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Dual disorders and implications for assessment and treatment

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Dual Disorders and Implications for Assessment and Treatment.

By

Eva Rosada

A Thesis (alternative format) Submitted in Partial Fulfillment of the

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Declaration

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PART 1:

LITERATURE REVIEW

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Dual Disorders and Implications for Assessment and Treatment: A review

By

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Abstract

This review of the published literature examines the consequences for individuals with co-occurring substance use disorder and chronic mental illness in traditional treatment systems that provide separate mental health and substance use treatment and identifies barriers to effective service delivery. Barriers to effective assessment and treatment are related to a lack of integration of treatments, a lack of networking among services, and a failure to identify and assess adequately for the presence of a dual disorder. The attitude of professionals towards DD individuals is indicated as a potential barrier. Professional education in dual disorders is emphasized and recommendations from the literature are discussed.

Dual disorders and Implications for Assessment and Treatment: A Review

Much has been written about the positive effects of de-institutionalization of the mental health service that took place from early 1960. In the twenty years from 1960 to 1980 there was a reduction of over 44,000 in the number of beds in British mental hospitals (Gregory, 1987). American figures show that the number of patients in mental hospitals declined from 558, 922 (in 1955) to 1 ⁻ⁿ, 405 (in 1977). This movement was in part an attempt to enhance the rights of patients to have a life as close as possible to "normal". At that time much less was said, or known, about the negative consequences of this process (Pepper, Kirschner, & Ryglewicz, 1981).

The early observations of Berry and Orwin (1966) and their summary of what was happening to these patients then (and today) is worth quoting:

"Their plight is evidence that the initial enthusiasm evoked by the

new Act for the discharge of chronic psychotics into community

care was premature in view of the resources available and has

resulted in the overwhelming of existing community services" (p. 1024).

It was not until the early 1980s that clinicians and researchers began to identify a group of young individuals with severe mental illness, labeled young chronic patients in the literature, who did not seem to fit into existing community programs developed to facilitate the process of de-institutionalization (Bachrach, 1982). These young patients used substances on a regular basis and were often described as difficult to manage. This challenging sub-group of psychiatric patients received different labels over the next few years reflecting their behaviour and problems, including the "3-D patient" (drinking, drugging, and disturbed), and more commonly, the "dual diagnosis patient" (Ries &

Ellingson, 1990). The term "dual diagnosis" or "dual disorder" is usually reserved for an association between drug abuse (including alcohol) and other psychiatric disorders.

By the mid-1980s, clinicians and researchers realized that these patients' use of substances was more than a symptom of their psychiatric disorder, and that they in fact had substance use disorders as well as severe mental illness. Thus, the concept of co-occurring disorders was formally recognized (Drake, Mueser, Clark, & Wallach, 1996).

Recently, researchers (Fayne, 1993; Lehman, 1996) have expressed concerns that the identification of a person with a dual disorder remains a challenge in most service settings and that health services are "failing" to care for patients with dual disorders, as they are not receiving appropriate treatment (Drake, et al., 1996; Ridgely, Goldman, & Willenbring, 1990).

Since Australia's first National Mental Health Policy was endorsed in April 1992, there has been an increasing progression towards more effective mental health services. The major principles outlined in the policy include protecting consumers' rights, setting national service standards, mainstreaming mental health services with general health services, better integrating inpatient and community mental health services to ensure continuity of care, and linking mental health services and other social and disability services (Whiteford, 1993).

A main focus of the growing emphasis on mental health has been the prevention and de-stigmatization of mental illness and the promotion of mental health (Hart, 1993). Vlais (1993) in discussing the situation in Western Australia has questioned whether the current level of activity (on prevention and promotion) is sufficient to meet the present and future community needs. In addition, Vlais points out that many mental health

professionals are concerned that by focusing on prevention and promotion, the severe and chronically mentally ill will be left with inadequate treatment.

One of the priority mental health targets include to reorient clinicians towards a public health approach that, in addition to promotional and preventative work, equips them to provide different treatment services in order to maximize individual mental health outcomes. One of the possible factors that may inhibit these goals was identified as the attitudes of health professionals (Commonwealth of Australia, 1998).

There are many obstacles that remain to be overcome in reaching the goals of the National Mental Health Policy, especially for people who suffer from dual disorders (DD). The literature, especially the work of Drake, Mueser, Clark and Wallach (1996), Haywood et al., (1995) and Drake and Wallach (1989) indicate that there still exist multiple barriers to effective treatment. This literature review will look at the consequences for individuals with co-occurring substance use disorder and chronic mental illness in traditional treatment systems that provide separate mental health and substance use treatment. The second part will explore the impact of stigma and attitudes in society towards individuals with a DD and any possible repercussions for the clinician in establishing a therapeutic relationship.

Prevalence of Dual Disorders (DD)

Rates and types of substance abuse differ markedly throughout the world. It should be noted that the majority of data on comorbid substance abuse has been mainly collected from the United States and that these estimates may not apply to patients in other parts of the world. In addition, prevalence estimates vary depending upon which disorder is considered primary and which one is considered secondary. Figures reported by the Australian Bureau of Statistics (ABS) found that 4 percent of the population have

a substance use disorder only, while a further 8.8 percent had a dual disorder. Dual disorder in this case was defined as substance use disorder combined with either a mental disorder or a physical disability (ABS, 1999).

The prevalence of dual disorders in the United States was established by the Epidemiologic Catchment Area (ECA) Study carried out by the National Institute of Mental Health. Researchers conducted a standard diagnostic interview with residents (20.000) of five cities and with a separate group of people living in prisons, nursing homes, and mental hospitals. The study reported specific figures for individual disorders. The ECA Study found lifetime rates of 13.5 percent for alcohol abuse or dependence, 6 percent for other drug abuse or dependence, and 22.5 percent for other psychiatric disorders. Among people with other psychiatric disorders, 22 percent also had an alcohol problem and 15 percent had another drug problem. Having another psychiatric disorder nearly tripled the risk of an alcohol or other drug problem (Regier et al., 1990).

