Multidisciplinary care in the management of substance misuse and mental health problems in Indigenous settings

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Abstract

Objective: This paper reviews published reports relevant to answering the question: Is multidisciplinary care coordination effective in the management of comorbid substance abuse and mental health problems in Indigenous Australian populatitons.

Method: Published materials were identified through a search of electronic databases.

Findings: There ia a paucity of information in this area. However there is support for the use of particular treatment approaches in non–Indigenous populations (pharmacotherapy and focused psychological therapies) and for multidisciplinary, integrated care. A range of service factors supporting the effectiveness of such approaches are identified, as are particular contextual challenges relevant to Indigenous populations.

Conclusion:

Pharmacotherapy in conjunction with cognitive behavioural therapy within a multidisciplinary, integrated care context is effective. However, there is a need for long–term studies to assess sustainability and to assess the effectiveness of this approach in Indigenous populations.

Key words

Drug and alcohol dependence, comorbidity, coordinated care, integrated care, pharmacotherapy, cognitive behavioural thereapy, Aboriginal, Indigenous.

Introduction

Aboriginal and Torres Strait Islander Australians suffer a disproportionate burden of premature mortality not only by comparison to non–Indigenous Australians, but also by comparison to indigenous peoples in other 'Anglo-settler societies' – New Zealand, Canada and the United States. [1, 2] There is also a much broader burden of ill health, with data from the Northern Territory indicating an Indigenous burden of disease some 2.5 times that of non–Indigenous Territorians, in the 35–54 year-age group being 4.1 times higher. [3] Furthermore, 37% of Indigenous Australians over 15 years of age have a disability or chronic health problem. [4]

The data for Indigenous mental health is more uncertain. However, data collected by the AIHW for 1998–99 reveals that Indigenous males and females are hospitalised for 'mental and behavioural disorders' at 2.0 and 1.5 times the rate, respectively, of their non–Indigenous peers, with the Indigenous: non–Indigenous rate ratios for males and females

for mental disorders due to psychoactive substances being 4.1 and 3.5, and for psychotic disorders 1.8 and 2.0. For 2002–03 to 03–04 not only were admissions for mental disorders twice as high as for the non–Indigenous population, so too were admissions for accidents and injuries with young adult women being particularly vulnerable. [4]

The misuse of alcohol is recognised as a contributor to the excess of both physical and mental health disorders, and comorbidity is common which, in the wider population, regardless of primacy, leads to poorer outcomes. [5, 6] There are no comparable studies of Indigenous Australian populations, but it is likely that co–morbidity is more common and similarly contributes to poor prognosis. Alcohol also contributes to 'risk amplification' through its broader social impact and, particularly, on the neurodevelopmental environment. [7, 8]

There is, then, general consensus that alcohol misuse is a major problem in Indigenous Australia. By contrast, there is no consensus on how to overcome that problem. While contentious, the position of Noel Pearson in relation to Indigenous substance use is gaining increasing political currency – that a precondition for resolving the broad social ills of Aboriginal Australia is the need to successfully address the ravages of alcohol misuse by abstinence. [9–12] Regardless, the alcohol treatment field in Aboriginal Australia remains a broad church, reflecting the paradox that while Indigenous people are less likely to drink than non–Indigenous people, those who do are more likely to drink at harmful levels. [13, 14] Unfortunately, as a review across urban, rural and remote settings in north Queensland in the late 1990s demonstrated, coordination across primary care and alcohol treatment services was poor with little specific attention to comorbidity or use of targeted treatments and therapies.[15]

Despite numerous approaches, the evidence base for effective substance misuse interventions with Indigenous populations is scant. This paper overviews published information drawn, largely, from research and work in non–Indigenous populations which may be relevant given the particular circumstances of Aboriginal and Torres Strait Islander Australians. It focuses on multidisciplinary case management (and component elements) relevant to rural and remote Indigenous settings.

