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An Approach to Treating Depressive and Psychotic Illness in Indigenous Communities

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This study is one of the activities of a multi-site research program, the Australian Mental Health Initiative (AIMhi), funded by the National Health and Medical Research Council. AIMhi in the Northern Territory collaborated with Aboriginal mental health workers and Northern Territory remote service providers in developing a range of resources and strategies to promote improved Indigenous mental health outcomes. A brief intervention that combines the principles of motivational interviewing, problem solving therapy and chronic disease self-management is described. The intervention has been integrated into a randomised controlled trial. Early findings suggest that the strategy and its components are well received by clients with chronic mental illness, and their carers, in remote communities.

Key words: Indigenous mental health, Self-management, Brief intervention, Co-morbidity

Many mental disorders are chronic or relapsing in nature (World Health Organization [WHO], 2001). Schizophrenia, depression, and bipolar illness all have high rates of recurrence. However, the problems of chronicity and the prevention of recurrence have not yet been major foci of research, compared with research into secondary interventions that target those already identified as having illness. Interventions to reduce the incidence of recurrence may adopt biological, psychological or social approaches alone, or in combination. Psychological approaches have included compliance therapy, brief interventions, motivational interviewing, problem solving therapy, cognitive-behavioural therapy, and psycho-education targeting individual and family (Healey et al., 1998; Kemp, Hayward, Applewhaite, Everitt, & David, 1996; Mueser et al., 2002; Pekkala & Merinder, 2003). Chronic disease self-management principles have linked improved outcomes with good client-service collaboration (Bodenheimer, Lorig, Holman, & Grumbach, 2002; Hewitt, & Birchwood, 2002), and best practice guidelines now include care planning and regular review and engagement of consumers (McGorry, Killackey, Elkins, Lambert, & Lambert, 2003; Rickwood, 2002).

Although good evidence exists for the effectiveness of the above relapse-prevention strategies for the general population, there remains a significant gap between evidence and practice for Indigenous Australians, particularly in remote settings where many Indigenous people live. The Indigenous community has particular difficulty accessing specialist services given issues of distance, language, literacy and worldview (Bailey et al., 2002; Brock et al., 1999; Cass et al., 2002; Eades, 2005). Moreover, there is a need to explore new combinations of approaches to understanding and treatment of mental illness in order to develop a therapy that is appropriate to Indigenous people (Kirmayer, Simpson, & Cargo, 2003; McLennan & Khavarpour, 2004; Murray et al., 2002; Roxbee & Wallace, 2003; Trudgen, 2000). The paucity of clinical research into Indigenous-specific relapseprevention interventions is a major concern given the high number of Indigenous hospital admissions for psychiatric illness, and escalating substance misuse, self-harm and suicide rates (Clough et al., 2004; McLennan & Khavarpour, 2004; Nagel, 2005, 2006; ShuQinLi, Measey, & Parker, 2004).

Chronic disease self-management, and, more recently, "Collaborative Recovery Training" draw

on a range of theoretical approaches to train clients in relapse prevention and to develop care plans for disease management (Bodenheimer et al., 2002; Crowe, 2006; Hibbard, 2003).

This intervention combines the principles of motivational interviewing, problem solving therapy, and chronic disease self-management with traditional story-telling (Brock et al., 1999; Kirmayer et al., 2003; Watson, Obersteller, Rennie, & Whitbread, 2001). The following will detail the methodology and baseline findings of this trial in two remote communities. Outcomes of the intervention will be reported following completion of follow-up measures.

This study is one of the activities of a multi-site research program, the Australian Mental Health Initiative (AIMhi), funded by the National Health and Medical Research Council. AIMhi in the Northern Territory collaborated with Aboriginal mental health workers and NT remote service providers in developing a range of resources and strategies to promote improved Indigenous mental health outcomes.

