Alcohol and Other Drug Education and Training for Indigenous Workers: A Literature Review

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Acknowledgements

1.   Introduction

A report by McLennan and Madden for the Australian Bureau of Statistics concluded that the health status of the Australian Indigenous population is the worst of any identifiable group in the country.[1] Misuse of alcohol and other drugs makes a significant contribution both to the major causes of excess mortality – circulatory disease, injury and poisoning, diabetes, and respiratory disease – and to morbidity.[2–5] Alcohol and other drug misuse is also a consequence of, and a contributor to, a range of social problems including dispossession, discrimination, poverty, unemployment, inadequate housing, social disruption and violence.[6–8] Unfortunately, there is no evidence of any significant decline in the levels of alcohol and tobacco use among Indigenous Australians and there is evidence that use of illicit drugs is increasing.[4] Responding to these problems is difficult because of the complex inter-relationship between substance use and the socio-economic determinants of health and well-being.

It is widely accepted that health care services based in Indigenous culture, and managed by Indigenous people, provide better health care to Indigenous people.[9] However, most health care services for Indigenous people are provided by non-Indigenous health care organisations.[9] Nevertheless, in Australia, there are over 80 Indigenous community-controlled health services – all of which provide primary health care services for people with alcohol – and/or other drug-related problems. In the 1999–2000 financial year 38 of these services and 139 other Indigenous community-controlled organisations conducted specific alcohol and other drug (AOD) intervention projects.[10]

An Australian Government Department of Health and Ageing report – based on expert consultation, narrative literature reviews, and review of epidemiological data – found that most AOD services for Indigenous people are provided by primary health care workers.[11] It found that these workers are confronted with drug use problems on a frequent basis, but often have not been provided access to sufficient training or information to enable them to respond to these problems. The report concluded that more trained, Indigenous staff are required to meet the needs of Indigenous people with AOD-related problems.[11]

The specific occupational category 'Indigenous AOD worker' is relatively new, there is no clear definition of the role, and relatively few workers are classified in this way.[11] These workers may be found in Indigenous AOD treatment agencies, Indigenous primary health care services, needle and syringe services, and mainstream health care agencies – although they are sometimes isolated from the latter.[12] Indigenous AOD workers provide a wide range of services, including counselling, education, life skills training, and peer support.[5] Over the last decade they have been confronted with new service provision roles in areas such as methadone maintenance therapy and needle and syringe programs.

Many existing staff members at specialist Indigenous AOD agencies – especially those focusing on alcohol problems – are ex-clients. The practice of employing ex-clients is common across non-Indigenous as well as Indigenous agencies of this kind. These staff usually have little or no formal training,[13, 14] and very few possess tertiary qualifications.[11] A review of the evaluations of 14 Indigenous alcohol intervention projects conducted by Gray and others concluded that the effectiveness of AOD programs could be adversely affected by factors such as levels of staff expertise and administrative inefficiencies. However, they also commented that levels of expertise, along with other factors influencing program effectiveness, such as a need for more staff support and availability of educational resources, were likely to be related to funding issues.[15]

Other reports concerning AOD education and training for Indigenous workers have arrived at similar conclusions.[12, 16, 17] These reports indicate that AOD education and training must be based on the needs of Indigenous workers. It must recognise the fact that, despite a lack of formal qualifications, many workers have extensive experience in the field. Training must also take into account the needs of new entrants to the field. However, it has been acknowledged that little work has been done on the specification of the skill-base required to address the AOD training needs of Indigenous workers.[11]

A review by Allsop and his colleagues found that in Australia, AOD training in general varies greatly in quality, nature, content and delivery,[18] and little specific provision has been made for the delivery of such training to Indigenous workers.

There are nationally accredited courses intended to meet the AOD training requirements of workers operating in community service settings, such as withdrawal services, needle exchange units, community counselling services, residential rehabilitation services, methadone services, half-way houses, self-help groups, information and education providers, and prevention services and mobile assistance patrols. These courses have been developed by Community Services Health Training Australia (part of the National Industry Training Advisory Board system). They are contained in the Community Services Training Package which has a number of relevant qualifications that can be delivered nationally as training courses by Registered Training Organisations. These qualifications include Certificates at several levels (II–IV), a Diploma and an Advanced Diploma in Community Services (Alcohol and Other Drugs). This package also contains complementary qualifications in mental health (non-clinical), aged care and social housing.

In 1995 the National Community Services and Health ITAB also developed national competency standards for Aboriginal and Torres Strait Islander health workers.[11] This National ITAB has now been contracted to develop a national training package which will review these competencies and decide upon appropriate qualification levels for the package.

No published information was identified on either the extent to which Indigenous AOD agency staff have taken up any of these AOD training options, or the number of Indigenous training providers (Registered Training Organisations) that have become registered providers of training leading to these qualifications. Furthermore, the literature review did not produce any information on the relevance or suitability of these training options for Indigenous workers. This omission is of critical importance.

The Australian Government Department of Health and Ageing has noted that there remains significant work to be done on the integration of existing AOD training programs for Indigenous workers within the national training framework, and on the possible development of a set of national competencies for Indigenous substance abuse workers.[11]

2.   Method

This literature review was undertaken as part of a larger project concerned with the development of resources to enhance the education and training of Aboriginal and Torres Strait Islander workers in the illicit drug field. This project is being undertaken by the Aboriginal Drug and Alcohol Council (SA) Inc. with funding from the Australian Government Department of Health and Ageing. The specific aims of the literature review were:

- to identify the range of factors (including cultural relevance) which may have a role in mediating the impact of education and training on work practice change;
- to critically evaluate the evidence for the relevance of each factor to work practice change;
- to identify gaps and overlaps in currently available education and training;
- to identify barriers and facilitators of education and training and its impact on work practice;
- to make recommendations for overcoming the identified barriers to education and training;
- to identify the appropriate content for the training resource; and,
- to identify mechanisms for ongoing monitoring and evaluation, including performance indicators.

In an effort to ensure that all the aims of the review were met, a wide range of information sources was reviewed, including research reports that utilised 'Cochrane methodology' to identify an evidence base for best practice in changing the work practices of health workers, to reports of focus group discussions with Indigenous alcohol and drug workers.

In line with the work of Allsop and others[18] concerning frontline workers, this review is based on the assumption that workers in many different professions, across a variety of jurisdictions, will, of necessity, undertake alcohol and other drug work. Therefore, AOD education and training should not be limited to 'health professionals' or 'AOD experts' but should be considered essential for a broad range of frontline workers.

Where relevant, throughout the review, the sources of the information being discussed are indicated. The Appendix gives more details of the search procedures used to identify sources of information.

3. Key Factors in Education and Training

In an Australian review of AOD training issues by Allsop and his colleagues, undertaken in 1998, it was repeatedly emphasised that there was an absence of quality literature in this area.[18] A major systematic review by Ludbrook and others[19] some years later (2002) considered the worldwide literature on the topic of training programs for drug professionals but identified only one review paper in the area.[12] These reviewers concluded that the education and training requirements of professional groups working with AOD issues had yet to be addressed.[19]

Despite these reviews, there is a small body of literature relating to AOD education and training for non-Indigenous workers that might have relevance for Indigenous workers. This literature includes reports on general principles of effective training, and the literature on producing behavioural change among health care professionals. The evidence relating to each of these issues will be briefly examined in the following sections.

