

# Translating evidence to practice: improving oral health outcomes for rural mental health clients

**Amanda Kenny<sup>1</sup>, Mark Gussy<sup>2</sup>, Susan Kidd<sup>3</sup>, Carol McKinstry<sup>4</sup>, Ben Keith<sup>2</sup>, Melanie Bish<sup>1</sup>**

<sup>1</sup>Faculty of Health Sciences, La Trobe University, <sup>2</sup>School of Dentistry and Oral Health, La Trobe University, <sup>3</sup>Joint Appointment in Mental Health, La Trobe University and Bendigo Health, <sup>4</sup>School of Occupational Therapy, La Trobe University

## Introduction

In 2001, the Australian Health Ministers Advisory Steering Committee for National Planning on Oral Health released their final report, *Oral Health of Australians: National Plan for Oral Health Improvement*. Building on this report, in 2004, the National Advisory Committee on Oral Health released *Healthy Mouths Healthy Lives: Australia's National Oral Health Plan 2004–2013*. The key features of this plan highlighted the importance of oral health and the significant financial and social burden that poor oral health has on Australia. Importantly, the plan identified, that whilst there have been some improvements in the oral health status of the broader community, the 'gap between the oral health status of the advantaged and the disadvantaged is substantial and increasing'.

A major action area of this plan was to improve the oral health of people with special needs, including individuals with mental health issues. Socio-economic disadvantage and people in rural and regional locations were highlighted as key areas that should be targeted for improvement in oral health outcomes. An important key strategy proposed in the National Oral Health Plan was to develop oral health educational modules to improve the knowledge and skill level of health and community service professionals.

The *Healthy Horizons Framework* provides a blueprint for the improvement of the overall health status of rural communities and highlights both the importance of oral health and the significant issues surrounding mental health. The project reported in this paper brings together the key areas of oral health and mental health, and proposes a plan to support, educate and train health professionals and consumers by focusing on a key issue, the oral health of mental health clients. It develops and encourages collaborative partnerships between interdisciplinary health professionals and consumers through the development of processes and materials that are available for wider dissemination.

## The prevalence of mental health issues

Key surveys have indicated that the prevalence of mental health problems in Australia is significant, supporting the inclusion of mental health as one of the country's seven National Health Priority Areas.<sup>1</sup> In Australia, it is estimated that 16.1% of males and 7.8% of females have a significant mental disorder.<sup>2</sup> A major report on young people's mental health indicated that approximately 500,000 Australians aged between 4-17 years have serious emotional and behavioural health problems<sup>3</sup> and in the 18-24 age brackets, 27% of males and 26% of females are deemed to have a significant mental health problem.<sup>4</sup>

Since the early 1990s, there have been major changes to the way in which mental illness has been managed in Australia and reforms have been implemented that have been driven by the three Plans of the National Mental Health Strategy.<sup>5</sup> The focus has been on 'mainstreaming' mental health care, by increasing the focus on community based care. Consistent with this strategy, in Australia in 2003-

2004, there were almost five million mental health service contacts in outpatient and community based mental health services.<sup>2</sup>

## Access to services

The increasing incidence of mental health issues in the community creates an enormous demand on primary health services. Health policy in Australia and internationally focuses on ensuring that mental health clients receive appropriate care, support, treatment and follow up.<sup>6</sup> In any setting, mental health clients face many challenges in accessing services but in the rural context, consumers are further disadvantaged and marginalised by the lack of appropriate public health infrastructure, lack of access to primary health services and issues of confidentiality and stigma associated with living in a rural environment.<sup>7</sup> The main providers of mental health services in rural areas include GPs, community mental health nurses and workers, occupational therapists, social workers, dieticians, psychologists and psychiatrists.<sup>6</sup>

## Oral health

In Australia, poor oral health makes a significant contribution to the burden of disease measured in terms of disability adjusted life years (DALYs) and oral health care is currently one of the major reasons for hospitalisation.<sup>8</sup> In 2003, 5.1 billion dollars was expended on dental care and it is estimated that by 2033 dental health expenditure will increase by 144%.<sup>9</sup>

The National Oral Health Plan<sup>10</sup> identified mental health clients as one of the major disadvantaged groups facing significant issues around declining oral health and poor access to dental services. Studies have indicated that the mainstreaming of psychiatric care has resulted in the responsibility for oral health being placed with mental health clients who face many barriers in accessing this care.<sup>10</sup>

