Title: The Grog Mob: lessons from an evaluation of a multi-disciplinary alcohol intervention for Aboriginal clients

Dr Peter d'Abbs, BA (Hons.), MA, PhD (1)
Samantha Togni, BA (Hons), MA (2)
Clive Rosewarne, BA, Grad. Dip. (Education) (3)
Dr John Boffa, MBBS (Hon), MPH (4),

(1) Menzies School of Health Research, Darwin

(2) Baker IDI Heart & Diabetes Institute, Central Australia, Alice Springs; Samantha.togni@bigpond.com

(3) Research Consultant, Alice Springs; chrisandclive@bigpond.com

(4) Central Australian Aboriginal Congress, Alice Springs; John.boffa@caac.org.au

Corresponding author:
Peter d'Abbs
Menzies School of Health Research, PO Box 10639, Brisbane Adelaide Street, QLD, 4000, Australia
Peter.d'abbs@menzies.edu.au
Ph: 61 (0)7 3309 3429; Fax: 61 (0) 7 3832 0030

Abstract

Objectives
To evaluate a 12-month trial of an evidence-based non-residential treatment program for Indigenous clients with alcohol problems, offering three streams of care: pharmacotherapy, psychological, and social support.

Methods
Process evaluation of program implementation; outcome evaluation of client outcomes.

Results
Implementation: despite constraints of time and remoteness, the trial demonstrated the feasibility of implementing such a program. The medical stream generated fewer pharmacotherapy prescriptions than expected. The most active stream was the psychological therapy stream.

Outcomes: between March 2008 and April 2009, 129 clients were referred to the program, of whom 49 consented to have de-identified data used for the evaluation. Of these, 19 clients received one or more streams of care, 15 of whom (78.9%) subsequently stopped or reduced drinking. However, among the remaining 30 consenting clients who had not received an intervention, 70.0% also reported stopping or reducing drinking. The evidence of program effectiveness is therefore equivocal and evaluation over a longer period is required.

Conclusion & implications
The trial demonstrated the viability of, and demand for, evidence-based non-residential treatment for Indigenous clients with alcohol problems. Reasons behind an apparent reluctance among GPs to prescribe pharmacotherapy for Indigenous clients, and steps to overcome this, need further attention.

Keywords: Program evaluation; Indigenous health services; Evidence-based practice; Alcohol abuse; ambulatory care

Introduction

The town of Alice Springs in the Northern Territory of Australia (Estimated Resident Population in 2011: 27, 589 [1]) has long been a focal point for concern over high levels of alcohol-related harm and of innovative, locally-driven attempts to prevent and reduce those harms, especially among Indigenous Australians (e.g. [2-5]). The Northern Territory itself consistently records per capita consumption of alcohol levels around 50% above the Australian national average [6]; central Australia, of which Alice Springs is the service centre, exhibits higher levels of consumption than the NT as a whole [7]. Between 2000 and 2004, the number of alcohol-attributable deaths among Indigenous people in the former ATSIC region of 'NT Central' was estimated at 14.4 per 10,000 Indigenous residents, higher than any other region in Australia and more than three times the national rate of 4.17 deaths per 10,000 Indigenous residents [8].

To date, many local initiatives have focused on reducing supply of alcohol. During the 1980s, for example, central Australian Aboriginal organizations such as the Ngaanyatjarra Pitjantjatjara Yankunytjatjara Women's Council (NPY) and the Pitjantjatjara Council campaigned for restrictions on alcohol sales from roadhouses [9, 10]. In 1991 the Central Australian Aboriginal Congress (CAAC), an Aboriginal community-controlled health service providing comprehensive primary care in Alice Springs and surrounding communities, purchased a take-away liquor licence attached to an Alice Springs licensed corner store, publicly tipped the alcohol out and let the licence – valued at $150,000 - lapse, as part of a campaign to reduce take-away alcohol supply. In March 1993, around 50 women from Hermannsburg community, west of Alice Springs, picketed the NT Liquor Commission, demanding an end to exploitation of Aboriginal drinkers by 'grog shops' [11]. In the following month some 300 women from sixteen communities marched through Alice Springs in protest against alcohol abuse by their own menfolk and to demand the closure of take-away outlets [11, 12]. More recently, the Alice Springs-based People's Alcohol Action Coalition has successfully lobbied for restrictions on take-away trading hours, and the removal from sale of cask wines [2, 13] and for other measures, such as a minimum floor price on alcoholic beverages.