3.1 The impact of education and training on workplace practice

In a review of Indigenous health issues and core nursing curricula, Goold and her colleagues have stated that education in itself does not necessarily lead to workplace change or improved workplace practice.[9] This observation has been the focus of work at the National Centre for Education and Training on Addiction (NCETA).[20–22] Researchers from NCETA have argued for a 'systemic approach' to education and training issues. This approach is based on the assumption that education and training should be seen as a method for attempting to change or improve workplace practice, and that the effectiveness of education and training programs should be judged in light of their impact on workplace practice and behaviour. Accordingly, they argue that policies directed at achieving workforce change need to address:

• education and training (which can modify knowledge, attitudes and skills of trainees);

- support strategies for skills and knowledge acquisition, including approaches such as mentoring and the ongoing support of workers; and

- strategies to modify workplace structure and policy, such as incentives for workers, performance monitoring strategies, issues of resource allocation and management priorities.[21]

A systematic review by Bero and others, identified both effective and ineffective strategies for changing workplace practice among health care professionals in line with improvements in treatment and care practices.[23] Strategies reported as being effective included:

- educational meetings (workshops involving discussion, practice, and skill rehearsal);

- educational outreach visits; and,

- follow-up from training (including reminders or prompts for behaviour change).[23]

Those claimed to be ineffective included:

- passive dissemination of information to health care workers;

- simple provision of educational materials (distribution of clinical practice recommendations, including clinical practice guidelines, audiovisual materials, and electronic publications); and,

- didactic educational approaches such as lectures.[23]

Notably, the most common approaches to education and training for existing health care workers were considered to be the least effective. These approaches included the publication of guidelines in journals, the passive distribution of educational materials and the provision of lectures.[23]

On the basis of their review, Bero and others also argued that multifaceted strategies (e.g. those using a number of different approaches simultaneously) were more effective than single strategies. They reported that while particular strategies – using audit and feedback techniques, and using key local practitioners as opinion leaders – have been found to have limited effectiveness overall, their effectiveness can be increased if used in conjunction with other strategies.[23] The development of new approaches to meet the AOD training needs of Indigenous workers should be informed by this evidence.

3.2   Other influences on workplace practice

Potential changes in practice resulting from education and training are often met with barriers when workers attempt to implement change in workplace settings. Thorsen and Makela, and Iles and Sutherland have argued that ensuring workplace change in health care workers involves the identification and removal of barriers to effective clinical practice.[24, 25]

Shoobridge reports that employer-level issues such as workplace dynamics, politics, historical practices and resource issues all impact upon workers' opportunities to demonstrate, practise, and retain new skills.[22] If education and training issues are considered from a systemic perspective, then the extent to which organisational practice allows skill improvements that result from training to be utilised in the workforce, and supports maintenance of training-acquired skills and knowledge, become important issues.

It would appear that effective training is of little benefit if there is no ability and/or capacity for the newly acquired knowledge and skills to be applied and sustained in the workplace.[12]

3.3   Effective AOD education and training practices

Allsop and his colleagues conducted a review of the literature and a series of interviews with key stakeholders on the educational requirements for 'front-line' AOD work. On the basis of this, they concluded that quality AOD training includes the following elements:

- experiential learning methods;
- training focused on knowledge, skills and attitudes;
- programs with clear learning objectives;
- the use of quality resources;
- flexible learning methods, which enhance access;
- training which is informed by evidence-based practice;
- training which links with accepted standards;
- training which is assessed and evaluated;
- programs that are relevant to the individual's work role;

- training which is supported by the workplace;
- the provision of post-training support, supervision and practice; and
- training which has career support.[18]

Apart from this review by Allsop and his colleagues, no other sources of information on accepted 'best' practice were identified in our literature search.

3.4   Summary: non-Indigenous literature

Several lines of evidence contribute to a general picture of effective education and training and the ways in which knowledge and skills acquired through education and training can be translated into changes in work practice. Approaches that have been identified as effective in changing work practice include practice-based educational meetings with a focus on rehearsal of work related skills; educational outreach visits; and ongoing follow-up from training programs. These factors reflect the need for practice-based training that is supported by opportunities to try out new skills and a training program that incorporates follow-up support. These factors have also been identified in the work undertaken by Allsop and others to define the key components of quality alcohol and drug training. The organisational factors that may influence transfer of knowledge into changes in work practice also emphasise the importance of on-the-job practice, support and supervision.

4. Barriers to AOD Education and Training for Indigenous Workers

A key aim of this review was to identify barriers to AOD education and training for Indigenous workers. Such barriers fall into several different domains and include structural and cultural barriers, education-sector and employer-level issues. These issues are reviewed below.

4.1 Structural issues

4.1.1 Socio-economic inequities

Indigenous people have less access to, and achieve poorer outcomes from, education and training than other Australians, for a variety of reasons.[26] The broad socio-economic disadvantage experienced by Indigenous people is clearly the most significant barrier to accessing, and participating in, education and training. In the literature reviewed, there was clear consensus on this issue.[11, 13, 17, 26–30] Indigenous poverty can reduce access to training, and economic barriers that inhibit training access are common.[11, 31] Low retention rates among Indigenous high school students after Year 10, and the educational status of Indigenous people in general, have a significant impact on the ability of Indigenous people to access later vocational education and training and tertiary education.[9, 11, 26]

In addition, the poor health status of Indigenous people and their reduced life expectancy, must also limit the opportunities available to them to undertake education and training later in life.

4.1.2 Funding for AOD education and training

As indicated previously, a review of evaluations of alcohol intervention projects by Gray, Saggers and others, found that lack of AOD training compromised the effectiveness of some interventions.[15] Similarly, an Australian Government report found that there is not a sufficient number of workers with skills that enable them to respond to alcohol and other drug problems among Indigenous Australians.[11] Moreover, Gray, Sputore and others found that limited funds were allocated to the

training and education of such workers. Of \$35.4 million expended directly on AOD interventions by Australian, state, territory and non-government agencies in the 1999–2000 financial year, less than three per cent was spent on education and training.[10]

4.1.3 Recruitment and retention of Indigenous staff

Key stakeholders at a national workshop about AOD education and training programs for Indigenous workers which was held in 1997 identified high turnover of staff within Indigenous AOD and health care agencies as a significant problem that acts to reduce the impact of training provision in the workplace.[28] This report, which was based on a combination of expert opinion and stakeholder consultation, identified several key issues affecting the retention of skilled staff. Indigenous health care work is inherently difficult and demanding, is poorly paid, and there are stakeholder reports that this contributes to difficulties in attracting young Indigenous people to the health care workforce.[11, 29] The lack of clear career pathways for Indigenous AOD workers, educators or trainers is also seen as an obstacle both to skill development and staff retention.[28, 29] Working conditions can be difficult, and in some instances poor housing for staff has also been identified as a factor contributing to the retention Indigenous health care workers.[29]

An additional issue related to the recruitment of workers into the AOD field in general is the stigma associated with AOD work. Alcohol and other drugs work is often considered to be inherently difficult, demanding and unrewarding, making recruitment of new workers problematic.