## Mental health and poor oral health outcomes

Little has been reported about the oral health status of Australians with mental health problems; however, international reports consistently show significantly higher levels of dental disease.<sup>11,12</sup> Key national and international reports have identified the major issues that mitigate against improved oral health for mental health clients.<sup>6,10</sup> These factors include the type of mental illness, client motivation and self esteem, understanding of the importance of oral health, socioeconomic factors, and lack of understanding of how to access dental services. Studies have suggested that mental health clients have poor oral health practices and avoid dental visits and brushing of teeth.<sup>13</sup> Issues such as poor diet, and heavy cigarette smoking contribute to the oral health concerns of mental health clients.<sup>14</sup>

The impacts of oral health adverse effects that arise from common pharmacology used in psychiatry are consistently identified in the literature.<sup>15</sup> Xerostomia (lack of saliva causing dry mouth) can lead to increased plaque, calculus formation, dental caries, periodontal disease, enamel erosion, oral candidiasis and perleche.<sup>15</sup> Australian prescriber guidelines indicate that most antidepressants cause xerostomia, with tricyclic antidepressants and selective serotonin reuptake inhibitors having a major impact on oral health as a result of prolonged diminished salivary function.<sup>15</sup> Conversely, cholinergic agonism, a common adverse effect of clozapine, a popular antipsychotic, results in sialorrhoea or hypersalivation which can lead to dribbling and face soreness. The potential impact of methadone on oral health is regularly reported within the literature.<sup>15</sup> Excessive dental damage is associated with

bruxism (excursive movement of the jaw with grinding of the teeth), an adverse effect arising from psychotropic medication<sup>15</sup>. Studies have indicated that only a very small percentage of mental health clients have any understanding of dental caries and conditions such as atypical odontalgia, tardive dyskinesia, temporomandibular joint disorders and dysphagia that can be the impact of many common mental health medications<sup>13</sup>.

Fear and dental phobias amongst mental health clients have been reported in numerous studies<sup>16</sup> and it has been argued that dental fear is one of the most stress provoking management issues for dental professionals. Importantly, oral health knowledge and attitudes by health professionals and health workers, dental professional's attitudes and knowledge of mental health problems, and the reticence of dental health professionals to provide dental care to mental health clients have been identified as major mitigating factors that impede improved oral health outcomes for mental health clients.<sup>6,10,13</sup>

It has been argued that the impact of poor oral health amongst mental health clients extends well beyond dental caries, tooth discoloration, and oral malodour and is a major contributor to a mental health clients self esteem and attempts at social acceptance.<sup>16</sup> Broken down teeth can act to diminish employment prospects and lead to problems dealing with bank managers, landlords and health services which results in further disadvantage to an already marginalised group.<sup>17</sup>

## Rationale for the project

Anecdotally, our experience of working in a major rural region in North Central Victoria reflects the international literature. That is, mental health clients have poor oral health outcomes and face many barriers to accessing appropriate services. A small survey conducted by the community mental health team from Bendigo Health, and completed by mental health clients of this service, indicated that only 10% of clients had accessed dental services on an annual basis in the previous five years. Sixty per cent of clients indicated that their dental hygiene could be improved. Forty per cent of clients were currently experiencing some degree of dental pain. Although the sample size of this local study was small, the findings are generally reflective of those reported elsewhere.<sup>6</sup>

In our region, case workers have indicated that oral health and mental health attitudes and knowledge amongst mental health clients, general practitioners, community mental health nurses and workers, allied health professionals and dental professionals could be significantly improved. With the establishment of the first Australian, rurally located dental school in Bendigo, Victoria we believed that we had the expertise to make a significant contribution, through partnership with the local community, to the improved oral health status of mental health clients in our rural/regional location.

## Project aim

The overall aim of this action research project, funded by the Rural Health Support, Education and Training (RHSET) program, is to improve the quality of life for rural mental health clients in the area of oral health. In designing the project, we believed that our aim could be achieved by the development of a supportive education package for multidisciplinary rural health professionals and mental health consumers and the holding of a one day, workshop training program.

## The overall project design

The project was underpinned by community development and participative approaches that were designed to develop new collaborative relationships that would strengthen the capacity of health care workers and their clients to achieve better oral health. In designing the project, the following recommendations drawn from an extensive literature provided guidance and helped focus our work:

- oral health promotion information to mental health clients must be provided
- information on accessing dental services for clients and health professionals should be clear
- education and training for general practitioners, community mental health nurses and workers and allied health professionals should be provided to ensure a good understanding of oral health issues
- training for dental professionals in managing mental health clients should be a priority
- formal pathways for communication and referral between health care workers and dental services should be established.

## Project stages

The project has been designed around four key stages.

