South Australian Office of the Public Advocate

Comorbidity in the country

Opinions and Observations of Dual Diagnosis Services in Rural South Australia

A Collaborative Project

Office of the Public Advocate

Massachusetts General Hospital Division of International Psychiatry

Country Mental Health SA

Report of a visit to South Australia by:

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April 2009

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Summary

Increasing attention is being paid to the mental health care needs of rural and remote Australians. The need can be particularly acute for people who have co-morbid psychiatric and substance use disorders that require an effective interface between primary care and specialist mental health and substance use services.

In this observational report, one of us (DG) met with consumers and service providers in a number of rural and remote locations to listen to their experiences and views about what the priorities for future service improvement and develop should be, as well as observe clinical practice. Common themes that emerged from these meetings included the need to reduce overlaps and gaps, to improve communication so that information is available across services, and to recognize and address the impediments that might stop people coming forward with a dual diagnosis problem to get treatment. Other issues raised included the need for improved systems to routinely identify substance withdrawal of inpatients in country hospitals and manage detoxification as well as providing local care for people who experience brief episodes of stimulant intoxication and are currently transported to Adelaide.

Based on these findings, potential strategies to address these issues were canvassed in discussion with practitioners in the field. These are described in the report. The need for redesign and improved integration of service is noted along with the benefit of assertive community services. In addition other practical improvement projects are suggested including a quality audit of the management of intoxication and withdrawal in rural health settings, and the development of distant education resources that could be combined with multiple choice questions in the dual diagnosis area to test practitioners knowledge, as well as making the practitioner eligible to receive continuing education points.

Whereas there is a need for further study, it is hoped that this report provides suggestions for future actions improve health care for Country South Australians who have a dual diagnosis.

Introduction

There are a number of differences between metropolitan Adelaide and country South Australia in the delivery of health care. Specialist services (e.g., such as cardiac surgery, neonatal intensive care, inpatient psychiatric care, etc.), for a number of reasons, are centralized in the metropolitan area while there is a heavy reliance on primary care in the country. If some health care services are less available to residents of country South Australia, this disadvantage may lead to poorer health outcomes for country people [Owen et al. 1999; Pong et al. 2009; Taylor & Cheers 2008]. Whereas specialty services might be available to individuals with these conditions in metropolitan Adelaide, individuals from country South Australia with these conditions may not have access to appropriate services [Drought Policy Review Expert Social Panel 2008]. Equity is an important goal for any health care system, and accounting for access is an important first step in identifying and correcting healthcare disparities. Among the groups of patients who do not fit neatly under the care of health care providers operating within traditional services in country South Australia are patients with dual diagnosis.

Dual diagnosis refers to co-occurring or comorbid psychiatric and substance use disorders, and it is an important distinction because dual diagnosis complicates treatment of the constituent disorders. The relationship between psychiatric and substance use disorders is conceived of in three distinct ways [Samet & Hasin, 2008]. The first refers to an individual with a psychiatric disorder such as a mood, anxiety, or psychotic disorder exacerbated by the co-morbid use of alcohol and/or illicit drugs. The second reflects the observation that prolonged alcohol and drug abuse might precipitate a mood, anxiety, or psychotic disorder in some individuals. Lastly, a psychiatric disturbance may be the result of the expected effects of withdrawal or intoxication. Because of medical co-morbidities related to alcohol or drugs (cardiovascular, gastrointestinal, etc.), these patients also require good physical health care as an essential part of their treatment [Clark et al. 2009]. However, individuals with a dual diagnosis have chronic, relapsing conditions and do not fit neatly in the care of traditional medical, mental health, or substance abuse providers. Service to these individuals even in the best of circumstances can be exacerbated by poor insight and socioeconomic disadvantage.

What is evident both in the literature [Drake et al. 2008; Horsfall et al. 2009], and from discussions with senior dual diagnosis practitioners in both Boston and Adelaide is that there is little robust evidence of what works in effectively treating dual diagnosis, nevertheless there is some evidence to guide best practice. First and foremost, it is important to have clinicians who understand the variety of ways a comorbid psychiatric and substance use disorder affects health and wellbeing, including social and occupational functioning.