4.2 Workplace issues

Given the inherent difficulties of AOD work, workplace issues assume a greater degree of importance for this field. For example, the absence of organisational policies and structures which support education and training, or the lack of supervision for workers undertaking AOD work, may have a significant impact on the quality of services delivered and the ability of the field to recruit and retain workers.

Allsop and his colleagues found that organisational and institutional workplace issues are rarely considered in the design and evaluation of education and training programs.[18]

As discussed earlier, a systemic approach to education and training requires consideration of the workplace environment in which the new skills are to be applied. This environment can either mediate the impact of training, or inhibit access to training. Within the workplace, support and supervision of workers are key factors in supporting the transfer of knowledge and skills into work practice change. For example, research by Roche and Jordan, and by Roche, indicates that the absence of a culture of supervision and support is an obstacle to the implementation of training and the identification of training needs, and that it serves to make the upkeep and maintenance of newly acquired skills more difficult.[12, 32]

Indigenous workers have identified themselves as having a high degree of need for support and supervision[16]. However, the lack of a supervisory culture in the Indigenous AOD field has been identified as a significant problem which impacts upon education and training provision.[5, 11, 16] An Australian Government Department of Health and Ageing report – based on expert opinion and stakeholder consultation – concluded that the two main reasons for inadequate supervision were a lack of senior staff to provide supervision, and a workplace culture that does not support its provision.[11] The same report concluded that the absence of adequate supervision contributes to low staff retention rates, and makes skill development for new and existing staff difficult.[11] In addition, Pearce and Savage report that Indigenous workers often work in isolation, further reducing their access to appropriate support and supervision.[5]

4.3   Issues for education and training providers

The VET sector is the educational sector with the greatest potential to develop appropriate training standards for Indigenous AOD work as an occupational category and to offer appropriate AOD training courses for Indigenous workers.

The National Training Framework is overseen by a council of the relevant Commonwealth and state and territory training ministers. The Australian National Training Authority (ANTA) is set up to administer the training framework. At industry level, National Industry Training Advisory Boards (ITABs) provide relevant information about the training needs and the nature of work in industries to which trainers need to respond. ANTA endorses national training packages developed by the ITABs. These

packages include the competency standards for particular jobs which are put through agreed assessment processes for skill recognition, and lead to nationally recognised qualifications. The packages are periodically reviewed. A review includes a focus on addressing barriers for groups with special needs, including Indigenous Australians. The Community Services and Health Training package, developed through Community Services and Health Training Australia (the National ITAB), contains the relevant qualifications for working with alcohol and other drugs, mental health issues in the community, youth work, aged care, children's services etc.

In addition, each state and territory has a State Training Authority which administers vocational education and training within its boundaries. These agencies register training organisations and accredit any other training courses that lie outside of training packages.

However, the 1998 review by Long and others noted several significant barriers to uptake and completion of VET courses by Indigenous people.[31] These barriers included:

- a lack of community involvement in course design and content;
- a rushed course design process that did not include adequate consultation and negotiation with key stakeholders, or provided only tokenistic consultation;
- a lack of involvement of key parties;
- course content that had an undue focus on compensating for perceived Indigenous deficits such as literacy, numeracy, and work ethic instead of focusing on the creation of a supportive environment;
- lack of awareness of cross cultural issues;
- a mismatch between training course and employer expectations; and
- inflexible off-the-job training.[31]

4.3.1 Indigenous ways of learning

It has been argued that mainstream AOD training courses are not relevant for Indigenous workers because they do not reflect cultural norms and learning styles, and because they fail to address the knowledge, skills and experience of Indigenous peoples.[17, 18] Indigenous AOD agencies have also reported that the mainstream training agencies providing those courses themselves have not demonstrated an adequate understanding of these issues.[28, 33] Given this lack of understanding, it is not surprising that most AOD

training for Indigenous workers is provided in-house and on-the-job by Indigenous, rather than mainstream, agencies,[34] and so the impact of these inadequacies may be minimal. However it is not clear whether this training is accredited, and this situation does not detract from the need for mainstream training agencies to provide culturally appropriate education and training for Indigenous workers. Where appropriate, this training should provide career and educational pathways that are nationally recognised. Accordingly, there have been persistent and repeated calls for training providers to acknowledge Indigenous ways of learning and to incorporate Indigenous learning styles into their delivery modes.[33] This includes recognition that mainstream models of education and training provision are far from optimal for Indigenous people, and that different approaches to education and training are needed to ensure the best educational outcomes.

4.4 Summary: barriers to the provision of AOD education and training to Indigenous workers

Access to AOD education and training is limited by a number of factors, not least of which are the socio-economic inequities experienced by Indigenous people.

A very small percentage of funding is available for allocation by organisations to specific AOD education and training. In addition, organisational issues such as lack of support and supervision have been identified as major concerns for Indigenous workers in the AOD field. These factors may be considered as barriers to the provision of education and training and they may in turn contribute to low rates of retention of Indigenous workers as AOD specialists.

The education and training sectors that have the potential to meet the training needs of Indigenous workers are failing to do so. The low completion rates of Indigenous students are an example of this failure.

Systemic and cultural factors have been identified as significant barriers to the development and delivery of education and training courses for Indigenous people.

5.   Gaps and Overlaps in Existing Training

Given the limited funding available for education and training, and the lack of emphasis given to workplace issues such as supervision and support, it is not surprising that no evidence for overlap or oversupply in existing training provision was identified in this review. However there are reports of concerns about gaps in the available training base.

5.1   Best practice education and training

There is a recognised need for the development of best practice training programs in all areas of Indigenous health care training.[11, 29] The final draft of the National Strategic Framework for Aboriginal and Torres Strait Islander Health, prepared by the National Aboriginal and Torres Strait Islander Health Council, has identified examples of 'successful programs and promising approaches' which it considers contribute to the development of a competent health workforce.[35] Identification of programs such as these begin to build the evidence which can underpin the development of models of best practice for the education and training of Indigenous workers.

5.2   Restricted professional focus

The Australian Government Department of Health and Ageing's draft strategic framework on the Aboriginal and Torres Strait Islander Health Workforce reports that the existing provision of AOD education and training focuses on doctors and Aboriginal health workers to the detriment of other groups of Indigenous workers.[11]

5.3   Focus on rural/remote issues

The current focus in Indigenous health care is on meeting the needs of rural and remote communities. However, as most Indigenous Australians live in urban areas, the education and training of urban-based Indigenous health care workers, including AOD workers, is of equal importance.[10] This does not detract from the need to ensure adequate access to training for Indigenous people from remote locations, and of

equipping trainees to work in remote environments.[26] However, the issue of balance is crucial.

