular. There is a fair bit of animosity, so you have to know which way to step. It makes it very hard [to know how best to use the diabetes expertise of the health worker] (S23).*

Others reported that it was a future plan:

> *That's what we were planning for … but since we do everything in here it hasn't been a slowdown … [to enable the AHW to undertake this initiative] (S24) … it might be in the very near future that that will happen. But at the moment, it's our aim to have a more planned coordinated response to chronic diseases … it may be that we end up with someone specifically looking after diabetes. But at the moment, we haven't planned for it, and we haven't got the money to do it. And it's quite possible that we'll end up … [focussing on diabetes health care] (S30).*

Response from Aboriginal Health Workers

The health workers were asked how they viewed their supervisor's lack of use of their newly acquired diabetes expertise (Appendix 2). The findings indicated that several of them reported that this was not a priority for supervisors, because it was not used in any strategic way to benefit Aboriginal clients:

> *They … (the supervisors) … don't see it as a priority … they think that you can fit it in somehow …[into your normal day's activities] (A29) … I was surprised to read it … [an Aboriginal report] … a lot of the Nungas [term for Aboriginal person from southern South Australia] … that did that course are not utilising their experiences (A8) … unless you are dealing with diabetes all the time, it is a really hard subject to turn yourself off and on (A34).*

Reflecting on these issues, one supervisor who had previously trained as a specialist in a particular area shared how she felt when she had been employed for her qualifications, only to find that her expertise was not used by her employer:

> *It gets really frustrating … my self-esteem dropped … if you've got this diabetes training … and you're not doing it, you're going to lose touch (S15) … [while others reported other disadvantages] … losing the knowledge and skills (S36) … loss of confidence (S31).*

Negligence

Recognising their lack of utilisation of the newly acquired diabetes expertise of the AHW, one supervisor reported:

> *I think when you have a community that has such a high rate of diabetes … it's negligent on the organisation's behalf to not allocate dedicated time for that … there has to be a level of commitment from Aboriginal health about Aboriginal issues. And what other problem is there in their community that rates as high as 20%? … [the prevalence of diabetes in her community] (S27).*

However, despite the admission that it was negligent not to use the diabetes expertise of the health workers, another supervisor excused this decision by arguing that change 'takes time' (S31).

Discussion

The findings indicated that although all supervisors were aware of the *First Step Report* that identified diabetes health care as a priority for action, only 50 per cent of the supervisors elected to use the diabetes expertise of their AHW in a constructive way that would benefit clients with diabetes. The literature clearly demonstrates the high prevalence of type 2 diabetes, morbidity and mortality in the Aboriginal community (AIHW 2003, 2004, 2005). Therefore, it is not unreasonable to conclude that it is negligent to not use the newly acquired diabetes expertise of the AHW in a constructive way to improve the diabetes health status of Aboriginal people. However, in fairness to the supervisors, they were often faced with a vast range of complex issues that prevented them from doing so. For instance, as well as being inadequately funded, some Aboriginal health services already employed a non-Indigenous diabetes nurse educator for that purpose. Consequently, those supervisors believed that it was not necessary to use the additional diabetes expertise of the health worker. Hence, the solution was to continue using the diabetes specialist AHW in a generic health care role and to ignore their specialist expertise.

Yet with encouragement, the diabetes specialist AHW and the diabetes nurse educator could work in partnership to improve the care of Aboriginal clients with diabetes. For example, the former could have spent more time in the Aboriginal community educating people about diabetes issues and organising health promotional activities in conjunction with the diabetes nurse educator. The latter could have acted as a resource person to support the AHW and their clients as required either in the clinic or the community. Working together in partnership, they could have both used their individual expertise to improve the diabetes services delivered to Aboriginal clients.

Of significance, the literature has demonstrated that the role of the expert practitioner needs to be acknowledged and supported by employers or else there will be a loss of self-esteem, job satisfaction, confidence and skills (Anderson & Clement 1987; Cartwright 1980). By employers not acknowledging, maintaining or using the newly acquired diabetes expertise of AHW, as was the case for 50 per cent of the participants, it is most likely that these health professionals will quickly lose their skills, knowledge and confidence. This outcome is a waste of a valuable resource that is needed in the Aboriginal community. Clearly, there needs to be an opportunity for members of the AHCSA, supervisors and AHW who undertook the diabetes course to discuss how best to use the expertise of the latter in a constructive way to benefit Aboriginal clients.

In terms of critical social theory, those AHW who undertook the diabetes course did become enlightened about contemporary diabetes health issues, about how to assist their community's care and about its relevance to their clients. However, both Friere (1972) and Fay (1987) argue that enlightenment on its own is not sufficient unless emancipation also occurs, and this did not happen in half of the research sites. Instead, and contrary to the recommendations of the *First Step Report* and the State government's diabetes strategies (DHS 1999; SAAHP 1997), diabetes health care was not regarded as an important priority for action by half of the supervisors. Even though specialisation had already been identified as a legitimate role in the National Review of Health Worker Training (CIRC 2001), the constructive use of the diabetes expertise of AHW did not occur at their sites.

2.4. Further barriers that compromise practice

The findings indicated a range of additional barriers that also compromised the effective delivery of Aboriginal diabetes health services by AHW and supervisors; some barriers affected AHW and others affected supervisors.

BARRIERS TO ABORIGINAL HEALTH WORKERS

The lack of a realistic and achievable career pathway, a lack of support from supervisors, the crisis management of Aboriginal people with diabetes and negative behaviour from Aboriginal clients were clearly barriers that affected the practices of AHW.

Lack of career pathway

The findings indicated that the lack of an established career pathway did not provide AHW with an incentive or the motivation to undertake postgraduate studies, such as the diabetes course conducted by Flinders University:

> *As an Aboriginal Health Worker, I will only ever go as far as AS03 … [the highest paid level of the AHW] … in this organisation (A37) … we are fighting to get professionalism now … [with a view to recognising other postgraduate qualifications] …we can go and do as many studies and tertiary courses … [as we like or have the opportunity to do] … and we are still going to be sitting on AS02 and AS01 … [the basic paid level without the Aboriginal Primary Health Care certificate] (A34) … we … can only go to …[level] …4 if we want to do office work. Now I am sure that there others like me that don't want to do office work … we want to work with Aboriginal people in … health. I think that when we do a graduate certificate course or any course that's recognised through Uni or TAFE, that we should be able to get monies, because we've done the hard work (A1).*

One AHW demonstrated that her career pathway change, from health worker to nurse, was motivated by the following:

> *I think a lot of the reasons that … [I am undertaking a nursing degree] … is that the nursing profession has … a structured pathway … whereas, with an Aboriginal Health Worker, you're just an Aboriginal Health Worker … [doing] … the same thing day in and day out (A29).*

Supervisors agreed that a career pathway for AHW was required to establish the new specialist roles and suitable salary scales as incentives for AHW to develop their careers and undertake further training:

> *What happens with health workers is they get certificate after certificate but their pay doesn't rise. What is the point of doing it? … there is no financial incentive … why put all that effort in? … the organisation's like the piggy in the middle … we don't have the money … [it is necessary to have] … a career structure so that when they get these bits of paper, it actually is an incentive to them (S25) …there are a lot of health workers out there that like opportunity to undertake this diabetes [course] … but they feel that what's the use of going … I can't go anywhere … it doesn't matter what training she gets … she is not getting remunerated for it (S38) … in order for them to get to a … [higher level] … 4, which is a higher pay rise, they have to become ….a clinic supervisor … and there is a lot of frustration (S35) …[the AHW is not] …. getting paid any more (S15) … even though she does get a certificate, there is no where to actually go … because we just haven't got that structure in place (S36).*

Concerned about these issues, three supervisors reported:

> *The Aboriginal Health Worker … has got the diabetes educator's knowledge but they've still got the title as the Aboriginal Health Worker, and as long as they've got that title, the diabetes nurse educator is going to see them as an Aboriginal Health Worker, the doctor will see them as an Aboriginal Health Worker, and the community will see them as an Aboriginal Health Worker, so there's one unfortunate downside (S15 & S16).*

Without a clear role description, the supervisors expected the diabetes specialist AHW to fulfil a range of other activities that resulted in stress and burnout:

> *It's a thankless job really … they … [the AHW] … get stressed out and burnt out pretty easy (S35).*

Lack of support from supervisors

The findings indicated that it was common for supervisors not to acknowledge, support, respect or value the diabetes qualifications achieved by AHW. In fact, some supervisors actually made these health professionals feel guilty about focusing on their specialisation so that they would continue working as a generic health worker:

> *Not … valuing the health worker … not giving them trusting … a bit of freedom to kind of develop that … [diabetes expertise] … it's not a priority (S15 & S16) … I believe the health worker needs to know what's in their budget … health worker never know … they never know if they've got anything to work with (S25).*

> *There is one problem that I have … talking to men about the sexual complications of long-term diabetes … I have got a … traditional male health worker who is supposed to work with me … on clinic days. But he doesn't because they [supervisors] … grab him and take him to a general clinic … this guy is qualified to talk to both traditional and non-traditional men … [and I am unable to do so being female] (A37).*

> *What I worry about sometimes is that sort of situation … when health workers get back into their organisations, anything they might have learnt, diabetes education courses or anything, is very hard for them to factor back into their work. Especially if they get a negative or guilt laid on them by their managers (S25).*

Negative attitudes from clients

The findings indicated that the AHW had often been subjected to negative behaviour from members of their Aboriginal community. This was a concern to supervisors as well, because it had the potential to compromise practice and services. Such attitudes were related to the unrealistic expectations held by community members concerning what they believed to be the role and responsibilities of the AHW, namely, 'all things to all people'. Consequently, if an AHW was unable to fulfil their presumed role of 'jack of all trades', as expected by the community, they could be verbally abused:

> *To the community, the health worker is there to do everything (S36) … we do everything in here … the hospital will ring [and say] … this drunk would like to go to this place … and sometimes if they're on the road they … [Aboriginal clients] … will say I want to go in that place and … [we say] … we are not a taxi [service] … it's mostly the health workers … [that these unrealistic expectations are delivered towards] (S24).*

One supervisor reported that an AHW employed in their service was treated disrespectfully and verbally abused by members of the Aboriginal community, because she had been absent while undertaking the diabetes course and had not been available to Aboriginal clients at the local clinic. The supervisor reported:

> *I guess because we've got limited staff … it's caused problems for our service, mainly because clients … come in to obtain ... strips or needles or whatever. And the person that was designated to that position for one reason or another … didn't attend work that particular day or week … when … [the AHW returned from the course] … she got blasted … for not being available. I think some of our diabetic clients, because they are aged clients, they tend to depend [on the AHW] … they like to just deal with the one person, not two or three different faces. And when that continuity is broken … it just falls in a big heap … when they return … they get verbally abused … the community do expect a lot from them. They will get verbally abused on somebody else's problem … that first worker then would be rung up or accosted down the street and verbally abused as to why this didn't happen. (S35).*

Another supervisor reported that the judgmental attitude held by certain members of the Aboriginal community acted as a major barrier to practice by undermining the confidence of AHW:

> *I think … part of the hesitancy of the health workers [to take on extra responsibility for diabetes health care] … the reason why they are so hesitant [about taking responsibility for clients with diabetes] … is because they are scared of the judgement and the Aboriginal community is very unforgiving … if [the AHW] … makes a mistake it takes you four or five years to resurrect that [trust] (S27).*

Discussion

The findings indicate that there is an urgent need for a clear structured career pathway to be established for AHW that would outline the different roles, areas of specialisations, required training, scope of practice, terms of employment, and salary scales. If AHW are to be motivated and encouraged to undertake postgraduate specialist studies in priority areas that will benefit the Aboriginal community, it is imperative that a clear structured career pathway occurs. However, before this can eventuate there is an obvious need for a professional organisation to be established that will address industrial and political issues of concern to AHW. It should be the responsibility of this organisation to define the role and scope of practice of generic and specialist AHW, their qualifications and industrial awards.