In 2007 CAAC received funding from the National Drug Research Institute (NDRI) to conduct a 12-month trial of an innovative, non-residential alcohol treatment program. The project grew out of CAAC's desire to complement supply-reduction initiatives with evidence-based primary health care-based treatment, and was one of five projects funded

under an NDRI program aimed at enhancing the management of alcohol-related problems among Indigenous Australians by trialling interventions that were known to be effective in other populations, but that had yet to be taken up among Indigenous population.

In this paper we report on an independent evaluation of Grog Mob (GM), as the program came to be known.

Methods

The project grant, recognizing the dearth of rigorous evaluations of programs in the Indigenous alcohol and other drugs domain[14], required an independent evaluation. Two of us (PdA and ST) designed and carried out a process and outcome evaluation between June and November 2009 [15].

The evaluation aimed to assess the degree to which the project had met its objectives, document the processes involved in implementation (including barriers encountered and steps taken to deal with these), and gauge the impact of the project on client outcomes. The conceptual framework and evaluation design focused on three domains:

- A descriptive account of the implementation of the project, identifying key processes and events, barriers encountered, strategies adopted in response to these barriers, and contextual factors that influenced implementation processes and outcomes. This part of the evaluation focused on the organizational level, rather than client level.
- A descriptive account of client trajectories into and through the program, including sources of referral, presenting problems, assessment outcomes, case management plans, and clients' engagement with the program.
- An assessment of client outcomes – as indicated by self-reported drinking behaviour following participation in program, and self-reported experiences with the program.

Both qualitative and quantitative data were utilised, the former by in-depth interviews with program staff and other stakeholders. CAAC provided the evaluators with a list of 38 stakeholders, comprising 23 current and former CAAC staff members, and 15 representatives of external organizations that either referred clients to the program or worked with clients engaged by the program. All but one of the CAAC staff members agreed to be interviewed, as did 10 external stakeholders, making 32 interviews in all. (The remaining 5 external stakeholders were either unavailable for interview or declined on the grounds of insufficient involvement in the program.). Quantitative data comprised client contact and outcome data collected by GM staff or by CAAC, and covered a period from March 2008,

when GM staff commenced work, to 7 April 2009, the cut-off data for quantitative evaluation data-collection. During this period 129 clients were referred to the GM program, 49 of whom consented to their de-identified data being utilized for the evaluation. CAAC also made available documents relating to the GM program.

Quantitative data was analysed using SPSS Version 17 and qualitative data was analysed by using 'framework analysis' as developed by Ritchie and Spencer for applied policy research[16]. Ethics approval was obtained from the Central Australian Human Research Ethics Committee.

Program theory and evidence base

Prior to the program commencing, a review was conducted of evidence relating to multi-disciplinary care coordination in the management of comorbid substance abuse and mental health problems in Indigenous primary health care settings [17]. The review noted a paucity of published literature relating to Indigenous populations, either in Australia or internationally. At the same time, among non-Indigenous populations it found evidence of the importance of social support as an integral factor in alcohol and other drug recovery (eg [18], and of the benefits of combining treatment modalities with social support interventions, with the strongest evidence for pharmacotherapies and psychological therapies, particularly cognitive behavioural therapy (CBT). For example, a meta-analysis by Bouza et al [19] of randomised and controlled clinical trials assessing a

Acamprosate and Naltrexone therapy for alcohol dependence concluded that both were affective as adjuvant therapies for alcohol dependence in adults. Anton et al conducted a double-blind, randomized clinical trial (RCT) in which 131 recently abstinent alcohol-dependent outpatients were treated with 12 weekly sessions of CBT and either 50 mg/day of Naltrexone or a placebo [20]. They found that Naltrexone treated subjects drank less, took longer to relapse, had more time between relapses, and showed more control over alcohol-related urges than the placebo group. In a subsequent RCT participants were assigned to one of eight groups receiving combinations of medical management with Naltrexone and/or Acamprosate, or placebos, with or without a combined behavioural intervention (CBI), with a ninth group receiving CBI only [21]. Patients receiving Naltrexone, CBI, or both reported better outcomes as measured by per cent days abstinent form alcohol and time to first heavy drinking day. No combination yielded better results than Naltrexone or CBI alone, in the presence of medical management. Acamprosate showed no evidence of efficacy, with or without CBI. Feeney et al 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 [22].