5.4   Injecting drug use

There are recent reports of increased injecting drug use among Indigenous youth, accompanied by reports that Indigenous workers often do not feel equipped to respond to injecting drug use.[4, 8] For example, some services have found themselves implementing methadone programs without staff having had any training in the area.[29] There have also been reports from stakeholders that there is a lack of Indigenous health promotion and educational material and resources that relate to injecting drug use.[4, 8]

5.5   Ongoing professional development

In focus groups conducted as part of a recent Victorian study, Indigenous AOD workers reported they were not confident that they were accessing the best possible information and training to inform and support their work. These workers recognised that quality information was important for their work and that without it their credibility was diminished.[16] These reports are consistent with reports that many stakeholders feel isolated from current medical practice and from recent research and policy developments in the AOD field.[29]

5.6   Counselling skills

Almost all AOD workers have a counselling role, yet many have no specific training in counselling skills.[29] This gap is a key issue for training programs for both new and ongoing workers. Counselling Indigenous clients is a complex task which requires a range of skills.[29] It cannot be assumed that conventional western counselling approaches apply to the Indigenous context. Clearly some degree of specific training in culturally appropriate skills for counselling Indigenous clients is required.

5.7   Summary: gaps in existing training

The review has identified the need to build an evidence base that can inform the development of 'best practice' AOD training programs for Indigenous workers. The few programs that exist may provide a starting point for the development of such an evidence base. For example, the review found that:

- AOD training needs to be available to all groups of Indigenous workers and should not restrict its focus to addressing the training needs of rural and remote workers;

- AOD training itself needs to address issues such as increasing injecting drug use among young Indigenous people and should provide the opportunity for the development of counselling skills; and,

- training support should include Indigenous health promotion materials and resources as well as access to ongoing professional development.

6. Overcoming Barriers

An aim of the review was to generate appropriate recommendations for overcoming the identified barriers to AOD education and training for Indigenous workers. The various reports reviewed have made a number of recommendations that are briefly summarised below. These recommendations are based on issues that have been discussed previously in the review.

6.1 Addressing inequity

It is clear that many of the most significant barriers to education and training stem from wider structural factors including poor health, high unemployment rates, inequality, discrimination, and economic disadvantage amongst Indigenous Australians. There is little doubt that improvements in the socio-economic status of Indigenous people would lead to improved health status and education and training outcomes. While discussion of measures to reduce social inequity is beyond the scope of this review, addressing such inequity is of fundamental importance.

The Australian National Training Authority has argued that improvements in Indigenous participation in education and training can, and will, significantly contribute to improving the current inequitable status of Indigenous Australians across a range of social indicators.[26] This argument is supported by reports which show that participation in education and training makes a significant contribution to Indigenous well-being, and that there are significant flow-on benefits to Indigenous communities and individuals.[9] However, this flow-on contribution requires provision of adequate resources.

6.2 Cultural sensitivity

The position that VET providers need to demonstrate cultural sensitivity in all aspects of service provision to Indigenous clients is broadly accepted.[28, 31, 33] The need for cultural sensitivity is also recognised in current national VET policy.[26] Representatives from

Indigenous AOD and health services agencies have recommended that Indigenous values need to be incorporated into course planning and structure.[28, 37] Recently, an extensive research project conducted by McRae and others, on 'what works' in rapidly improving Indigenous education outcomes, concluded that Indigenous culture must be respected, recognised, supported, and integrated into the process of training and education.[36] Projects that addressed these issues delivered significantly enhanced educational outcomes for Indigenous students.

It is clear that cultural sensitivity is a critical issue that must be incorporated in course planning. A review of Indigenous nursing education by Goold and her colleagues also concluded that non-Indigenous staff should be provided with education about Indigenous cultural and family matters, with the aim of increasing staff sensitivity to Indigenous issues.[9] No evaluation reports were identified on the impact of such programs on non-Indigenous staff and their responses to Indigenous students.

6.3   Self determination

Indigenous ownership and control is a critical issue in Indigenous health care provision. An Australian Government report on the Indigenous health care workforce concluded that a key issue in improving the quality of the workforce is to continue to support and advocate for the Indigenous ownership and control of the Indigenous health care system.[11] This viewpoint has obvious implications for Indigenous health care training. It has been widely argued that an essential prerequisite to the effective implementation of culturally sensitive training programs is control over course content and delivery methods by Indigenous people.[9, 31, 33, 37] Power has reported that Indigenous AOD agencies support these broad calls for increased Indigenous ownership and control over course content, planning and implementation.[28]

The National Indigenous VET policy advocates extensive collaboration with Indigenous health and AOD agencies and local Indigenous communities in curriculum design, and increased involvement of Indigenous staff in program development and delivery.[26] Support for these principles is echoed in other reports.[9, 32, 33] However, control remains in the hands of the Australian National Training Authority – a non-Indigenous body. In contrast, numerous reports from Indigenous stakeholders argue that Indigenous control,

both over health care systems and training delivery, is essential for improving Indigenous education and training.

6.4   Responding to Indigenous ways of learning

A number of distinct strategies have been advocated to promote and support Indigenous ways of learning. They include:

- an increased focus on work experience and practical learning in training programs;[17]
- flexible delivery and access;[17]
- flexible pacing of content progression;[17] and,
- Indigenous health education service providers co-ordinating placements in rural and remote communities.[9]

All of these recommendations are part of national Indigenous VET policy.[26]

Adult learning principles, which underpin VET provision, and, in particular, VET provision for Indigenous students,[26] have much in common with recommendations for accommodating Indigenous learning styles. These principles include recognition of prior experience, recognition of skills acquired outside of formal learning settings, flexibility in delivery models, self-paced learning approaches, and a focus on skill development.[18] Participants are encouraged to take responsibility for their own learning. Also of interest is the similarity between recommended responses to Indigenous ways of learning and the literature on achieving behavioural change in health care professionals discussed earlier. It has been demonstrated that one effective strategy for ensuring that work-practice change results from education and training is the use of educational meetings with a focus on participant learning, skills rehearsal and workforce-based learning.[23] These strategies are consistent with the recommended methods for accommodating Indigenous ways of learning.

6.5 Distance learning

Several reports have recommended more widespread implementation of distance learning approaches using the internet, videos, teleconferences and printed materials.[20, 12, 18, 31] However, concerns have been expressed about the utility of this approach. Existing Indigenous AOD workers have reported that e-mail and electronic information dissemination is not a realistic medium for ongoing distribution of new information and education and training.[16] The Australian National Training Authority (ANTA) has noted that, while an information technology approach has the potential to improve remote access to education and training, it is not a solution in itself and that improving Indigenous access to information technology is an obvious prerequisite for the implementation of such approaches.[26] While there are general claims that flexible modes of program delivery help overcome barriers of distance and access, no specific evaluations of effectiveness were identified.[5, 29] Finally, and perhaps most importantly, ANTA notes that for Indigenous people, remote learning may complement face to face learning, but cannot replace it.[26]

6.6 Improving support for AOD workers

Various recommendations have been made for improving the support structure and employment conditions of workers in order to improve recruitment and retention. Both Indigenous workers and the Commonwealth government have recommended improving the provision of debriefing, counselling and professional support and supervision for Indigenous AOD workers.[8, 11] It is possible that improved support and supervision would improve the retention of AOD workers and enhance the impact of education and training on work practice. However, concerns about general funding shortages in Indigenous health care agencies need to be addressed in order to provide adequate resources for appropriate levels of support and supervision. In addition, there appears to be a need to consider more closely issues concerning managerial or organisational level training that encourages development of policies and procedures that provide the support and training needed by AOD workers.