Materials and Methods

Participating communities

Two remote communities in the Top End of the Northern Territory were recruited to the project. The two communities have populations of 1500 and 500 people—the vast majority of whom are Indigenous. Dominant society influences have altered remote community lifestyles markedly in the last three decades; however, most community members still follow traditional cultural activities such as hunting, fishing and ceremony, and many speak English as a second language.

Participants

All subjects were current clients of the health centre, and were referred by the Aboriginal mental health workers (AMHWs) and the regional mental health team, or were self-referred carers. All subjects were assessed as having chronic mental illness. Diagnoses included schizophrenia, drug-induced psychosis, recurrent major depression, bipolar affective disorder and schizoaffective disorder. Given the complexity of cross-cultural psychiatric diagnosis, formal diagnoses will not be applied until all the data has been analysed. Organic mental illness, intellectual disability and age less than 18 years were criteria for exclusion. Chronicity was assessed by the senior researcher (psychiatrist) and took into account duration of symptoms (greater than six months) and previous episodes of relapse (a number of clients were not otherwise receiving treatment for their illness). Clients, carers and AMHWs were given an explanation of the project in plain English in spoken, written and pictorial formats. Where appropriate, translation was provided by the AMHWs.

Design

The broader AIMhi five-year research framework allowed this study to draw on more than 12 months of consultation and relationship development with services and AMHWs prior to commencement. An 18-month repeated measures design with delayed treatment group was used, and data were collected at baseline, 6, 12 and 18 months. The participants were randomised to one of two conditions; a twosession motivational care planning intervention delivered by the research team and a six-month delayed treatment control group receiving treatment as usual from the local mental health services. Treatment occurred at baseline in the first group (the "early treatment" group), and six months in the second group (the "late treatment" group). The two treatment sessions were two to six weeks apart. Sample size was based on statistical power calculation at a power level of 0.8 and type 1 error rate of 5%. Moderate to large effect sizes (0.5 SD to 0.8SD using Health of Nations Outcome Scale as the primary outcome measure) required a target sample size of 50-90 subjects. In the end, 49 clients were recruited to the trial, and received treatment between November 2005 and August 2006. The Menzies School of Health Research and Department of Health and Community Services Joint Ethics Committee granted ethics approval.

Procedure

The first phase of the project in each community was the development of a five-minute mental health story for that community with the AMHWs. The story was developed using photographs, music, artwork, and language of that community, and was then translated into video and flip-chart formats. The story content covered local views of strength and resilience, stressors and precipitants, symptoms and treatments. This story was then used to inform the pictorial tools used in assessment and treatment. The local story was then linked with three other short education videos developed for the intervention. Two videos were shown during the first treatment session and two in the second. All videos were less than five minutes in length. Following the assessment procedure described below, participants were randomised to one of two conditions—the experimental intervention, or treatment as usual. The project leader, a psychiatrist with remote NT experience, working with one research officer/AMHW, provided the assessment and therapy with assistance from the local AMHWs wherever possible.

Assessment

Assessment and intervention sessions were conducted in the remote health centre, homes or chosen outdoor sites. The assessment comprised a separate semi-structured interview with client, carer and AMHW, in which data pertaining to demographics, family setting, psychiatric symptoms and lifestyle were gathered. Additional instruments to assess psychological drug dependence, wellbeing, life skills, psychiatric symptoms and knowledge of illness and treatment and compliance were used. Instruments with known psychometric properties and validated in the cross-cultural setting were chosen where possible.

Two scales measured severity of mental health disorder-the Health of Nation Outcomes Scale (HoNOS) and the Life Skills Profile (LSP). The HoNOS is a clinician rated instrument with 12 items measuring behaviour, impairment, symptoms and social functioning, with each item rated on a fivepoint scale (Wing, Curtis, & Beevor, 1996). The abbreviated Life Skills Profile (LSP-16) assesses consumers' overall day-to-day functioning rather than clinical symptoms and requires the clinician to rate in four broad domains (withdrawal, antisocial behaviour, self-care and compliance) according to their assessment over the last three months (Department of Health and Ageing [DoHA], 2003). Self-assessment of wellbeing was measured by the Kessler 10 instrument, a short dimensional measure of non-specific psychological distress in the anxiety-depression spectrum.

