BMJ Open Developing a best practice pathway to support improvements in Indigenous Australians' mental health and well-being: a qualitative study

Rachael Hinton,¹ David J Kavanagh,² Lesley Barclay,³ Richard Chenhall,⁴ Tricia Nagel¹

To cite: Hinton R,

Kavanagh DJ, Barclay L, *et al.* Developing a best practice pathway to support improvements in Indigenous Australians' mental health and well-being: a qualitative study. *BMJ Open* 2015;**5**: e007938. doi:10.1136/ bmjopen-2015-007938

Prepublication history for this paper is available online. To view these files please visit the journal online (http://dx.doi.org/10.1136/ bmjopen-2015-007938).

Received 23 February 2015 Revised 9 July 2015 Accepted 30 July 2015



For numbered affiliations see end of article.

Correspondence to Dr Rachael Hinton; rachaelhinton22@gmail.com

ABSTRACT

Objective: There is a need to adapt pathways to care to promote access to mental health services for Indigenous people in Australia. This study explored Indigenous community and service provider perspectives of well-being and ways to promote access to care for Indigenous people at risk of depressive illness.

Design: A participatory action research framework was used to inform the development of an agreed early intervention pathway; thematic analysis **Setting:** 2 remote communities in the Northern Territory.

Participants: Using snowball and purposive sampling, 27 service providers and community members with knowledge of the local context and the diverse needs of those at risk of depression were interviewed. 30% of participants were Indigenous. The proposed pathway to care was adapted in response to participant feedback.

Results: The study found that Indigenous mental health and well-being is perceived as multifaceted and strongly linked to cultural identity. It also confirms that there is broad support for promotion of a clear pathway to early intervention. Key identified components of this pathway were the health centre, visiting and community-based services, and local community resources including elders, cultural activities and families. Enablers to early intervention were reported. Significant barriers to the detection and treatment of those at risk of depression were identified, including insufficient resources, negative attitudes and stigma, and limited awareness of support options.

Conclusions: Successful early intervention for wellbeing concerns requires improved understanding of Indigenous well-being perspectives and a systematic change in service delivery that promotes integration, flexibility and collaboration between services and the community, and recognises the importance of social determinants in health promotion and the healing process. Such changes require policy support, targeted training and education, and ongoing promotion.

Strengths and limitations of this study

- Increases the understanding of strengths and stressors in two remote Indigenous communities, and in response, the identification of resources and pathways to care and development of a community best practice pathways map in each community.
- Informs the development of an integrated, coordinated and cooperative approach to mental healthcare that is flexible, smooth, culturally appropriate and easy to navigate.
- Contributes to a shift in the prevailing culture in mental healthcare, from the prioritisation of acute treatment to that of prevention and early intervention.
- The small, focused sample makes generalisation tentative, although two locations were included and principles are unlikely to differ markedly.
- Some community members and other nonclinical participants felt unqualified to comment on details in the practitioner version of the care pathway.

INTRODUCTION

The burden of mental illness in Indigenous discommunities in Australia is unacceptably high. Recent analysis of survey data indicates that Indigenous adults are three times more likely to have very high levels of psychological distress than other Australians.¹ In using the term Indigenous we refer to the Aboriginal and Torres Strait Islander people, and acknowledge their diversity of language and culture. The risk factors for mental illness are also on the rise, and substance misuse, trauma and physical illness combine with social disadvantage to heighten community concern about the emotional well-being of Indigenous families.^{2–4} National data indicate that Indigenous people have higher rates of hospitalisation and mortality from

mental and behavioural disorders than non-Indigenous people.⁵ In the remote Northern Territory (NT), there is limited access to appropriate mental healthcare. Youth, perinatal women, and those with comorbid substance misuse and chronic disease are at particular risk.^{6–9}

A range of guidelines and initiatives highlight the importance of early intervention and treatment of people at risk of depression in primary healthcare, but there remains a need to implement these recommendations.^{10–12} Multiple reports recommend culturally appropriate mental health treatment and integrated care for Indigenous people, but evidence of appropriate screening and effective treatment for depression in this group are difficult to find.¹³ ¹⁴ For example, a recent study among pregnant women found that Indigenous women were four times less likely to be screened for distress than non-Indigenous women.⁸ The authors recommended improved training for health service providers and further research on appropriate screening tools for Indigenous women to address this gap. Brief screening tools and best practice treatment algorithms have been developed to assist practitioners.^{15–17} However, these initiatives require adaptation to remote Indigenous settings, where differences in worldview, literacy and workforce profiles may limit their effectiveness.¹³

While evidence is emerging that culturally adapted assessment and treatment strategies have shown a positive impact on well-being, substance dependence and self-management among Indigenous people,^{18–22} there remains a need to develop improved screening strategies and clarify care pathways to treatment.