Employer groups have recommended that a national award structure for Indigenous AOD workers be developed. It is anticipated that this structure would help to reduce the number of people leaving the field and encourage greater employer investment in

education and training, as well as improving the general skill base of the workforce through the retention of skilled staff.[28]

These strategies appear to be a logical response to some of the previously identified barriers. However, no information could be identified regarding the impact of interventions based on these strategies.

6.7   Organisational issues

A brief consideration of the literature on organisational change management in the health care sector is warranted, given that the effectiveness of education and training programs can be impeded by organisational barriers. While there is an extensive literature on change management in organisations, a systematic review of this literature in regard to health care systems has concluded that this is a field remarkably lacking in either evidence of efficacy or theoretical validity.[25] Thus, while organisational structure and culture have been identified as potential barriers to the effectiveness of education and training programs (for example, in the translation of education and training into changes in work practice), there appears to be no evidence concerning the ways in which these factors can be influenced or changed.

6.8   Student support

It is widely acknowledged that the provision of effective student support is an important aspect of education and training provision for Indigenous students.[11, 28, 31] Provision of support could be considered as a partial response to many of the broader structural barriers to Indigenous participation in education and training, including issues of health, housing and economic and social inequality. A report specifically on Indigenous nursing students made a number of recommendations for improving support arrangements. These recommendations include:

- provision of academic advisory services;
- provision of personal counselling services;
- provision of remedial education programs;
- provision of child-care;
- improved financial support;

- travel allowances;
- mentoring and peer-support programs; and,
- culturally safe housing provision.[9]

Although the review could not find any evidence concerning the impact of such support arrangements on educational outcomes for Indigenous students, it would not be unreasonable to assume that the provision of these services would contribute to improved outcomes for any student.

6.9 Articulation

The issue of articulation between Indigenous AOD training programs and mainstream AOD training programs is a significant, complex and politically sensitive topic. It is intertwined with issues of Indigenous control of local health care systems, and with Australian Government moves towards national standards for Indigenous health workers. There are a number of areas where articulation has been proposed. These include links between tertiary and VET sector training, between Indigenous AOD training programs at the national level, and between Indigenous AOD training programs and their mainstream equivalents.

Tertiary-sector and VET-sector articulation, which allows students to move from VET courses into appropriate tertiary courses, has been widely recommended as a means of improving Indigenous education and training outcomes, and addressing broader issues of social inequity.[5, 9, 18] The Australian National Training Authority advocates the continued pursuit of articulation and linkages between VET and tertiary training wherever possible, and specifically in regard to Indigenous VET provision.[26]

It has also been argued that VET to tertiary articulation will become more necessary in the future due to increasing numbers of Indigenous enrolments in the VET sector.[9] There have been assertions that national articulation and cross-recognition may make the AOD field more attractive and improve worker retention.[28, 29] This call for national standards for all types of Indigenous health care workers is longstanding and widespread.[33]

An implicit requirement of articulation processes within the VET sector, particularly between Indigenous and mainstream education, is national accreditation of training programs.[28, 38] There are diverse Indigenous stakeholder opinions on the merits of

national accreditation. Some Indigenous AOD agencies have indicated support for articulation between the VET and tertiary sector, and between Indigenous and mainstream AOD VET programs.[5] However, other agencies have expressed concern about the loss of local control over course content implicit in national standards and national accreditation systems.[30] These latter concerns are linked to recommendations that training packages should to be developed on a regional basis to respond to differing role requirements for Indigenous AOD workers based on local needs. At present, this issue remains unresolved.

6.10 Training content

An aim of the review was to identify appropriate or relevant content areas for inclusion in training programs for AOD workers. The list below is a summary of topics identified by Cahill,[8] McKelvie and Cameron,[37] and Alati:[30]

- historical context of AOD issues in the Indigenous population;[37]
- holistic approach to substance use issues; to consider substance use in the historical, socio-economic, cultural and political context, as well as just the medical perspective;[12]
- general drug overviews;[8]
- myths about drug use;[8]
- an understanding of injecting drug use behaviour and its relation to risk for blood borne virus infection;[8]
- legal issues around injecting drug use;[8]
- workplace safety procedures including needle stick injury;[8]
- adaptation of mainstream AOD counselling approaches to Indigenous culture;[37]
- relapse prevention;[30]
- controlled drinking approaches;[30]
- prevention and health promotion strategies;[8]
- 'what works' in general prevention in Indigenous communities;[36]
- program assessment and evaluation techniques;[30]
- culturally appropriate methods of following up clients for treatment and evaluation purposes;[30]
- general principles of Indigenous health care including appropriate conversational and counselling styles;[8]

- avoiding value-laden terminology;[8] and,
- interactive approaches to learning.[8]

Power reported that focus groups with Indigenous AOD agencies generated the following list of agency-preferred course content areas for Aboriginal AOD workers:

- Aboriginal and Torres Strait Islander history and knowledge of local culture, using elders as a source where appropriate;
- core national AOD competencies that are agreed to by the National Aboriginal and Torres Strait Islander Council;
- major mainstream addiction models.
- AOD models developed by Aboriginal people for Aboriginal people; and
- latest research findings on Aboriginal AOD use. [28]

On the basis of these recommendations – derived largely from expert and stakeholder opinion – it is clear that developing appropriate course content for an Indigenous AOD worker program is a complex task because the skills required cover such a broad base. No more thorough research on the required skill set for Indigenous AOD work was identified and it would appear that further investigation is needed in this area to clarify the skill base for this work.

6.11 Summary: overcoming barriers

The literature on effective and evaluated means of improving Indigenous AOD education and training is limited. The central issues are:

- addressing Indigenous inequity;
- respecting Indigenous culture;
- demonstrating cultural sensitivity;
- accommodating Indigenous ways of learning; and,
- providing appropriate student support.

The issues of articulation between Indigenous AOD education and training, and mainstream education and training are linked with issues of Indigenous self-determination in health care. There are differences of opinion within the Indigenous AOD community as to the merits of national articulation and national accreditation.

The similarities between the national guidelines for Indigenous VET education, the recommended ways of teaching to accommodate different ways of learning, and the cited literature on effective methods of producing behavioural change in health care workers is of interest. McRae and others assert that accommodating Indigenous ways of learning have been shown to improve educational outcomes for Indigenous people.[36]

7. Evaluation and Ongoing Monitoring

One of the aims of this review was to identify mechanisms for ongoing monitoring and evaluation, including performance indicators. However, the literature in this area is limited because there has been little history of AOD training programs – mainstream or Indigenous – being evaluated for effectiveness.[18] Nevertheless, the available literature highlights two issues to be considered in the evaluation and monitoring of Indigenous AOD training programs:

• the need for culturally appropriate evaluation methods; and,

• identification of specific performance indicators.

In a review of the evaluation of Indigenous health and substance misuse programs, Gray and his colleagues highlight the fact that evaluation is a politically charged issue.[27] There are sometimes strong differences between the agendas of Indigenous people and those who seek to evaluate programs for them. Pearce and Savage report that Indigenous AOD services can be apprehensive about quality assurance programs due to concerns about the outcomes and impacts of such processes.[5] Indigenous involvement and/or control in determining assessment parameters is seen as essential.