### Stage one

Stage one involved the establishment of a critical group. Twenty two group members are involved in the project representing health services, medical staff, community mental health staff, allied health representatives, dental professionals, a representative from our regional Aboriginal Co-operative, a pharmacist, an educational designer, academics, professional body representatives, the Victorian Mental Illness Awareness Council and importantly mental health consumers. Using the action research spiral processes, the critical group has informed all stages of the project.

Central to the overall project has been a strong commitment to true consumer participation. Consumer participation has been defined as:

any activity done by consumers where they have power or influence on the system and services that effect their lives.<sup>18</sup>

Consumer and carer participation in mental health research and education has been enshrined in Australian National Mental Health Policy since 1991 and partnerships since 2003.<sup>19,20</sup> The Australian National Health and Medical Research Council framework for consumer inclusive research guided all stages of the project.<sup>21</sup> As a group, we have been informed by Australian taskforces and reports that have highlighted the importance of consumer participation and true partnership development.<sup>22-26</sup>

In this project, we believe that the knowledge, experience and expertise of consumers and carers are integral to the project and has been given the same value as other professional knowledge.<sup>27</sup> In developing our processes we are cognisant that in many cases, in other projects, genuine consumer participation has not been achieved.<sup>20</sup>

In the project, accountability to consumer participation and partnership is achieved in a number of ways. The whole process is guided by the nine principles of sustainable partnerships outlined in the



NHMRC Statement on Community and Consumer Participation in Research.<sup>21</sup> The project group worked with the Victorian Mental Illness Awareness Council (VMIAC) and a regional consumer consultant in the initial development of the project. Consumer recruitment was managed through the regional VMIAC representative. It was important to achieve a diversity of consumer experience and representation and this process was successfully managed in collaboration with VMIAC. Six consumer representatives are involved in the project, reflecting the commitment of all project members to genuine collaboration. The consumer's involved in the project are remunerated at a level equal with all other reference group members.

Consideration was given to the consumers who have not been involved in research before. Clear language was used and time was taken to explain all aspects of the project and requested tasks. Consumers and non consumers worked in small groups so that each person was working with another, with more education and research experience. An open dialogue was encouraged so that consumers felt that they were able to put forward their view and importantly, not feel overwhelmed by the academic nature of the project. Meetings are digitally recorded to facilitate everyone's involvement and time is provided to ensure everyone is clear on what is required of them.

### Stage two

In stage two, the critical group developed a shared understanding of ways in which oral health and mental health could be maximised in the rural/regional context. An oral health questionnaire was developed by the group and distributed widely to develop an understanding of current issues, including knowledge and attitudes to oral health and mental health. In analysing the data, the focus has been on the requirements for an educational package.

### Stage three and four

As we move through stage three and four, we are developing an educational package by drawing together existing evidence based resources and developing new resource material by experts from our critical group and identified key people. The materials are continuously reviewed and refined by our critical group and wider stakeholders. In completing the project, we are in the planning stages for a full day dissemination workshop that will be advertised widely to health professionals and mental health consumers and carers. The workshop will include practical training sessions, presentation of the developed educational package and opportunities for networking.

### Conclusion

Aligning closely with the objectives of the National Advisory Committee on Oral Health and *Healthy Mouths Healthy Lives: Australia's National Oral Health Plan 2004–2010*, this project is providing an opportunity to contribute to the improvement of the overall health status of rural communities. The importance of oral health and the significant issues surrounding mental health is a focus, as the project is orientated toward supporting, educating and training health professionals and consumers regarding the oral health of mental health clients. It is a proactive process that since commencement has initiated and nurtured collaborative partnerships between interdisciplinary health professionals and consumers. As we move through the process, the value in developing a multidisciplinary project that focuses on true consumer participation is enabling us to not only learn about the subject material that we are engaging in, but perhaps most importantly, to capture the enormous expertise that can be harnessed by bringing people together who are committed to valuing the unique expertise of individuals who come from different perspectives.