Appropriate pathways to care might include a range of services from within the health sector as well as from health-enhancing sectors, such as education, justice and workforce. However, Indigenous community perspectives on how to promote access to mental healthcare have not been sought. The current study sought to fill this gap.

This paper discusses the first phase of the study, which examined perceptions of best practice in early intervention, assessment and treatment of depression among Indigenous people, specifically among four target groups: young people, perinatal women, those with chronic disease and healthy adults. The first phase sought to explore perspectives of well-being and strategies to promote access to care for those with well-being concerns. It aimed to develop a culturally informed treatment pathway which outlined a step-by-step approach to care within communities for those at risk of depression. Given high rates of comorbid substance misuse, the pathway also included early intervention strategies for those with substance use concerns. The 'best practice pathway' (BPP) included recommended screening strategies, assessment processes, referral options and time frames. Additionally, the study sought to understand enablers and challenges to the development and implementation of such a pathway. The second phase of the research assessed service delivery

for those at risk of depression through an audit of the two community health centre files, and will be reported separately.

METHODS

Key informant interviews were conducted within a participatory action research framework. Participatory action research has been shown to be an effective strategy to promote implementation of research findings and change health provider practice.²³ NT research has shown that continuous quality improvement approaches using action research methodology have successfully translated to improve delivery of best practice care.²⁴ ²⁵

Study setting

The study was conducted in two remote communities: one at the Top End of the NT and a second in Central Australia. The Top End community has a population of approximately 1500 (including Outstations). Local health services are provided by the NT government health centre, which is staffed by of one general practitioner, six registered nurses and two Aboriginal health workers (AHWs).

The second community is located 130 km South-West of Alice Springs and including Outstations has a population of approximately 1250. A local Aboriginal health corporation and the NT government health clinic jointly provide primary healthcare services to the several communities and numerous outstations. The health centre employs around 12 staff, including 4 registered nurses, 4 AHWs, support staff and a trainee AHW. The Aboriginal health corporation also employs a team of over 20 staff, and lays a particularly strong emphasis on collective wellbeing and for promoting cultural ways.

Participant selection and setting

The study employed purposive and snowball sampling to identify government and non-government service providers and community members with specific in-depth knowledge of the local context and available community resources, and who would potentially use the treatment pathway. The approach was unobtrusive and took account of the limited time frame.

account of the limited time frame. Interviews were conducted with 16 service providers and community members in the Top End community and a further 11 in Central Australia. Key informants included NT government and local council representatives, education and early childhood service providers, employment and housing agencies, police and correctional services, alcohol and other drug (AOD) workers, remote health centre staff and Top End mental health staff. Thirty per cent of the key informants were Indigenous people. Most government service (health, education, police, council) interviewees were non-Indigenous, while Indigenous participants made up the majority of community members and other local service providers, such as housing, health and family support roles.

Data collection

Data were generated from semistructured interviews conducted face to face with 27 people. The interviews were recorded in written notes. The interview guide was developed by the research team to gain an in-depth view of well-being in each community, and of factors that were perceived to support or undermine it.

The interviews also sought to assess the perceived usefulness and appropriateness of a proposed BPP as an intervention to improve detection and treatment of depression and substance misuse. Two representations of a well-being pathway were shown: a pictorial representation of a culturally informed collaborative pathway (figure 1); and a table version of the screening, assessment and integrated care options for Indigenous people at risk of depression or substance misuse (box 1). Both representations drew on key findings of previous research with Indigenous communities,²⁶ and were further developed through extended consultations within the research team and reference to relevant best practice guidelines, such as those on perinatal clinical practice.²⁷

Three Indigenous researchers (one male, two female) conducted the interviews in each community. Using the two formats to stimulate discussion, particularly around sensitive issues, there were opportunities to discuss the detection and care of people at risk of depression and substance misuse in different ways with community and service provider participants.