We solicited the opinions and experiences of health care professionals and residents in the country regarding knowledge of and access to care for individuals with dual diagnosis. As will be discussed below, it is a timely topic. There is need in the country, and some systemic changes to improve partnerships between country mental health and Drug and Alcohol services are underway. In this context, care may be improved with simple changes in policy and focus.

Method of the Review

This is a collaborative project of the Office of the Public Advocate (OPA), Country Mental Health South Australia and the Massachusetts General Hospital Division of International Psychiatry. The OPA has a legislated role to review programs in South Australia for people who have a mental incapacity – which includes incapacity caused by mental illness. This work program has been completed under the Public Advocate's authority.

The OPA auspiced this project, and it was implemented through the support and assistance of Country Mental Health SA, its staff, country people who use the services, and staff members of Drug and Alcohol Services, South Australia (DASSA).

One of us (DG) undertook the review over 4 weeks. DG is a psychiatry fellow of MGH who completed this attachment as part of his residency. Prior to commencing medicine, he worked in risk management (in a non-health setting) in the private sector. With this, his first visit to Australia, he was able to observe the local system with fresh eyes, and relate this information to the fundamental clinical principles of good practice gleaned in training. He had weekly supervision sessions with JB, and regular discussions with KF during his visits to SA country centres.

Over four weeks, DG met with health care professionals and residents of South Australia who discussed their opinions and experiences of dual diagnosis services in rural South Australia (see Table 1). Whereas it was not the focus of the information gathering, a number of South Australians described their own personal experience. No information that may potentially identify consumers will be disclosed. Whereas disclosing the names of professionals contacted in this work would not infringe upon an expectation of privacy or confidentiality, they were far too numerous to list individually. In addition to conversations with informants, a number of observations were made of rural health care practice.

Table 1. A list of organization and informants on this project and the location of contact.

ORGANIZATION/INFORMANTS	LOCATION
Flinders Emergency Room and inpatient units	Adelaide
Rural and Remote Mental Health Service	Glenside
Telepsychiatry Consultation service	Glenside
Royal Flying Doctor Service (RFDS)	Adelaide and Port Augusta
Women and Children's Hospital Boylan Ward	Adelaide
Child and Adolescent Mental Health Services	Murray Bridge
Rural practicing pediatrician	Port Augusta
Aboriginal Health	Ceduna
Remand Centre	Adelaide
Guardianship Board	Adelaide
Drug and Alcohol Services South Australia	Adelaide, Murray Bridge, Fleurieu

(DASSA)	Peninsula
Community Mental Health Teams	Adelaide Hills, Fleurieu Peninsula, Murray Bridge, Port Lincoln
Drought counsellors	Yorke Peninsula
General Practioner (GP) clinics / Country hospitals	Murray Bridge, Ceduna
Drought Counseling Center	Murray Bridge
Headspace	Murray Bridge
Yalata school	Yalata
Consumers (i.e., non-professionals such as patients/residents/clients)	North to Mungerannie, west to Yalata, east to Mt. Gambier

As is notable from the above:

1. The metropolitan Adelaide area is a major part of the care of rural South Australians.
2. A significant portion of rural South Australia was reached over the four week period, particularly near the coast.
3. A variety of organizations provide services to dual diagnosis patients.

Limitations of the report:

1. Four weeks is a limited amount of time for such a review, conducive to a preliminary analysis only.
2. As this was a quality improvement initiative, no standardized research methods were undertaken.
3. Access to the interior of the state was limited.
4. Access to the viewpoints of Aboriginal Australians was limited.

Observations

A. Professionals and consumers consulted described dual diagnosis as an active and significant problem for country South Australia. The rates of dual diagnosis conditions may be influenced by factors that relate specifically to rural life, and patients can be at greater risk of harm because of distance from specialist care.