These findings provided an evidence base for a primary treatment program designed to generate multi-disciplinary, self management rehabilitation care plans and case management to improve alcohol treatment for Aboriginal people in Alice Springs [23]. In line with a perspective on drug addiction that saw it as having biological, behavioural and social dimensions [24], the program included three streams of care in its service model: a medical stream, to involve an assessment of whether the client would benefit from pharmacotherapies such as Naltrexone; a psychological therapy stream that was to include CBT as well as other therapies such as goal-setting, motivational interviewing and problem solving skills with individuals and families, and a social and cultural support stream that was to include working with supported employment and accommodation services, assisting Aboriginal people to explore their cultural roots and issues of Aboriginal identity while in treatment, and provide support to clients to resolve interpersonal and other conflicts. Under the program design, the medical stream would be provided by general practitioners , psychological therapies by a qualified psychologist or social worker (referred to in this report as the Alcohol and Other Drugs (AOD) therapist - over an eight week period of weekly sessions, and the social and cultural support stream by an Aboriginal Liaison Officer (ALO) who was a local language speaker.

Implementing the program

Between commencement of the GM program in March 2008 and June 2009, the program underwent three distinct phases. The first was a 'setting up' phase that commenced with the recruitment of GM program staff, and ended four months later with the resignation of the first AOD therapist. This was followed by an interim period of four months during which the program was, in effect, semi-dormant, due mainly to delays in recruiting to the AOD therapist position. The third phase, which began with recruitment of a new AOD therapist in November 2008 and continued through to the time of the evaluation and beyond, was marked by a re-establishment and strengthening of the program's operation.

The setting-up phase commenced with recruitment of the two project staff positions – ALO and AOD therapist – late in 2007. As is not uncommon in Alice Springs, finding suitably qualified and experienced applicants proved difficult, and it was not until March 2008 - three months into the 12 month project timeframe - that the positions were filled. Although the appointed AOD therapist was a qualified social worker with knowledge and experience of

using CBT, he had no experience in project establishment and management, and neither the therapist nor the ALO had any experience in research projects.

Initially it was envisaged that the steering committee would train and mentor project staff in data collection and entry, but in reality this support was very limited. Data collection responsibility was shared between the therapist and the ALO, in addition to the latter's community/client liaison responsibilities. Most data were collected in real time during consultations with clients through Communicare, the patients information and recall system used by CAAC. Additional data collection was undertaken by the ALO, who was subsequently reported to have struggled with data collection and collation during this initial period.

During the setting up phase, management of the program was transferred from the CAAC Directorate, which had developed the initial program design and obtained funds, to the Social and Emotional Wellbeing Branch (SEWB) of CAAC. By this time, a number of issues relevant to implementing the program had already arisen. Firstly, although the program was intended to provide a service for clients, it had also been conceptualised and funded as a *research* project, one moreover operating within a very tight 12-month timeframe. As a result, tensions periodically emerged between the need to adhere to the research design, and the need to adapt program delivery to prevailing circumstances. Secondly, SEWB staff, who had not led the development of the initial research proposal, reported a degree of confusion regarding the respective roles and responsibilities of SEWB as the operational manager and of the CAAC Directorate as the research manager. This was aggravated by difficulties experienced by SEWB in recruiting a clinical psychologist – one of whose responsibilities was to supervise the GM AOD therapist. Thirdly, although the original proposal contained a detailed project plan, it did not include an operational plan. Part of the AOD therapist's task was to develop one, but he, as already indicated, did not have experience in establishing new programs. The AOD therapist did, however, develop a Practitioner Treatment Manual, to turn the program theory into practice and to guide the team's work. This included an eight week treatment program to deliver the psychological stream. (In practice, it soon became apparent that a more flexible approach was required, in which the therapist identified key topics to be covered during therapy rather than a session by session prescribed plan.)

During these initial months, GM staff also met with key referral partners for the program, including general practitioners within CAAC, Drug and Alcohol Services Association of

Alice Springs (DASA) and Alcohol and Other Drug Services Central Australia (ADSCA). Memoranda of Understanding were negotiated with some organisations. Attempts were also made to negotiate an agreement with Aboriginal Hostels to secure hostel accommodation for GM clients who needed safe, non-residential treatment facility accommodation, but these proved unsuccessful.

The program's first client referral occurred on 14 April 2008, just two weeks after the AOD therapist started, while the program was still being established. Between program commencement and the end of June 2008, 25 referrals were received by the program, of whom 12 clients were 'engaged' – that is, they participated in one or more therapy sessions in additional to the initial contact session with the therapist. During this period, the ALO commenced collaborating with a male ALO from ADSCA in making regular, joint visits to the Alice Springs Hospital to follow up patients with alcohol-related admissions and offer them a referral to one of the alcohol treatment services, including the GM program.

Under the GM plan, formal Mental Health Care Plans (MHCP) were to be developed for clients by the therapist to take advantage of recent changes to Medicare that enable consultation fees for registered psychologists and social workers to be claimed, thereby providing a potential ongoing funding stream beyond the trial period. However, the first AOD therapist did not have the required registration as a social worker and therefore was not eligible to claim this income through Medicare. Instead, he formulated some MHCPs for sign off by the client's GP. Of the 49 GM clients who gave consent for their data to be used for this evaluation, MHCPs were developed for five clients.