The pictorial version used relevant representations and symbolism, rather than written words, to demonstrate key steps along the pathway to care. It presented an integration of four components: friends and family, services, culture, and community activities. The picture attempted to represent the holistic nature of Indigenous perspectives of social and emotional well-being, where each component was interdependent and balanced by the others. The pictorial version recognised the importance of connections to land, culture, spirituality, ancestry, family and community, and how these affect the individual.²⁶ 28

Participants were asked to comment on the accuracy and appropriateness of the diagrammatic visualisation of the well-being pathway. They were asked to describe wellbeing and if, as the pictorial version suggested, it could be supported by links with family and culture, and by $\boldsymbol{\xi}$ services and community-based activities such as work 8 and sport. They were also asked to suggest how the pathway could be adapted for the local setting, such as the addition of individuals, activities and services that were perceived to support the well-being of the community. Participants also considered current challenges and enablers in the community for the detection, support ing and treatment of people at risk of depression and substance misuse. uses rela

Participants were also asked to consider groups in the community who were the most 'at risk' of depression and substance misuse (such as youth, healthy adults, those with chronic disease and perinatal women) and how they might benefit from well-being screening in the community.

The table version incorporated specific activities related to the implementation of a care pathway, including screening, early intervention and integrated care options for any at-risk clients who may have had depression or other mental illness alone or in combination

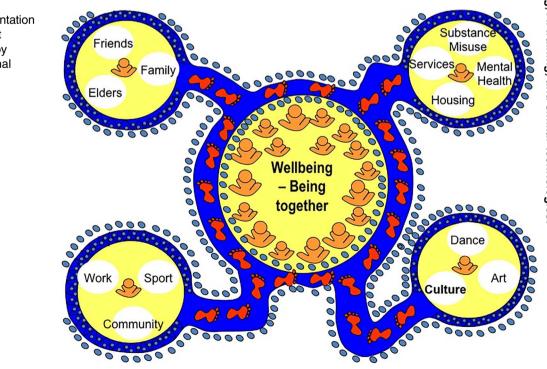


Figure 1 Pictorial representation of a culturally informed best practice pathway. Artwork by Anacleta Apuatimi, Aboriginal Mental Health Worker.

đ

Box 1 Table version of best practice pathway for people at risk of depression and substance misuse

- 1. All youth, healthy adults and people with chronic disease will be screened for depression at minimum every 12 months. Perinatal women will be screened during pregnancy, and 6 weeks and 6 months postpartum (recently released perinatal guidelines).
- 2. For those individuals who are identified at risk and brought to care, those assisting support people or services are acknowledged and provided with advice, as appropriate.
- 3. Screening and related services below will be documented in the health centre file.
- 4. All those who screen at risk or are otherwise identified as being at risk will receive a full assessment by a nurse, doctor or allied health worker with input from Indigenous workers and family and interpreters, if needed, as soon as practicable (within 1 week).
- 5. High-risk clients will be referred immediately for specialist review and/or phone advice following the CARPA (Central Australian Rural Practitioners Association) recommendations.
- 6. At assessment, if still at risk, a care plan will be developed (Medicare or other type; within 1 week).
- 7. Following assessment, if still at risk, an intervention will be delivered, for example, brief intervention, counselling, medication, psychotherapy, cultural intervention (within 4 weeks).
- 8. Following assessment, support for cultural interventions or referral for cultural treatment will be provided, where appropriate, through consultation with family and/or local Indigenous practitioner (within 4 weeks).
- 9. Following assessment, a referral to relevant other services will be made, for example, housing, domestic violence, alcohol and other drugs, etc (within 4 weeks).
- Following assessment, all at-risk clients will also be referred, as appropriate, to community activities: sport, culture, art, music, dance, church, and linked with key contact people in the community (within 1–3 months).
- 11. Following assessment, progress will be reviewed (within 2– 4 weeks) and the care plan revised as needed.
- 12. Following assessment and referral, feedback from external services will be received (within 4 weeks of service being concluded).

with substance misuse. The table included suggested time frames for the delivery of services, and for those activities that linked the health centre and community (as discussed in the pictorial version) as part of the assessment, monitoring, referral, feedback and review processes. It primarily focuses on detailed implementation of the pictorial pathway by services (ie, the top right of the picture, while involving all segments, including the central goal of collaborative well-being).

Data analysis

Interview data were reviewed independently by the research team and organised into coded concepts and categories. Interpretation of the emergent themes was discussed at length among the study team until consensus was reached. A two-staged approach was used to strengthen the dependability and validity of the 6

findings.²⁹ Following the participant interviews, the pictorial and table version of the care pathway were refined and presented back to each key informant along with key themes of the data analysis. This allowed cross-checking of the accuracy of the interpretation of their responses. Consistent with the participatory action framework, the key informants were able to comment on the final pathway and provide further modifications. This process also enabled the clarification of terms, ideas and local nuances.