The lifetime rate of substance abuse in antisocial personalities was 84 percent; in schizophrenics 47 percent; in people with bipolar disorder 61 percent; and in people with panic disorder 25 percent ("Dual Diagnosis", 1991). Substance use disorders co-occurred with certain mental disorders much more frequently than would have been expected by chance, suggesting that the occurrence of either a substance use disorder or mental disorder makes the other more likely (First & Gladis, 1993).

Studies e.g. (Miller, 1993) suggest that there may be a relationship between psychiatric illness and client's drug of choice. A large study conducted by Miller (1993) showed the following diagnostic patterns. Cocaine addicts were more likely to have a mental illness within the Bipolar spectrum of disorders, compared to other substance users, and there was a higher incidence of addiction to sedative or hypnotic drugs among

persons with Anxiety Disorder/Panic Disorder than among individuals with a Bipolar disorder.

Mueser, Bellack, and Blanchard (1992) reviewed the literature on schizophrenia and substance abuse and reported that substance users diagnosed with schizophrenia most commonly abuse alcohol, although there is also a high correlation between schizophrenia and other drug abuse, particularly marijuana and stimulants. Finally, Major Depression was prevalent across all types of substance abuse disorders, except cocaine addiction. The interaction between the substance use disorder and a specific mental illness complicates the difficulty in identifying DD patients and in providing treatment relevant to the unique needs of each sub-group (Miller, 1993).

DSM-IV Classification of Substance-Related Disorders

In the past, substance abuse was thought to be associated, primarily with personality disorders. This was clearly observed in the first two editions of the American Psychiatric Association's (APA) official Diagnostic and Statistical Manual of Mental Disorders (DSM) published in 1952 and 1968, which classified drug and alcohol dependence as personality disorders. DSM-III, published in 1980, was the first version of the manual that identified alcohol and other drug dependence as distinct psychiatric conditions ("Dual Diagnosis", 1991). Now it is generally agreed that the addictive personality does not exist as a distinct syndrome, but that certain personality types (such as antisocial and borderline) are more susceptible to drug misuse and dependence.

The DSM-IV classification of substance-related disorders refers broadly to "disorders related to the taking of a drug of abuse, to side effects of medication, and to toxin exposure" (p. 175). Substance-related disorders are further divided into substance

use disorders, including abuse and dependence, and substance-induced disorders (APA, 1994).

Substance Abuse and Substance Dependence

The DSM-IV defines substance abuse as a "maladaptive pattern of substance use leading to clinically significant impairment or distress", as manifested by recurrent use resulting in a failure to fulfill major role obligations, recurrent use in situations which is physically hazardous, recurrent use despite persistent or recurrent social or interpersonal problems related to substance use, and/or recurrent substance-related legal problems (APA, 1994). Substance dependence may include any of these symptoms of abuse, but can also involve signs of physical tolerance, withdrawal, or compulsive drug taking.

Substance-Induced Disorders

Substance-induced disorders include intoxication and withdrawal, as well as syndromes that meet criteria for another mental disorder (such as psychosis, depression, or dementia), but are directly induced by a drug of abuse (APA, 1994). The use of psychoactive substances can produce a variety of substance-induced mental syndromes, such as depression and anxiety. These symptoms can be associated with chronic alcohol and sedative use and withdrawal from stimulants. Although less common, the use of stimulants and hallucinogens can produce both acute and chronic psychotic syndromes (Lehman, 1996). The important characteristics of this group is that their "dual diagnosis" is attributed mainly to the symptoms induced by the substance use and the discontinuation of substance use is therefore likely to cease the psychiatric symptoms. The implications for treatment of patients who have substance-induced clinically significant symptoms, which may or may not meet disorder criteria, is that they may need only "traditional" substance disorder treatment (McKenna & Ross, 1994). These clients

need help addressing the substance abuse without the additional focus on mental illness and substance use.

Substance Use Disorders and other Axis I Disorders

In individuals with a primary Axis I mental disorder the treatment or cessation of substance use alone will no. remove the psychiatric problem. For example, identifying whether mood symptoms are due to substance use or an independent Axis I disorder can generally only be made after a period of abstinence. It has been shown that the presence of a substance use disorder interferes substantially with the diagnostic reliability of other Axis I disorders (Corty, Lehman, & Myers, 1993).

In addition, substance use in an individual with a major mental illness can easily be overlooked, as symptoms such as paranoia, anxiety, or depression may be attributed to the "known" Axis I disorder. There is considerable evidence that certain psychoactive substances can mimic or aggravate psychotic symptoms (Turner & Tsuang, 1990). Included among these substances are CNS stimulants and depressants (including alcohol), the natural and synthetic hallucinogens, tetrahydrocannabinol (THC) in its various forms such as marijuana and hashish, and phencyclidine (PCP) (Mirin & Weiss, 1991). This underscores the need to obtain differential diagnoses for all patients who present with psychotic features (Lehman, 1996; Mirin & Weiss, 1991).

To provide appropriate treatment, patients with a primary psychiatric disorder plus substance use disorder need specialized treatment, focusing on both disorders. However, those patients with a primary psychiatric disorder who use drugs in a compensatory manner to deal with their psychiatric symptoms may also need specialized treatment. Providing treatment with a main focus on reducing psychiatric symptoms may help those patients to reduce the motivation to use drugs to deal with psychiatric

symptoms (McKenna & Ross, 1994). Other patients may use drugs to facilitate social

interaction and may benefit from treatment focusing on the development of social skills.

They may also need help to establish different social networks to help resist offers to use

drugs or alcohol (Mueser, Nishith, Tracy, DeGirolamo, & Molinaro, 1995). Clearly, the

management of the different types of "comorbidities" needs to be differently addressed.

Substance Use Disorders and Axis II Disorders

Many personality disorders also commonly co-occur with substance use.