Method

The literature search involved accessing seven electronic databases: Medline (1996 to present), Ovid, Cochrane Collaboration, Embase, PschInfo, Cinahl, and Informit. In addition web library catalogues, internet search engines and internet sites were accessed.

Given the paucity of literature relating specifically to Indigenous health and alcohol and substance use, search terms were varied, and depended on the particular database. The search needed to be expanded to alcohol and drug problems due to the limited returns relating to alcohol only. Furthermore, during the search it became clear that 'multidisciplinary care' elicited a range of other terms that appear to be used synonymously. These include integrated care, collaborative practice, integrated interventions and case management. For the purposes of this review multidisciplinary care and integrated care are used interchangeably except where 'integrated' was limited to discussion of spatial collocation. The papers discovered came from both Australia and overseas, with very little specific to remote Indigenous community settings.

Findings

The initial searches on multidisciplinary care and integrated care provided limited results but identified a range of critical constituent elements which were in turn searched. The review findings are presented accordingly.

Multidisciplinary case management

In a review of the effectiveness of integrated interventions Smith and Clarke [16] list the determinants of successful inter-professional collaborations as systemic (social, cultural, professional and educational); organizational (structure, philosophy, support, resources and communication); and interactional (willingness, trust, communication skills and processes, and mutual trust). Consequently, in some organizations, major reform at a number of levels is required for successful implementation of integrated care. Smith and Clarke also make the point that the literature is conflicting but provides evidence of modest benefit. In their paper examining models of integrated care, Wulsin and colleagues [17] list five critical components for improving outcomes in the integrated care of patients who have medical–psychiatric comorbidity: readily available psychiatric assessment in the primary care setting; active primary care screening to identify high–risk patients who have psychiatric illnesses/disorders; ability to apply pharmacotherapeutic and psychosocial interventions that have proven effectiveness through well designed studies; coordination and integration of medical and psychiatric care among clinicians, and; case management for patients with chronic or complex illnesses. These authors add that a critical issue is the provision of support for practitioners and treatment teams.

Due to complexities of care, clients engaged in contemporary health systems are increasingly seen by an array of service providers. This has led to an increase in

multidisciplinary case managed interventions. While this has aimed to more comprehensively addressing client needs, it has also been suggested that it can add to fragmentation of care. [18] This issue is particularly salient among alcohol and drug using populations where multiple problems are the norm. In a randomised clinical trial of elderly (non–Indigenous) clients, Oslin [19] compared integrated care with enhanced specialty referral and concluded that the results were comparable though not improved.

A number of papers note that a barrier to service engagement for substance using populations is stigma, compounded by the prevalence of comorbid mental health problems. In a randomized trial, Willenbring [20] found that integrated outpatient treatment significantly increased engagement and abstinence for a modest cost, but acknowledged the need for further refinement and testing of the approach. In an uncontrolled descriptive pilot study addressing improved treatment of depression in primary care, Symons et al. [21] concluded that while patient access may have been enhanced the model was not cost effective, but that adaptation to the particular needs of practices was possible.

Cohen et al. [22] performed a content analysis on 17 interventions that aimed to enhance adherence to healthy behaviours in the primary care setting and concluded that more versatile, multi–faceted solutions involving new innovative approaches including multidisciplinary teams are needed in order to integrate health behaviour change into everyday primary care routines.

Critical components of an integrated case management approach included a substantial proportion which focused on nursing roles. Within a case management model, several articles pointed to the critical role of a primary case manager to provide leadership, coordinate care and ensure effective communication to avoid service duplication. [23] In a descriptive study, Solheim et al. [24] report that teamwork (across disciplines and including community representatives) is a viable approach to improving health outcomes. Furthermore, primary health care values, principles, and elements, such as making health care accessible, reaching all members of a population and focusing health promotion and disease prevention are often embedded in teamwork. In a qualitative study of multidisciplinary team functioning, Colombo and colleagues note the importance of establishing a common identity (or vision) that transcends the ideological differences among disciplines and service models. [25]