RESULTS

Perceptions on the BPP

The primary health and mental health professional participants confirmed that given the high risk of well-being concerns, routine screening for depression was a necessary component of ordinary healthcare in these communities. Most clients engaged with primary care services, and both community members and health professionals identified opportunities to address depression and substance misuse issues early and in a coordinated way through these services. Community-based activities and cultural resources were identified as especially important treatment options.

Perceptions of well-being and support for well-being

All Indigenous and non-Indigenous professional participants agreed that the pictorial representation captured the important aspects of well-being, and that well-being is supported by family, cultural activities, local services and community resources. One participant suggested that 'support needs to include family, land and traditional law', while a second participant, although agreeing with the pictorial representation, said it was important for the link with culture 'to be much stronger' in the pathway to care.

The link between culture and well-being was also emphasised in the participant's descriptions of wellbeing. For example, an Indigenous participant said that well-being was:

A balance, to be able to live in environment with cultural and spiritual identity to know that what you believe cannot be taken away.

Very few participants in the Top End community suggested changes to the pictorial representation, but four participants in Central Australia (a community elder, health professional and two other community service providers) emphasised the importance of cultural continuity and the contribution that elders make in supporting well-being. For example, a family support professional stated:

We need elders to help and support by teaching the cultural ways and traditional activities, as there are a lot of suicide problems going on.

An Indigenous health professional observed:

Tolerance, perseverance and patience are the core to making change with guidance from elders and elder's spirits.

Importance and priority for screening

Most participants noted the importance of regular screening for depression, particularly for youth and perinatal women, but saw it as conditional on the capacity of local health services to implement it. Youth were seen by several participants as in need of specific attention given their risk of substance use, and emotional or behavioural difficulties. As a community worker in Central Australia said:

We need to stop kids getting into trouble, and they are also not going to school.

Six people did not respond to the timeline questions in box 1, saying they were unsure of clinical processes. In addition, several people suggested shortening some of the time frames. A non-Indigenous health professional noted:

I would like to see earlier intervention perhaps within two weeks to one month. Feedback needs to be earlier too—within three months.

Most participants agreed with the proposed timeline of screening, assessment, review and feedback in box 1. However, several Indigenous and non-Indigenous participants from both communities noted that the implementation of the pathways to care was dependent on whether a holistic, collaborative approach to well-being, as shown in figure 1, was implemented. This would see family, community, services and culture being more fully integrated into the screening, assessment, referral and feedback process.

Challenges to care: resources, knowledge, stigma and antisocial behaviours

Participants were asked to consider current challenges in the community to the quality of care for youth and adults with well-being concerns. Four main themes emerged from the two communities. From the combined number of key informants, over half (52%) mentioned a lack of resources and capacity to implement services. Participants from both communities highlighted inadequate and ad hoc financial resourcing, combined with an inadequate workforce and substandard infrastructure as common reasons for the lack of quality care and services. A non-Indigenous health professional participant said:

There is a lack of resources, [including] physical, human resources. It's unrealistic to think you are going to provide a service.

Several service providers in both communities noted that high turnover, poor communication and

inadequately qualified staff within clinics and community-based programmes impeded access to quality care and support for at-risk adults and youth.

Indigenous and non-Indigenous participants highlighted the need to create a more culturally safe environment for Indigenous clients and a culturally competent workforce with expertise of both mainstream and Indigenous perspectives of care. Participants suggested, for example:

People should have interpreters to explain about illness and medication.

There should be respect of cultural and traditional values/language and two way learning.

Employ a person who has knowledge of both the cultural and mainstream way when doing screening and assessment.

Individual and community knowledge, perceptions and attitudes about mental health was a second theme mentioned by nearly half (44%) of the various types of participants. There were strong commonalities in the ways participants from both communities perceived mental health issues. In particular, participants felt there was lack of knowledge and awareness about depression, and about the types of services that were available. As one participant expressed:

People don't realise there is help for people at risk. There is a communication break down.

Many Indigenous and non-Indigenous participants from both communities also mentioned that stigma (both public and self-stigma) and shame associated with mental illness prevented people from accessing services, as the following participant acknowledged:

We do need more services but the individuals won't use support or services. They worry that their problem or issue will be exposed and that others in community may hear about it. They worry issue may be used against them such as for punishment.

A lack of family support and understanding of mental health issues was also identified as a threat to well-being, which compounded the stigma and shame associated with mental health problems.