Closely linked to the issue of Indigenous control is the issue of accountability. The Australian Government Department of Health and Ageing advocates that programs aiming to improve retention, education and participation in the Indigenous health care workforce should be clearly accountable with regard to achieving their objectives.[11] However, Pearce and Savage, and Gray and his colleagues, have identified concerns of Indigenous service providers about accountability requirements.[5, 27] An issue of particular concern in this area is that – as well as being financially accountable to various funding agencies – programs should be *socially* accountable to Indigenous communities.[39]

Gray and others identified several key elements in the successful evaluation of health and AOD programs for Indigenous people. These elements include:

- community involvement, which is central in ensuring that evaluation is culturally appropriate;
- ensuring that evaluation is taken into account in initial project planning, and not carried out *post hoc*;
- providing adequate funding for evaluation (something which Allsop *et al.* also identify as often being neglected[18]); and,
- use of a range of evaluation methods, including on-site visits, key informant interviews, discussion with participants and observation of programs in action.[27]

7.1   Performance indicators

The only set of performance indicators identified were the Australian National Training Authority's detailed set of 'key performance measures' for the National Indigenous VET strategy.[40] These measures were designed to evaluate the strategy's four major objectives. The objectives seek to address many of the general obstacles to Indigenous education and training access – including issues of economics, health, housing, education and broader social equity – previously identified in this review. No evaluations or assessments of the quality or appropriateness of these performance indicators, nor any indications of how they had been used, were found.

It may be possible to use these measures as a guide to the development of performance indicators for AOD education and training of Indigenous workers. However the uptake and usage of such measures assumes the existence of state and national strategies to support their implementation. The Ministerial Council on Drug Strategy's *National Drug Strategy Aboriginal and Torres Strait Islander Peoples Complementary Action Plan 2003–2006* is an important step in this direction. It would seem appropriate to develop performance indicators based on the directions for AOD education and training contained in this and other state and national strategies that have been developed in partnership with Indigenous people.

7.2   Summary: evaluation and performance indicators

The evidence available indicates that evaluation strategies should be embedded early into the program planning process, and ongoing funding must be made available to

support those strategies. Evaluation must take into consideration the cultural appropriateness of the planning process, content development and delivery, and post-training support.

The only identified performance indicators were those of the National Indigenous VET strategy. It is possible that these indicators could be successfully adapted to evaluate AOD education and training for Indigenous workers. However these indicators need to be developed with consideration for state or national strategies that can provide an overall framework for such evaluation and this must be negotiated with Indigenous stakeholders.

8.   Summary and Conclusions

This review has identified the need for information currently available about AOD education and training for Indigenous workers to be translated into informed practice. This practice would include consideration of appropriate methods for delivering education and training and ways to overcome barriers to education and training for Indigenous workers.

It is widely accepted that the most important way to reduce barriers to education and training for Indigenous people is to adopt strategies that address the socio-economic disadvantage experienced by Indigenous people. This point is acknowledged both in the reviewed literature and in current national policy on Indigenous vocational education and training.

Evaluation of attempts to address more specific barriers to AOD education and training for Indigenous workers is a critical and complicated task that has often been neglected. Although it is not possible to make conclusive statements about what does, or does not work in addressing these barriers, a number of strategies have been proposed that appear likely to help overcome them and to improve the working conditions of Indigenous workers who undertake AOD work. These recommendations should take into consideration the following:

- training should demonstrate cultural competence and respect Indigenous ways of learning;
- the important issue of self-determination in Indigenous health care provision should extend to enabling of local communities to decide on course content and training delivery methods for Indigenous AOD programs;
- training should include flexible access, which has been recommended both as a response to the rural and remote nature of much Indigenous AOD work and as a response to Indigenous ways of learning;
- there needs to be improvements in student support services – which have been recommended as a means to attract people to the field, and to improve retention in training; and

- finally, and most importantly, appropriate training content clearly needs to be determined by the relevant Indigenous stakeholders, including Indigenous AOD workers themselves.

Of particular importance when considering strategies and recommendations are the reports from Indigenous frontline workers themselves. In several of the reports cited in this review, these workers acknowledge the need for improved access to education and training opportunities, including nationally accredited training and improved supervision and organisational support. These workers recognise the necessity for any information and training to be flexible in its delivery and presentation so that it can be adapted to the needs of their communities.

9.   Recommendations

Specific recommendations relating to Indigenous AOD workers need to be put in the context of factors that influence both the uptake and outcomes of education and training of Indigenous workers in general. They include:

- the influence of socio-economic inequities such as poor housing, lack of finances, and lack of stability;
- Indigenous ownership and control of the Indigenous health care system;
- achieving a balance between the needs of workers in rural and remote areas and those of workers in urban areas, where the majority of Indigenous people live; and
- recognising that training should be made available to all groups of workers.

Five major issues emerged from the review: the development and delivery of training; the content of training; the quality of training; the importance of post-training and organisational support; and the importance of culturally appropriate evaluation methods. For each of these issues, potential barriers for Indigenous workers were identified. Below are recommendations, arising from the evidence presented in the review that may help to identify and overcome barriers in each of these areas.

9.1   The development, content and delivery of AOD training

9.1.1 Development of training

Alcohol and other drug training that is developed to meet the needs of Indigenous workers must demonstrate cultural sensitivity and respect and acknowledge Indigenous ways of learning. Training developed to meet these needs should:

- include community input into course design;
- provide for adequate negotiation and consultation with key stakeholders – eg, elders and community members;
- ensure that all parties are recognised and involved;
- emphasise a supportive learning environment – one that recognises skills and abilities;
- consider issues of cultural appropriateness;

- be relevant to employer and workplace expectations;

- articulate with VET and tertiary sector courses;

- lead to accreditation (if this is appropriate);

- be relevant to career pathways for Indigenous workers; and,

- enable the achievement of positive outcomes for clients.

9.1.2 Content of training

Further work is needed to clarify the skill base required for Indigenous AOD work. Based on the information presently available, the content of training for Indigenous workers must:

- be developed within the context of AOD issues for Indigenous people;

- have an holistic approach that accounts for the cultural, spiritual, social, emotional and physical determinants of Indigenous health and well-being;

- give an overview of Indigenous AOD issues and Indigenous AOD use;

- cover topics such as,

    · injecting drugs; blood borne viruses; legal issues relating to drug use,

    · assessment and evaluation,

    · prevention,

    · controlled drinking,

    · relapse prevention; and,

- have a focus on the development of counselling skills that build on Indigenous patterns of communication.

9.1.3 Delivery of training

The delivery of training should reflect: the evidence for 'best practice' in education and training for non-Indigenous workers; the information available about what constitutes 'quality' education and training programs; and the factors that have been identified that are of relevance to Indigenous workers.

- Education and training should encompass 'active' modes of delivery that encourage the transfer of knowledge and skills into changes in work practice. Such modes of delivery can include:

    · educational meetings;

    · educational outreach visits; and,

    · follow-up training.