With the ultimate goal of comprehensively addressing a complex range of needs, whether this is through a team with a range of skills, or by ‘multi-skilling’ practitioners has been considered. For instance, in relation to working with the elderly, Shield and colleagues

note that many multidisciplinary teams have workers who are multi-skilled across a range of disciplines and activities, and note that such 'inter-professional practitioners' both address a stated client/carer need, and also allow for more efficient and effective use of existing specialist resources. [26] Regardless of whether teams are made up of discretely or multiskilled practitioners, training is critical. In an evaluation of clinical and social care coordination in a community alcohol and drug service McLellan [27] reported that this approach improved outcomes for substance abuse patients in community treatment programs, noting the importance of training to foster collaboration.

As the published material relates mainly to trials and pilot projects, and since there is little in the way of long term studies, sustainability is poorly explored. However, in a review of 48 articles focusing on the effects of different models of case management with clients using substances and/or with mental health problems, Vanderplasschen and colleagues [28] found that while use of inpatient services decreased and community–based services increased, the outcomes concerning drug use and psychosocial functioning were less consistent. He concluded that further research is required to learn more about the sustainability of the outcomes. Siegal and colleagues [29] performed a study of 453 veterans with criminality, finding that case management resulted in longer engagement in aftercare services, and that this was significantly associated with employment and 'readiness for treatment'. This is supported by another study by Siegal et al [30] which demonstrated the value of case management in terms of improved functioning in other life areas.

In a paper on HIV infected drug users, Bruce and Altice [31] refer to the importance of establishing multidisciplinary teams to meet this population's complex needs. In considering barriers and incentives to HIV treatment in a small Indigenous community in Western Australia, Newman and colleagues [32] found Aboriginal people to be more open to treatments made available through broad–based health services, which provide greater opportunity for trusting relationships with Aboriginal clients and their families. In exploring engagement of allied health practitioners with Indigenous and non–Indigenous clients in north Queensland, the lack of access to services was noted and the critical role of a professional partnership between the allied health practitioners and Indigenous Health Workers in the development of culturally appropriate strategies and more effective services. [33] For those requiring health service intervention, Nehls (writing on non–Indigenous populations) [34] asserts that the team and process should be a partnership that is client focused. Such a team may include staff who can assist with housing, employment, and individual and family counselling.

Drug and alcohol misuse, social support and recovery

Recovery is described by Nehls [34] as a deeply personal, unique process of changing one's attitudes, values, feelings, goals, skills, and/or roles. Empowerment is used at both individual and group levels and has received significant attention in the national [35] and international literature. [36, 37] There is also a nascent but growing literature on empowerment in Indigenous populations. [38–40] However, there is little in relation to either recovery or empowerment in terms of Indigenous substance use disorders although Brady [41] has written extensively of self directed recovery stories of Indigenous people across Australia. In this context, Indigenous ex–drinkers often recalled a significant health professional who treated them in a non–judgmental manner whilst discussing the adverse lifestyle effects of alcohol.

While social capital has been suggested as a key factor, the underlying determinants of natural remission remain unclear with Bischof and colleagues concluding from a cluster analytic study that this reflects interactions of a variety of variables including social support. [42] Social support is an integral feature of holistic care which is foregrounded in the recently released *Alcohol treatment guidelines for Indigenous Australians* as incorporating integrated attention to general health, mental health and social issues, such as housing, financial management, transport or child care. [14]

The wider literature supports social support as an integral factor in drug and alcohol recovery. In a controlled quasi–experimental study of standard addiction rehabilitation versus social service supplemented treatment programs, McLellan [43] demonstrated less substance use, fewer physical and mental health problems, as well as improved social functioning at six months. However, McLellan cautioned extrapolation to 'real world' systems. Sarrazin, [44] in a randomised clinical trial using a longitudinal design, found that case management positively impacted overall client perceptions of social support, however the effectiveness of case management in improving social support appeared to be limited to clients who were married or had 'significant' partners. Of course, heavy alcohol use is well known to be associated with increased relationship conflicts and family violence, including in Indigenous settings. [45, 46] Despite much attention in the public arena, there is a marked paucity of evidence on which to draw when seeking best practice outcomes in such family environments. However, a recent ANCD document [47] on drug use in the family suggests that Indigenous family–based interventions should address the multi–systemic problems that exist in Indigenous settings thus acknowledging the contextual factors that impact profoundly on Indigenous families.