Legitimising and acknowledging the role of specialist AHW is absolutely essential if these health professionals are to maintain competence and function with any degree of job satisfaction, self-esteem and confidence (Anderson & Clement 1987; Cartwright 1980), and ultimately improve the delivery of health services to Aboriginal people.

Currently, there is no clear career pathway, role description or delineated scope of practice developed for the different roles and qualifications held by AHW. Instead, many employers expect the specialist health worker to perform a broad range of health activities for Aboriginal clients, rather than to focus on one speciality; in other words, the health workers are expected to perform as a 'jack of all trades and master of none'. As a result, AHW who have achieved postgraduate qualifications in a specialist area are expected to perform the same generic role at the same salary as the health worker with none. This means that

postgraduate educational achievements are not acknowledged, valued and remunerated by employers. This outcome does not motivate or encourage AHW to undertake further study or to use their expertise in any constructive way to improve the health status of Aboriginal people. This barrier to practice may result in AHW experiencing burnout, frustration, a lack of expertise and a sense of powerlessness (CIRC 2001; Dollard *et al*. 1999).

With reference to Freire (1972) and Fay (1987), AHW who undertook the Flinders University course have become enlightened about diabetes issues. However, without the official legitimisation of the specialist roles through an established career pathway, those AHW may not be empowered to assist their clients. Hence, both AHW and their clients will remain in a powerless situation that is dependent on the goodwill of non-Indigenous health professionals.

With regards to the negative attitudes and behaviour of Aboriginal clients, this could have been minimised by improved communication between the health service and the Aboriginal community. For example, during AHW absences at university, a weekly radio bulletin or newsletter could have informed clients about the study details and the perceived benefits of this study initiative to the community. Alternatively, a community meeting could have been convened to discuss why it was necessary for the AHW to be present at the course and its benefits to the community in the long term.

Given the unrealistic expectations held by the community regarding the generic role of AHW, the notion of specialisation and its benefits should be discussed within the Aboriginal community. This would clarify issues involving what could be expected of generic and specialist health workers.

BARRIERS AFFECTING SUPERVISORS

The findings indicated that supervisors had a range of issues which affected their ability to deliver effective diabetes services. These included their focus on the medical model of practice as the method of choice for caring for people with diabetes, and the reluctance of AHW to assume responsibility for the care of clients with diabetes. Additional concerns involved political issues, the need for client confidentiality, the difficulties associated with continuity of care, non-compliant clients and the lack of trust by Aboriginal clients of Western medicine.

Medical model of practice

One supervisor reported that, in general, Aboriginal health services tended to place greater importance on the medical role of treating clients with diabetes in clinics rather than adopting a pro-active primary health care framework aimed at diabetes health promotion and prevention, as well as treatment and self-management:

> *Another thing … is … the workplace understanding of primary health care … being able to translate what you learn into practice … being able to have the time and space and organisational support to health promoting activities … there is still a huge emphasis on clinical work and not on prevention and promotion in the community … at an organisational level, not a proper understanding of primary health care … it being both an outcome and a process (S25).*

Thus the *modus operandi* for most health services involved:

> *Very much crisis management. If they're coming through the door, we'll treat them instead of looking at … health promotion or community development, it's like the health workers aren't given training in that but it's the crisis stuff that's the easiest stuff to do sometimes or the clinical stuff … it's that bigger picture of information and … that get often missed (S16).*

Reluctance of AHW to assume responsibility

Another barrier to practice noted by non-Indigenous supervisors was the unwillingness of AHW to assume responsibility for Aboriginal clients with diabetes. With this criticism in mind, one reported:

> *I think that the organisation themselves are pleased when these people … [the AHW] … get all this training … [but] … it has to be that health workers themselves take some control of their destiny … until they've got a voice themselves, and it's a unified voice, then we are only tinkering around the edges … it's the Aboriginal Health Worker talking to their employer about it … and the funders find the money to … [to improve the diabetes health status of Aboriginal Australians] (S25).*

Justifying this, three other supervisors reported:

> *I suppose that … [not being prepared to take an active role in diabetes health care] … comes out because the Aboriginal Health Workers are not getting the … [remuneration and recognition for the qualification] … that they deserve, so of course they're going to hand it … [the responsibility for diabetes health care issues] … to the diabetes educator. She's getting paid, she's called a diabetes educator. I am just the Aboriginal Health Worker with the diabetes education qualification or some kind of qualification. I'm not getting paid any more … so why should I do it … they're [employers are] … not going to change my title or acknowledge that I've got the skills to do that, not only to Aboriginal people but to the wider community [then why should I take on the added responsibility of diabetes health care] (S15 & S16) … [the diabetes nurse educator has] … got time specific to diabetes … they're … [the AHW with the diabetes qualification] … referring them through to us (S4).*

The reluctance by the health workers to use their diabetes expertise placed two non-Indigenous supervisors, who were employed as diabetes nurse educators, in an embarrassing position in the community:

> *It's very hard publicly when the community say to you how come there's not a Nunga [term for Aboriginal person in South Australia] … doing your job? And there have been Nungas trained in your job. How come you're still doing it? That puts me in a very awkward position … it's their health centre and we [non-Indigenous health professionals] … should just be taking a back seat and just being there as a supervisor … I actually felt embarrassed … I was squirming. I didn't want her [the AHW] … to think that … I can do a much better job than the Aboriginal people (S27 & S28).*

Political issues in the community

Other supervisors faced a range of internal and external political issues that compromised their ability to deliver effective diabetes services to Aboriginal clients. These included dissension between Aboriginal community members, clients and AHW, and a perceived lack of confidentiality of services by Aboriginal clients who moved across South Australia:

> *I think … another barrier is … we've got so many different traditional groups around, I think adequate resources isn't available … there is always this in-house fighting within the different groups. They don't trust the health workers to some degree. They don't see them as a professional person. Even though they are qualified in Certificate 3 primary health care and some have specialised in a particular area like women's health or whatever (S35).*

> *Well there are here … [the repetition of health services to Aboriginal people] … I know … they get [the AHW from another health agency] … to come up once a fortnight … [to the Aboriginal community] … I … said … why are they getting … [this other agency] … when we've got Aboriginal Health Workers here? But apparently it's because … they prefer … [the AHW from another agency to address their health care needs] … that's the politics at the moment (S4).*

Lack of client confidentiality

The findings indicated that supervisors believe the lack of client confidentiality was an important issue to community members, and unless this aspect of health care could be guaranteed Aboriginal clients were not prepared to have their health details documented. This compromised the accuracy of patient records and the continuity of care:

> *There is a lot of in-house-type undercurrents … the community is very wary of confidentiality, and there have been some breaches of confidentiality. Now I don't think that means that they … [the AHW] … have actually gone out and deliberately discussed something but somehow things have inadvertently got out and of course clients have come back and said things. I see a lot of clients who put me in a medical legal dilemma in that they will talk to me about really personal type stuff, which really needs to be documented … [and clients say] … I don't want it on my file. I don't want anybody else to read it … I say that I have to document but I will do it in a way that the doctors would only know what I meant and no one else would understand what I'm writing about. It makes it very difficult (S35).*

A common reason for this problem was the lack of private facilities for health workers to educate, counsel or interact with Aboriginal clients. This meant that some rural and remote AHW needed to visit their clients in their own homes if a private discussion was to take place. However, because each Aboriginal household is also likely to lack privacy, with multiple people present at the time of the visit, it was also unlikely that such a visit could be undertaken with any degree of confidentiality. With this in mind, one supervisor reported:

> *It's not confidential because they … [the Aboriginal client] … might have fourteen or fifteen people living in the home and there's nowhere where they can sort of sit down and talk like this. Very few of them have got chairs or tables or even beds. The furniture situation and the housing situation is really bad up here. … [Aboriginal clients] … are extremely sensitive because the families are sort of clans in the group and one clan doesn't want the other one to know, but even in family groups, individuals want confidentiality because they don't have it in the homes and everything is sort of buzzed around (S23).*

For this dilemma to be resolved, the supervisor reported that her agency urgently required:

> *A couple of consultation rooms really … [to ensure that confidentiality could be maintained] (S23).*

Lack of continuity of care

Many Aboriginal clients live an itinerant lifestyle, moving from one region to another. Within this context, one supervisor from a well-established, rural Aboriginal health service described the difficulties that her organisation faced in attempting to provide a continuity of care for clients:

> *They've … [the remote agency] … got the captive audience because the rural and remote people are in the community and they don't wander around like they do in our area. So, you do have the captive audience … [in the remote agency but] … you don't have the resources. Whereas we've got the resources and our captive audience flits around everywhere. It's very difficult … [to deliver a continuity of care under these circumstances] (S35).*

Non-compliant clients

The findings indicated that supervisors and their AHW have to deal with the frustrating problem of trying to care for Aboriginal clients with diabetes who do not comply with prescribed medical regimes and medication or make the necessary life style changes:

> *We've got three groups [people with] … diabetes … the young folk who have only just been diagnosed … you might be able to get some education to them … they might take it in and be responsible about it … then we've got the next group who have diabetes … that's adolescence to late forties or fifties … they are just out of control … some of them are medicated and some of them aren't … then the third group is the elderly group who do everything right. They do eat the right food, take their medication on time, have regular diabetic checks and look after their eyes and everything … they want to keep living. So they do tend to try and look after themselves a bit better … some of them don't get to that third group because they have either passed away or they have become so chronically ill and required other medical intervention such as dialysis and heart operations (S35).*

With regard to the inability of clients to comply with their medical regimes, two supervisors reported that it was difficult for Aboriginal clients with diabetes to accept their diagnosis or to understand or know how to make important lifestyle changes to improve glycaemic control:

> *I think they … go through the grieving process and they never get to that ultimate acceptance of their disorder … you will never get them to change … a lot of Indigenous seem to be addicted to Coke … they drink bottles of it (S35) … I found … the very major thing … for them … to actually accept that they've got diabetes … how do you encourage somebody especially when they're on the lower end of the socio-economic side of things … and support them through situations with their living conditions 'cause they're often one diabetic in a family … it's a very, very hard situation … they go out and Joe Bloggs offers them a beer and somebody else says, oh there's a can of coke there, and they get thirsty and that, and it makes it very, very hard (S19).*

Two others reported that Aboriginal clients with diabetes are easily put off managing their medical regimes if they are continually lectured at by health professionals:

> *Aboriginal people are at risk of diabetes and … you just turn off … you don't want to hear it no more … it's negative (S15) …. it's not an easy job, diabetes … people get fed up being lectured to … some people get really frustrated as well because there is some people that do strictly … look after themselves but yet their sugars are still high. And they get so disappointed. Whereas there are ones that don't bother and their sugars mightn't be so bad …it's so frustrating for them … when we've put people into hospital to try and regulate their sugars, it never works … because while they are in hospital they are not doing their normal, everyday things. So they might control it a little bit better in hospital but when they come out they go back into doing their normal, everyday routine and their sugars are all over the place. It's a very difficult medical problem to work with … it's very frustrating for the staff because after a while you get fed up. What's the point … people won't change their attitude … they don't feel unwell and you are trying to preach to the converted … we've got diabetes but we feel okay. It's only when they get really sick … [that they suddenly see the importance of health care] (S35)*

> *I think … the community's attitude towards their health is that if they get sick, well that's their lot, and they just deal with it, so to actually get them to think differently to that it's just [too difficult] (S28).*

Hence, diabetes health care may not be seen as a health priority and, according to one Aboriginal supervisor, changing community attitudes to comply with medical regimes is like:

> *Flogging a dead horse … [however] … if you got to the younger children you might be able to make a bigger impact. But for the older groups, no (A38).*

Lack of trust

The findings also indicated that community members often do not trust non-Indigenous health professionals or their associates to address their health care needs adequately:

> *Barrier is what happened decades and decades ago and it's still got an impact on the … [Aboriginal] community and we still don't trust white fellas … [and, thus, the incentive to access the services of non-Indigenous diabetes health professionals is not there] (S15).*

Discussion

The findings have indicated that supervisors certainly experienced complex and frustrating barriers that affected their ability to deliver effective diabetes health care services to Aboriginal people in their community. For example, some supervisors did not know how to use constructively the newly acquired diabetes expertise of the AHW. With the benefit of hindsight, perhaps this was an area that could have been included in the role description of project officers employed by SAAHP to assist the AHW in their new roles. These health professionals may have been able to discuss with supervisors how best to use the health workers' diabetes expertise to benefit clients.