The second, interim phase began in July 2008, just four months after the program commenced, with the resignation of the AOD therapist to take up a permanent position with *headspace*, a newly established youth health service within CAAC. Because of recruitment difficulties, the clinical psychologist position remained vacant for seven months, and the AOD therapist position for four months. In the absence of designated GM staff, three psychologists working with SEWB were asked to work with the GM program in a part-time capacity, while continuing to manage their regular responsibilities.

These arrangements proved problematic. Two of the three psychologists were interns who had only recently completed their studies, and none of them received any handover from the AOD therapist. Difficulties emerged in relationships between the psychologists and the

ALO, who also reportedly experienced strain in maintaining the program in the absence of the AOD therapist. Very little outreach work with clients was done at this time. In the July to September 2008 quarter only 17 referrals were received with only one client engaged in the program.

This phase in turn came to an end, to be succeeded by what we have labelled a 're-establishment phase', in October 2008, with the appointment of a new SEWB clinical psychologist. In the following month an AOD therapist was also recruited for the GM program. Despite some further staffing difficulties, with the ALO leaving the program in February 2009, these appointments signalled a new phase in program activity. A key priority for the new AOD therapist was to develop client engagement strategies and to increase knowledge of the program within the community generally, as well as re-engage with referring organisations. Efforts were made to inform potential clients and their families about how the program worked and who worked there. In May 2009, the vacant ALO position was filled with a full-time Aboriginal Family Support Worker (AFSW), supported for two months by a second part-time AFSW seconded from another branch of CAAC.

These changes were followed by an increase in the rate of referrals, with 25 referrals in the October to December 2008 quarter and a further 71 in the January-March 2009 quarter. By now, the number of referrals being received exceeded the capacity of the program to follow up these clients and response times for follow up became longer.

Results: referral patterns and treatment outcomes

During the evaluation period, 129 clients were referred to GM. As Table 1 shows, around two-thirds were referred by other CAAC GPs (66 referrals) or other CAAC staff, and the remainder by a variety of external agencies, the most prominent being Centacare (a social services program run by the Catholic Church, now known as CatholicCare NT), and Drug and Alcohol Services of Alice Springs (DASA), another non-government service. A number of GPs and clinicians interviewed commented that having the option of referring a client to GM reduced the pressure on them to address alcohol issues with the patients within short consultations, especially when there were other health issues that they needed to work on with the patient.

No referrals were received from the local residential treatment program Central Australian Aboriginal Alcohol Programs Unit (CAAAPU), and only two were received from the NT Government's Alcohol and Other Drugs Service of Central Australia (ADSCA).

TABLE 1 ABOUT HERE

The 129 clients referred were evenly divided between males (51.2%) and females (48.8%), and ranged in age from 17 years to 75 years, with a mean and median of 38 years. A third (33.3%) of clients were single, separated/divorced or widowed and 45.7% married or cohabiting. Marital status was not recorded for the remaining 20.9% of clients. Almost half of those referred (46.5%) lived in town camps in Alice Springs, and most of the remainder lived in houses in Alice Springs. Of those whose employment status at time of referral was recorded, almost all (92%) were unemployed.

Under the GM program, once a client was referred to the program it was expected that one of the GM staff would follow-up and seek to engage him or her in the program. Figure 1 summarises what occurred with respect to the 129 clients referred. Around one-third (42 clients, or 31.6%) could not be contacted, and so did not become GM clients. Of the remaining 87 clients, 18 declined to become involved with the GM program; 45 'engaged' with the program in the sense of the term defined above, while another 24 were still on a waiting list at the time of evaluation.

FIGURE 1 ABOUT HERE

As stated above, of the 129 clients referred to GM, 49 consented to having their de-identified data used in the evaluation. The remainder of this analysis is restricted to these 49 clients.

As the GM program was designed to be integrated with the primary health care system, clients were also expected to receive an Adult Health Check and Brief Intervention for alcohol or other drug misuse and, where appropriate, to have Mental Health Care Plans (MHCPs) prepared for them. Of the 49 consenting clients, 27 received an Adult Health Check, and eight clients received a Brief Intervention. Five MHCPs were signed off, but in only two of these cases were MHCP reviews completed.

The GM program offered, as indicated earlier, three streams of care: pharmacotherapy and other medical care; psychological interventions, and social support. Of the 49 consenting clients, 30 had not received any of the three streams of care at the time of the evaluation. Thirteen clients had received one stream, four clients two streams, and two clients all three

streams, making 19 clients in all who received one or more streams of care. The distribution of clients among the streams is summarised in Table 2.