The above three outcome measures have been chosen by the Commonwealth Government to measure needs of the population for community mental health services across Australia (DoHA, 2003). A shortened version of the K10 (K5+) was used in the 2005 National Aboriginal Torres Strait Islander Health Survey (NATSIHS). The National Advisory Group on ATSI Health Information and Data (NAGATSIHID) met in November 2006 and reviewed the NATSIHS and supported the validity of K5 items (Australian Institute of Health and Welfare, & Birch, 2006).

Illness behaviour and knowledge was measured by an adapted version of the Partners in Health scale which has demonstrated potential to be a reliable and valid measure of chronic condition self-management (Battersby, Ask, Reece, Markwick, & Collins, 2003). The fiveitem Severity of Dependence Scale measured psychological dependence on marijuana and alcohol. This scale has been found to have good psychometric properties with amphetamine, cannabis, benzodiazepine, alcohol and opioid users. Preliminary analyses have indicated cut-off scores of 3 as indicative of cannabis dependence, and of 2 in the setting of psychosis (Ferri, Marsden, de Araujo, Laranjiera, & Gossop, 2000; Dawe, Loxton, Hides, Kavanagh, & Mattick, 2002; Hides, Dawe, Young, & Kavanagh, 2007). All scales were adapted to include pictorial prompts and plain English as necessary. The AMHW interview included an assessment of AMHW knowledge and confidence. The semi-structured interview covered a full current psychiatric assessment, while background history was obtained from audits of clinical and hospital files.

The brief intervention

The motivational care planning intervention was designed to assist participants in understanding symptoms and signs of mental illness, in problem solving, and in developing a set of strategies to manage relapse and pursue lifestyle goals step by step. Where possible, carers and local AMHWs were present. Two short animated videos were shown during each treatment session. Each one-hour session included a brief motivational interview with a focus on change in the context of family and community, rather than for the individual. The second session, 2-6 weeks later, reviewed the previous change plan, and barriers to goal achievement, and developed new strategies as appropriate. Participants received flip charts and information sheets at each session that reflected the content of the videos. A formal care plan was then developed with the client for the clinic file,

incorporating a crisis relapse plan and identifying early warning signs of relapse. A copy of the care plan and a matching pictorial booklet were sent 4–12 weeks post treatment.

Baseline Findings

Client characteristics

Eighty per cent (80%) of local mental health service clients agreed to participate in the project. Fortynine participants and 37 carers were recruited in Community 1 and Community 2. Seven carers were caring for two or more clients and four clients identified no carer. One out of the 38 carers approached declined to participate at baseline. One hundred per cent of the recruited clients attended a baseline interview. One client committed suicide in the first six months of the trial and another 12 months later. The average age of clients was 33 years; 57% were male. Follow-up interviews were completed for 44 clients (90%) out of the 48 remaining clients at six months after baseline. Forty-two clients (86%) were followed up at 12 months, and 37 of the 47 clients (76%) remaining were followed up at 18 months. The missing interviews were usually not the result of withdrawal from the trial, but resulted from deferral of invitations to be interviewed. Three of the 49 clients (6%) formally withdrew from the trial.

Baseline diagnosis, substance dependence and wellbeing scores

Clinical assessment involved interviews with clients, AMHWs and carers, and review of the clinical file. Fifty-nine per cent of client participants met criteria for a schizophrenia-related disorder, 37% were diagnosed with a depressive disorder, and 4% met criteria for bipolar affective disorder. Diagnoses were made with reference to DSM IV criteria. Diagnosis is complicated by cross-cultural differences as well as high rates of co-morbidity with substance misuse. Final diagnoses will be established at completion of 18-month follow-up. Forty people (82%) used marijuana and /or alcohol, and nine did not. Ninety-two per cent of users were psychologically dependent on that substance (SDS score greater than or equal to 3). Clients and carers have high rates of emotional distress. Ninety-six per cent of clients and 77% of carers have medium risk (K10 16–29) to high risk (K10 30–50) of anxiety and/or depressive disorder.