As well as funding the medical model to deliver care to Aboriginal clients with diabetes, there is an obvious need to increase health funding to enable Aboriginal health services to undertake primary health care and health promotion activities in the community. This is clearly confirmed in the literature (Access Economics 2004) and the data generated by this study.

Various political and health issues associated with continuity of care, non-compliance, lack of confidentiality and so on that arose in the community between different Aboriginal groups need to be explored and discussed, and solutions found both by Indigenous and non-Indigenous health professionals working together in partnership.

Crisis management alone cannot improve the diabetes health status of Aboriginal Australians. While there will always be a need for medical expertise to diagnose and treat clients with diabetes (Dunning 2003; Guthrie & Guthrie 2002), just focusing on the medical treatment of diabetes-related complications will not prevent and minimise the incidence of type 2 diabetes in the Aboriginal community. For this to occur, the diabetes specialist AHW and other health professionals need to be involved in diabetes health promotional activities in the community where Aboriginal people live, work and play, and where the health problems occur. This goal is consistent with the principles of primary health care and health promotion and is generally missing in Aboriginal health care (WHO 1978, 1986, 1997).

Summary of Theme 2

The findings have demonstrated that there are four main barriers preventing Aboriginal health professionals from delivering effective diabetes services to Aboriginal clients. Diabetes health care is not regarded as a priority for action by government funding decision-makers, Aboriginal education providers nor Aboriginal health professionals and their clients. Both AHW in general and their clients lack knowledge about the effective contemporary management of diabetes. Significantly, 50 per cent of supervisors in this study did not support or effectively use the expertise of the specialist diabetes health worker to improve the health status of Aboriginal clients with type 2 diabetes—a waste of a valuable resource. Lastly, there are a range of socio-political factors, such as dissension between groups and a lack of confidentiality, that seriously compromise the standard of health delivery to Aboriginal people.

The failure to acknowledge Aboriginal health care as a priority for funding translates into a lack of infrastructure and personnel within such services to deliver effective diabetes health care to Aboriginal people. As it currently stands, a powerful message is being communicated to all members of the Aboriginal community that diabetes health care is not a priority for action. This is demonstrated by the poor allocation of long-term health dollars and the inadequate recruitment, training and employment of competent specialist AHW. Consequently, half the supervisors in this study elected not to use the diabetes expertise of the AHW in any constructive way to benefit their clients. Instead, supervisors depended on the crisis management of very ill clients and the contributions made by non-Indigenous diabetes health professionals. In this way, 50 per cent of the supervisors ignored the valuable contribution that could have been made by a specialist diabetes health worker, who is regarded by all health professionals as the best person to educate Aboriginal clients about important diabetes issues (King 2001). Half the supervisors elected to use the specialist health worker in a generic role, rather than to plan constructively how best to use this valuable resource. Unless this practice changes, and increased health funding is allocated to Aboriginal health care, the diabetes health status of Aboriginal people will continue to remain poor.

The fact that diabetes health care is not regarded as a priority for action, and the lack of knowledge about this important health priority, are significant issues that contribute to ill-health. It means that uninformed AHW and their clients ignore the serious effects that diabetes has on their bodies, Aboriginal diabetes health services are ignorant about contemporary diabetes management, and Aboriginal people are not encouraged to comply with appropriate medical regimes. This outcome contravenes the goal of contemporary diabetes health care to promote self-care and quality of life, and will inevitably affect the lives of individuals with type 2 diabetes, their families and the Aboriginal community. The result of excessive morbidity and premature mortality is inconsistent with the principles of primary health care/prevention and health promotion to educate and help people effectively manage their disease.

Successful management of clients with type 2 diabetes is certainly not helped by the lack of a career pathway for specialist diabetes AHW that clearly describes their role, responsibilities and salary scales. Without this structure, Aboriginal employers and supervisors will remain unclear about specialist roles or how to support and use the expertise of AHW in the clinical area. Without employers and supervisors legitimising specialist roles through a professional and industrial structure, there is little or no incentive for health workers to undertake specialist training to benefit their clients or themselves. With no formal acknowledgment or support from supervisors, specialist health workers will soon lose confidence, self-esteem, self-worth, competence and job satisfaction (Anderson & Clement 1987; Cartwright 1980), resulting in expertise being lost to the Aboriginal community.

Clearly, there is an urgent need for a professional organisation to be established that will establish a career pathway for general and specialist AHW. It is imperative that this occurs soon if specialist opportunities are to be utilised by employers in a constructive way to improve the health of Aboriginal people. If this does not occur, as is the current situation, AHW will continue to be expected to perform as a generic health worker, and their specialist expertise may soon be lost.

The lack of a career pathway for specialist diabetes health workers has led to many supervisors being unwilling to use the diabetes expertise of those health professionals—a serious barrier to better practice. The supervisors could have exercised their power (Foucault, 1979) to use the newly acquired expertise of the diabetes specialist health worker to care for Aboriginal clients, but chose not to do so. This decision demonstrates the supervisors' lack of enlightenment and emancipation about the goals of contemporary diabetes management and its benefits to Aboriginal clients and, as such, this decision would need further discussion to redress this problem (Freire 1972). Alternatively, the decision made by some supervisors may have been influenced by the philosophical belief that all health workers, despite their qualifications, should provide only general health care. Regardless of this, the specialist diabetes health worker was enlightened through the university course but not empowered or emancipated through the action of the supervisors and, in turn, the Aboriginal community did not benefit from the educational initiative or the decision made by the supervisors.

Other barriers to practice identified in the findings included political tension, non-compliance of treatment regimes and negative behaviour by community members. These issues really need to be discussed at community, regional and State levels, and strategies found for managing these complex problems. They require input from a range of Aboriginal health care decision-makers, community leaders and AHW and their clients in consultation with both expert Indigenous and non-Indigenous health professionals.

After the course had been completed, at least half the health workers continued to remain powerless (Foucault 1979) and unable to exercise their diabetes expertise to care for their clients. Hence, this study found that the use by AHW of their diabetes expertise had been blocked by the lack of a career pathway

that legitimated their role and the action taken by half of the supervisors. Consequently, after graduation 50 per cent of the health workers continued in the generic role—one that may or may not include the care of people with diabetes. As a result, beyond being well informed through the course, this group was not empowered or emancipated (Fay 1987; Freire 1972) to help their clients with diabetes issues. Instead, these Aboriginal Health Workers, supervisors and clients continued to remain dependent on the non-Indigenous diabetes health professionals to provide services to Aboriginal people. This action greatly devalued the contribution that could have been made by specialist diabetes AHW to improve the diabetes health status of Aboriginal people.

This is an alarming outcome given that the *First Step Report* (SAAHP 1997) identified diabetes management as one of the five most important health priorities for action in the Aboriginal community of South Australia. Despite the recommendations of this important report, diabetes health care still remains seriously disregarded as a priority according to the literature (AIHW 2005) and to the findings of this study. This action is contrary to the principles of primary health care, prevention and health promotion. As a consequence, the diabetes health status of Aboriginal people will continue to remain poor unless constructive action is taken immediately by Aboriginal health services, educators, communities and government bodies to address this important aspect of health.

Lack of knowledge by Aboriginal health professionals has been attributed to the poor educational preparation for diabetes health care—in the basic AHW training courses and funded opportunities—to enable interested AHW to undertake specialised diabetes training. This means that, currently, general AHW who have graduated from these programs do not have the capacity or knowledge to help Aboriginal clients with diabetes issues. Instead, Aboriginal Community Controlled Health Services rely on non-Indigenous health professionals to meet the diabetes-related needs of Aboriginal clients.

For this situation to change significantly, AHCSA and the Aboriginal Health Division of the SA Department of Health need to work with Aboriginal services and communities to address this serious deficit. Aboriginal organisations need to enable AHW to undertake specialised diabetes training, so that expert health workers will be in a position to care effectively for their clients and to educate other health workers and communities.

THEME 3: STRATEGIES TO IMPROVE PRACTICE

Four sub-themes emerged from the findings to form the basis of the recommendations made by the participants. These included:

- need for increased health funding;
- responsible management;
- preferred approach to care; and
- need for a role manual concerning AHW.

3.1. Increased health funding

The findings indicated that there was a need for increased health funding to provide the necessary infrastructure (facilities, personnel, equipment and resources) for AHW to care effectively for clients with diabetes:

> *We really need to set up … the diabetes room … this is where all the diabetes stuff will take place … you can see why we really desperately want the position [of diabetes educator] … we have one in four people, 25% of our population is a diabetic, that is Indigenous (S32) … allowing her to tap into better resources or more resources, give her the space to actually develop her program and use initiatives in the program, so just ways of actually helping her (S36).*

With respect to this, several supervisors recommended that qualified AHW be employed specifically as diabetes educators. They reported:

> *From my point of view … ideally I would like to have a diabetes health team in the region … to change the ways of how health services are [delivered] … they're mainly clinical based and most of the health workers want to look at community and … to introduce [diabetes health promotion and education] … into the community (S15) … I can't say strongly enough how important it is for us to have a diabetic educator here … we just so desperately need [a diabetes educator] (S19) … the community health service, is wanting to employ … a person to coordinate projects for Aboriginal health … I think they [Aboriginal people] … would prefer that person to be Aboriginal (S47).*

In support, two supervisors from mainstream services reported that unless increased health funding was made available for this purpose, the employment of a specialist diabetes health worker would not occur:

> *Unless people [governments] … come up with the money… [to employ the AHW] … to have a diabetes day once a month. We [mainstream organisations] … can't do that … while [the AHW] … is doing one day of diabetes, that means something else is missing out (S21) … if there was a budget, we'd like to do more things … it would be lovely to have a dedicated health worker, just working with diabetes (S14).*

Increased health funding was also required to provide the health workers with culturally relevant health promotional resources to be used in client education:

> *I'd like more visual stuff because I think the visual stuff works better than any written [teaching resources] … just more appropriate material for the Aboriginal community in general (A20) there is not a lot [culturally appropriate health promotional resources] (A9, A39) … it would be good to add in a lot more resources to use for Aboriginal clients. Like we did with the flip chart for the visual impaired [(King, Baxter & Raymond 2001)] … along those lines for diabetes (A18).*

Discussion

As previously discussed, the provision of infrastructure is an important recommendation and essential to the successful management of any organisation (Gillies 1989; Swansburg & Swansburg 2002). It is also the responsibility of governments to provide the infrastructure required by health services to deliver an acceptable level of health care to the community (WHO 1978, 1986, 1997). If this outcome is not achieved, both the product of the organisation and the health care of clients are seriously compromised.

Aboriginal clients place great value on confidentiality. AHW require facilities where they can converse with and educate their clients in privacy. Observation revealed that at least half of the health workers in this study did not have access to culturally appropriate facilities, where they might educate clients in privacy about diabetes issues. Furthermore, AHW did not have access to diabetes health literature or teaching resources that had been developed specifically for Aboriginal people (King 2001; King & Wilson 1998b) or the space to store them.

Based on critical social theory (Fay 1987; Freire 1972), a lack of infrastructure arising from inadequate health funding means that supervisors, AHW and their clients were disempowered. The Aboriginal health professionals were unable to make effective use of the diabetes expertise of the health workers who had undertaken the course to care and educate their clients.

3.2. Responsible Management by Aboriginal Health Services

The findings identified three minor themes that are important components of responsible management. Diabetes health care needs to become a priority for action, with Aboriginal health professionals being accountable to the Aboriginal community for their effective delivery of diabetes services. Supervisors need to dedicate funding to diabetes programs from their budgets and to give adequate support to specialist diabetes health workers so they are able to care for their clients.