TABLE 2 ABOUT HERE

As Table 2 shows, the most widely used interventions were psychological interventions, with 16 clients receiving one or more types of psychological intervention. A total of six clients were prescribed Naltrexone – fewer than had been expected at the outset. During the period under review, social support interventions were also less frequently implemented than had been envisaged. Only five out of the 49 consenting clients received social support. However, this outcome appears to be a product of the fact that, for some of the period under review, there was a gap between the departure of the ALO and the appointment of the AFSW, with some client contact data reportedly being lost along the way.

Within the psychological stream, differences arose over the applicability of particular therapeutic approaches. In the original design, the psychological stream was to use a structured therapeutic approach based largely on CBT and motivational interviewing, a choice based on the evidence base for effectiveness of CBT in mainstream AOD treatment. This approach was reflected in the treatment manual developed by the first AOD therapist. However, some of the psychologists who became involved in the program during the interim period brought different therapeutic approaches to the program. More importantly, the second AOD therapist appointed to the program, while experienced in CBT, was more highly experienced in narrative therapy. Further, she saw the therapist's role slightly differently: rather than attempt to frame the therapeutic encounter within a particular therapeutic mode, she emphasized the importance of establishing a mutually satisfactory *relationship* between therapist and client, on the basis of which a particular therapeutic approach – which may or may not involve CBT – would be adopted.

Of the 19 clients who had received one or more interventions, 15 (78.9%) reported that they had stopped drinking or reduced their alcohol intake following participation in the GM program. However, a similar result was found among the 30 consenting clients who had *not* received an intervention – with 70% reporting having stopped or reduced their drinking. The evidence of program effectiveness, hampered as it is by low numbers, is therefore equivocal.

Consenting clients who had reduced or stopped drinking were asked in a follow-up visit what had been the most help in giving up or reducing drinking: answers were grouped into five main categories: having someone to talk to; support from others; concerns for family wellbeing; other family-related reasons, and concerns for health. Consenting clients were supportive of GM continuing, stressing the need to have staff who were Indigenous language speakers; a male worker where culturally appropriate, and the need for GM to keep making people in the community aware of the services it offered.

Discussion

Evaluation of the setting up, implementation and client outcomes of GM brought to light a number of issues, challenges and enabling factors that have potential relevance for other comparable initiatives.

Firstly, setting up the GM program was made more difficult than it might otherwise have been by virtue of it having being conceived and funded as a 12 month trial, to be implemented in a regional context where delays in recruiting suitably qualified staff are the norm rather than the exception, and where, even when good staff are recruited, there is always the risk that they will seek longer term employment when it becomes available, as it often does in remote centres. This occurred in this program.

Moreover, while the proposal as funded spelt out the principles, objectives and primary intervention strategies of the service model for the program, it did not provide the procedures and tools needed to implement the service model. This task fell by implication to the first AOD therapist, who was therefore under pressure to begin accepting clients without first having the opportunity to consolidate the program, develop referral pathways and identify all the necessary protocols and other resources required. Initial uncertainties about roles and responsibilities were compounded by the lack of understanding about the distinction between the management responsibility for the service within SEWB and the management responsibility for research within Directorate.

Secondly, as a 12 month trial, the GM program was both an exercise in evaluative research and an innovative service delivery program. The need to reconcile demands generated by these two aspects also generated tensions. As a research project, the GM program was expected to remain true to the original program design, while the search for effective ways of delivering the services inevitably led to a need for flexibility in adapting to conditions on the ground.

For example, because some GPs appeared reluctant to prescribe Naltrexone for GM clients, fewer clients were treated by the medical stream than had been envisaged in the program design. Similarly, at least during the evaluation period, the social support stream was not activated as much as had been anticipated, although this may in part have been due to the absence of an ALO or AFSW for some of the period under review. One of the motives behind the original conceptualization of the GM program as offering three streams of care had been to develop an evidence base for the effectiveness of pharmacotherapies for Indigenous clients with alcohol problems. In the event, the small number of Naltrexone prescriptions generated precluded that from occurring. Differing views about the most appropriate therapeutic approaches in the psychological stream also generated some tensions, particularly in light of the requirement to implement the original research objective of ensuring that suitable clients received CBT rather than other therapies. The original service model designated CBT as the treatment of preference on the basis of its effectiveness in mainstream evidence.