Issue A1 Populations at risk: There are a variety of populations and demographic groups at risk. The ongoing needs of the following groups were frequently cited:

- There are a considerable number of people in the country facing hard economic times, particularly because of climate change or drought. Entire communities, not just farmers and their families, are impacted directly and/or indirectly. Many individuals are noted to have increased their alcohol consumption in the setting of situational stress, anxiety, and depression.
- Young people in isolated communities are a special consideration and may engage in treatment through schools, youth services, and youth centres.
- Certain geographic regions may be more affected than others owing to variation in the availability of drugs. For example, some areas are more affected by stimulant use because they are close to the interstate routes by which the drugs are trafficked to metropolitan areas.
- Another distinct population is the subset of consumers with preexisting psychiatric diagnoses whose alcohol and drug use exacerbates underlying mental illness. This group can be particularly susceptible to marijuana and stimulant use triggering relapse of psychosis.

Issue A2: Safety during transfer to the city. Individuals with transient psychosis secondary to amphetamine abuse are a distinct subset of consumers. Because of amphetamine-induced psychosis and resultant detention under the mental health act, they require transfer to the city in fulfillment of the requirement of the law that once detained care be delivered in an authorized treatment centre within 24 hours of detainment. All authorized centers are located in the Adelaide metropolitan area.

Within the larger group who may be transferred, there is a smaller group of highly agitated and disturbed people with amphetamine-induced psychosis who require extraordinary measures to be transferred to Adelaide. An estimated 15 of these individuals per year are detained in country South Australia and subsequently anesthetized and intubated (i.e., put on a breathing machine) for transport by the RFDS to Adelaide. Upon emergence from anesthesia, many of these individuals are no longer psychotic suggesting that their symptoms were transient and

related to intoxication. These individuals can no longer be detained and may be given a bus ticket home without any follow-up care.

This situation reflects both the clinical capacity of rural hospitals to manage acute behavioral disturbance, but is also an artifact of arrangements under the current mental health act that do not allow ongoing involuntary care in a country setting. The cost to transport patients whose psychosis might have otherwise resolved on its own in the country exceeds A$6000 per episode. The risk to the patient of travel under anesthesia is difficult to justify, if once in Adelaide further specialist care is no longer required soon after arrival.

Issue A3: The specific needs of Aboriginal people. This area was not explored fully in this brief project. The deleterious effects of alcohol and drug use for Aboriginal people and their communities were noted by most informants, including DASSA.

B. A multitude of services and funding sources address issues that either directly or indirectly relate to dual diagnosis (See Table 2). This speaks to the importance of the issue; however, there are reports of poor coordination of efforts, redundancy through service overlap, and gaps between services.

Table 2. Individuals and entities encountering individuals with dual diagnosis

FIELD/INITIATIVE	AGENCY/PROFESSION (SOURCE OF FUNDING)
Law enforcement	Forensic psychiatry (State) DASSA counselor (State) Drug courts (State)
General practitioners	Doctors (Medicare) Nurses (State, private) GP Clinic Mental Health Staff (State)
Traditional psychiatry	Rural and Remote Mental Health Inpatient Unit (State) Telepsychiatry (State) Royal Flying Doctor Service (Private) Community Mental Health teams (State)
Traditional substance abuse treatment	DASSA substance abuse counselors (State) Inpatient and residential detoxification services (State)
Drought initiatives	Drought counselors (State) Drought counseling centers (Commonwealth)
Aboriginal health	(Commonwealth, state, and/or private)
Non Government Services	(Commonwealth or state by contract and/or private)

Issue B1: Overlaps and Gaps. A consistent theme from the field was one of service overlaps created by the funding of similar services by different sources. For example, there are a number of drought-related initiatives covering mental health and substance abuse in parallel and dual

diagnosis counseling may be provided by Community Mental Health, DASSA, and GP clinic mental health staff in the same areas. Despite overlap in services, both GPs and community workers report gaps in services including long wait-lists for treatment and, in some areas, a lack of available drug and alcohol workers. Because of limited resources, Community Mental Health team members and DASSA counselors report making difficult decisions about the appropriateness of a dual diagnosis consumer for their services based on a notion that the consumer's problem is primarily substance abuse or primarily mental health-related.