## References

1. Commonwealth of Australia. Health Priorities. Canberra: Department of Health and Ageing, 2007.
2. Australian Institute of Health and Welfare. Mental health services in Australia 2003-04. Canberra: Commonwealth of Australia, 2005.
3. Sawyer M, Arney F, Baghurst P, Clarke J, Graetz B, Kosky R, et al. The mental health of young people in Australia. Canberra: AGPS, 2000.
4. Australian Institute of Health and Welfare. Australia's Young People 2003. Canberra: Commonwealth of Australia, 2003.
5. Commonwealth of Australia. National Mental Health Strategy. 2007, <<http://www.health.gov.au/internet/wcms/publishing.nsf/content/mental-strategy>>, accessed on 10 February 2009.
6. Griffiths J, Jones V, Leeman I, Lewis D, Patel K, Wilson K, et al. Oral Health Care for People with Mental Health Problems Guidelines and Recommendations. London: British Society for Disability and Oral Health, 2000.
7. Kenny A, Kidd S, Jarvis M, Tuena J, Robertson A. Falling through the cracks: Supporting young people with dual diagnosis in rural and regional Victoria. Australian Journal of Primary Health 2006;12(3):12-9.
8. Australian Institute of Health and Welfare. Use of hospital services. 2008, <[http://www.aihw.gov.au/cdarf/data\\_pages/hospital/index.cfm](http://www.aihw.gov.au/cdarf/data_pages/hospital/index.cfm)>, accessed February 10 2009.
9. Australian Institute of Health and Welfare. Projection of disease and health care expenditure in Australia 2003 to 2033. 2008, <[http://www.aihw.gov.au/eventsdiary/ah08/presentations/projection\\_of\\_disease\\_and\\_health\\_care\\_expenditure\\_in\\_australia\\_2003\\_to\\_2033\\_-\\_goss\\_j.pdf](http://www.aihw.gov.au/eventsdiary/ah08/presentations/projection_of_disease_and_health_care_expenditure_in_australia_2003_to_2033_-_goss_j.pdf)>, accessed February 10 2009.
10. National Advisory Committee on Oral Health. Healthy mouths, healthy lives: Australia's National Oral Health Plan 2004-2013. Adelaide: National Advisory Committee on Oral Health, 2004.
11. Friedlander A, Mahler M. Major depressive disorder. Psychopathology, medical management and dental implications. Journal of American Dental Association. 2001;132:629-38.
12. Friedlander A, Marder S. The psychopathology, medical management and dental implications of schizophrenia. Journal of American Dental Association. 2002;133:603-10.
13. Tang WK, Sun F, Ungvari G, O'Donnell D. Oral Health of Psychiatric In-Patients in Hong Kong. International Journal of Social Psychiatry. 2004;50:186.
14. Mirza I, Day R, Phelan M, Wulff-Cochrane V. Oral health of psychiatric in-patients. Psychiatric Bulletin. 2001;25:143-5.
15. Page M. Psychotropic drugs and dentistry. Australian Prescriber. 2007;30:98-101.
16. Davies R, Bedi R, Scully C. Oral health care for patients with special needs. British Medical Journal. 2000;321:495-8.
17. Senate Community Affairs Reference Committee. Report on Public Dental Services. Canberra: Commonwealth of Australia, 1998.
18. O'Hagen M, Pearson A. Consumer participation in a projector counter. Stigma and discrimination associated with mental illness, 2000.
19. Australian Health Ministers. National Mental Health Plan 2003–2008. Canberra: Commonwealth of Australia, 2003.
20. Bland R, Epstein M. Encouraging Principles of Consumer Participation and Partnership : The Way Forward in Mental Health Practice in Australia. . In: Taylor C, Foster M, Fleming, J ed. Health Care Practice in Australia. South Melbourne: Victoria Oxford University Press, 2008:239–54.
21. National Health and Medical Research Council and Consumer Health Forum of Australia. Statement on Consumer and Community Participation in Health and Medical Research Canberra.: Commonwealth of Australia, 2002.
22. Commonwealth Department of Health and Family Services. National Standards for Mental Health Services. Canberra : Commonwealth of Australia, 1996.
23. Deakin Human Services Australia. Education and Training Partnerships in Mental Health. Canberra : Commonwealth Department of Health and Aged Care, 1999.
24. National Health Service. National Health Service Modern Standards and Service Models, Mental Health, National Service Frameworks. London: National Health Service, 1999.
25. Australian Nursing and Midwifery Council. National competency standards for the registered nurse. Australian Nursing and Midwifery Council, 2006.
26. National Nursing and Education Taskforce. What are common myths about nurse practitioners? Canberra: Australian Health Ministers Advisory Council, 2006.
27. Stacey K, Herron S. Enacting policy in mental health promotion and consumer participation. Australian E-Journal for the Advancement of Mental Health, 2002.

## Presenter

**Amanda Kenny** holds a PhD in rural health policy. She is an Associate Professor in Rural and Regional Nursing and is the Director of the Faculty of Health Sciences at La Trobe University's Bendigo campus. Mandy is widely published internationally and has been a key speaker at a number of international conferences. She is the Assistant Editor of the United Kingdom based *Journal of Clinical Nursing*. Mandy is an active researcher and her current research includes rural health service delivery and chronic disease management in rural communities. She has conducted extensive consultancies, with an emphasis on rural workforce development.