Substance abuse has been found to be most common among those in the cluster B group

(antisocial, borderline, histrionic, narcissistic). These patients are often impulsive and

erratic in their behaviour. Substance use in borderline personality disorder is often

mentioned as an example of impulsive self-damaging behaviour. The interpersonal

difficulties often experienced by this group can both contribute to continued drug use and

interfere with engagement in treatment (Lehman, 1996).

The type of personality disorder may have important implications for treatment,

as an appropriate formulation will permit the clinician to consider the person's

personality difficulties in designing treatment (Lehman, 1996). For example, antisocial

substance users may respond better to structure, limit-setting, and social skills or

problem-solving training, than to exploratory psychotherapy or the moral and religious

programs of Alcoholics/Narcotics Anonymous (AA/NA) ("Dual Diagnosis", 1991).

Recent research by Drake (1996) supports this finding, indicating that different

clients prefer different interventions, with Bipolar disorder patients being more interested

than schizophrenics in self-help groups. Patients with a higher psychiatric severity appear

to do better in coping skills training group therapy than in interactional group therapy, but

both treatments have been found to be equally effective for patients with low psychiatric severity (Crits-Cristoph et al., 1997).

The clinician must also be aware that substance use can lead to behaviour that is misdiagnosed as a personality disorder. For some of these drug-using patients, effective substance abuse treatment may substantially reduce antisocial behaviour. In addition, failure to make an appropriate formulation of the nature of the personality disorder can lead to burnout for clinicians who may feel that the patient "doesn't want help" (Lehman, 1996, p. 34).

Problems Experienced by the DD Population

Although, this paper focus on the negative consequences of substance use for DD individuals, it is important to remember that substance use has its benefits, as well as costs, and that there are very real advantages for the individual user, especially in the short term (Saunders, Wilkinson, & Towers, 1996). Individual differences in addiction behaviour and reasons for using are many and varied. Very little is known about why for example schizophrenic patients use substances, what they expect from that use, and how either of these relates to the etiology or maintenance of substance abuse (Mueser et al., 1995). It is beyond this review to discuss the etiology or maintenance of substance use and interested readers are referred to the literature of West (1989), Rotgers, Keller and Morgenstein (1996), Kleindorfer, Kunreuther and Schoemaker (1993), Saunders and Herrington (1995), and Miller and Hester (1989).

Galanter, Castaneda, and Ferman (1988) in reviewing mental health and the alcohol and drug abuse literature indicate that the problem of multiple mental illnesses or disabilities is more common than previously thought among individuals seeking mental health and drug and alcohol treatment in the public sector. The researched literature

(Bartels, Drake, & Wallach, 1995; Breaky, Calabrese, Rosenblatt, & Crum, 1998) consistently shows that DD patients experience more symptoms, hostility, suicidal thinking, disorganization, and poor treatment compliance, and are more frequently hospitalized.

The clinical effects related to drug use on the course of illness and cognitive functioning is particularly acute for patients with severe, chronic psychiatric illnesses, such as schizophrenia. Being highly sensitive (psychologically, socially and chemically) to the effects of drugs and alcohol even recreational use of these substances can have extremely adverse effects (Brown, Ridgely, Pepper, Levine, & Ryglewicz, 1989). A study by Drake et al (1990) found that individuals with schizophrenia who use alcohol manifest alcohol-related problems that interfere with community living without the full dependency syndrome, suggesting that schizophrenic patients may be particularly vulnerable to the effects of alcohol.

Follow-up studies (Drake & Wallach, 1989) of 187 chronic mentally ill patients living in the community following treatment showed DD individuals to have poorer psycho-social adjustment compared to individuals with only severe mental illness. Ratings by aftercare clinicians indicated that DD patients were nearly twice as likely to be re-hospitalized during a one-year follow-up. Of the 59 DD patients 35 (59 %) were re-hospitalized, while of the 128 patients with no substance abuse diagnosis, 45 (35 %) were re-hospitalized (Drake & Wallach, 1989).

Herman, Galanter, and Lifshutz (1991) studied homelessness in DD patients requiring hospitalization, and reported findings of homeless DD schizophrenics in their sample to be as high as 46 percent at the time of admission. This appears to be consistent with earlier reports provided by Berry and Orwin (1966), who reported on the steep rise

in the number of patients of "no fixed address" admitted to a Birmingham hospital since the Mental Health Act came into being in 1959.

The literature review on schizophrenia and substance abuse by Mueser et al. (1992) suggests that substance abuse is associated with an increased risk of suicide especially amongst young male schizophrenic patients. The link between substance abuse and suicidal behaviour is not clear, as depression is also a strong correlate of suicide in individuals with schizophrenia. However, individuals with schizophrenia have an elevated risk of suicide, which is apparently increased further by substance use (Mueser et al., 1992).

Furthermore, schizophrenia patients are often non-compliant with their neuroleptic treatment and report discontinuing taking medications during times of substance abuse because of concerns about medication-drug interactions (Pristach & Smith, 1990). A study using 42 inpatient schizophrenics who completed the Self-Administered Alcoholism Screening Test (SAAST) and provided self-reports on their alcohol and drug use 30 days prior to their admission found that 57 percent reported drinking in the 30 days prior to admission. Seventy-two percent stated that they failed to take their medication (Pristach & Smith, 1990).

The findings of a recent study by Owen et al. (1996), carried out on substance use behaviour prior to hospital admission, supports the findings by Pristach and Smith (1990). Six-month follow-up on 135 discharged schizophrenic patients using scores on the Brief Psychiatric Rating Scale (BPRS) and self-reports on medication compliance and alcohol/drug use indicated that medication non-compliance is 50 percent more likely before hospitalization than at six-month follow-up (Owen, Fischer, Booth, & Cuffel, 1996).

Alcohol and/or drug problems and medication non-compliance have been shown to be the two most important factors related to re-admission to state hospitals (Haywood et al., 1995). In addition, re-hospitalization has been found to be instigated due to other problems related to substance use disorders, such as housing instability, aggressive outbursts, and financial crises (Drake & Wallach, 1989).