Issue B2: Communication. When this review occurred, substantial work was underway to improve communication between mental health services and drug and alcohol services through joint policies and assessments. The new statewide approach as it currently is formulated will rely on the co-administration of a standardized "triage" and "assessment" form by a DASSA counselor and member of the Community Mental Health team. It will provide a comprehensive drug and alcohol history of a client.

Although this reform effort is still in a planning stage, some DASSA and Community Mental Health teams have made an effort to address shortcomings to the system on their own. For example, some of the country DASSA counselors will regularly attend Community Mental Health team meetings. Nevertheless, care may not be coordinated between services, and there are reports of instances when both services can be involved with the same client but not be aware of it.

The planned assessment approach will go some way towards collaboration; however, it was noted at the time of the review that the current forms have significant drug and alcohol assessment items, but could have more assessment of medical risk associated with substance use and withdrawal and provide for a meaningful psychiatric evaluation. It was also noted that in existing Drug and Alcohol Services publications and treatment protocols for the assessment and treatment of people with amphetamine intoxication, a reference to referral to Community Mental Health is not obvious, despite describing situations where detention under the Mental Health Act is inevitable.

Issue B3: Lack of sharing of clinical records. Most of these organizations keep records of patient contact, many of them keep standardized records, and some of them have computerized records. Nevertheless, medical records are not shared.

Issue B4: Need for a population-wide justice & health strategy**.** Violence associated with substance abuse and dual diagnosis, particularly in the setting of amphetamine use, was a topical issue at the time of DG's visit to Adelaide with front-page headlines about risks in major metropolitan hospitals, and similar concerns from country practitioners about managing such patients in regional centers. For some intoxicated individuals it is a matter of chance whether their behavior is regarded as a health problem or a forensic one – seemingly determined by the level of harm to others while intoxicated on amphetamines or other drugs. At the Remand Center, the majority of arrestees with dual diagnosis were arrested for violent crimes; however, some individuals with similar conditions (such as amphetamine psychosis) also demonstrated

violence and were not arrested. Whereas the courts provided psychiatric care and substance abuse treatment to those under arrest, many of these individuals had not contact with community mental health or substance abuse services prior to their arrest.

C. The GP is often the primary point of contact for dual diagnosis care for the consumer, either by obtaining detoxification services through a local hospital or by referral to mental health or drug and alcohol services. Access to services, however, is complicated by a variety of factors.

Issue C1 Failure to disclose mental health or substance use problems to local GPs through shame. The country GP office is full of familiar faces. Whereas one might think knowing the local GP on a personal basis might enhance rapport, it may hinder disclosure of substance use disorders and psychiatric conditions. One rural farmer would not consult his GP in the setting of increased alcohol use because of concerns for privacy and confidentiality (he knew the GP as well as clinic staff).

Issue C2 Difficulty communicating with non-Australian GPs. A number of consumers feel a strain on the doctor-patient relationship because of a perceived lack of understanding by their GP because of language or cultural differences.

Issue C3 Identification of withdrawal and the management of detoxification. States of intoxication and withdrawal can be life threatening, and workers in country SA report a practice gap between recommended guidelines for the management of withdrawal and what occurs on a day-to-day basis. Difficulties include suboptimal dosing of medications for alcohol withdrawal during detoxification at country hospitals. Many workers also report difficulty having patients admitted for detoxification. There is a lack of reference to standardized protocols for detoxification, despite the use of these protocols on a routine basis in metropolitan Adelaide and evidence which suggests that the use of protocols reduces complications of withdrawal.

Recommendations

This review has highlighted areas for improvement based on discussions with practitioners on the ground. Solutions to many of the issues raised in the report are the subject of active debate in South Australia. A number of important principles may contribute to this discussion.

Strategies to improve patient outcomes and decrease health care costs.