Priority for action

Familiar with the findings of the *First Step Report* (SAAHP 1997), participants confirmed that diabetes health care was a known health priority:

> *The First Step document nominated priorities from communities [diabetes was identified as a priority]… at partnership level, we were able to say what every community said about diabetes, so we've got to give it a bit of emphasis. How can the funders argue [against not funding diabetes health care] … when the communities have told us this is important. I just don't see how they can … I think a thing about Aboriginal health, and lots of health …is that we get so bamboozled by the big picture that we don't know where to start, so we don't do anything. Whereas if you encourage organisations to focus and say, 'here are three issues, what are you going to do about these?', what you will find is, that there are links between those three anyway that have offshoots for communities, no matter what the issue is. It actually assists an organisation to focus … I think in the long term it actually assists communities, because communities that understand that organisations are providing these services based on what they were told were the issues (S25).*

Accountability for diabetes health care

From their knowledge of the *First Step Report* participants also acknowledged that they were accountable to the Aboriginal community for the effective delivery of diabetes services, and that dedicated health funding should be allocated from their health budget to this important area:

> *The service has to be accountable … have goals set … regarding diabetes (S15) … they [Aboriginal health providers] … have a lot of money that's been given to them from various grants and things, which is great. I believe that they [Aboriginal health providers] … have the resources to have an allocated diabetes worker (S27).*

Two supervisors also argued that those AHW who had undertaken the diabetes course were accountable to the community to use their diabetes expertise to help improve the diabetes status of their people:

> *I actually think our organisation [a mainstream organisation] … is very supportive of [the AHW] … and in a lot of ways she really has a very free rein to organise her own time. So I think it could actually work the other way where the organisation says, 'Look, … you need to dedicate some of your time to diabetes education. How about you put six hours a week or eight hours a week into it' … she may not agree with me on that but I just think that you can't do it unless you do [put the time in to care for clients with diabetes] (S3) … [they have a] … responsibility for their own destiny (S25).*

In agreement, one AHW reported:

> *I think …the only way that we're going to learn to do the diabetes education is to start doing it ... it's may be time for them [non-Indigenous diabetes educator] … to back off a bit and be in the background as resource people (A29).*

Dedicated diabetes health funding

The findings indicated that AHW strongly recommended health funding be dedicated to diabetes care. The funding could be used to employ a specialist diabetes health worker to care for clients with diabetes, and to provide a budget to assist them with health promotional activities:

> *Funding should be specifically set aside for an Aboriginal diabetes educator … we don't get any funding for diabetes at all … we get a little bit for renal … quite a bit for immunisation and hearing and eyes … but … we don't get any specific diabetes funding (A22) … [furthermore, employers] … could improve [the delivery of diabetes health care] … by giving us more time to spend with our clients, … more funding to run camps, because at camps you do get the information across because they're all relaxed and we're all networking with each other (A9).*

Supporting this theme, several AHW recommended:

> *Put in an Aboriginal diabetic educator, that's the only way you can do it … to make a difference. Then you need to work in that area and that area only (A34) … I'm sure that we would justify another full-time position … [for a male Aboriginal Health Worker to talk] … to men about the sexual complications of long-term diabetes (A37) … we should have a designated Aboriginal diabetes educator full time … within our region (A5) … I think … what we need here is just a specialist diabetes [AHW] (A29).*

In an informal discussion with several supervisors who were employed in ACCHS, I discovered that board members of these health services have the power to affect the way health funding is spent in their region. Thus, if board members with little or no health background or expertise in strategic health planning believed that anger management or youth suicide programs should be the focus of health spending for that year, other priority areas such as diabetes health care might not be given the attention it warranted and these services and programs could cease or be seriously reduced.

Furthermore, two supervisors reported that improving the diabetes health status of Aboriginal people did not have to involve unnecessary expense, as some interventions could be achieved by introducing several inexpensive activities such as establishing a walking group:

> *Not only Aboriginal but mainstream [organisations] … always think … we've got no money we can't do nothing … you don't [necessarily] … need money, you can just start a walking group you don't need money to walk. You could start a food group. You … could buy the first meal, second meal gets alternative workers to do a meal and maybe have a gold coin donation, you don't need a budget … the communities they really like something in their community. They will help in any way to keep that going and ideas will start flowing … a lot of the health workers are so used to … handed [things] … we're so dependent on the government and it's about the health worker has got a lot of knowledge and sometimes that gets taken away, services, and they've got the brains and they've just got to have some power to use it (S15 & S16).*

Support from supervisors

The findings also indicated that AHW required support from their supervisors to validate their new role. This included formal acknowledgment and celebration of their diabetes qualification, support to use their diabetes expertise in the clinical area, a budget to assist them with health promotional activities, and ongoing educational opportunities to consolidate their expertise. Acknowledging this, several supervisors reported:

> *Anybody else that was studying away and doing as many courses as health workers have done … I would have thought they should have been recognised for it, but unfortunately they're not (S12) … I think the organisation should take time out to showcase the Aboriginal Health Worker in the organisation and in their community, the Aboriginal Health Council and the Aboriginal Health Service… that Aboriginal worker should do a presentation … they don't get feedback, you know. The service has to be accountable … how can you put 100% into education training … if there is no position? … Stand up and show the way and either have an award night or some kind of dinner or special night (S5).*

Furthermore, other supervisors encouraged their health workers to actively communicate and celebrate their educational achievements to members of the Aboriginal community through the media and during NAIDOC Week:

> *I tried to advocate for the workers to use their local papers [to communicate to the Aboriginal community about the diabetes initiative] … the graduates get together and have a photo … [to celebrate and communicate their achievements] … we need to acknowledge the little things that happen in the community … I think to have community elders … maybe have an elders luncheon … your elders are the ones that are going to be pushing … NAIDOC … week or tucked into the elder's luncheon … invite elders … to put on a big luncheon for them [to celebrate the achievements of the health workers] (S15).*

Others agreed that the achievements of the AHW should be communicated to the Aboriginal community through the medium of radio or the showing of a video developed for that purpose:

> *We've got a radio station that a lot of Aboriginals listen to. Get on there and say … I am the diabetic educator. I am responsible for [caring for clients with diabetes] … I provide [diabetes health care] … we want them [the AHW] … to be more pro-active in the community … make up their own little information pamphlets … who they are, what their roles are and what services they offer. Monthly clinics and write down contact numbers. Those sorts of things could be dropped off at organisations or get on the radio (S36).*

> *I'd actually like to have a video done of the health workers when they're actually doing their work … the health worker comes and says oh hello my name is so and so, I'm an Aboriginal Health Worker, I've got qualifications in this, this and this, and this is what I do for my community, and then actually showing the health workers doing things and then having that video put in each, not only in the hospitals but for other organisations to access maybe over the Internet or something, and that will go a long way to getting some respect from other organisations … they can say well in one of our units we have an Aboriginal health team and this is what they do, and having something like that I think would go a long way (S11).*

Agreeing with their comments, two AHW responded with:

> *[The diabetes qualification] … does need to be recognised [by employers] (A18) … [and there needs to be allocated] … funding for an Aboriginal diabetes educator (A22).*

Several supervisors acknowledged that their health services should actively support their health workers by identifying those with specific health interests and expertise, providing them with the infrastructure required, allocating the time for them to work with clients and allocating them a budget for health promotional activities:

> *You've really got to define people who have specialist interest. They have to be actually given the time and opportunity to do it [care for clients with diabetes] … rather than transporting someone to a medical appointment … why make them work an hour-and-a-half driving someone to a medical appointment when they could spend an hour-and-a-half being a specialist on diabetes (S21) … set aside time for a person to work in that particular field, that would really help (S33) … if someone's got expertise in an area that's going to help the community, well that's the way you go (S31) … going out to the community on a weekly basis and having education groups going to your local women's group and talking to the women there and doing a lot of recalling and getting them on care plans, helping to put them on care plans, and doing the recalling and the assessing and liaising with the doctor with them, 'cause often we need to go into the doctor because they don't always understand and when they get their tablets and things changed and that sort of thing … helping them and that sort of thing … freeing [the Aboriginal Health Worker] … to go out into the community more (S19).*

Three supervisors who came to appreciate the value of using the diabetes expertise of the health workers in the clinical setting reported:

> *One of the recommendations would be to set aside time for a person to work in that particular field [diabetes health care] … that would really help [improve the diabetes health status of clients] (S33) … I do support that and so does the Future Pathways document that has the voices of Aboriginal Health Workers in there. I would support it because health workers are telling us that's what they need (S25) … each organisation would really need to look at … dedicating time to working on diabetes and dedicating a budget and provide the resources and whatever that they need to do these things. So it's about putting the funding in and it's about allowing the health worker the time to do it (S12).*

Another supervisor also suggested that AHW should have access to:

> *Funding for maybe excursions … taking clients, like people on a little trip somewhere … supermarket … that sort of thing … health promotion … programs in schools … would help too (A14).*

To ensure that the AHW are able to maintain and keep up to date with their diabetes expertise, one reported:

> *It would actually be good to have a refresher on that sort of stuff too (A39).*

This suggestion was supported by two supervisors who agreed that AHW should also have funded opportunities to undertake specialised training in locations near their communities. They reported:

> *If you can suddenly work out how they can do it without paying … that would be a big advantage … if you did one in Whyalla for example, you'd probably get a lot more people from Port Augusta, maybe even Ceduna, Coober Pedy would come to Whyalla and do it … you get the money and then locate it in a few different areas (S12) … allowing her to do extra training if required (S36).*

Discussion

It has been well documented in the *First Step Report* that diabetes is one of the top-five priorities to be addressed by Aboriginal health providers across the eight regions of South Australia (AIHW 2003; SAAHP 1997). It has also been established that diabetes management is a national and State priority and, as such, should be addressed by health providers (Colagiuri *et al.* 1998; DHS 1999, 2002). Only half the sites visited in our study had this important area of health in any planned and constructive way that benefited clients.

In terms of critical social theory, the findings indicated that there were three power differentials operating in the funding of Aboriginal diabetes health services and the use of diabetes expertise by supervisors. It is apparent that governments are not exercising their power (Foucault 1979) to fund Aboriginal health services appropriately (Access Economics 2004; AIHW 2003; AMAATSI Health Series 2004), thus facilitating the problem of inadequate infrastructure and related barriers to practice. In addition, several Aboriginal health services were not exercising their power (Foucault 1979) to dedicate funding from their budget to employ or use the expertise of specialist diabetes health workers.

This outcome compromised the delivery of services to Aboriginal people. The misuse of power by all concerned meant that AHW, their clients and the community were not being enlightened, empowered or emancipated (Fay 1987; Freire 1972) about diabetes issues. Consequently, they remained dependent on the services of non-Indigenous health professionals to meet the needs of clients with diabetes. This outcome of ignorance and dependence is contrary to the contemporary goals of diabetes health care (Dunning 2003; Guthrie & Guthrie 2002) and primary health care, prevention and promotion (WHO 1978, 1986, 1997).

If diabetes health care is indeed a priority area for action, and health professionals are accountable for meeting the diabetes health care needs of Aboriginal people, there is an obvious need for improved action in this area. Increased health funding is required from government departments to address the need for adequate infrastructure (AIHW 2003). Supervisors need to dedicate specific health funding to this important area from their budget and support the diabetes specialist health worker to help improve the diabetes status of Aboriginal people (Anderson & Clement 1987; Cartwright 1980). This action would be consistent with previous research that identified a need in the workforce for diabetes specialist AHW to educate clients (King 2001). Lastly, the directors of ACCHS need to educate their board members about identified health priorities and the need for strategic planning in health funding while still listening to the health care needs of the Aboriginal community. Specialisation is consistent with the findings of the National Review of Aboriginal and Torres Strait Islander Health Worker Training (CIRC 2001). Thus, health services are expected to allocate health funding to employ and support the activities of the diabetes specialist health worker.