Thirty per cent of both Indigenous and non-Indigenous participants also identified specific social issues in the community as impediments to care and support for at-risk adults and youth. Similar social issues were identified in both communities. This final theme included issues such as substance misuse, gambling and disrespect for elders as challenges to wellbeing. As one participant from the education sector stated:

for uses related to

text

data

mini

simi

technol

Our biggest issues are gambling and alcohol. Old people, parents, people spend a lot of time gambling and the kids watch and learn.

Other social issues identified in both communities included young people dropping out of school, a lack of effective role models, respect for elders and awareness of culture. These latter concerns were noted by several key informants as impacting negatively on youth wellbeing and their access to appropriate services.

Enablers to care: services, cultural and community activities. collaboration

Indigenous and non-Indigenous participants identified factors that supported early intervention for people at risk of depression. The components were thematically comparable for both communities, and were incorporated into each care pathway.

Three specific types of services were perceived to be enablers to care. The first included services provided by local health centres, such as men's health programmes, health promotion, and alcohol and other drug services. Visiting services to the community were also identified as important for the pathway, including mental health and other health services. The final group of services included community-based services related to substance misuse, law and justice, employment, community safety, art, education, and housing. Many responses focused on educational services and social activities for youth, such as youth centres and playgroups. For example, a member of local government suggested:

Youth programmes are important, as are volatile substance programs and family safety programs.

Other community resources were identified as enablers to well-being. In terms of cultural activities relevant to the care pathway, participants identified the art centre and mentoring programmes. Sports, religious and educational programmes were also mentioned as enablers to good mental health as well as the role of women's and men's groups. For example, a community development worker said that well-being could be strengthened with:

... input from the local community, such as men's and women's groups, the men's shed and mentor groups.

To strengthen cultural values (eg, cultural obligations and knowledge; spirituality and relationship to country; sense of identity) and, in turn, promote health and wellbeing, Indigenous and non-Indigenous participants emphasised the important role of elders and traditional leadership. Lack of respect for elders and traditional authority was identified as a challenge to well-being in both communities, and respondents suggested that action was needed to strengthen the position of elders and the sharing of cultural ways, particularly with at-risk young people. For example:

We need elders to help and support by the teaching of 'cultural ways' and traditional activities.

Community elders need to be more proactive about health issues.

Specific factors considered supportive of early intervention included interservice collaboration, dedicated staff, a positive and open approach to service delivery, and awareness of local resources and services. Positive interaction within families and between families or individuals and service providers was seen as imperative to engaging people in treatment and establishing meaningful connections. This included the necessity for respectby copyright, including ful communication and consideration of cultural values within contacts between service providers and clients. As a community development worker explained:

Within interactions between different people we need respect of cultural and traditional values and language. It's two way learning and communication, it's identifying cultural issues and having respect.

As noted above, the Central Australian community provided primary care services through two different organisations—a government-run clinic and а community-controlled service, while the service in the Top End only had the government service. However, the comparisons between responses from the two communities found no substantial differences in perspectives. This may suggest that both government-run and community-controlled services face similar challenges in ensuring that service delivery conforms to the key features and values, as shown in figure 1, although Central Australian respondents may have primarily focused on the government service in their comments.

DISCUSSION

ing, Al training, The findings confirm that Indigenous mental health and well-being is perceived as multifaceted and strongly linked to social and cultural resources as well as local services and community activities. These observations are highly consistent with previous research and current knowledge.^{20 21 30-32}

The study also identifies early intervention for wellbeing concerns as a priority in Indigenous communities, particularly for youth and perinatal women, while service providers confirmed the usefulness of having a defined, written protocol for screening and assessment. These **8** findings are in keeping with recommendations for early detection, and integrated treatment and care in youth and adults with comorbid disorder.¹⁴ ¹⁶ Additionally, early intervention measures are recommended in national and international clinical guidelines for the early identification and treatment for people at risk of or experiencing depression or substance misuse issues. Given that young people, perinatal women and those with chronic disease in these remote communities are

likely to experience a range of concurrent wellbeing concerns, including trauma and sociocultural stressors,^{2–4} they are populations at risk of both depression and substance misuse. The well-being issues raised by participants, particularly with regard to sense of identity, suicide, substance misuse, and social and economic disadvantage, support those of Chandler *et al*³ who discuss that suicide rates are higher among Aboriginal youth in Canada because they are at risk of losing the thread that tethers together their past, present and future, including losing a sense of control over the future.

In terms of treatment, the study confirmed that a broad range of treatment options was seen as appropriate, which included community-based resources and cultural activities, and identified adaptations of the structured care pathway to the cultural context of Indigenous remote communities. These included enhanced focus on community resources, such as strengthening the role of traditional elders in health promotion, cultural activities and support for the use of a pictorial representation of the steps to care.