- **INTOXICATION AND WITHDRAWAL MANAGEMENT: AUDIT, IMPLEMENT PROTOCOLS, & RE-AUDIT**:

  Given that individual general practitioners have responsibility for the medical management of intoxication and withdrawal, it was not surprising to hear a range of stories both highlighting practices that could be improved as well as examples of excellence. There were stories of undertreatment of withdrawal in country hospitals, and other stories of excellent hospital and community based management of substance withdrawal by GPs working closely with community workers. There will likely be variation across different locations, and objective measurement of the extent of problems is indicated and could be accomplished by objective clinical audit.

  Best practice protocols are used extensively for the management of life threatening situations in teaching hospitals in both the United States and Australia. Set protocols for the management of alcohol, benzodiazepine, barbiturate, and opiate withdrawal are commonplace within teaching hospital settings and were introduced because individual practitioners often fail to recognize the potential for withdrawal and/or treat withdrawal symptoms with adequate doses of medication. Protocols are meant to enhance but not replace careful clinical history, as symptoms of withdrawal such as agitation may be the result of medical illness, underlying psychiatric illness, recent intake of substances, withdrawal or a combination of factors. Correlating behaviors with physical observations and vital signs can assist in this differentiation.

  As a follow-up to this review it is suggested that a chart review of patients who have a dual diagnosis be conducted. This could look to see if appropriate observations of withdrawal symptoms and vital signs were in place, that the response to abnormal vital signs was timely and consistent with guidelines, and complications such as seizure or delirium tremens were either prevented or promptly treated. Such reviews are routinely a part of quality programs for health services often undertaken by students and trainees under supervision. Results can be compared with audits undertaken in general hospital settings.

The results of these studies may support implementation of protocolized treatment strategies for the management of withdrawal states across South Australia. Any effort to protocolize treatment ought to be the subject of evaluation and study with special attention to efficacy, reduction of complications of withdrawal, and cost.

- ## DISTANT EDUCATION STRATEGIES:

Identification, assessment and management of dual diagnosis problems is a common topic for continuing education programs – training directed to mental health workers tend to focus on acquiring drug and alcohol related skills, and to substance abuse workers on mental health topics. Such knowledge can then be reinforced through ongoing update and refresher programs.

It was apparent that there was a challenge in reaching all the professionals (GPs, nurses, mental health professionals, DASSA counselors, and specialist visitors from the city) across a large geographic area, and new methods of education should be considered. The topic of dual diagnosis would ideally suit the online educational survey method often used for continuing medical education programs in the United States and Australia. Online survey programs may be adapted to almost any purpose, and one could distribute a survey electronically to health professionals to determine their understanding of mental health and substance use disorders and/or their management decisions in a clinical case vignette. The survey could record the multiple-choice responses and display explanations for correct and incorrect responses. In this way, one can determine where knowledge gaps exist to plan further training and provide feedback to the individual taking the on-line test so that the survey in itself is educational. These online educational surveys might be a low-cost way to educate health professionals, research perceived knowledge deficits, and improve patient care.

- ## CHANGES TO LAW:

Changes to existing detainment regulations are currently proposed. One change planned is to eliminate the need to have patients who are detained in the country travel to Adelaide for a psychiatric evaluation within 24 hours of detainment. Relying instead on telepsychiatry to provide an evaluation, a psychiatrist can use clinical judgment and wait to see if a patient will need an inpatient psychiatric hospitalization. Most patients with amphetamine psychosis do not seem to need an inpatient hospitalization, and if their detainment did not necessitate a trip to Adelaide then it would save money in the cost to transport patients, reduce the risk of morbidity and mortality to those patients requiring anesthesia, and increase the utilization of the telepsychiatry service in South Australia. The information

collected in this review underscored the importance of this long awaited change to South Australian legislation.

Restructuring the system may eliminate redundancy and increase the coordination of care:

- ### ANALYSING INFORMATION DATABASES TO IDENTIFY THE NUMBERS OF INDIVIDUALS WITH DUAL DIAGNOSIS:

  The individual databases maintained by the various health agencies and services (including justice) could be used to determine where individuals with dual diagnosis seek treatment and the extent to which an individual is seen by multiple services. One way that this could be done is to deidentify the data by taking the name and date of birth and converting it into a random sequence of numbers and digits and then merging the databases. Understanding why some individuals appear in multiple databases and some individuals appear in one database might help us understand utilization of services, patient preference, and redundancy of services.