Support and affirmation from supervisors is required by the diabetes specialist health worker to enable AHW to deliver effective care to clients. However, although some supervisors did acknowledge and celebrate the educational achievements of the health workers, this generally did not occur. Thus, half the health workers informally reported that this lack of recognition and under-utilisation of their diabetes expertise left them feeling undervalued, under-utilised and unappreciated by both their employers and their Aboriginal clients. This outcome was contrary to the research undertaken by Cartwright (1980) and Anderson & Clement (1987). Their research demonstrated that health professionals whose qualifications were recognised and who were given the relevant experience and support from employers were more likely to be motivated and satisfied about their roles. The obvious benefit of work motivation and satisfaction is that the standard of care is more likely to be higher than if the opposite were the case.

Several benefits would occur if organisational support were provided by supervisors. In the first place, AHW themselves would feel valued as health professionals and motivated to care and educate their clients in this important area. Positive acknowledgment would also increase the health worker's sense of self-worth, confidence and motivation. Through communication, members of the Aboriginal community would soon become aware of the new role of the diabetes specialist health worker and know which individual to contact for assistance with diabetes issues. Moreover, Aboriginal people, also aware of the implications of the *First Step Report* (SAAHP 1997), would realise that Aboriginal health services had listened to and acted on their concern that diabetes as a health problem should be addressed by training health workers in this important area. Lastly, a formal acknowledgment that an AHW had successfully completed a postgraduate diabetes course would also be communicated to non-Indigenous health professionals, who would realise that a specialist AHW was now able to work with them as a valued member of the diabetes health care team. This action is consistent with that of a multi-disciplinary diabetes health care team—working in partnership to improve the health of people with diabetes (ADEA 2005; Dunning 2003; Haire-Joshu 1996).

In line with the critical theorists, I strongly agree with the participants that the educational achievements and qualifications of AHW should be acknowledged and celebrated within the Aboriginal community and health agencies. Using critical social theory, an official acknowledgment by employers would be an empowering and emancipating process (Fay 1987; Freire 1972). This acknowledgment confirms that the health worker has the knowledge and expertise to assist clients with their diabetes health-related issues.

Of further significance, and extrapolated from the most recent Australian Bureau of Statistics data (AIHW 2003), Aboriginal people are significantly less likely to achieve certificate or tertiary qualifications than non-Indigenous people. For this reason alone, the educational achievements of AHW should be publicly celebrated. This sends out a message to Aboriginal people that tertiary education is available to and achievable by them. And it says to non-Indigenous Australians that Aboriginal people are seriously trying to improve the diabetes health status of their people by undertaking tertiary studies to address this problem.

The recommendation to use the diabetes expertise of AHW should be actioned by the supervisors as a concern of responsible management. However, only half of the supervisors in the study used this valuable resource effectively for the benefit of clients with diabetes. This outcome is contrary to sound managerial strategies focused on improving the standard of health care (Gillies 1989; Swansburg & Swansburg 2002).

The use of specialist health workers is not a new concept to supervisors. The National Review of Aboriginal and Torres Strait Islander Health Worker Training lists several examples, including alcohol and drugs, and mental health (CIRC 2001). Thus, within the context of specialisation, it is logical to use the diabetes expertise of the health worker in the clinical setting.

Finally, if the diabetes expertise of the specialist health worker is to be sustained, their employer organisations need to support their ongoing education in this area. Acceptable strategies for doing this would be to allocate funding for the specialist health worker to attend diabetes update meetings at State and national level. These would include the local South Australian ADEA branch meetings and educational weekends, the Diabetes Refresher Days held throughout the year by the large public hospitals and, at the national level, the annual ADEA scientific meetings held within Australia and New Zealand. By funding these opportunities, Aboriginal services would enable their specialist diabetes health worker to update and maintain their knowledge and skills.

Health agencies should also encourage the Diabetes Outreach Program, funded by DHS, to link in with the AHW to assist them with any diabetes issues and concerns. In this way, the diabetes expertise of the AHW could be actively supported, resulting in increased confidence and self-esteem and greater job satisfaction.

3.3. Preferred approaches to care

The findings indicated four sub-themes that would improve the practice. Diabetes health care should be undertaken within a chronic disease framework and in partnership with other diabetes health professionals. It should also incorporate the principles of primary health care and health promotion and be organised in such a way that it enables the diabetes specialist AHW to work with clients in the community and in the clinics.

A chronic disease framework

One supervisor voiced the preferred approach to care supported by most Aboriginal health services:

> *Our aim is to have a more planned coordinated response to chronic diseases [rather than a focus on one particular condition, for example, diabetes] … it may be that we end up with someone specifically looking after diabetes … [however] we haven't got the money to do it (S30).*

Others reported that care within this framework should also be continuous, coordinated and empathic:

> *You have to have continuity [of care] with Aboriginal people because if you only go once a month or every now and again … they don't know when you're coming, they're not there, but if they know you're coming on a regular basis … they know you're going to be there and they'll make an effort to be there …you need to work to a timetable (S19).*

As well as continuity, a coordinated approach to care was required:

> *I think a more coordinated effort … I mean, because we've got clients scattered over the [region] … maybe a more coordinated approach from either the doctors at [the various towns] … and the Aboriginal health centre [would be the way to go] (A20).*

Rather than insisting on a rigid compliance to a diabetes regime, two health workers, who were fully aware of the many other factors that compromised the health of Aboriginal clients, recommended that an empathic approach be used to care:

> *We try to make life a little bit more easy for them [Aboriginal clients] … instead of [saying] … these are the things you've got to have and stick by them. If you don't, then you will end up with all these problems … [we try] … to work it in a way that's positive and that they can easily work with. Not just for the individual but for the whole family (A18) … it's just mainly praising the client up if they're doing something really good, and just sitting down and explaining a bit more to the clients where they might improve if they're going down track (A13).*

The empathic approach to care was also supported by one supervisor who stated:

> *Diabetes is such a grim discussion topic to talk about and what you have to do is look at ways to how can you turn it into a way to make it sound positive and that worker can take control. It's great that you're doing this diabetes education course, because not only that you've got the training and the knowledge you can assist your community and you can help mainstream work better with your community (A15).*

A partnership of care

The findings indicated that supervisors believed that care should be undertaken in partnership with other members of the diabetes health team:

> *One of the ways that improvement will happen is that Aboriginal controlled agencies will be able to access the allied health professionals … there will be a lot of support going on between the two organisations [the Aboriginal and mainstream health organisations] … that will enable the improvement of diabetes care for Aboriginal people (S33) … my concern is that we [Aboriginal agencies] … continue to really work in partnership [with other diabetes health professionals] … not by themselves … I think it works well … when they're … working [together with diabetes health professionals] … its got to be a comprehensive approach … a collaborative approach (S30) … you achieve a lot more in partnership (S31) … both work well together … the Aboriginal and the non-Aboriginal, it makes a big difference (S15) … they [health professionals and the AHW] … both want to do it together … they [the Aboriginal Health Worker] … don't want to do it on their own (S3) … I'm not convinced that [the AHW working alone] … would be a huge benefit anyway (S31).*

Principles of primary health care/health promotion

The findings indicated that to minimise the incidence of diabetes, other supervisors strongly recommended that the principles of primary health care, prevention and health promotion be implemented within the approach to care, particularly in schools:

> *That's one of the areas that we hope to get into too, is the primary education site in schools … particularly in schools (S23) … school education would be the main thing … getting to the younger generation … the older ones are too set in their ways … all we are actually doing [with the older adults] … is managing the complications from their diabetes now … if we can get to the younger folk then obviously they may have a bit better outlook … trying to re-educate older people who are set in their ways. It doesn't work … if we can get to the younger folk then obviously they may have a bit better outlook (S35).*

Screening for diabetes in schools was also regarded as a priority:

> *Doing random checks in the schools too … because we don't see many young folk in the clinic … you don't come into clinic unless it's something that your Mum has brought you in for … it's only then that we may actually pick up a young person with some sugar problem, especially if they've got a wound that won't heal and you track back. Is there any diabetes in your family? My Mum's got it, my uncle, grandad (S35) … we need to get at them [children] … before they get diabetes. We need to get to all these young ones that are doing, because there's such a high incidence of it among the Aboriginals, it's an inherited thing, that their children are going to get it, but there's just not that understanding … [so it's really reaching out into the schools] (S19).*

One supervisor recommended that Aboriginal clients required budgetary advice, so that they could best use their money to meet their nutrition needs:

> *We need to be able to teach the Aboriginal people [how to budget] … we have a dietician that comes over from [a main rural town] … and [the Aboriginal Health Worker] … works with her [but I know for a] … fact that these people haven't got the money to go and buy the things that the dietician [recommends] … they [Aboriginal clients] need to know just the basic foods and things (S19).*

The participants also recommended several innovative examples of the type of care that they would like conducted by their health services. These included drop in centres, camps and inexpensive health promotional activities.

> *Probably something like what mental health has got at the moment. They've got a little house where they sit and talk with the mental health clients; it can be either in groups or one on one. Maybe there could be something done like that with diabetes, because you've got the men's support group and all the men get together and do stuff. We've got the women's camp where all the women get together and then we have other support groups like women that have lost their children or been victims of abuse or something like that. So if there's something around diabetes, a support group for diabetes, people who have got diabetes it would be something new to try (S11).*

Balance between the clinic and community

One influential supervisor strongly recommended that there should be a balance between the medical care of individuals at the clinic level and primary health care activity undertaken in the community:

> *I think that the balance between providing the clinical service and providing a health promotion and prevention service is not always an easy balance to strike … I think that the best thing that managers could do would be to make sure that health workers understand what primary health care really is. And what it ranges from. Everything from preventive work to providing a clinical service … striking that balance so that health workers get the opportunity to actually go out into their communities … by providing them with a designated time for community development, health promotion and prevention activities (S25).*

The findings also indicated that AHW should be allocated time to spend caring for clients with diabetes out in the community:

> *If you can go out and see the people in their own environment … how they live … you might [be able to] … help them with … see where they come from … if their homes have got … running water …and so on … they feel comfortable in their own homes … they tend to come out in the open a bit more and talk about their problems … a lot of education is one to one … women don't want to talk about men's business … men don't want you to talk about women's business … each individual person wants you to focus on them … they are the ones you've come to see … so it's their health issues, their problems and if you're in the clinic setting they're not going to be easy anyway … they're a lot more relaxed in their own homes (A22) … [however, instead of having time to spend in the community] … we seem to have more paper work, more time working on the computer, more meetings we have to attend and administration (A9).*

In support of this one health worker argued:

> *You need the time to just educate the person … the family … the children … it's much better to sit with them in an appropriate environment for them to be able to speak out about their problems and diabetes. They tend to want to talk more in depth about it. It's got to be an environment that they feel safe and able to talk about it ... in places like … the foreshore [where you can] … sit down and have a chat. Then work it around to talk about diabetes. If there is any other problems, then try help work it out with them there … in their own home. Sitting down with a cuppa and talking about their problems. Ask them … gives us ideas in improving the program (A18).*

Another emphasised the value of home visits to care, because it enabled her to:

> *[Coordinate] appointments … like podiatrists and dieticians … making sure that they get to them (A29).*

Discussion

The findings of this study indicated that the preferred management style for Aboriginal people with diabetes health care is to use a chronic disease framework in conjunction with the principles of primary health care, prevention and health promotion. The style of care should be continuous, coordinated and empathic, and undertaken in partnership with members of the multi-disciplinary health team. Moreover, equal time should be allocated to enable the diabetes specialist health worker to work with clients in the community and clinic. This empowering process is consistent with the goals of contemporary diabetes management, primary health care and health promotion, and critical social theory (Dunning 2003; Fay 1987; Freire 1972; Haire-Joshu 1996; WHO 1978, 1986, 1997).

Based of the findings, and as part of this chronic disease framework, I strongly recommend that dedicated funding be used to employ and support a specialist diabetes AHW, and that other health workers have the opportunity to undertake specialised training in this area. This would enable a continuity of qualified diabetes specialist health workers to be available to care for Aboriginal people with this complex disease, and still work within this framework.