It is important to note that both Indigenous and non-Indigenous service providers highlighted the need to link care pathways more closely with community values (eg, role of the family and links to country; collectivism; cultural knowledge and learning) and the need for health providers to recognise that culturally adapted services were important for improving access to services and quality of care. Similarly, a recent study found that service providers believe that to better address the cultural needs of Indigenous clients, health services must become more family oriented and culturally safe.³⁴

Additionally, significant barriers were identified to the detection and treatment of people at risk of depression. Challenges include lack of sustainable services, resources and capacity of service providers to provide culturally safe care that promotes respect, trust and client empowerment. Social and cultural impediments were also identified, such as lack of knowledge about mental health, shame and stigma and antisocial behaviours. Importantly, at least one respondent pointed out that even if the necessary services were available, people may still avoid them because of the associated stigma and shame. Such challenges have also been reported previously.^{30 34-37} On the other hand, specific facilitators to care identified in this study included a broad range of services, both visiting and community based, combined with local community resources and families.

The study findings suggest that integrated and cooperative approaches to healthcare are required to effectively meet all of the needs of people at risk of depression and substance misuse. This will mean developing a process of care that is flexible, smooth, culturally appropriate and easy to navigate, and which recognises the importance of social determinants (such as employment, education, sport and art), not just for health promotion but also in the healing process. Such changes are especially important given that people with comorbid substance use and mental disorders have poorer outcomes than those who have a single disorder.³⁸

Collaboration within and across services, with respectful engagement with community sociocultural resources is needed. This requires long-term systemic change. It will require service providers to work with professionals from different fields and sectors, to coordinate tasks and services across traditional professional boundaries, and to develop strong links with the community resources. Practical strategies include recruiting traditional owners for administration and programming roles, and building a more culturally sensitive health workforce by engaging Š elders in support and mentoring roles, instituting the use of interpreters, increasing the number of 8 Indigenous staff and guides, and cultural awareness training for non-Indigenous staff.

Joint programming and coordination is also dependent on the development and implementation of highlevel policy decision-making. To bridge gaps that may arise between policy intent and implementation, it will be necessary to harness closer links between policymakers, researchers, educators, practitioners involved in integrated care development and community members. These findings reiterate that the early detection and treatment of emotional distress among Indigenous people is a priority that requires integrated treatment pathways adapted to the complexity of the local social context.

Limitations of the study

The key informant process included questions that were relevant and important to many of the participants, and focused on the work of many of the users of the care pathway. The sample was small, which makes it difficult to make broad generalisations, although it was obtained from two contrasting locations and service contexts. The authors contend that many of the principles underlying Indigenous health and well-being are likely to be the same as in other remote localities.

The approach was also limited by the presentation of draft pathways, and while these were both derived from previous consultations and were open to revision, this process may have inhibited broader, open-ended discussion of well-being issues. Some participants may even have felt they were simply required to endorse the presented care pathways. Furthermore, due to the perceived technical and clinical nature of the table version & of the care pathway, some community members and **g** other non-clinical participants struggled with the concepts and detailed issues in the table, and chose not to respond. A group discussion of ways that issues in the table may relate to specific aspects of the pictorial version in figure 1 may have empowered respondents to provide additional responses on detailed service issues.

The experienced difficulties in relating the two depictions of a care pathway gave additional insight into the

Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies

committees. Our data are deposited within Menzies School of Health Research, Darwin, Australia.

Open Access This is an Open Access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited and the use is non-commercial. See: http:// creativecommons.org/licenses/by-nc/4.0/