Another aspect where implementation departed from the original design concerned Medicare rebates for MHCPs. In the program design it was envisaged that these would be generated by at least some clients. In the event, as mentioned above, this expectation all but foundered on CAAC's inability to appoint a registered psychologist to the AOD therapist position (as required for MHCP rebates). This in turn is a symptom of the difficulties encountered in remote regions such as the NT in recruiting and retaining highly qualified professional staff. The small number of MHCPs generated precluded any assessment of their effectiveness under these conditions.

Other issues and challenges emerged as the GM program was implemented. Within CAAC, linkages between GPs and GM program staff were marked by what some GPs regarded as excessive delays on the part of GM staff in following up with referred clients, and feeding back information to the GPs. These problems appear to have been compounded by GM staff turnover. The task of developing and managing relationships and referral pathways between GM and some external agencies was also confounded, not only by staff turnover within GM but by structural changes and staff turnover amongst external agencies. While some agencies reported positively on GM's capacity to respond to referrals, the anticipated linkages with one local residential treatment facility (CAAAPU) and with the NT Government's local AOD agency (ADSCA) did not eventuate. In the case of CAAAPU, following repeated

meetings, a formal letter was received stating that the program was not needed as they were seeking funding to employ their own therapist. An effective working relationship with the other residential treatment service (DASA) was however, established.

While these issues emerged as significant challenges during implementation of the GM program, other program characteristics served as strengths or enabling factors. One strength identified by a number of stakeholders was that the GM program was a dedicated alcohol treatment program within CAAC. Having such a program encouraged CAAC GPs and other clinicians to talk about alcohol issues with their patients knowing that if the patient did want to do something about their alcohol issues there was a genuine program option within CAAC to which they could be referred.

Several strengths related to the program design were also identified. The program's multi-disciplinary approach, with the three streams of medical care, therapy and social support, addressed a real demand from referral agencies. Stakeholders interviewed identified flexible outreach services as a significant strength in enabling clients to engage and be sustained in the program while allowing program staff to work with the client's real life situation. Flexibility of the program in not limiting clients to a fixed duration of treatment, and enabling clients to access ongoing support if necessary from time to time, were also identified as strengths. That the program was designed as a non-residential treatment program was also identified as a positive feature, especially as other AOD services in Alice Springs offered residential programs.

The staffing structure of GM was also seen as a distinctive strength, with the therapist position designated for a qualified psychologist or social worker experienced in working with AOD clients, and the inclusion of an Aboriginal Family Support Worker (AFSW). Several interviewees praised the professionalism of GM staff and their capacity to develop and utilize collaborative networks in the community. Several stakeholders who had referred clients to the program spoke positively about the flow of information between them and the AOD therapist, with one informant remarking that GM was "working with us", in contrast to experiences with other service providers. Stakeholders also commented positively on the case-conferencing and family meetings that were focussed on the needs and desires of the individual and his/her family, as well as being strengths-based and non-judgemental in approach. In addition, the AFSW was considered by several stakeholders to be critical to the effective engagement of clients in the program.

Within CAAC, having the support of senior management was seen as giving the program leverage and priority within the organisation, fostering implementation and allowing for flexibility in program outreach and therapeutic approaches to occur.

Finally, notwithstanding the difficulties encountered, the program demonstrated that the core objective of implementing a multi-disciplinary, non-residential treatment program for Indigenous clients with alcohol problems was a feasible one, for which there is a demand from referral agencies. Further work is required in addressing reluctance by GPs to prescribe pharmacotherapies for Indigenous clients. Similarly, the social support stream, at least for much of the period under review, suffered because of the absence through much of this time of an ALO or AFSW.

The evaluation did not yield conclusive findings regarding client outcomes, partly because of the modest number of clients (49) who gave consent for their data to be included in the evaluation. The consent process required GM program staff to ask clients to give consent for their de-identified data to be included in data collected for evaluation of the program. This requirement subsequently created a substantial barrier to being able to obtain outcome data from sufficient clients to assess the effectiveness of the program. The AOD therapist initially employed under the project collected consents from clients at the time of commencement. However, the AOD therapist who subsequently took over the position did not feel comfortable asking for consent at the time of initial engagement of the client in the program, believing that to do so risked compromising the therapeutic relationship. As a result, for several months no consents were collected from new clients. Consent was then sought retrospectively by the program's Aboriginal Family Support Workers (AFSWs) when they followed up clients to complete the client evaluations in May to July 2009. Of the 129 clients referred to the program between March 2008 and 7 April 2009, consent was obtained from 49 clients. Whether or not the differences between initial and later procedures introduced biases into the treatment sample we are not able to say, especially in light of the small numbers involved.