The treatment needs for those who have comorbidities presents an additionally complex environment for providers of health interventions. The life experiences of people with

drug and alcohol problems often compound the difficulty of providing effective and coordinated care. For instance, this includes higher levels of contact with the criminal justice system, serious health problems and exposure to traumatic events, in relation to which Tate et al [48] postulate that given the frequency of trauma experiences among those with substance dependence, treatment programs may show greater benefit through systematic attention to addressing the mental health consequences of trauma.

Integrating treatment approaches

In terms of combining treatment modalities to support social interventions, the best published evidence is for pharmacotherapies and focused psychological therapies, particularly cognitive behavioural therapy (CBT). Carmen et al [49] concluded in their meta–analysis of published randomised and controlled clinical trials assessing acamprosate or naltrexone therapy in alcohol dependence that both acamprosate and naltrexone are affective as adjuvant therapies for alcohol dependence in adults. In a randomized controlled trial Anton et al found that patients receiving medical management with naltrexone, CBT, or both fared better on drinking outcomes, with acamprosate showing no evidence of efficacy with or without the cognitive behavioural interventions. [50] The authors found this result surprising given the efficacy of acamprosate in other trials. In a study of adherence to medication treatment with alcohol dependent patients, Feeney et al [51] combined naltrexone 50mg orally daily in a twelve week rehabilitation program, with CBT, finding high levels of anti–craving medication compliance, good rehabilitation programme participation and favourable outcomes. Anton et al [52] provide further support for the combination of naltrexone and CBT in their double–blind, randomised clinical trial where alcohol consumption, craving, adverse events and urinary riboflavin levels were assessed weekly, concluding that motivated individuals with moderate alcohol dependence can be treated with greater effectiveness when naltrexone is used in conjunction with weekly outpatient CBT

It is widely accepted that CBT is one of the most effective treatment interventions for both alcohol dependent and non dependent clients along with a range of other psychological therapies including family therapy. [52–64] It is also accepted that neuroadapative changes occur in the brains of alcohol dependent people and that this means that controlled drinking programs are unlikely to be effective – abstinence is the preferred goal for these clients. [63, 64]

It is also widely accepted that the co–occurrence of mental health symptoms and alcohol and other drug problems is becoming the norm in treatment settings. In his 2004 meta–analysis, Hesse [65] concluded that medication and psychotherapy may both be useful in

the treatment of substance–dependent depressed patients, but that there is no evidence that antidepressants are efficacious in reducing drug use even withy additional psychosocial treatments. This is supported by Baigent [66] who found that high intensity services were more effective than less intensive interventions, that mental health comorbidity cannot be ignored, but that treatment of depressive disorders alone will NOT help the alcohol use problems. He also asserts that rather than adopting treatments from successful treatment strategies for singular disorders, new pharmacological and psychological treatments need to be generated specifically for the comorbid patient.

Contextual Factors

The impact of alcohol misuse and disorders of mental health in Indigenous populations reflects the social context in which Aboriginal and Torres Strait Islanders live – which also informs the nature and likely effectiveness of interventions. This is not just a matter of 'disadvantage' but also of perpetuating historical, social and political factors. [67, 68] It is also not universal. Thus, data on a range of adverse social indicators for Queensland demonstrates not only that, for most of these indicators, Torres Strait Islanders are closer to non–Indigenous than to Aboriginal Queenslanders, but also that for Aboriginal populations negative outcomes generally increase with increasing remoteness. However, the highest rates of negative outcomes are found in ex–DOGIT (Deed of Grant in Trust) discrete Aboriginal communities [69] with histories of mission and government reserve controls, that Peggy Brock and, more recently, Noel Pearson, have called 'outback ghettos'. [11, 70]