Substance abuse has been found to play a prominent role in precipitating the admissions of a large portion of patients in acute psychiatric services as far back as the early 1970s. Cohen, Kern and Hassett (1986) asserts that according to early research (West & Park, 1974) as many as 30 percent of patients admitted to general hospitals were alcohol dependent. West and Park stated, "Although the primary diagnosis for these patients may not be specified as 'alcoholism', the reason for hospitalization is related to alcohol use". A study by Crowley, Chesluk, Dilts, and Hart (1974) concluded that 18 percent of psychiatric patients would not have been admitted to hospital if they had not been affected by a drug or alcohol problem.

A more recent study by Ries, Mullen, and Cox (1994) supported these findings and concluded that psychiatric patients with either a past or current substance use disorder are not only at risk for increased symptom severity, but also increased use of treatment resources. It must be noted, however, that the psychiatric patients involved in the study consisted of voluntary in-patients who were less acutely psychotic, disorganized, or violent, compared to involuntary patients that would be found in a locked ward. A sample that included more patients with schizophrenia may not have received as many services as their behaviors are often seen as "unmanageable" in the drug and alcohol systems (Ries et al., 1994).

Research by Alterman, Erdlen, and Murphy (1981) found that drug-abusing

hospitalized psychiatric patients have a poorer attitude to treatment compared to non-

using patients. Drug-abusing patients also show a higher rate of discharge against

medical advice (Miller & Tanenbaum, 1989). This is consistent with recent studies

(Greenberg, Otero, & Villanueva, 1994) showing that risk factors for irregular discharges

(which totaled 38 % in the study) include substance abuse and having an antisocial

personality disorder. Although the authors employed a retrospective chart review and the

results needs to be interpreted with caution, associations can be made. Fifty percent of

patients included in the irregular discharge group were discharged against medical

advice. Moreover, lack of outpatient contact appears to interact with substance abuse to

decrease medication non-compliance and contribute to worse outcomes (Owen et al.,

1996).

Dual disorders are also common among prisoners. The Epidemiologic Catchment

Area survey found lifetime prevalence rates of substance abuse in prisoners to be 72

percent, amongst whom 56 percent had an alcohol problem and 54 percent another drug

problem (Regier et al., 1990). Incarceration can be a possible barrier to the patient

receiving appropriate assessment, especially in penal settings that lack integrated mental

health and substance abuse treatment services (Lehman, 1996).

Remission of substance use disorders may reduce many of the associated mental

health outcomes, as suggested by studies showing few clinical differences between

severely mentally ill individuals with an earlier substance use disorder and those without

a history of substance use disorder (Perkins, Simpson, & Tsuang, 1986). Improved

recognition of substance use disorders seem to be of particular importance because

research has demonstrated that feedback and advice can contribute to significant

reductions in drinking (Anderson & Scott, 1992).

A study using 154 men (recruited from 8 general practices) who were randomly

allocated to either treatment or control groups, were given advice by their general

practitioner to reduce their alcohol intake. The men in the study consumed between 350-

1050 grams of alcohol per week. The study relied on self-reported alcohol consumption,

which is always a methodological problem in studies of this kind as deception is likely to

occur. However, the one-year follow-up showed that the men, who received advice to

reduce their drinking, had significantly reduced consumption of alcohol by 65 grams per

week compared to the control group (Anderson & Scott, 1992).

Babor, Ritson, and Hodgson (1986) carried out a review of studies that focused on

early intervention strategies of alcohol related problems in the primary health care

setting. Methodological issues such as length of follow-up period and criterion of success

afflicted many studies. In addition, many treatment studies were mainly experimental in

nature and the results only suggestive of their efficacy. However, the researchers

concluded that modest but reliable effects of drinking behaviour and related problems

could follow from brief interventions. This includes, information giving, brief advice, and

periodic monitoring of progress by the health worker, especially with individuals who

experience less serious type of problems due to their drinking (Babor, Ritson, & Hodgson

(1986).

Available Treatment Options

In discussing the limitations of agencies to deal with patients who have a dual

disorder, Lehman (1996) states that administrative concerns often arise when the agency

is unable to deal with all the problems of the dually disordered patient. Most human

service agencies feel an obligation to help dually disordered patients who come for help, although they often lack the capacity to do so.

Provision of appropriate treatment for people with co-occurring addictive and mental disorders is hampered by difficulties in diagnosing this diverse population and in identifying and delivering necessary services (usually via agencies that focus on only a portion of these patients' problems). Many researchers (Ridgely, Goldman, & Willenbring, 1990) have stressed that treatment of dual disorders in separate but parallel systems is inefficient and ineffective. Treatment in parallel systems fails for a variety of reasons. Some problems are related to training differences, administrative conflicts, clinical and ideological disagreements, inter agency miscommunications, disorder-specific categorical boundaries, and funding mechanisms (Drake et al., 1996). There are different views within each field about the causes of these disorders, as well as philosophies of intervention exacerbating the barriers between the different systems of care (Ridgely & Dixon, 1995).

When a problem is identified, there is a need to develop a comprehensive treatment program, incorporating all the identified problems. However, Lehman (1996) suggests that lack of capacity to deal with a problem might result in an incentive to "under-identify" problems that cannot be dealt with.

Failure to detect and address substance use problems can defeat efforts to engage the patient in treatment and has the potential to contribute to professionals' perception of "non-compliance". The patient may as a result, perceive the treatment as irrelevant or any (non-identified) problems can consequently overwhelm the patient's capacity to participate in treatment (Lehman, 1996). For patients who have a dual disorder the introduction to the psychiatric service system must begin with building trust and with

providing services that meet their basic survival needs. Until those needs are met, traditional clinical interventions are thought to have little positive effect (Bachrach, Talbott, & Meyerson, 1987).