REFERENCES

- Cunningham J, Paradies YC. Socio-demographic factors and psychological distress in Indigenous and non-Indigenous Australian adults aged 18–64 years: analysis of national survey data. *BMC Public Health* 2012;12:95.
- 2. Australian Bureau of Statistics (ABS) and Australian Institute of Health and Welfare (AIHW). The health and welfare of Australia's Aboriginal and Torres Strait Islander peoples 2005. Canberra: ABS & AIHW, 2005.
- Begg S, Vos T, Barker B, et al. The burden of disease and injury in Australia 2003. Canberra: AIHW, 2007.
- Northern Territory Government. Report of the Northern Territory Board of Inquiry into the Protection of Aboriginal Children from Sexual Abuse. Ampe Akelyernemane Meke Mekarle "Little Children are Sacred". Darwin: Northern Territory Government, 2007.
- 5. AIHW. The health and wellbeing of Australia's Aboriginal and Torres Strait Islander people: an overview 2011. Canberra: AIHW, 2011.
- Zubrick SR, Silburn S, Garton A, et al. Western Australian Child Health Survey: developing health and well-being in the nineties. Perth, WA: Australian Bureau of Statistics and the Institute for Child Health Research, 1995.
- beyoundblue. The national depression initiative. Perinatal mental health national action plan 2008–2010. 2008. http://www.gpsa.org. au/media/docs/mentalhealth/perinatal_national_action_plan.pdf
- Gausia K, Thompson S, Nagel T, *et al.* Antenatal emotional wellbeing screening in Aboriginal and Torres Strait Islander primary health care services in Australia. *Contemp Nurse* 2013;46:73–82.
- 9. Teesson M. *Comorbidity in mental health and substance use: causes, prevention and treatment.* Sydney: National Drug and Alcohol Research Centre, University of New South Wales, 2000.
- Richardson L, Katzenellenbogen R. Childhood and adolescent depression: the role of primary care providers in diagnosis and treatment. *Curr Probl Pediatr Adol* 2005;35:1–24.
- McGorry PD, Tanti C, Stokes R, *et al.* headspace: Australia's National Youth Mental Health Foundation—where young minds come first. *Med J Aust* 2007;187(7 Suppl):S68–70.
- Zuckerbrot RA, Maxon L, Pagar D, *et al.* Adolescent depression screening in primary care: feasibility and acceptability. *Pediatrics* 2007;119:101–8.
- Brown A, Mentha R, Rowley K, *et al.* Depression in Aboriginal men in Central Australia: adaptation of the Patient Health Questionnaire 9. *BMC Psychiatry* 2013;13:271.
- Macdonald E, Gulliver A, Christensen H, et al. Primary care management of comorbid mental health and drug and alcohol problems: co-occurring depression/anxiety problems and substance use problems. Canberra: Centre for Mental Health Research, ANU College of Medicine and Health Sciences, Australian National University, 2007.
- Lowe B, Kroenke K, Herzog W, et al. Measuring depression outcome with a brief self-report instrument: sensitivity to change of the Patient Health Questionnaire (PHQ-9). J Affect Disord 2004;81:61–5.
- 16. U.S. Preventive Services Task Force Screening for Depression. 2002. http://www.ahrq.gov/clinic/uspstf/uspsdepr.htm#summary
- Kroenke K, Spitzer RL, Williams JB. The PHQ-9 validity of a brief depression severity measure. J Gen Intern Med 2001;16:606–13.
- Chenhall R, Senior K. Treating Indigenous Australians with alcohol/ drug problems: assessing quality of life. *Alcohol Treat Q* 2012;30:130–45.
- Swan P, Raphael B. Report on Indigenous and Torres Strait Islander mental health: "Ways Forward," part I & part II. Canberra: Office of Indigenous and Torres Strait Islander Health, 1995.
- 20. Nagel T. Motivational care planning: brief interventions in Indigenous mental health. *Aust Fam Physician* 2007;37:996–1001.
- Nagel T, Thompson C, Robinson G, et al. Two-way approaches to Indigenous mental health literacy. Aust J Prim Health 2007;15:50–5.
- 22. Nagel T, Robinson G, Condon J, et al. An approach to treatment of mental illness and substance dependence in remote Indigenous

existing clinical and community divide that the care pathway proposed to bridge. It reinforced the importance of addressing structural components and values as well as detailed implementation when gathering responses to a proposed care pathway.

CONCLUSION

This study identified clear impediments to the early diagnosis and effective treatment of well-being concerns among Indigenous people in remote Australian communities. Addressing these challenges to make sustainable changes in this setting requires concerted effort, and an investment of time and resources. The facilitation of integrated client-centred care requires a systematic change in service delivery that promotes the importance of culture and traditional leadership in the care pathway, and supports the need to address shame as an impediment to access. Targeted investment and resources are needed to strengthen community care seeking capacities and engagement with services and to improve provider support, training and knowledge to adopt best practice measures. Strong leadership at the policy, service delivery and community level is necessary to strengthen accountability for the provision of culturally appropriate care and support focused attention on assessment and early intervention measures.