The constraints imposed by the consent process have implications that extend beyond this particular evaluation. As participants in a recent Alcohol Data Workshop convened by the National Health and Medical Research Council point out, there appears to be a growing propensity on the part of human research ethics committees to impose constraints that go beyond protecting clients, to hindering the collection of the kind of de-identified client

contact and outcome data necessary for any evaluation. The NHMRC Workshop made a formal recommendation calling upon human research ethics committees to 'differentiate in their deliberations between consent and other procedural requirements of population health monitoring, service audit and evaluation, as compared with biomedical and health research'[25] .

These and other constraints notwithstanding, the GM trial also helps to fill a critical gap in existing responses to alcohol problems among Indigenous Australians. Fifteen years ago, in an examination of treatment options available for addressing Indigenous alcohol problems, Brady et al concluded that these were almost entirely of just two kinds: primary prevention programs, such as education, health promotion or limiting supply, and tertiary residential rehabilitation programs. Conspicuously missing were secondary interventions, such as brief interventions and non-residential counseling services [26]. Since then, despite some attempts at introducing secondary interventions in primary health care settings [27, 28], the situation identified by Brady and her colleagues has remained unchanged. Compared with the range of intervention options available for treating substance misuse problems among other populations, such as the kinds of interventions reviewed above [18, 19], evidence-based options for treating similar problems among Indigenous Australians remain limited. This is particularly unfortunate in light of a trend in recent years towards invoking treatment, including mandatory treatment, as a preferred policy option for addressing public drunkenness among Indigenous Australians [29].

The GM trial has also become the foundation for a larger scale program, also run by Central Australian Aboriginal Congress, known as Safe and Sober [30]. The newer program is also a multi-disciplinary approach to alcohol and other drug service delivery, involving four components: ambulatory casework and care coordination; development of alcohol and other drug sector partnerships; a Prison In-Reach Program, and program evaluation. Like the GM program itself, Safe and Sober promises to make an important contribution to the urgent task of developing effective, evidence-based treatments for Indigenous alcohol and other drug misuse in Australia.

Acknowledgements

The Grog Mob program and the evaluation reported here were part of the 'Enhancing the management of alcohol-related problems among Indigenous Australians' Program, funded by a grant to the National Drug Research Institute (NDRI), Curtin University of Technology, Perth, by the Australian Government Department of Health and Ageing. We would like to thank staff at NDRI for their support throughout the period of evaluation. We also thank two anonymous reviewers for their insightful comments on an earlier draft of this paper.

References

1. Australian Bureau of Statistics. 3218.0 Regional Population Growth, Australia. Canberra: Australian Bureau of Statistics; 2012.
2. Hogan E, Boffa J, Rosewarne C et al. What price do we pay to prevent alcohol-related harms in Aboriginal communities? The Alice Springs trial of liquor licensing restrictions *Drug Alcohol Rev* 2006; **25**: 207-12.
3. Lyon P. What everybody knows about Alice: A report on the Impact of Alcohol Abuse on the Town of Alice Springs. Alice Springs: Tangentyere Council; 1990.
4. Lyon P, Hill J, Wynter J. Final Report and Grog Action Plan. Alice Springs NT: The Central Australian Aboriginal Alcohol Planning Unit; 1992.
5. Rosewarne C, Boffa J. Alcohol and Alice Springs: meeting the needs and wishes of the community. *Aboriginal Law Bulletin* 2003; **5**: 11-5.
6. Skov S, Chikritzhs T, Li S et al. How much is too much? Alcohol consumption and related harm in the Northern Territory. *MJA* 2010; **193**: 269-72.
7. Gray D, Chikritzhs T. Regional variation in alcohol consumption in the Northern Territory. *ANZ J Public Health* 2000; **24**: 35-8.
8. Chikritzhs T, Pascal R, Gray D et al. Trends in alcohol-attributable deaths among Indigenous Australians, 1998-2004. National Alcohol Indicators Bulletin No. 11. Perth: National Drug Research Institute, Curtin University of Technology 2007.
9. d'Abbs P, Togni S, Duquemin A. Evaluation of restrictions on the sale of alcohol from Curtin Springs Roadside Inn, Northern Territory: A Report Commissioned by the Office For Aboriginal and Torres Strait Islander Health, Commonwealth Department of Health and Aged Care. Darwin: Menzies School of Health Research; 1999.
10. Land Rights News. Pitjantjatjara want to dry up Curtin Springs. Land Rights News. 1989 March;Sect. 13.
11. Northern Territory News. 50 in Alice grog demo. Northern Territory News. 1993 17 March.
12. Northern Territory News. 300 women in anti-grog rally. Northern Territory News. 1993 24 April;Sect. 6.
13. Senior K, Chenhall RD, Ivory B, Stevenson C. Moving Beyond the Restrictions: The Evaluation of the Alice Springs Alcohol Management Plan. Darwin: Menzies School of Health Research; 2009.
14. Clifford A, Pulver LJ, Richmond RL et al. Smoking, nutrition, alcohol and physical activity interventions targeting Indigenous Australians: rigorous evaluations and new directions needed. *ANZ J Pub Health* 2011; **35**: 38-46.
15. d'Abbs P, Togni S. The Grog Mob: An evaluation of a multi-disciplinary alcohol intervention for Indigenous clients. A report prepared for Central Australian Aboriginal Congress, Alice Springs. Darwin; 2010.
16. Ritchie J, Spencer L. Qualitative data analysis for applied policy research. In: Bryman A, Burgess R, eds. *Analyzing Qualitative Data*. London: Routledge 1994:173-94.
17. Brown J, Hunter E, Conigrave K et al. Multidisciplinary care in the management of comorbid substance misuse and mental health problems in Indigenous settings. Perth: National Drug Research Institute, Curtin University of Technology 2008.
18. McLellan AT, Hagan TA, Levine M et al. Supplemental social services improve outcomes in public addiction treatment. *Addiction* 1998; **93**: 1489-99.
19. Bouza C, Magro A, Muñoz A, Amate JM. Efficacy and safety of naltrexone and acamprosate in the treatment of alcohol dependence: a systematic review. *Addiction* 2004; **99**: 811-28.