I also recommend that specialist diabetes AHW should work with clients equally in the community and in clinics. The aim would be to minimise the incidence of diabetes in the community through health education and promotion activities and, in doing so, actively reduce the incidence of unnecessary diabetes-related complications and premature morbidity. Time should also be allowed to enable specialist diabetes AHW to care for clients in the clinic.

The majority of specialist diabetes AHW in this study spent most of their time working in the clinic under a crisis management-style of health care and not in the community in diabetes health care activities. These health workers were also expected to cover a wide range of other health problems that could be undertaken by other health workers. There is a need for strategic planning by Aboriginal health services so that the diabetes specialist AHW can concentrate on improving the diabetes status of Aboriginal people. To facilitate this process, the supervisors and specialist diabetes AHW together could decide how best to use the diabetes expertise of the health worker in the clinic and the community. Depending on the needs of the health service, specialist diabetes AHW could work full-time or part-time and, where appropriate, in partnership with the diabetes nurse educator or dietician. The intention would be to educate Aboriginal

clients about diabetes issues before they become a major health hazard and compromise the lives of individuals, families and the community. This type of activity is consistent with the goals of the AHW courses, contemporary diabetes management (ADEA 2005; AHCSA 2004; DETAFE SA 1996) and primary health care/health promotion (WHO 1978, 1986, 1997).

In terms of critical social theory this approach, if adopted, would enlighten, empower and emancipate AHW and their clients about diabetes issues and increase the potential for effective self-management.

3.4. A Role Manual

The findings indicated that a manual should be devised for health professionals, supervisors and employers to describe the different roles undertaken by AHW in general and by the diabetes specialist health worker.

> *One of the things that we [a large rural Aboriginal health agency] … are actually doing is getting people's procedures manuals up and running. I know we've got this issue with the hospital. The hospital thinks the ALO [Aboriginal Liaison Officer] … is there to do everything. Their role is actually totally different [from the AHW] … I think once we have our procedure manuals, we can actually say that these are the roles of the workers. These are the jobs they perform. … once these procedure manuals [are completed] … and people know what they do and the community knows what they do [there will be an improved understanding between the various groups] (S36).*

> *We're sending out … a list of what they did … so the team leaders will also see … they've done this foot care so they can assess people's feet, but they will also know what the health workers have learnt and they can do, and I think that's sometimes missing actually (S16).*

Discussion

The report entitled *Future Pathways* (Dollard *et al.* 1999) has established that many employers are generally confused about the different roles and activities AHW are expected to perform (CIRC 2001). With the advent of specialisation, the confusion among employers will become even more problematic. Hence, the suggestion is to develop a manual that outlines the different roles and activities, and communicates to other health professionals the role and activities of both the generic and specialist health workers. In the absence of a professional organisation that has established a clear career and industrial pathway for health workers, this manual would alleviate some of the confusion surrounding the role of health workers. The manual's development could be undertaken by the AHCSA in conjunction with Aboriginal health professionals and diabetes specialist AHW.

Summary of Theme 3

Four sub-themes emerged which formed the basis of the findings. These involved the need for increased health funding, responsible management, effective approaches to care, and the need for a role manual to describe the activities undertaken by AHW.

Increased health funding is required from government departments to improve the infrastructure of at least half the sites visited in the study. This would enable and empower AHW and their supervisors to improve the delivery of diabetes services to Aboriginal people in South Australia.

There was a clear need for AHW to have increased organisational support from both supervisors and health agencies. Without this, the diabetes expertise of AHW may be lost and the educational initiative will prove to be of little benefit to Aboriginal clients. Thus, it is critical that supervisors have the opportunity to be assisted in this area by expert managers, which could perhaps be undertaken in internal training sessions organised by AHCSA or at State managerial forums.

CONCLUSION

Type 2 diabetes mellitus as a major health problem in the Aboriginal population has to be managed effectively. If this is not achieved, its incidence and prevalence will continue to rise and the longevity and quality of life for individuals afflicted with this disease will continue to be seriously compromised.

Both the literature and the research findings confirm that federal, territory, and State governments must maintain a 'whole government approach' to health funding. It is imperative that increased and allocated designated health funding is made available to address the total health needs of Aboriginal Australians, and that funding is received for the care of people with type 2 diabetes. Research has clearly demonstrated that Aboriginal health care is grossly under-funded by an estimated $450 million per year (Access Economics 2004; AMAATSI Health Series 2004). The findings of this study confirm that several Aboriginal health services are currently unable to provide the necessary infrastructure to deliver effective diabetes services to Aboriginal people. Substantial health funding is urgently required to educate more Aboriginal health professionals (doctors, nurses and allied health professionals) to meet the complex health care needs of Aboriginal clients (Access Economics 2004; AMAATSI Health Series 2004). Health funding is also needed to recruit, train and employ sufficient numbers of AHW to care both in clinics and communities for Aboriginal clients affected by a range of complex health problems.

Furthermore, the literature and the findings have indicated that if AHW caring for clients with diabetes are to be consistent with the goals of contemporary diabetes management, they need the opportunity to undertake specialised diabetes training. Our research indicated that specialist diabetes AHW need the support of their employers to legitimise their role and to enable them to access the relevant clinical experience. AHW also need the opportunity to undertake ongoing education in this specialist field of health care to consolidate, refine and update their expertise.

The literature and the findings have demonstrated that there are inadequate numbers of competent AHW in South Australia (Spencer Gulf Rural Health School 2001). As a result, even if the supervisors wanted to use the diabetes expertise of AHW to educate clients about diabetes issues in the community, the

supervisors were often prevented from doing so through a need to address the many other complex health problems in the Aboriginal community. This meant that some diabetes specialist AHW were often unable to use their newly acquired knowledge and skills simply because they were the most competent health worker available to address all the other complex health problems.

However, even if there were adequate numbers of AHW available to the health services, the findings indicated that most of the health workers who had completed the diabetes course were still required by their supervisors to work as generic health professionals. This meant that the role of the health worker with the diabetes qualification had not changed in any significant way to benefit clients with this condition. Some supervisors exercised their power (Foucault 1979) by not using the diabetes expertise of the specialist health worker in any planned or constructive way to improve the health of their clients with type 2 diabetes. This was a concern because the literature has demonstrated that a lack of support from employers is detrimental to the practice of the specialist practitioner and, unresolved, will ultimately result in a loss of confidence and skills by that health professional. In the context of diabetes specialist AHW, this would translate into a lack of job satisfaction and a loss of confidence, self-esteem and expertise, and ultimately lead to the loss of a valuable resource to the health service and Aboriginal community. Inevitably, this outcome would not encourage other AHW to undertake postgraduate study to improve the health outcomes of the Aboriginal community, because their achievements would not be acknowledged, valued, supported or used by their health service.

In the context of critical social theory and this study, AHW were enlightened (Fay 1987; Freire 1972) through the diabetes course, but disempowered through the action taken by those supervisors who elected not to use the diabetes expertise of the health worker. To be empowered and emancipated as diabetes specialist AHW, these health professionals need to be able to educate Aboriginal clients in the community in ways that best suit the community, as well as work in the clinics. This approach is consistent with the principles of the *Ottawa Charter* (WHO 1986), and would enable diabetes specialist AHW to educate members of the Aboriginal community in a proactive manner concerning the prevention, detection and management of type 2 diabetes. This would also enlighten and empower members of the Aboriginal community about important diabetes issues and the need to make informed choices and decisions about healthy living (Fay 1987; Freire 1972).

For this initiative to succeed, several interventions need to occur. First, there must be an attitudinal change by Aboriginal health professionals. The findings have indicated that a significant barrier to improving the diabetes health status of Aboriginal Australians is that Aboriginal health services, health professionals, their clients, and members of the Aboriginal community do not regard diabetes health care as a serious priority for action. Thus, even though the *First Step Report* has established that diabetes is a health priority, this reality has yet to be addressed strategically and operationally.

Secondly, the findings indicated that Aboriginal health services have no clear strategic health plans to address the problems associated with type 2 diabetes because they do not receive dedicated diabetes funding for that purpose. Most Aboriginal health services in this study, therefore, did not specifically allocate funding from their health budget to employ and use the diabetes expertise of their AHW in any planned or strategic way, nor did they allocate time for the specialist health worker to care for clients with diabetes. Neither did the health services fund the resources and facilities required by the AHW for client education in the clinic or the community. Most Aboriginal supervisors believed that any AHW, with or without a diabetes qualification, can care for clients with diabetes. This belief is contrary to the goals of contemporary diabetes health care (ADEA 1997).

Lastly, the attitude currently held by Aboriginal supervisors, that the diabetes specialist AHW is just a generic health worker, needs to change as it does not promote best practice. Specialisation has already been identified in the *Training Re-visions—A National Review of Aboriginal and Torres Strait Islander Health Worker Training* in the areas of men's and women's health, youth issues, and drug and alcohol addiction. Now the diabetes specialist AHW also needs to be acknowledged (CIRC 2001). To do so will encourage Aboriginal health service boards and supervisors to plan strategically how best to use the diabetes expertise of their employees in a constructive way that will improve the delivery of diabetes services to Aboriginal clients. To be effective, they will need to allocate equal time for the diabetes specialist AHW to care for clients with diabetes in the community and in the clinic. It will also require the health worker, as a member of the diabetes health team, to work in partnership with other diabetes health professionals.

Clearly, there must be specific health funding allocated to support the specialised diabetes training of AHW by Aboriginal employers, so that there is a continuous supply of diabetes specialist AHW available to care for Aboriginal clients with this chronic disease. Acknowledging this, in 2005, AHCSA made available funded scholarships for interested health workers to undertake a range of postgraduate courses offered by South Australian universities in areas such as diabetes, mental health, and drug and alcohol addiction. These actions are consistent with the recommendations of the *First Step Report*.

The findings have indicated that an urgent need exists for health funding to be designated for the supply of required resources to support the AHW in the clinic and in the community. Funding is required to purchase equipment, vehicles and culturally appropriate health promotional resources, so that AHW in all settings are able to educate Aboriginal clients about diabetes health-related issues. This approach would not only enlighten and empower clients to self-care (Fay 1987; Freire 1972), but also enable Aboriginal clients to make informed decisions about important lifestyle issues.

Reflections concerning the findings

As well as the need for a substantial increase in health funding for Aboriginal health care, I believe that the following approach would help to address the problem of type 2 diabetes in the Aboriginal population. There is an urgent need for the establishment of a professional organisation for AHW, one that will describe their various roles, qualifications, scope of practice, salary scales and career pathway. This action would alleviate much of the confusion and angst felt by employers, health workers and members of the Aboriginal community over the role of AHW.

Of importance, the educational achievements of AHW need to be formally recognised, actively supported and valued by the Aboriginal health services and supervisors. Otherwise this valuable resource will soon be lost to the various Aboriginal health services that employ the diabetes specialist AHW and the Aboriginal community. The lack of acknowledgment and support by employers makes the training of AHW irrelevant, a waste of energy and time, and a total misuse of the health dollar. It is also important that the achievements of AHW be communicated to and celebrated by the Aboriginal health service and members of the Aboriginal community. This action publicly affirms the achievements of the specialist AHW and sends a clear message that postgraduate qualifications are achievable for other health workers and members of the Aboriginal community too. This situation is worthy of celebration because currently only a small percentage of Indigenous people achieve a postgraduate university qualification, and now there are significantly more. To acknowledge this achievement publicly encourages other AHW to undertake similar postgraduate courses that will help to improve the health of their people.

The findings indicate that Aboriginal health services need to actively support the specialist health worker by establishing the new role of specialist diabetes AHW within their organisation. This changed role needs to be communicated to clients, members of the Aboriginal community, and other health professionals, so that all will know what to expect from this health professional. To facilitate this process, Aboriginal health services need to use the diabetes expertise of AHW in a constructive way that will benefit Aboriginal clients. This should be undertaken in consultation with specialist AHW and other members of the diabetes health team, and will mean allocating sufficient time for this health professional to work with clients both in the clinic and in the community. Through educational sessions, opportunities should also be given to diabetes specialist AHW to improve their knowledge and skills of other health workers.