Substance Abuse/Dependence Rehabilitation Services

Professionals working in the substance abuse treatment system may not have the experience or training needed to assess adequately the psychopathology found in some of their patients (Ross, Swinson, Doumani, & Larkin, 1995). For patients in treatment for substance use, the best predictor of improvement is the severity of co-occurring psychiatric symptoms, with more severe psychiatric symptoms predicting worse outcomes (McLellan et al., 1983).

People with psychiatric disorders are generally reluctantly admitted to substance abuse rehabilitation programs, as most workers have a limited knowledge of mental health issues. Many residential treatment facilities do not accept anyone who is taking prescribed psychiatric drugs ("Dual Diagnosis", 1991). This is likely to lead to individuals with a primary Axis I disorder not being admitted, or dropping out of treatment, as the symptoms of their mental illness may interfere with their capacity to comply and abstain from "substance use", that is medication (Lehman, 1996). Some researchers report that the more recent AA literature agrees with the use of medically monitored treatment with psychotropic medication, but despite this many AA members continue to discourage their peers from using medication while in treatment (Brown & Saura, 1996).

Many addiction programs in the United States are based on the 12-step approach (AA), use confrontation as a therapeutic tool, emphasize the need for self-control and responsibility, and often require abstinence before entering the program. This

may not be an ideal approach for individuals with schizophrenia for example, who have cognitive deficits and may be at increased vulnerability to the effects of interpersonal stress (Mueser et al., 1992). The concept of spirituality ("higher power") may also encourage and become part of delusional beliefs (Jerrell & Ridgely, 1995).

Psychiatric Services

Although de-institutionalization has provided some encouraging responses for many psychiatric patients, it has also created some serious problems with providing comprehensive services to chronic psychiatric patients (Bachrach, Talbott, & Meyerson, 1987). In the past, all the needs of the patient could be met within a single setting, but in de-institutionalized service systems, individual programming is typically divided among different settings in both public and private sectors. The parallel systems of care, which provide separate mental health and substance abuse treatment, expect the person seeking help to respond positively to the treatment that is provided by the approached service. Psychiatric services of hospitals and outpatient clinics usually lack the resources to deal with the problems of addicts and alcoholics. Substance use is often discounted unless it interferes with treatment (Mueser et al., 1992).

According to Lehman (1996) the most common assessment problems in the mental health setting are "failure to assess and treat adequately the substance use disorder" as the focus tends to be on the non-substance Axis I disorder. When psychiatric staff identify substance use as an obstacle to psychiatric treatment, the patient is likely to be referred on to a substance abuse program (Mueser et al., 1992).

Existing substance abuse programs restrict access to patients, especially those suffering from schizophrenia, as they do not possess a comprehensive treatment program aimed at both disorders (Carey, 1995). In addition, Carey believes that when the patient is

referred, it is unlikely that the patient will follow through with the referral often due to the frequent lack of coordination between different service providers. Any follow-up services for patients with substance use disorders should be in place before discharge (Carey, 1995).

Other Services Involved with the DD Patient

According to national health services data, obtained after the de-institutionalization process, primary care physicians in the United States were recorded as the initial case-finders of mental health problems as well as the major providers of treatment. A review of primary care physicians' diagnostic accuracy, carried out by Borus, Howes, Devins, Rosenberg, and Livingston (1988) showed that they failed to recognize almost two-thirds of 88 patients with a current mental disorder. Using a structured clinical interview (SCID) for the primary care setting, the Primary Provider Rating Scale (PPRS) and the General Health Questionnaire (GHQ), primary care physician's assessment (recognition and diagnosis of mental disorders in a sample of 88 patients) was compared with mental health professionals' assessment of the same patients. Results showed that primary care physicians identified only one of seven depressives (14 %), three of the 18 anxiety disorders (17 %), and none of the four alcohol or drug abuse disorders. In addition, 10 out of 54 patients (19 %) were falsely identified as having a mental disorder, when they had neither Axis I nor Axis II disorders by the SCID standard (Borus, et al., 1988).

Other professions with limited exposure to DD patients, such as vocational rehabilitation professionals, might not recognize the signs of substance abuse in their clients' behaviour or in the individual's psycho-social history. Even when aware of a substance abuse problem, the counselors may feel that it is too sensitive or personal to

discuss, as substance use is not directly related to the vocational rehabilitation the client has presented for. The counselors are therefore likely to avoid the issue, although the presence of a substance use disorder has the potential to affect rehabilitation outcomes (Brown & Saura, 1996).

As many individuals often cease or moderate drinking when they become aware of the negative consequences associated with alcohol abuse, many health professionals such as physicians, nurses, and psychologists, can help to reduce their patients drinking by providing information and brief counseling regarding the risks associated with substance abuse. However, increased intervention in primary care setting, as in other settings, depends on improved recognition of substance use disorders (Johnson et al., 1995).

Identification and Assessment of DD Patients

As previously emphasized, a major theme in the literature on DD patients is that effective treatment for this population begins with accurate detection of the problems that need to be addressed (Lehman, 1996). As the literature reviewed has shown, an accurate diagnosis has important prognostic and treatment implications as patients with a dual diagnosis are typically more difficult to treat and have a worse prognosis compared with either mentally ill or substance dependent patients (Osher & Kofoed, 1989; Mirin & Weiss, 1991).

Identification of a person with a DD remains a challenge in most service settings as patients can be too intoxicated, impaired, or disorganized and even deny the presence of one or both disorders (Crowley, Chesluk, Dilts, & Hart, 1974). They may also be familiar with the admission and exclusion criteria and tailor their presentation according to the service provider (Fayne, 1993).

Current Problems Related to Assessment

Individuals with a DD are likely to seek help in several different settings such as mental health facilities, substance-abuse treatment facilities, general health care facilities, and non-health care service agencies and institutions. Lehman (1996) drew attention to the problem in matching patient service needs with service setting. The first problem relates to how the referral agency defines the primary problem. In addition Lehman points out that agencies are best at detecting the problems for which they are primarily designed to respond to. Therefore, there is a great possibility that many agencies will not provide the appropriate care that is needed to address both disorders, were both disorders successfully identified.