Such communities are at risk not only as a consequence of remoteness and its vicissitudes (though not all are remote) but also as a consequence of their particular histories and circumstances. Nationally, access to effective services is limited – according to the 1999 Community Housing and Infrastructure Needs Survey 30–50% of residents of discrete Indigenous communities have no access to allied health or mental health care workers. [71] Access to Indigenous health professionals is even more restricted and particularly so at higher professional levels – a 'pear shaped' distribution weighted towards service roles with least training and responsibility. While there is increasing attention to developing the Indigenous health workforce, because of basic educational disadvantage this has not, as yet, resulted in significant gains, with students from remote areas faring worst. [72] As a result, the lived realities of Indigenous residents of remote Australia are hard, summarized by certain commentators as 'hardship, sufferance and invisibility', [73] the last referring both to high levels of unrecognised and untreated illness, and to the lack of understanding of the difficulties Indigenous people experience in accessing help.

Developing effective services, then, demands attention to the general (social disadvantage, service limitations …) and unique features (remoteness, history and circumstances such as statutory and government 'partnership' arrangements) of the populations targeted. Clearly, these factors constrain the range and nature of interventions feasible. In relation to multidisciplinary case management of substance use and mental health problems in Indigenous settings these considerations present major challenges. This is not just the obvious in terms of the range of services available to provide the 'multi' in multidisciplinary care, particularly in remote settings. This also involves significant service constraints critical for quality of care and service sustainability including staff retention, supervision, information systems and infrastructure. However, there are also factors that may be given little consideration in metropolitan, non–Indigenous populations that are relevant to program effectiveness in Indigenous settings and which can be considered on three levels: individual, family and community.

At the individual level this includes the lack of basic life skills associated with failed education experiences, childhood environments of normative instability (in some settings including exposure to high levels of violence) and limited or no opportunity to engage in meaningful work activities. As a consequence this not only results in a foreshortening of perceptions of personal agency and opportunity, but of being able to conceptualise change for better or, for those with substance abuse and mental health problems, the possibility of recovery.

At a family level, overcrowding demands sharing of scarce resources and creates excessive demands on existing carers. The cumulative impact of multi-problem families are salient. At the community level widespread unemployment, paucity of healthy recreational opportunities, the normalizing of substance misuse and deviant behaviour among particular subgroups, and the fatalism of service providers in the face of seemingly overwhelming demands all have implications for program effectiveness.

Thus, while particular interventions may demonstrate gains under controlled conditions, they are unlikely to be effective in the real world of Indigenous substance misusing populations in the absence of systematic attention to social needs.

Conclusion

This review had demonstrated the paucity of published literature relevant to Indigenous populations and therein emphasizes the importance of thorough evaluation and documentation of current and future interventions to expand the evidence base. From the experience in non–Indigenous settings there is support for the effectiveness of particular

pharmacotherapies and psychological therapies for both dependent and non–dependent problem drinkers. Further, it appears clear that the goal for dependent drinkers should be abstinence. While it is clear that there is NOT a consensus, at present, that multidisciplinary care provides benefits over 'usual' case management, the published reports tend to support that position. This material also raises a number of factors that appear to be integral to program effectiveness. These include staff with appropriate training and expertise, ensuring a common vision and clear structure with defined leadership, effective communication both within the program and with other key sectors and stakeholders, attention to wider client needs, and inclusion of the client in treatment planning. Among non–program factors supporting success, supportive social networks stand out. The sole article involving an Indigenous program supports findings from other areas of the importance of the Indigenous workforce.

Given that there is not consensus regarding the effectiveness of these approaches (albeit support for that contention) and taking into account the important contextual factors in Indigenous settings it may be reasonably concluded that multidisciplinary case management cannot be assumed to be more effective than standard care. However, it also suggests that for this approach to possibly provide benefits will require attention to program factors (structure, training and support, leadership and communication) and to the addressing social context factors that undermine positive social networks and support.

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