Unless action is taken, the findings have indicated that there is little incentive for AHW to undertake specialised diabetes training. Study of this nature usually involves the health worker leaving their health service, family and community, which is costly in time and energy and disruptive for all. Thus, if their qualifications are not formally recognised by Aboriginal employers, and their diabetes expertise is not used constructively, there is little incentive for AHW to undertake or complete postgraduate studies.

Based on the literature and the findings of this study, it is reasonable to conclude that governments need to be consistently and strongly challenged by health professionals to substantially increase the health funding awarded to Aboriginal health services. As well as improving and providing a raft of benefits within the health system, this action would demonstrate to both health and educational providers that diabetes health care is a priority because it is funded accordingly. This would encourage Aboriginal health services to allocate and designate health funding to diabetes health care programs and activities that will benefit Aboriginal people. Educational providers of AHW training also need to be encouraged to include within their curricula more content that will teach their health workers how to care effectively for Aboriginal people with type 2 diabetes.

The findings of this study have supported the three aims of this research. First, it has been established that the ADEA-accredited diabetes course undertaken by AHW is relevant to their clinical practice and to the health care needs of Aboriginal clients. This outcome was consistently apparent from the responses of the participants, the development of AHW as health professionals, and the clinical examples about how the participants used their newly acquired diabetes knowledge in the community. There is also a growing awareness among other Aboriginal groups from other Australian States concerning the relevance of specialised diabetes training to their clinical work. As a result, since 2001 there has been a steady influx of AHW enrolling in the course from Victoria, Northern Territory and New South Wales, as well as from South Australia. The number of AHW has now increased from thirty-one to an estimated total of forty-two health professionals all of whom are caring for Aboriginal people with diabetes. The increasing number is likely to help improve the quality of diabetes health services delivered to the Aboriginal population.

Second, the barriers that prevent Aboriginal participants from delivering effective diabetes health care services have been identified in this study. Important ones are that diabetes health care is currently not regarded as a priority for action by Aboriginal health professionals in general, and clients' lack of knowledge about diabetes health care issues. In terms of critical social theory and in general, supervisors and AHW are not enlightened or empowered about care issues (Fay 1987; Freire 1972). Therefore, they are unable to manage the condition of their clients effectively, thereby increasing the risk of diabetes complications and premature mortality. This situation is contrary to the principles of primary health care, prevention, health promotion and contemporary diabetes health care.

The lack of a career pathway for AHW workers and the under-utilisation of diabetes expertise by supervisors are major barriers to good practice. As such, both of these deficiencies urgently need to be addressed by Aboriginal health professionals if the use of expertise is to be maximised. A professional organisation needs to be established that will define the different roles of AHW, the required qualifications, scope of practice and related salary scales. This organisation will also need to discuss how the diabetes expertise of the specialist AHW should be used in a constructive way to improve the health of Aboriginal people with diabetes.

Third, and consistent with these barriers, the participants clearly identified strategies that they believe would greatly improve diabetes care for Aboriginal people. These included increased health funding to address infrastructure needs, and responsible management that would use the diabetes expertise of specialist AHW within a chronic disease approach to care. There was also a need for a procedures and policy manual that communicated to other health professionals the different roles undertaken by AHW.

Limitations of the study

It was not possible for me to interview every AHW (n=31) who had undertaken the course between 1998–2000, because thirteen were unavailable, several had left South Australia for employment opportunities interstate, and others were on recreational, maternity or prolonged sick leave and were unavailable for interview. For practical reasons, this project was limited only to South Australia and within the context of the Aboriginal agencies that employed AHW who had previously undertaken the diabetes course between 1998 and 2000.

Due to my other commitments, it was not possible to revisit the participants to see if their circumstances had changed in any significant way. However, I did contact some of them by telephone during the writing-up of my thesis (upon which this report is based) and discovered that several had now resigned from their previous health agencies to take up employment opportunities elsewhere. These positions did not involve them using their diabetes expertise. Those who remained in their health agencies were using their diabetes expertise in a general way, if required, during client contact. However, their role description had not changed significantly from when they had enrolled in the course.

Finally, as this study was funded by Diabetes Australia, I was obliged to do the research within a certain timeframe, and this constraint prevented me from contacting some AHW who were on leave and unable to take part in the study. Furthermore, as a full-time university academic with teaching commitments, I had limited time to undertake a study that involved travelling many thousands of kilometres around the State and, consequently, could only deal with what was available during the time spent in the field.

APPENDIX 1

THE GRADUATE CERTIFICATE IN HEALTH: DIABETES MANAGEMENT AND EDUCATION

The current accredited ADEA course comprises four topics, with a fifth included that enables graduates from the previous DEC to upgrade their qualification. The course aims to provide registered nurses, podiatrists, dieticians and AHW with the knowledge and skills required to educate, assess and care effectively for clients with diabetes.

The program is conducted in the part-time mode and is spaced over one academic year. The course comprises three theoretical topics that are undertaken on campus, each over a five-day period from Monday to Friday between 9 am–4 pm. The practical topic involves forty hours of clinical placement in a recognised diabetes centre and is usually undertaken over a five-day period (Flinders University Adelaide Australia 2002).

Topic 1: Diabetes Management

This topic focuses on the clinical assessment and management of clients with diabetes and, in particular, addresses the epidemiology, aetiology, pathophysiology of diabetes, and the multi-disciplinary management of diabetes across the life span of individuals.

Topic 2: Diabetes Health Promotion

This topic focuses on the principles of health promotion and client/family/community education across the life span, the interaction of the family/significant others and the community in the management of diabetes, and the principles of health promotion and primary health care.

Topic 3: Diabetes Practicum

This topic includes forty hours of clinical placement in a range of venues and may be commenced after Topic 1 and completed before Topic 4. The aim of this topic is to enable students to observe and participate, where appropriate, in the multi-disciplinary assessment and clinical management of clients with diabetes.

Topic 4: Psychosocial Aspects of Diabetes Management

This topic focuses on the psychosocial aspects of diabetes care. Content includes: counselling skills, legal issues, cultural issues, theories involving self-management, decision-making, time management, motivational and behavioural theories and experiential learning.

Topic 5: Transition from Diabetes Educators Course

This topic enables students who have completed the previous short course known as DEC to upgrade their qualification to the Graduate Certificate in Health: Diabetes Management and Education. This level of award is necessary for accreditation with ADEA.

APPENDIX 2

SEMI-STRUCTURED QUESTIONNAIRE FOR ABORIGINAL HEALTH WORKERS WHO UNDERTOOK THE DIABETES COURSE

1. First of all I would like to find out a little bit about you as a person.

a) Are you single or do you have a partner?

b) Do you have any children or grandchildren?

c) Which age range you fit into to?
18-30 years 30-40 years 40-50 years 50 – and above

d) What types of activities, sports or hobbies do you like to do in your spare time?

2. May I ask you some questions about your job as an Aboriginal Health Worker?

a) How long have you been an Aboriginal Health Worker?

b) What is your current position?

c) How long have you been in this current position?

d) What job/role did you do before this?

e) What are the main activities of your current job? For instance do you:

- Work with Aboriginal people with different health problems?
- Attend meetings with other health professionals?
- Carry out research activities?
- Undertake an administrative role?
- Undertake community projects?
- Attend courses and conferences?

3. In relation to attending courses, I would like to ask you about the Diabetes Educators Course that you attended at Flinders University.

a) In terms of what you expected, how did you find the course assignments?
Easy What I expected Difficult

b) Did you feel that you were given the necessary support required to pass the assignments? Please feel free to comment.

c) How did you find the classroom environment?
Pleasant Okay Uncomfortable

d) How did you find travelling to attend the course?
No real difficulty Some difficulty A great deal of difficulty

Please feel free to comment.

e) How did you find the teaching content of the course:
Too simple Appropriate Too complex

f) Was the course content relevant to the diabetes health care needs of Aboriginal people in your community? Please comment.

g) Is there anything you can suggest that would improve the assignments, content and the course? Please comment.

h) Is there anything that could be included that would benefit Aboriginal Health Workers who may enrol in future courses?

i) What did you like or not like about the course?

j) What would you like the university to change?

4. Turning to what you have been doing in your job since the course

a) Has the diabetes course influenced the way that you now assess and care for clients in your community?

b) Can you give me an example when you were caring for a client that you drew on your knowledge gained from the diabetes course? Will you describe this situation?

c) Have you been directly involved with or responsible for any diabetes initiatives that have been undertaken in your community? Do you think it was a result of you having undertaken the diabetes course?

d) How much time in hours or days do you spend each week on diabetes management in your community?

e) How many clients with diabetes would you see in one week?

f) Do you keep records of these visits?

g) Do you think you need to have time designated in your role description for diabetes management?

h) What does the Aboriginal community think about Aboriginal Health Workers undertaking a specialised diabetes course conducted by the University?

5. The next couple of questions are about the organisational support given you by your employer.

a) How does your organisation use your diabetes expertise?

b) Has your organisation allocated a period of time for you to care for clients with diabetes? Is this time allocation adequate?

c) Does your organisation help you deliver an improved level of diabetes health care to your clients? For example, does your organisation:

- Offer extra resources
- Give you a budget,
- Enable you to run camps,
- Offer special diabetes sessions to your clients?

d) What are the barriers that prevent you from providing effective diabetes health care to clients?

e) Can you think of different ways that your organisation might help you to improve care given to clients with diabetes in your community?

f) Do you think your diabetes qualification should be recognised by your employers in some way? If so, what would you suggest?

6. Finally is there anything else that you would like to say about the issues were have discussed in relation to diabetes health care for your clients?

Thank you for your assistance with this research.

APPENDIX 3

SEMI-STRUCTURED QUESTIONNAIRE FOR SUPERVISORS

1) First of all I would like to find out a little bit about you as a person.

a) May I ask which age range you fit into to?
18-30 years 30-40 years 40-50 years 50 – and above

b) What roles do you perform in your community?

2) May I ask you some questions about your job as an Aboriginal Team Leader/ Supervisor?

a) What is your current position?

b) What are your qualifications?

c) How long have you been in your current position?

d) What are the main activities of your current job? For instance do you:

- Work with Aboriginal people with different health problems?
- Attend meetings with other health professionals?
- Carry out research activities?
- Undertake an administrative role?
- Undertake community development?
- Attend courses and conferences?
- Supervise staff or team lead?
- Participate as a member of key committees?

3) In relation to attending courses, I would like to ask you about the Diabetes Educators Course that you attended at Flinders University.

a) Did your organisation experience work-related difficulties when your Aboriginal Health Worker(s) attended the diabetes course? For example, were you short staffed or did you experience other difficulties?

b) Do you think that the Aboriginal Health Workers who attended the diabetes course were given enough support from the University to undertake and complete the course? If not, what could the University provide future Aboriginal Health Workers who enrol in the diabetes course?

c) Do you think the course content was relevant to the health care needs of Aboriginal people at risk of or with diabetes in your community? If not, what should be added, changed or withdrawn?

d) Do you think that Aboriginal Health Workers who have undertaken the diabetes course will be able to help improve the diabetes health status of Aboriginal people?

e) Have you seen any evidence of the Aboriginal Health Worker who has a diabetes qualification using course information to help Aboriginal clients make informed decisions about diabetes related health issues? Will you describe this situation?

f) Have you noticed that Aboriginal clients are coming specially to consult with the Aboriginal Health Worker with the diabetes qualification?