Author affiliations

¹Healing and Resilience, Menzies School of Health Research, Darwin, Australia

²Institute of Health & Biomedical Innovation and School of Psychology & Counselling, Queensland University of Technology, Brisbane, Australia ³University Centre for Rural Health, School of Public Health, University of Sydney, Sydney, Australia

⁴Centre for Health Equity, Melbourne School of Population and Global Health, University of Melbourne, Melbourne, Australia

Acknowledgements The authors gratefully acknowledge Christine Connors, Northern Territory Government, and members of the research team, including Carolyn Griffin, Valerie Thompson, Luke Mayo and Kate Senior. Special acknowledgment is also given to the participants in both communities.

Contributors RH, DJK, LB, RC and TN all contributed to the design of the study. TN and RH led the data collection and data analysis phases of the study, and developed the first drafts of the manuscript. DJK and LB also contributed to data analysis and participated in related research team discussions. DJK, LB and RC reviewed and commented on all drafts, and together with RH and TN provided inputs for the revised version based on the two reviewers responses. The authors are in agreement with the content of the manuscript.

Funding The study was supported by *beyondblue*, grant number 09-133 and the Northern Territory Department of Health (no grant number).

Competing interests None declared.

Ethics approval Human Research Ethics Committee of Northern Territory Department of Health and Menzies School of Health Research (ref. HREC-2010-1365), and the Central Australian Human Research Ethics Committee (ref 0.2010.10.06).

Provenance and peer review Not commissioned; externally peer reviewed.

Data sharing statement The research team can make anonymised data available on reasonable request and with the approval of both ethics

<u>6</u>

communities: results of a mixed methods project. *Aust J Rural Health* 2009;17:174–82.

- Bero L, Grilli R, Grimshaw J, *et al.* Closing the gap between research and practice: an overview of systematic interventions to promote the implementation of research findings. *BMJ* 1998;317:465–8.
- Bailie R, Si D, O'Donoghue L, *et al.* Indigenous health: effective and sustainable health services through continuous quality improvement. *Med J Aust* 2007;186:525–7.
- Bailie R, Si D, Connors C, *et al.* Project protocol: Audit and Best Practice for Chronic Disease Extension (ABCDE) project. *BMC Health Serv Res* 2008;8:184.
- Nagel T, Robinson G, Trauer T, *et al.* An approach to management of psychotic and depressive illness in indigenous communities. *Aust J Prim Health* 2008;14:17–21.
- beyondblue. Clinical practice guidelines for depression and related disorders—anxiety, bipolar disorder and puerperal psychosis—in the perinatal period. A guideline for primary care health professionals. Melbourne: beyondblue: the national depression initiative, 2011.
- Nagel T, Thompson C. AIMHI NT 'Mental Health Story Teller Mob': developing stories in mental health. *AeJAMH* 2007;6:1–6.
- Braun V, Člarke V. Using thematic analysis in psychology. *Qual Res* Psychol 2006;3:77–101.
- Nagel T, Hinton R, Griffin C. Yarning about Indigenous mental health: translation of a recovery paradigm to practice. *Adv Ment Health* 2012;10:216–23.
- 31. Dudgeon P, Walker R, Scrine C, et al. Effective strategies to strengthen the mental health and wellbeing of Aboriginal and Torres

Strait Islander people. Issues paper no. 12 produced for the closing the gap clearinghouse. Canberra: Australian Institute of Health and Welfare, 2014.

- Chenhall RD, Senior K. Those young people all crankybella': Indigenous youth mental health and globalization. *Int J Mental Health* 2009;39:28–43.
- Chandler MJ, Lalonde CE, Sokol BW, et al. Personal persistence, identity development, and suicide: a study of Native and Non-native North American adolescents. *Monogr Soc Res Child Dev* 2003;68: vii–iii.
- Rix EF, Barclay L, Wilson S, *et al.* Service providers' perspectives, attitudes and beliefs on health services delivery for Aboriginal people receiving haemodialysis in rural Australia: a qualitative study. *BMJ Open* 2013;3:e003581.
- Hinton R, Nagel, T. Evaluation of a culturally adapted training in Indigenous mental health and wellbeing for the alcohol and other drug workforce. ISRN Pub Health, 2012.
- Paradies Y. A systematic review of empirical research on self-reported racism and health. *Int J Epidemiol* 2006;35:888–901.
- Westerman T. Engagement of Indigenous clients in mental health services: what role do cultural differences play? *AeJAMH* 2004;3:88–93.
- Teeson M, Proudfoot H. Responding to comorbid mental disorders and substance use disorders. In: Teeson M, Proudfoot H, eds. *Comorbid mental disorders and substance use disorders: epidemiology, prevention and treatment.* Sydney: National Drug and Alcohol Research Centre, University of New South Wales, 2003:1–7.