There are factors that have been found to be indicators of substance abuse including a family history of substance abuse, young male, unstable housing, homelessness, disruptive behavior, treatment non-compliance, legal difficulties, incarceration, frequent relapses, and friends who are antisocial or drug abusers. Drake and Mercer-McFadden (1995) point out that the presence of one or more of these factors among individuals with chronic mental illness should alert the clinician to the possibility of drug abuse. Furthermore, among patients with only one type of disorder, clinicians should be aware that these patients are at increased risk of the subsequent occurrence of later disorders of another type, making them better suited to preventive interventions (Kessler et al., 1996).

There are factors that can interfere with the assessment of a comorbid substance use disorder. First, the reliability of patients' self-reports regarding substance use has been questioned by several researchers (Donovan & Marlatt, 1988), as psychiatric patients has been found to deny substance abuse (Ridgely et al., 1990). Studies such as

those of Crowley, Chesluk, Dilts, and Hart (1974) consistently show that there are

positive urine tests among psychiatric patients (8 cases out of 52) who deny abuse.

Secondly, patients with severe mental illness often fail to recognize the negative

effects of their substance use (Drake et al., 1990). Seventy-nine outpatients with definite

DSM-III-R schizophrenia or schizoaffective disorder were asked to participate in an

interview about the role of alcohol and drugs in their lives. The study also included the

use of clinical records, ratings by case managers, the Alcohol Dependence Scale (ADS),

the CAGE, and the Michigan Alcoholism Screening Test. The results showed that of the

38 subjects with lifetime alcohol diagnoses, 14 (36.8 %) denied problems, while 4

(10.5%) reported possible problems, and 20 (52.6 %) reported definite problems (Drake

et al., 1990).

Stigma, Attitudes, and the DD Patient

Certain groups and behaviors can be stigmatized by society. The stigma of having

a mental illness and the associated labeling often result in negative consequences for

mental patients because stigma has the potential to damage self-esteem and self-efficacy

(Rosenfield, 1997). The degree to which the stigma of having a mental illness is

incorporated into the patient's self-concept increases with the likelihood that the illness is

long-term (Rosenfield, 1997), which is the case with most DDs. Labeling theory holds

that once other people label an individual with a certain attribute or trait, that person's

self-concept comes to be dominated by the label and is socialized into a role that becomes

a self-fulfilling prophecy (Eisenberg, 1997). Sometimes health professionals can

unknowingly contribute to this process. This underscores the importance of addressing

the impact of learned attitudes on the therapeutic relationship.

The therapeutic relationship

 Imhof (1991) has suggested that very little attention have been given to "that one factor, which often determines whether or not treatment will succeed: the attitudes and feelings of the treatment provider" (p. 931). Attitudes are evaluative and affective reactions that are learned. The process of evaluation involves a judgment of positive (good) or negative (bad). Clinicians view themselves as "helpers", and as part of society the clinician also brings to the therapeutic relationship a complex set of experiences, attitudes, and interactions with others that influence his/her experience of current relationships (O'Neill, 1995a).

 The influence of society's attitudes reaches not only the clinician, but also the patient. According to Lamb (1982) the first task of psychotherapy with chronic psychiatric patients is to provide them with a sense of mastery that will permit them to cope with their impulses and their symptoms, as well as the realities of their external environment. If the clinician unconsciously does not believe that this is possible, then this belief will ultimately reach the patient. The notion of the "difficult" patient derives from various sources, including the characteristics of the patient, the service systems, but also the service provider's perceptions.

 An earlier study by Mogar, Helm, Snedeker, Snedeker, and Wilson (1969) examined staff attitudes toward the alcohol dependent patient. The study assumed that treatment outcome with an alcohol dependent patient is a function of the degree of congruence between staff attitudes and patient attitudes. This implies a shared belief that the treatment will be effective. Seven independent samples of patients and staff were administered the Staff Attitudes Toward Alcoholism Questionnaire. The questionnaire comprised two sections, one scale measuring Optimism and Pessimism (likelihood of

improvement) and the second scale Disease and Moralism (recovery unlikely or moral weakness). The results showed that the patients' viewed their condition in a manner similar to the staff in relation to their chances of recovery. In addition, Mogar et al. (1969) concluded that in this study moralistic attitudes and treatment outcome pessimism among professional workers were related to ignorance and a casually held, stereotyped view of the alcohol dependent patient.

In examining factors related to the quality of patient evaluations in general psychiatric emergency services, Segal, Egley, Watson, Miller, and Goldfinger (1995) found that patients' clinical characteristics and clinicians' social biases have more influence on the quality of care provided than institutional factors. The study sought to examine the relationship between qualities of care (incorporating the perspective of patients, health care providers and administrators) and comprised 683 patients, in nine psychiatric emergency services in California, who were independently observed and evaluated by mental health professionals over a 5-year period. Structured instruments were used to gather data on patients including the Art of Care Scale, the Quality of Care Index, the Hospital Benefit Scale, and the Three Ratings of Involuntary Admissibility Scale (TRIAD). The "optimum time" allocated to the patient was also recorded (Segal et al., 1995).

Institutional constraints included the physical setting, such as the availability of beds and work related issues for the clinician (workload, language matching patient's, patient's insurance cover). Sources of social bias focused on demographic descriptors of the patient, such as age, sex, degree of nuisance in the community, and referral source. The clinician's attitude, defined by direct verbalizations and other actions toward the patient, was observed and recorded during each session (Segal et al., 1995).

Multivariate analyses were used to see what factors affected the quality of care of patients' evaluations. Although the researchers used a small sample, making generalizations only suggestive, there were some interesting results. "Good" patients, who were treatable, likeable, and not a nuisance in the community, were among the patients more likely to receive correct evaluations, and patients with severe mental illness and dangerous patients were less likely to be involved by the clinician in the treatment process (Segal et al., 1995).