4) Turning to your organisation.

a) What is the attitude of people in your organisation concerning Aboriginal Health Worker(s) undertaking the Flinders University diabetes course?

b) Does your organisation allocate time each week for the Aboriginal Health Worker with the diabetes qualification to care specifically for clients with diabetes?

c) How does your organisation use the diabetes skills and knowledge of the Aboriginal Health Worker(s) in the clinical setting? Can you give me some examples?

d) Has this change occurred because the Aboriginal Health Worker(s) completed the diabetes course?

e) How does your organisation assist the Aboriginal Health Worker(s) with diabetes qualification to provide better services for Aboriginal clients at risk of or with diabetes? For example, does your organisation do any of the following:

- Offer extra resources to assist health workers for use in client education?
- Allocate a specific budget to Aboriginal Health Workers for that purpose?
- Conduct diabetes screening days for early detection of type 2 diabetes?
- Enable Aboriginal Health Worker to conduct diabetes health promotional camps for clients?
- Offer education and special diabetes sessions or programs to your clients?
- Offer continuing educational opportunities for specialist diabetes Aboriginal Health Workers?

f) Can you suggest any other strategies that your organisation might put in place to improve the level of diabetes health care offered to clients in your community?

g) Do you think that there are any barriers impacting on or in your organisation that might prevent the Aboriginal Health Worker with the diabetes qualification from providing effective services to clients?
If so, what recommendations would you suggest could improve the situation?

h) Do you think that the diabetes qualification gained by the Aboriginal Health Worker(s) should be rewarded in some way? If so, what would you suggest? For example, a title, a revised job description and a pay increase? How might this happen?

i) What does your Aboriginal community think of Aboriginal Health Worker(s) undertaking a diabetes course at a University?

5. Finally is there anything else that you would like to say about the issues were have discussed in relation to diabetes health care for your clients?

Thank you for your assistance with this research.

REFERENCES

Access Economics Pty Ltd 2004, *Indigenous Health Workforce Needs*, Australian Medical Association. Available: http:///www.ama.com.au [23 August 2005].

Australian Diabetes Educators Association (ADEA) 1997, *A Guide to Diabetes Education for Health Professionals*, NSW Health Department, Sydney.

ADEA 2005, *ADEA Vision and Mission Statement,* ADEA. Available: http://www.adea.com.au/about/role.html [1 April 2005].

ADEA Course Accreditation Sub-committee 2002, *Accreditation and Re-accreditation Procedures for National Diabetes Educator Courses*, ADEA, Canberra.

Aboriginal Health Council of South Australia (AHCSA) 2004, *Development of the Registered Training Organisation for the Aboriginal Health Council of SA* (Internal report), AHCSA, Adelaide.

Australian Institute of Health and Welfare (AIHW) 2003, *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples 2003*.
Available: http://www.aihw.gov.au/publications/ihw/hwaatsip03/index.html [15 July 2004].

AIHW 2004, *Australia's Health 2000* (Cat. No. AUS 44), Australian Institute of Health and Welfare, Canberra.

AIHW 2005, *Australia's Welfare* (Cat. No. AUS 65 44), Australian Institute of Health and Welfare, Canberra.

Australian Medical Association Aboriginal and Torres Strait Islander (AMAATSI) Health Series 2004, *AMA Discussion Paper 2004—Healing Hands—Aboriginal and Torres Strait Islander Workforce Requirements*.
Available: http://www.ama.com.au/web.nsf/doc/WEEN-63W755./$file/AMA%20/discussion%20Paper%20204/Healing%20Hands.pdf [2005, 15 July].

Anderson, P. & Clement, S. 1987, 'The AAPPQ Revisited: The measurement of general practitioners' attitudes to alcohol problems', *British Journal of Addiction*, vol. 82, pp. 753–9.

Australian Indigenous HealthInfoNet 2005, *Summary of Australian Indigenous Health—February 2005*.
Available: http://www.healthinfonet.ecu.edu.au [9 August 2005].

Bate, K. L. & Jerums, G. 2003, 'Preventing Complications of Diabetes', *Medical Journal of Australia*, vol. 179, pp. 498–503.

Burnard, P. 1991, 'A Method of Analysing Interview Transcripts in Qualitative Research', *New Education Today*, vol. 11, pp. 461–6.

Cartwright, A. K. J. 1980, 'The Attitudes of Helping Agents towards the Alcoholic Client: The influence of experience, support, training, and self-esteem', *British Journal of Addiction*, vol. 75, pp. 413–31.

Curtin Indigenous Research Centre (CIRC) 2001, *Training Re-visions—A National Review of Aboriginal and Torres Strait Islander Health Worker Training*, Curtin University of Technology, Perth.

Colagiuri, S., Colagiuri, R., Conway, B., Grainger, D. & Davey, P. 2003, *Diabetes Cost: Australia—Assessing the Burden of Type 2 Diabetes in Australia*, Australian Centre for Diabetes Strategies, Sydney.

Colagiuri, S., Colagiuri, R. & Ward, J. 1998, *National Diabetes Strategy and Implementation Plan*, Commonwealth Department of Health and Family Services, Canberra.

Commonwealth of Australia & Department of Health and Aged Care 1999, *National Diabetes Strategy 2000–2004* (No. 2577), Commonwealth Department of Health and Aged Care, Canberra.

Couzos, S., Metcalf, S., Murray, R. & O'Rourke, S. 1998, *Systematic Review of Existing Evidence and Primary Care Guidelines on the Management of Non-insulin-dependent Diabetes in Aboriginal and Torres Strait Islander Populations*, Office for Aboriginal and Torres Strait Islander Health Services, Commonwealth Department of Health and Family Services, Canberra.

Department of Education, Technical and Further Education South Australia (DETAFE SA) 1996, *Aboriginal Certificate in Entry Level Training: 1996–1999*, DETAFE SA, Adelaide.

Department of Human Services (DHS) 1999, *The Strategic Plan for Diabetes in South Australia*, DHS, Government of South Australia, Adelaide.

DHS 2002, *Strategic Plan for Diabetes in South Australia 2003–2006* (rev. edn), Government of South Australia, Adelaide, pp. 1–3.

Dollard, J., Bradley, H., Blue, I., Fuller, J., Hopps, M. & Moss, J. 1999, 'Aboriginal Health Workers in South Australia Future Pathways', *Review of the Status, Support Arrangements and Training Needs of Aboriginal Health Workers in South Australia,* South Australian Centre for Rural & Remote Health (SACRRH), Whyalla Norrie, pp. 1–232.

Dunning, T. 2003, *Care of People with Diabetes: A Manual of Nursing Practice*, Blackwell, Oxford; Malden, MA.

Edwards, M. 1995, *Ethnography: A View of Qualitative Research*, Qualitative Ethnographic Studies Consultancy, Tea Tree Gully, SA.

Erlandson, D. A., Harris, E. L., Skipper, B. L. & Allen, S. D. 1993, *Doing Naturalistic Inquiry: A Guide to Methods*, Sage Publications, London.

Fay, B. 1987, *Critical Social Science: Liberation and its Limits*, Cornell University Press, New York.

Flinders University of South Australia 2002, *Graduate Certificate in Health: Specialist Courses in Nursing and Midwifery*, Flinders University of South Australia, Adelaide, p. 12.

Foucault, M. 1979, *Discipline and Punish: The Birth of the Prison*, (English trans.), Vintage Books, New York.

Freire, P. 1972, *Pedagogy of the Oppressed*, (English trans.), Sheed and Ward Limited, London.

Funnell, M. M., Anderson, R. M. & Arnold, M. S. 1991, 'Empowerment: An idea whose time has come in diabetes education', *The Diabetes Educator,* vol. 17(1), pp. 37–41.

Gillies, D. A. 1989, *Nursing Management: A Systems Approach* (2nd edn), WB Saunders Company, Philadelphia.

Guthrie, D. W. & Guthrie, R. A. 2002, *Nursing Management of Diabetes Mellitus: A Guide to the Pattern Approach* (5th edn), Springer Publishing Company, New York.

Habermas, J. 1971, *Knowledge and Human Interest*, (J. Shapiro, trans.), Beacon Press, Boston.

Habermas, J. 1974, *Theory and Practice*, (J. Veirtel, trans.), Heinemann Educational Books Ltd, London.

Haire-Joshu, D. (ed.) 1996, *Management of Diabetes Mellitus: Perspectives of Care across the Life Span* (2nd edn), Mosby Year Book, St Louis.

Henry, B. R., Houston, S. & Mooney, G. H. 2004, 'Institutional Racism in Australian Healthcare: A plea for decency', *Medical Journal of Australia*, vol. 180(10), pp. 517–20.

King, M. 2001, 'The Diabetes Health Care of Aboriginal People in South Australia: Part 1 & part 2', *Contemporary Nurse*, vol. 10(3–4), 147–62.

King, M. 2006, The Relevance of an Accredited Australian Diabetes Educators Association Course to Aboriginal Health Workers and Aboriginal People in South Australia, PhD Thesis (under review), Flinders University, Adelaide.

King, M. & Wilson, K. 1998b, 'Diabetes Health Care of Aboriginal People at Nunkuwarrin Yunti', *Australian Journal of Advanced Nursing*, vol. 15(2), pp. 26–32.

Lincoln, Y. S. & Guba, E. G. 1985, *Naturalistic Inquiry,* Sage Publications, London.

McCarty, D. J., Zimmet, P., Dalton, A., Segal, L. & Welborn, T. A. 1996, *The Rise and Rise of Diabetes in Australia 1996: A Review of Statistics, Trends and Costs*, Diabetes Australia National Action Plan, Canberra.

McMurray, A. 1999, *Conceptual Models for Health Education and Promotion*, Mosby, Sydney.

McMurray, A. 2004, 'Culturally Sensitive Evidence-based Practice', *Collegian*, vol. 11(4), pp. 14–18.

National Health and Medical Research Council (NHMRC) 1991, *Guidelines on Ethical Matters in Aboriginal and Torres Strait Islander Health Research*. Available: http://www.health.gov.au/nhmrc/issues/asti.pdf [2000].

NHMRC 2003, *Values and Ethics: Guidelines for Ethical Conduct in Aboriginal and Torres Strait Islander Health Research*. Available: http://www.nhmrc.gov.au [July 2004].

Orem, D. E. 1995, *Nursing Concepts of Practice* (5th edn), Mosby, St Louis.

South Australian Aboriginal Health Partnership (SAAHP) 1997, *South Australian Aboriginal Health Regional Plans: The First Step*, Department of Human Services, Government of South Australia, Adelaide.

Spencer Gulf Rural Health School 2001, *Working with Aboriginal People in Rural and Remote South Australia: A Cultural Awareness Handbook for People Working in the Health Professions*, South Australian Centre for Rural & Remote Health, Whyalla.

Standing Committee on Aboriginal and Torres Strait Islander Health 2002, *Aboriginal and Torres Strait Islander Health Workforce National Strategic Framework* (3049), Australian Health Ministers' Advisory Council (AHMAC), Canberra.

Swansburg, R. C. & Swansburg, R. J. 2002, *Introduction to Management and Leadership for Nurse Managers* (3rd edn), Jones and Barlett Publishers, Boston.

Thomas, J. 1993, *Doing Critical Ethnography—Qualitative Research Methods: Series 26*, Sage Publications, New Delhi.

Thomson, N. 1994, 'A Review of Aboriginal Health Status', in J. Reid & P. Trompf (eds), *The Health of Aboriginal Australia*, Harcourt Brace & Company, Marrickville, NSW.

United Kingdom Prospective Diabetes Studies (UKPDS) 1998, 'Tight Blood Pressure Control and Risk of Macrovascular and Microvascular Complications in Type 2 Diabetes: UK PDS Group', *British Medical Journal,* vol. 317, pp. 703–13.

UKPDS 33 1998, 'Intensive Blood-glucose Control with Sulphonylureas or Insulin Compared with Conventional Treatment and Risk of Complications in Patients with Type 2 Diabetes', *Lancet*, vol. 352, pp. 837–53.

World Health Organization (WHO) 1978, *Declaration of Alma-Ata*. Available: http://www.ldb.org/iuhpe/jakdec.htm [22 February 2004].

WHO 1986, *Ottawa Charter for Health Promotion*. Available: http://www.who.int/hpr/NPG/docs/ottawa_charter_hp.pdf [13 July 2005].

WHO 1997, *The Jakarta Declaration on Leading Health Promotion into the 21st Century*. Available: http://www.who.int/hpr/NPH/docs/jakarta/_declaration_en.pdf [n.d.].

WHO 2003, *Diabetes*. Available: http://www.who.int/health_topics/diabetes_mellitus/enl [21 March 2004].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