- For Indigenous workers ways of learning should focus on:
  - work experience/practical learning with emphasis on skill development;
  - flexible delivery/access including self-paced learning approaches;
  - appropriate placements; and,
  - recognition of prior learning.
- To ensure quality education and training, the program should incorporate:
  - experiential learning methods;
  - a focus on knowledge, skills and attitudes;
  - clear learning objectives; and
  - quality resources.
- The program should be:
  - informed by evidence-based principles;
  - linked to acceptable standards;
  - assessed and evaluated; and
  - be relevant to the worker's role.

9.2   Post-training and organisational support

Information available concerning both Indigenous and non-Indigenous factors that can enhance education and training programs and promote the transfer of education and training into changes in work practice emphasise the importance of post-training support and support at the level of the organisation. In particular, adequate funding must be available to ensure access to AOD education and training and for the provision of post-training and organisational support.

For Indigenous students this support might include:

- academic advisory services;
- personal counselling services;
- remedial education programs;
- child care;
- financial support (including travel allowances);
- mentoring and peer support; and,
- housing.

To maintain knowledge and skills that have been acquired through education and training, and to promote their transfer into work practice, organisations need to provide workers with:

- improved supervision and improved access to supervision;
- adequate or appropriate access to mentors;
- debriefing/counselling services;
- ongoing professional development opportunities;
- access to information and resources;
- recognition for improvements in knowledge and skills, including financial recognition and career pathways; and,
- a national award structure.

It is also recommended that managers and organisations put in place training available which ensures the development and implementation of policies and procedures that support the AOD work of their employees and encourages the development of a workplace training culture.

9.3   Evaluation and performance indicators

The evaluation of Indigenous AOD programs needs to be undertaken in ways that ensure the involvement of Indigenous stakeholders (individuals, services, communities) throughout the evaluation process. Evaluation should not only consider financial accountability but also social accountability (of programs to communities).

To be successful, evaluation of Indigenous AOD programs should include:

- community involvement;
- evaluation occurring from the initial development of the programs;
- provision of adequate funding for evaluation; and,
- a range of evaluation methods.

The development of performance indicators for AOD education and training for Indigenous workers needs to be linked to appropriate state and national strategies, for example the *National Drug Strategy Aboriginal and Torres Strait Islander Peoples Complementary Action Plan 2003–2006*.[41] These performance indicators should also

reflect other relevant strategies that have been developed in consultation with Indigenous people at state and national levels.

10. Appendix: Search Procedures

A search of the electronic databases CINAHL, MEDLINE, PSYCHINFO, ERIC, and CURRENT CONTENTS was undertaken. The search terms for the electronic database searches were as follows.

1. [Training or workforce development or work practice] and [illicit or drug or addiction] and [literature review or systematic review or summary].

2. [Indigenous or Aboriginal or Maori or Native American or Inuit or Native Canadian or Indian] and [illicit or drug or addiction] and [training or workforce development or work practice] and [literature review or systematic review or summary].

3. [Barriers or problems or issues] and [Indigenous or Aboriginal or Maori or Native American or Inuit or Native Canadian or Indian] and [drug or illicit or addiction] and [literature review or systematic review or summary].

4. [Effective or best practice or recommended or quality or evaluation] and [Indigenous or Aboriginal or Maori or Native American or Inuit or Native Canadian or Indian] and [drug or illicit or alcohol or addiction] and [literature review or systematic review or summary].

5. [Harm reduction] and [Aboriginal or Indigenous or Native American or Inuit or Native Canadian or Indian].

Searches using these criteria identified a total of 364 papers. Abstracts of identified papers were manually reviewed for relevance. Any paper that addressed, directly or indirectly, any of the seven specified research topics listed in the introduction was considered 'relevant'. Of the 364 papers generated in this search, five were relevant and were obtained.

The National Drug Research Institute's *Database on Indigenous Australian Alcohol and Other Drug Use* (http://www.db.ndri.curtin.edu.au) was reviewed using different search criteria due to the structure of the database. The keywords [health professionals] and [professional development] returned 55 documents, of which 12 appeared relevant and were obtained.

The DRUGS database was also searched using different keywords due to the nature of its user interface. Each of the following keywords was used individually: [Indigenous] [Aboriginal], [training], [education], [counselling], [health worker], [professional], [addiction], [evaluation], [workforce change], [workforce development], [workforce], [workplace], and [review]. All papers containing two or more of these keywords were reviewed for relevance. This process generated nine relevant papers.

The 'grey' literature (government reports, electronic documents and unpublished documents) proved to be a fruitful source of documents. ADAC staff recommended 15 papers for consideration, of which five papers were included.

All papers obtained were reviewed for content relevant to the specified research questions, and those containing information considered relevant to the research questions have been considered, for a total of 31 cited papers. Of these:
- four were refereed journal articles (12, 13, 23, 27);
- two were books (24, 25);
- six were technical/research reports (4, 8, 16, 22, 30, 31);
- ten were review papers published by government agencies or research centres (5, 9, 18, 19, 20, 28, 29, 31, 36, 37);
- four were government program or policy descriptions (11, 26, 34, 40); and,
- five were miscellaneous items including two non-refereed journal articles and a conference paper (14, 17, 21, 33, 38).

In addition, nine other items providing background information are also included in the review. These include: a refereed journal article (15), a book (7), five technical/ research reports (1, 2, 3, 10, 39), a major review report (6) and a policy document (41).

11. References

1. McLennan W, Madden R. *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander People: 1999.* Cat. No.4704.0. Canberra: Australian Bureau of Statistics, 1999.

2. Unwin E, Thomson N, Gracey M. *The Impact of Tobacco Smoking and Alcohol Consumption on Aboriginal Mortality and Hospitalisation in Western Australia: 1983–1991.* Perth: Health Department of Western Australia, 1994.

3. Measey M-A, d'Espaignet, ET, Cunningham J. *Adult Morbidity and Mortality Due to Tobacco Smoking in the Northern Territory, 1986–1995.* Darwin: Territory Health Services, 1998.

4. Gray D, Saggers S, Atkinson D, *et al. The Harm Reduction Needs of Aboriginal People Who Inject Drugs.* Perth: National Drug Research Institute, Curtin University of Technology, 2001.

5. Pearce L, Savage J. Workforce issues for Indigenous substance use. In Roche AM, McDonald K (eds). *Systems, Settings, People: workforce Development Challenges for the Alcohol and Other Drugs Field.* Bedford Park, SA: National Centre for Education and Training on Addiction, Flinders University of South Australia, 2001.

6. Royal Commission into Aboriginal Deaths in Custody (Johnston E, Commissioner). *Royal Commission into Aboriginal Deaths in Custody: National Report*, 5 vols. Canberra: Australian Government Publishing Service, 1991.

7. Saggers S, Gray D. *Dealing With Alcohol: Indigenous Usage in Australia, New Zealand and Canada.* Melbourne: Cambridge University Press, 1998.

8. Cahill A. *Indigenous Injecting Drug Use Project: Consultation Report.* Brisbane: Indigenous Health Program, University of Queensland, 2001.