20. Anton RF, Moak DH, Waid LR et al. Naltrexone and cognitive behavioral therapy for the treatment of outpatient alcoholics: Results of a placebo-controlled trial. *American Journal of Psychiatry* 1999; **156**: 1758-64.
21. Anton RF, O'Malley SS, Ciraulo DA et al. Combined pharmacotherapies and behavioral interventions for alcohol dependence. *Journal of American Medical Association* 2006; **295**: 2003-17.
22. Feeney GFX, Connor JP, Young RM et al. Adherence with naltrexone prescription advice in hospital outpatient alcohol rehabilitation programme. *Journal of Pharmacy and Therapeutics* 2001; **26**: 73-9.
23. Central Australian Aboriginal Congress. Research proposal: Multidisciplinary, self management rehabilitation care plans and case management to improve alcohol treatment for Aboriginal people in Alice Springs. Alice Springs: Central Australian Aboriginal Congress; 2007.
24. Leshner AI. Addiction is a brain disease, and it matters. *Science* 1997; **278**: 45-7.
25. National Health and Medical Research Council (NHMRC). Alcohol Data Workshop: A workshop of the National Health and Medical Research Council 7 March 2012. Canberra: National Health and Medical Research Council; 2012.
26. Brady M, Dawe S, Richmond RL. Expanding knowledge among Aboriginal service providers on treatment options for excessive alcohol use *Drug Alcohol Rev* 1998; **17**: 69-76.
27. Brady M, Sibthorpe B, Bailie R et al. The feasibility and acceptability of introducing brief intervention for alcohol misuse in an urban Aboriginal medical service. *Drug Alcohol Rev* 2002; **21**: 375-80.
28. Sibthorpe BM, Bailie RS, Brady MA et al. The demise of a planned randomised controlled trial in an urban Aboriginal medical service. *MJA* 2002; **176**: 273-6.
29. Northern Territory of Australia. Alcohol Mandatory Treatment Bill 2013. Darwin: Northern Territory Government; 2013.
30. Stearne A, Schmidt S, Gray D et al. A program and its evaluation: the Safe and Sober Support Service. *Drug Alcohol Rev* 2011; **30**: 84.

Table 1: Sources of referral to Grog Mob

Agency	Frequency
CAAC (GP)	66
CAAC (Registered Nurse)	11
CAAC (Allied Health)	3
Centacare (now CatholicCare NT)	12
Drug & Alcohol Services of Alice Springs (DASA)	9
Alice Springs Hospital	4
Alcohol & Other Drugs Service of Central Australia (ADSCA)	2
NT Dept. of Corrections	4
NT Family Court	2
Friend	2
Self (via CAAC Social & Emotional Wellbeing Unit)	4
Self (via Outreach Worker)	6
Other external	4
TOTAL	**129**

Table 2: Care streams received by clients

Streams of care	Frequencies
Pharmacotherapy only	3
Psychological stream only	10
Social support stream only	-
Pharmacotherapy + psychological stream	1
Pharmacotherapy + social support	-
Psychological stream + social support	3
Pharmacotherapy + psychological stream + social support	2
TOTAL	**19**

Figure 1: Follow-ups to referrals to Grog Mob