Mental health and substance use: opportunities for innovative prevention and treatment

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MENTAL HEALTH AND SUBSTANCE USE:

OPPORTUNITIES FOR

INNOVATIVE PREVENTION AND TREATMENT

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MENTAL HEALTH AND SUBSTANCE USE

BACKGROUND

Mental and substance use disorders account for more years of life lost due to disability than any other disorders (24% of burden) and are second only to cardiovascular disease (CVD) and cancer as leading causes of disease burden. The top 10 causes of burden of disease in young Australians (15-24 years) are dominated by mental and substance use disorders (1). Every year alcohol and drugs conservatively cost the Australian community $23.5 billion (2). Governments take the lead in managing this problem, with investments in health, community and law enforcement interventions across Australia estimated at $3.2 billion p.a. (3). Comorbidity is common with 25-50% of people experiencing more than one disorder (4). Once both mental and substance use disorders have been established the relationship between them is one of mutual influence with both conditions serving to maintain or exacerbate the other. Such comorbidity leads to poor treatment outcomes and severe illness course (5). In the longer term, mental disorders and substance use disorders are themselves associated with increased rates of CVD and cancer (6). CVD and cancer are the leading causes of mortality for people with a history of mental health treatment.

Average life expectancy is 20-30 years shorter among people with mental (7) or substance use disorders (8) compared to those without such problems, with the last 10 years of life spent living with chronic illnesses (7). Despite significant public concern leading to a major government initiative (National Comorbidity Initiative) comorbid mental health and substance use remain a major cause of disability among young people and, in the longer-term, are associated with poor quality of life and early mortality at the end of life.

Comorbid mental health and substance use disorders are one of health’s most significant challenges. The prevention and treatment evidence base is weak, limited by traditional single disorder models and treatment silos. It is critical that we break down the single disorder silos, generate significant new research, ensure effective transfer of knowledge and mentor future leaders in this area of significant need.

Over the last 10 years Australia has responded to the gap and has begun to build an internationally renowned evidence base in comorbidity. Interventions in comorbid populations can be effective (9-13), translation of findings is possible (14) as are driven policy responses but traditional single disorder models remain dominant in research and clinical practice and thus translation lags.

There is a unique opportunity to capitalise on this investment and break down the barriers so that this innovative prevention and treatment is available to all Australians with comorbid mental and substance use disorders.
ACTION 1: GENERATE KNOWLEDGE TO IMPROVE HEALTH OUTCOMES

The field must move from treatment silos to everyday practice and single focus to multiple behaviour change.

A. From treatment silos to everyday practice: Our own Australian data on patterns of comorbid mental and substance use disorders in the general population clearly indicate that comorbidity is so common that intervention needs to be available for mental health and substance use disorders in everyday practice, in the settings where people with such disorders present for treatment. Treatment and research silos, specialising in one disorder and not others, or stigmatising ‘dual diagnosis’ centres, are incapable of meeting demand (4, 10). Prevention and treatment efforts need to be guided by the following data:

- Comorbidity between anxiety, depressive and substance use disorders is common, with a third to a half of persons with any mental disorder meeting criteria for another disorder at some point in their lives.
- All of these disorders typically have their onset in late adolescence and early adulthood presenting unique opportunities for prevention (15, 16).
- There are low rates of treatment seeking despite the considerable disability that they cause (17). Indeed, fewer than one in five Australians with a drug and alcohol problem seek help (15). However, treatment seeking increases with the severity of personal problems related to drug use, being highest among those with anxiety and depression (15). Even so, only a minority of those with severe disorders receive treatment.
- The treatment provided to those with comorbid disorders is often inadequate (9).
- Unhealthy behaviours tend to cluster together in risk behaviour bundles (18). Compared to the general population, people with severe mental health disorders have much higher rates of the main behavioural risk factors for CVD and cancer including smoking (73% vs 18% for men; 56% vs 15% for women), eating high-saturated-fat and low-fibre diets, high levels of sedentary behaviour (with 85% vs 61% overweight or obese), and alcohol use disorders (39% vs 6% for men; 17% vs 3% for women) (AIHW). Consequently, the adverse health impact of these behaviours is profound and they interact to exponentially increase the risk of CVD and cancer.

In summary, up to a half of all people with mental health problems will experience comorbid substance use disorders and experience poor physical health in the longer term. Few will seek treatment and, when received, treatment is often inadequate.

B. From single focus to multiple behaviour change: There is evidence in Australia, USA and UK that multiple behaviour change is possible, that interventions can address both mental and substance use disorders successfully. Indeed, interventions for multiple risk behaviours simultaneously is feasible, effective, and more efficient (18). Australian research is the first to evaluate the efficacy of a combined intervention to address all four main behavioural risk factors for CVD (smoking, poor diet, physical inactivity and alcohol misuse) among people with severe mental disorders (19). We need a vision to increasingly nest comorbidity interventions within a healthy lifestyles framework. This focus represents an important new innovation in comorbidity treatment dissemination as it reduces stigma associated with conditions such as drug and alcohol problems, is more appealing to young people, avoids prematurely focusing on substance abuse and incurring resistance (from staff and clients), and allows small changes across a number of health behaviours that increase self-efficacy for further behaviour change. Healthy lifestyle
interventions can also be translated to general mental health and substance use settings as comorbid physical ill-health, such as overweight, are rife among these groups.