  This strategy could quickly provide useful planning information. It is additional and separate to work underway to link databases across health services in real time to assist clinical care. Whereas linking databases is an important task, it is taking many years to achieve. For planning, quicker solutions can be achieved analyzing existing data while maintaining confidentiality without waiting for other interfaces between databases to be developed.

- ### ASSERTIVE COMMUNITY TREATMENT IN COUNTRY SOUTH AUSTRALIA:

  Many practitioners suggested a role for assertive community treatment for people who have dual diagnosis, significant disability, and relapses related to drug and alcohol use. In Assertive Community Treatment (ACT), mental health professionals take on a variety of roles: counselor, case manager, and advocate. Mental health workers have a team approach and share case loads. In the event of staff turnover, the consumer is always known by someone else on the team. Whereas traditional assertive community treatment models emphasize long-term contact with clients, a mix of short and long-term contact might be a more flexible approach for country South Australia. Mental health professionals have contact with the consumer in the consumer's home or natural environment as well as in the office, thus there is more attention paid to the difficulties many patients may have in getting to appointments. They focus on daily living problems as well as physical and mental concerns, and, for example, they may go the extra mile to make sure patients see general

practitioners for necessary physical health check-up. Lastly, they advocate and problem-solve on behalf of the client with regard to a variety of medical, legal, and financial matters.

ACT models have been particularly effective in the treatment of severe mental disorders, and a similar model might be easily adapted to country South Australia to address individuals with psychiatric disorder, substance use disorders, and dual diagnosis. At the present time, Mobile Assertive Care teams in the city working with non-government agencies deliver the equivalent of an ACT service. There is no designated MAC team function in rural areas, and it can be difficult in rural areas for one professional to constantly switch roles between the delivery of ACT services, regular community care (which is of lower intensity) and emergency care.

- ## SKILLS BUILDING:

A number of clinicians felt that they were underprepared to meet some of the challenges that they might face in taking care of individuals with dual diagnosis, in particular recognizing the potential life threatening risk to physical health associated with intoxication and withdrawal states. Among the concerns was the need to take and interpret of vital signs – particularly by staff without nursing training. Understanding vital signs is critical for the care of individuals who might be intoxicated or at risk for withdrawal syndrome, and it is becoming increasingly important for any clinician working with patients taking an atypical antipsychotic because of the risk of metabolic syndrome. As such, it is important for all staff, not just nursing staff, to be able to collect vital signs and recognize abnormal vital signs – particularly in country areas where a patient may be seen regularly by a non-nursing practitioner without a specific nursing review.

Vital signs are easily taught: guidelines are available to identify abnormal vital signs and automatic blood pressure cuffs are portable, inexpensive, and easy to use with minimal training. Such measurement of pulse and BP would not replace appropriate review by GPs and nurses, but be in addition, particularly when it may be some time before a patient next sees a nurse or GP. This suggestion could be developed in parallel to the electronic distance education programs suggested in the previous section.

- ## PROMOTING COMMUNITY INITIATIVES:

It is important to encourage, recognise and promote community-based initiatives, rather than basing strategies entirely on centralized plans, or suggestions of a report like this. For example, elder Aboriginal men in Point Pierce have decided that addressing substance abuse is a priority for their community. When the community decides to change, health services should be flexible enough to support the process.

Conclusion

South Australia's mental health and substance abuse services in the country are evolving. Health services are being linked and a number of new initiatives are being funded. Nevertheless, individuals with comorbid psychiatric and substance use disorders in country South Australia continue to face barriers to care. Efforts to understand and enhance delivery of services and utilization of services in country South Australia may transform existing services into a cost-effective, comprehensive health service capable of addressing the many needs of it consumers.

SPECIAL ACKNOWLEDGEMENTS:

The authors would like to thank all those who took the time to talk about their experience with individuals with dual diagnosis, especially Dr Adriana Latanzio, Warren Martin, Nathan Tasker, Dr Craig Raeside, and Dr Robert Ali.

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