Future Directions in Assessment and Treatment of DD patients

Addressing substance abuse among the chronically mentally ill has the potential to enhance the patient's potential for stabilization and improvement over the long run (Drake & Wallach, 1993). As psychiatric patients constitute a high-risk group for substance abuse it has been suggested that all individuals with a mental illness should therefore receive routine screening for substance use (Drake et al., 1990). Any regular use of alcohol or other drugs should be considered as potentially harmful use, as it may indicate the presence of a substance use disorder (Dixon et al., 1993). Although, screening instruments do not make a diagnosis, they have the ability to identify individuals who may have problems with drinking behaviour and therefore warrant further evaluation (Breaky et al., 1998). Using simple, standardized, screening instruments such as the Michigan Alcoholism Test (MAST), the shorter version of MAST (SMAST), and the CAGE allows quick identification of patients who may need a more thorough assessment (Breaky et al., 1998).

Although the use of self-reports can be problematic, especially in acute treatment settings, the use of a short self-report instrument is recommended and can be used successfully when patients seem willing to acknowledge their use (Drake & Mercer-

McFadden, 1995). Given the high rates of relapse in individuals with a mental illness and substance use disorders, assessment must involve taking life histories of dependence and abuse and perhaps more importantly the personal and social consequences of the substance use (Breaky et al., 1998). Hien (1995) suggests taking a drug history in several separate interviews with attention to discrepancies in the patient's self-reports. Similarly, Weiss et al. (1992) recommend using a longitudinal evaluation process and multiple sources of data, delaying interviews until the person is mentally and physically stable, and using clinically trained interviewers who understand the specific short- and long-term effects of each individual drug of abuse.

Urine drug testing is probably the most useful, practical, and commonly used approach available for detecting drug use in individuals with a mental illness. It is recommended for use with all incoming psychiatric patients, patients returning to inpatient care after community visits, and for patients in high-risk categories, such as those with frequent relapses, aggressive outbursts, and unstable housing (Drake & Mercer-McFadden, 1995).

The education and training of professionals working with DD patients

It has been suggested (Brown et al., 1989; Minkoff, 1989; Osher, 1996; Thacker & Tremaine, 1989) that mental health professionals are in need of additional education in diagnosing and treating dually disordered patients. Drake, Osher, and Wallach (1991) emphasized the need for attention to the clinical aspects of care, as well as the integration of systems of care. Suggestions included increasing the clinical capacity of individual clinicians to treat both severe mental illness and substance use disorder.

Lennox and Chaplin (1996) found that over 75 percent of psychiatrists reported

that they had insufficient training in the general and behavioral management of patients

with comorbid mental and intellectual disabilities. They were also of the opinion that the

current level of professional training in providing care to these patients was inadequate

and further training was needed. It was claimed this would not only improve assessment,

diagnosis, and treatment skills, but would further allow improved communication

between different services and disciplines (Lennox & Chaplin, 1996).

A review of the literature carried out 20 years ago revealed the importance of

addressing critical issues when developing education and training. Kilty and Field (1979)

suggested that the integration of substance use disorders training into general curricula

for most disciplines was unlikely to take place due to lack of interest in this area. More

recently, O'Neill (1995b) was of the opinion that both attitudinal and organizational

barriers have obstructed "specialized training" in higher degree programs.

Suggestions for further education of professionals

Although training exists in the context of organizational complexity,

education has been demonstrated to be an effective change technique. French and Bell

(1978) identified three goals of educational activities: (a) upgrading "knowledge and

concepts", (b) eliminating "outmoded beliefs and attitudes", and (c) developing "skills".

Based on these goals, a curriculum based on the bio-psycho-social model has

been outlined by O'Neill (1995b). O'Neill includes topics such as general concepts (dual

diagnosis, engagement, and treatment), treatment stages, pharmacology of substances of

abuse and psychopharmacology, and counter transference issues. The training seeks to

reverse any pessimistic attitudes and beliefs regarding the dual diagnosis population plus

increasing the clinician's specialized knowledge. With regards to formal education,

particularly at the postgraduate level, an interdisciplinary perspective on clients, as well as multi-modal approaches to care is emphasized (O'Neill, 1995b).

Continuing education for professionals already working in the field should involve cross training of professionals involved with DD patients. Because the field of treatment for dually diagnosed patients is rapidly changing, there is a requirement of in-service training components in every agency for workers to remain abreast of issues in the field (Pulice et al., (1994). Beyond the training issues, Pulice et al. further suggests that local agencies that address mental health, drug, and alcohol abuse through separate administrative structures, should develop interagency agreements that jointly address the problems experienced by DD patients.

Brown et al. (1989) make some suggestions, based on results of a study funded by the National Institute on Drug Abuse in the United States, that address approaches to training professionals working with DD individuals. One of the significant parts of an effective training program includes a focus on the attitudes of professionals. They report that changes in attitudes are necessary, both about the "other systems" of care and about patients who are seen as "manipulative", "unchangeable", "difficult to work with", or "treatment resistant" (Brown et al., 1989). To reduce the stigmatization of DD patients, discouraging attitudes to treatment in clinicians must be addressed and enthusiasm for an improved way of doing things must be maintained. Hopeful attitudes toward recovery by patients, families, and clinicians, are stressed to be significantly important and to be associated with effective DD treatment programs (Osher, 1996).

Conclusions

Dual disorders were barely recognized by professionals two decades ago. As a

result of the high prevalence and serious consequences of these disorders, they have received considerable attention since their recent re-discovery. However, many of the reviewed studies on DD suffer from a lack of uniform definitions and methodological deficiencies such as small samples, different population groups, brief follow-ups, and reliance on self-reports, making it difficult to compare findings. Furthermore, the DD population is very heterogeneous (diagnostically and functionally) making generalizations about any findings even harder.