**Prevention:** A key research strategy to improve our response to comorbidity is to determine whether interventions designed to prevent common mental disorders in adolescence reduce the prevalence of comorbid disorders in young adulthood. Interventions that have been shown to be effective provide an opportunity to assess whether the prevention of one set of disorders reduces the prevalence of the most common forms of comorbidity. This is a unique opportunity. Targeted prevention programs for depression in at-risk young people have been shown to be effective (20). Targeted and universal substance use prevention programs have been found to increase knowledge and decrease pro-drug attitudes and decrease drug use (21). Although there is evidence that prevention packages can reduce anxiety, depression (20) and substance use (21), none of these studies have attempted to prevent or assess comorbid conditions in a single program. It is critical we build our knowledge in prevention and treatment and disseminate those interventions.

**Treatment:** Reviews of studies of substance use and comorbid mental disorders (9, 22) suggested that these interventions can be effective but there were very few well designed and adequately powered clinical trials and translation of treatment into practice is weak.

In *psychosis* we require evidence around interventions for improving the lifestyle choices of those living with psychosis including smoking and other CVD risk behaviours (alcohol, diet and activity level). In *anxiety*, our responses for marginalised populations are weak, for example, prison inmates experience comorbidity at rates much higher than the general population, yet research on treatment options for this hidden population are limited. The feasibility of an integrated treatment approach for one of the most common forms of comorbidity found in this population - substance use and post traumatic stress disorder is untested. In *depression*, on entry to treatment at least one quarter of heroin users meet criteria for major depression. Despite this, practical and effective treatment options are scarce. *Suicide in heroin users is also a significant risk.* The *Suicide Assessment Kit (SAK)* is a resource that has been designed in partnership with the Network of Alcohol and other Drug Agencies (NADA), to provide front-line workers in residential rehabilitation services with evidence based resources to assist them in the assessment and management of suicide risk. A computerised suicide risk assessment training package incorporating the SAK would have the advantage of being accessible to services in remote areas.

**ACTION 2: ENSURE EFFECTIVE TRANSFER OF INNOVATION INTO HEALTH POLICY AND PRACTICE**

Breaking down barriers to the transfer of effective, innovative prevention and treatment into policy and practice is necessary for improvements to the health of individuals with comorbidity. Strategies for transfer into policy and practice are discussed below.

**Transfer of evidence into health policy.** Committee and advisory roles are fundamental in the transfer of evidence into health policy. The Australian Government National Comorbidity Initiative (23) was a roadmap developed after extensive consultation with the mental health and drug and alcohol community. It remains the national framework for responding to comorbidity. The framework in synergistic with state based policies but its evidence base is
now over a decade old. Future policy development in this area should be based on the hard fought evidence of Australian research.

**Transfer of evidence into clinical practice.** Training of clinicians and engagement of individuals with comorbid disorders using successful dissemination models and significant links with clinicians in the field, consumers, clinicians and clinical researchers is fundamental to effective practice. Translation of research by presentation of findings via workshops, local and national forums, development of practice guidelines, treatment summaries, manuals and webinars, will provide strong evidence based recommendations for the translation of research into clinical practice.

Ensuring the effective transfer of research findings to the clinical workforce and policy is critical to developing innovative responses to comorbidity. Equally important are the influence of clinical practice and the community of the development of research (See Figure 2 for our model guiding development of innovation).

**Figure 2: Model of development of innovative prevention and treatment in comorbidity**

The following key areas will ensure these links are developed and sustainable.

1. **Training:** Training across professions (psychology, addiction medicine, psychiatry & psychiatric nursing). Training in treatment delivery and training in research and a clinical research paradigm (see Medical University of South Carolina Model). Training in comorbidity should commence at the beginning of one’s professional education (e.g., in university undergraduate courses and vocational training), and continue throughout one’s career via workforce development.

2. **Internet technology:** Internet delivery of programs in comorbidity. Clearly sustainable models of treatment delivery are critical while also requiring integration within the clinical silos.

3. **Information booklets on substance use and mental health:** One of the major barriers is getting help, people lack knowledge of how to recognize mental health problems and of the help available (24). Improving substance users’ ability to recognise their own mental health symptoms may increase identification, and help-seeking, which may in turn lead to more appropriate provision of treatment and better prognosis. To improve the mental
health literacy of consumers, a suite of information booklets were developed on the most common types of comorbidity: i) mood + substance use disorders; ii) anxiety + substance use; iii) trauma + substance use; iv) psychosis + substance use; and iv) personality + substance use. Since their release in November 2011, \textbf{100,000} copies have been disseminated across Australia.

4. \textit{Clinical guideline development}: Influential clinical guidelines and handbooks (9) in comorbidity are required as knowledge increases, responding to clinical training needs in a collaborative and effective model.

5. \textit{Dissemination: Website portal for effective prevention and treatment in comorbidity}. A website portal will enable clinicians, researchers, stakeholders, consumers and policy makers to exchange information.

6. \textit{Generate new capability, mentoring and encouragement of further career development}. Focus on training and developing clinicians and clinical researchers.
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