9. Goold S, Miller M, Turale S, Usher K, Still V, Hanek A. *Indigenous Health in Core Nursing Curricula and the Development of Recruitment and Retention Strategies for Indigenous Australians in Nursing Education.* Canberra: Office of Aboriginal and Torres Strait Islander Health, Department of Health and Ageing, 2002.

10. Gray D, Sputore B, Stearne A, Bourbon D, Strempel P. *Indigenous Drug and Alcohol Projects: 1999–2000.* ANCD research paper 4. Canberra: Australian National Council on Drugs, 2002.

11. Commonwealth Department of Health and Aged Care. *Aboriginal and Torres Strait Islander Health Workforce: Draft National Strategic Framework.* Canberra: Commonwealth Department of Health and Aged Care, 2001.

12. Roche AM. Alcohol and drug education and training: a review of key issues. *Drugs: Education, Prevention and Policy* 1998; 5(1): 85–89.

13. Brady M, Dawe S, Richmond R. Expanding knowledge among Aboriginal service providers on treatment options for excessive alcohol use. *Drug and Alcohol Review* 1998; 17: 69–76.

14. Wilson S. Education and training for Aboriginal substance misuse workers. In *Interaction: Lifestyle, Culture and Gender. Conference Papers, 1997 Winter School in the Sun.* Brisbane: Queensland Alcohol and Drug Foundation, 1997.

15.   Gray D, Saggers S, Sputore B, Bourbon D. What works? A review of evaluated alcohol misuse interventions among Indigenous Australians. *Addiction* 2000; 95(1): 11–22.

16.   Lindsay F. *Koori Workers: Statewide Focus Group with AOD Professionals.* Australian Drug Information Network Research and Evaluation. Melbourne: Australian Drug Foundation, 2000.

17.   Ministerial Council on Education, Employment, Training and Youth Affairs Taskforce on Indigenous Education. *Discussion Paper: Achieving Education Equality for Australia's Aboriginal and Torres Strait Islander Peoples.* Canberra: Ministerial Council on Education, Employment, Training and Youth Affairs, 2000.

18.   Allsop S, Cormack S, Addy D, Ashenden R, Ask A, Beel A. *Education and Training Programs for Front-Line Professionals Responding to Drug Problems in Australia: Summary Report.* Bedford Park, SA: National Centre for Education and Training on Addiction, Flinders University of South Australia, 1998.

19.   Ludbrook A, Godfrey C, Wyness L, Parrott S, Haw S, Napper N, Van Teijlingen E. *Effective and Cost-Effective Measures to Reduce Alcohol Misuse in Scotland: A Literature Review*. (Place of publication not stated.) Health Economics Research Unit, University of York and Health Education Board Scotland, and University of Aberdeen, 2002.

20.   Roche AM. What is this thing called workforce development? In Roche AM, McDonald K (eds). *Systems, Settings, People: workforce Development Challenges for the Alcohol and Other Drugs Field.* Bedford Park, SA: National Centre for Education and Training on Addiction, Flinders University of South Australia, 2001.

21.   National Centre for Education and Training on Addiction. *National Centre for Education and Training on Addiction: Strategic Plan.* Bedford Park, SA: National Centre for Education and Training on Addiction, Flinders University of South Australia, 2000.

22.   Shoobridge J. *Enhancing The Transfer Of Training Within Organisations: A Longitudinal Evaluation of an Organisationally Based Training Strategy*. Unpublished manuscript. Bedford Park, SA: National Centre for Education and Training on Addiction, Flinders University of South Australia, 2002.

23.   Bero A, Grilli R, Grimshaw JM, Harvey E, Oxman AD, Thomson MA. Closing the gap between research and practice: an overview of systematic reviews of interventions to promote the implementation of research findings. *British Medical Journal* 1998; 317: 465–468.

24.   Thorsen T. Makela M. *Changing Professional Practice: Theory and Practice of Clinical Guidelines Implementation.* Copenhagen: Danish Institute for Health Services Research, 1999.

25.   Iles V, Sutherland K. *Organisational Change: A Review for Health Care Managers.* London: University of London and University of Cambridge, 2001.

26.   Australian National Training Authority. *Partners in a Learning Culture: Australia's National Aboriginal and Torres Strait Islander Strategy for Vocational Education and Training.* Brisbane: Australian National Training Authority, 2000.

27.   Gray D, Saggers S, Drandich M, Wallam D, Plowright P. Evaluating government health and substance abuse programs for Indigenous peoples: a review. *Australian Journal of Public Health* 1995; 19(6): 567–571.

28. Power B. *National Review of Aboriginal and Torres Strait Islander Alcohol and Other Drugs Education/Training Programs.* Bedford Park, SA: National Centre for Education and Training on Addiction, Flinders University of South Australia, 1997.

29. Commonwealth Department of Health and Aged Care. *Review of the Commonwealth's Aboriginal and Torres Strait Islander Substance Misuse Program: Final Report.* Canberra: Commonwealth Department of Health and Aged Care, 1999.

30. Alati R. *The Role of Alcohol and Drug Rehabilitation Amongst Aboriginal People.* Melbourne: Ngwala Willumbong Co-operative Ltd, 1996.

31. Long M, Frigo T, Batten M. *The School to Work Transition of Indigenous Australians: A Review of the Literature and Statistical Analysis.* Canberra: Commonwealth Department of Employment, Education, Training and Youth Affairs, 1998.

32. Roche A, Jordan DM. *Alcohol and Drug Education and Training in Queensland: A Review.* Brisbane: Queensland Alcohol and Drug Research and Education Centre, University of Queensland, 1996.

33. Williams S. The Indigenous Australian health worker: can research enhance their development as health and community development professionals? *Aboriginal and Islander Health Worker Journal* 2001; 25 (1): 9–15.

34. Office for Aboriginal and Torres Strait Islander Health. *Substance Misuse Service Report: 1999–2000 Key Results.* Canberra: Commonwealth Department of Health and Ageing, 2001.

35. *National Strategic Framework for Aboriginal and Torres Strait Islander Health.* NATSIHC, Canberra, 2002.

36. McRae D, Ainsworth G, Cumming J, *et al. What Works: Explorations in Improving Outcomes for Indigenous Students.* Canberra: Australian Curriculum Studies Association, 2000.

37. McKelvie G, Cameron J. Alcohol and substance misuse amongst Indigenous Australians. In Dudgeon P, Garvey D, Pickett H (eds). *Working with Indigenous Australians: A Handbook for Psychologists.* Perth: Gunada Press, 2001.

38. Roberts J. The National Health Worker Training Review. *Aboriginal and Islander Health Worker Journal* 1999; 23(6): 17–18.

39. O'Donoghue L. *Aboriginal Health: An ATSIC Perspective.* Research Section Occasional Paper No 1/1995. Canberra: Australian Institute of Aboriginal and Torres Strait Islander Studies, 1995.

40. Australian National Training Authority. *Australian Quality Training Framework: Transition Guide for Registered Training Organisations.* Melbourne: Australian National Training Authority, 2001.

41. Ministerial Council on Drug Strategy. *National Drug Strategy Aboriginal and Torres Strait Islander Peoples Complementary Action Plan 2003–2006.* Canberra: National Drug Strategy Unit, Commonwealth Department of Health and Ageing, 2003.