Environmental stress, strengths, worries and goals for change

There are high rates of associated domestic violence, mental illness, self-harm behaviour and substance misuse in the client households (Figure 1). Eightynine per cent of clients lived in households in which others were misusing substances. "Good tucker" (usually traditional foods known as "bush" tucker), "hunting and fishing", "family", and "dance" (usually traditional or "ceremony" dance) are the strengths most commonly identified by clients (Figure 2). "Worry family" "Family self-harm", "sadness", "smoking" and substance misuse were the most frequently identified stressors (Figure 3). The worry family response relates to the item on assessment as follows: "I do things which worry my family"-no worries, some worries or big worries. The family self-harm response relates to the item "Family or friend has self- harmed"-no worries, some worries, or big worries. Other common stressors were: "silly thinking", "memory" worries, and worry about being "violent". Silly thinking included prompts such as "jumbled" thoughts, or "afraid all the time", and sought to uncover abnormal thought form and content.



Figure 1: Behaviour of others in the client's home



Figure 2: Strength and resilience





Figure 4: Five most popular client goals for change



Goals

Clients and carers responded positively to the cross-cultural stories and engaged well with the goal-setting intervention. Cutting down or stopping marijuana and alcohol use was the most frequently identified goal (Figure 4.). Marijuana and alcohol were frequently linked with family worry such as arguments and domestic violence and with the worry family item, in that clients' acknowledged that their own substance use caused worry their family.

Discussion

The results show evidence of interest and engagement in goal setting and collaborative care planning. These findings suggest that the intervention is acceptable, and may offer a strategy for approaching treatment of comorbid illness in remote settings. The clients in this trial have high acuity-high rates of co-morbid substance misuse-and live in stressful environments. They live in remote communities where access to knowledge about mental illness and to appropriate treatments is limited. Although clients have significant motivation to change, they live in a setting conducive to frequent relapse of illness. These baseline findings underscore the importance of developing relapse prevention strategies and integrated approaches to substance misuse and mental illness. This study provides a rich library of client stories through the treatment sessions and care planning. These stories reveal life values that are specific to this cultural setting, and which may differ from the priorities of non-Indigenous and non-community-based practitioners, such as the following de-identified story:

Family, traditional dance, teaching children, work and fishing keep me strong. My daughter Christine and

my brother Eric and my three grandchildren Jimmy, John and Erin keep me strong too. My worries are family violence, not enough fishing, physical illness, not knowing enough about mental illness, and thoughts of self-harm. Early warning signs of me getting sick with mental illness are feeling down, stopping sleeping, thinking too much, stopping eating, and only drinking water. If I know I am getting sick I will get help quickly by talking to my sister Ellie or to my cousin Mona, or to the health worker, Alice. Changes I want to do are more culture in my life, and to get less upset about family worry. Good things about these changes would be more relaxation, and a ladies, fishing trip where we just sit around the fire, instead of playing cards. I want to ask at the shop and the women's centre about buying needles for weaving. I want to walk out bush and get pandanus leaves and dye with my cousin Cindy-and maybe make a mat or a basket. And go for walks with the grandchildren.

Responses to the baseline assessment indicated that the instruments developed for this program have a high degree of efficacy in engaging clients about issues that, evidence suggests, are highly relevant to the likelihood of relapse. These instruments are appropriate to cultural background and allow clients to develop their own priorities for change and identify their own steps toward those goals. Culturally appropriate service delivery requires recognition of cultural difference. This study describes one approach to translation of knowledge across cultures, and to development of a shared understanding of precipitating, perpetuating and protective factors of mental illness. The baseline findings of this study, and the goals and steps chosen by clients, are being used in the AIMhi project to further develop culturally-appropriate information resources for NT Indigenous people with mental illness, their families, service providers, and the broader community. The outcomes of the randomised controlled trial and of the remote service provider training will be reported in 2008.

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