Regardless of where DD patients initially present seeking care, the negative consequences of their substance use are multiple. The studies reviewed indicate that substance use tends to contribute to regular relapses among psychiatric patients and that poor outcomes can be attributed to barriers within the traditional service system. Although the separation of mental illness and substance use disorders has offered greater opportunity to provide specialized treatment, it has limited the system's capacity to address the coexistence of multiple disorders. In addition, the treatment and related service needs for DD patients undoubtedly differ due to the wide heterogeneity of their comorbidities.

The reviewed literature shows that a major problem in effective service delivery is a failure to screen adequately for the presence of a substance use disorder and associated problems. An initial failure to detect substance-related problems increases the risk of misdiagnosis, over-treatment of psychiatric syndromes with medications, and neglect of appropriate interventions such as detoxification, substance abuse education, and substance abuse counseling.

More effective interventions and more appropriate assessment procedures are

needed in order to improve the outcome for DD patients. Otherwise, these patients are doomed to a poor quality of life, repeated relapses and re-hospitalization, and a continuous use of service resources. Although the attitudes of service providers and other caregivers are interwoven within systems of care, attitudes from society and individual clinicians also affects the patient's perception of treatment and ultimately the outcome of any treatment.

It follows from this review that several areas for research can be identified. These are, to better understand the attitudes of psychologists and other mental health professionals towards individuals with a dual disorder, how professionals feel towards this population, and whether this has an impact on assessment and treatment. As the need for additional education in dual diagnosis has been regularly stressed in the literature, research examining the relationship between the ability to identify and treat a dual disorder and education is needed. Research in these areas will not only help to improve the mental health service delivery, but also add to the Australian literature on dual disorders. Because most research on this topic has been carried out in the United States Australian data are badly needed.

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PART 2:

RESEARCH REPORT

Running head: DUAL DISORDERS

Dual Disorders: The Attitudes, Practice, and Education of Psychologists.

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Abstract

This study was undertaken to examine the attitudes and practice of psychologists towards patients with dual disorders, and to establish whether the acquisition of additional education in dual diagnosis made a difference regarding assessment and treatment. An 18-item questionnaire was developed and mailed to 200 registered psychologists throughout Australia. A total of 98 responded after receiving two reminder letters. Results of univariate tests and discriminant function analysis indicated that education in dual diagnosis was significantly related to better knowledge of, and practice by psychologists towards, dually disordered patients. These findings were significantly related to the successful identification of individuals with a dual disorder as well as effective assessment and treatment.

Dual Disorders: The Attitudes, Practice, and Education of Psychologists.

Since Australia's first National Mental Health Policy was endorsed in April 1992, there has been increasing progress towards a more effective mental health service. However there are many obstacles that remain to be overcome in reaching the goals of the National Mental Health Policy, such as better integrating inpatient and community mental health services to ensure continuity of care and linking mental health services and other social and disability services (Whiteford, 1993). One priority mental health target is to reorient clinicians towards a public health approach that, in addition to promotional and preventative work, equips them to provide different treatment services in order to maximize individual mental health outcomes. One of the possible factors that may inhibit these goals has been identified as the attitudes of health professionals (Commonwealth of Australia, 1998).

The outlined obstacles in the National Mental Health Policy seem especially relevant for people who suffer from dual disorders. The term "dual diagnosis" or "dual disorder" (DD) is usually reserved for the combination of drug abuse (including alcohol) and some other psychiatric disorder.

The Diagnostic and Statistical Manual, 4th edition (DSM-IV) classification of substance-related disorders refers broadly to "disorders related to the taking of a drug of abuse, to side effects of medication, and to toxin exposure". Substance-related disorders are further divided into substance use disorders, including abuse and dependence, and substance-induced disorders (APA, 1994).

The DSM-IV defines substance abuse as a "maladaptive pattern of substance use leading to clinically significant impairment or distress", as manifested by recurrent use resulting in a failure to fulfil major role obligations, recurrent use in situations which is

physically hazardous, recurrent use despite persistent or recurrent social or interpersonal problems related to substance use, and/or recurrent substance-related legal problems (APA, 1994). Substance dependence includes any of these symptoms of abuse, but can also involve physical tolerance, withdrawal, or compulsive drug taking.

Substance-induced disorders include intoxication and withdrawal, as well as syndromes that meet criteria for another mental disorder (such as psychosis, depression, or dementia), but that are directly induced by a drug of abuse (APA, 1994). The use of psychoactive substances can produce a variety of substance-induced mental symptoms, such as hallucinations, depression, and anxiety. These symptoms can be associated with chronic alcohol and sedative use and withdrawal from stimulants.

Although less common, the use of stimulants and hallucinogens can produce both acute and chronic psychotic syndromes (Lehman, 1996). The important characteristics of this group of individuals is that their "dual diagnosis" is attributed mainly to the symptoms induced by their substance use and the discontinuation of substance use is therefore likely to clear up their psychiatric symptoms. The implications for treatment of patients who have substance-induced clinically significant symptoms, which may or may not meet disorder criteria, is that they may need only "traditional" substance disorder treatment (McKenna & Ross, 1994). These clients need help addressing the substance abuse without the additional focus on mental illness and substance use.

It is important to identify a patient's specific diagnosis to provide appropriate treatment. For example, identifying whether mood symptoms are due to substance use or an independent Axis I disorder can generally only be made after a period of abstinence. It has been shown that the presence of a substance use disorder substantially detracts from the diagnostic reliability of other Axis I disorders (Corty, Lehman, & Myers, 1993).

In addition, substance use in an individual with a major mental illness can easily be overlooked, as symptoms such as paranoia, anxiety, and depression may be attributed to the "known" Axis I disorder. There is considerable evidence that certain psychoactive substances can mimic or aggravate psychotic symptoms (Turner & Tsuang, 1990). This underscores the need to obtain differential diagnoses for all patients who present with psychotic features (Lehman, 1996; Mirin & Weiss, 1991). Failure to address both disorders has the potential to render treatment for either ineffective.

The clinician must also be aware that substance use can lead to behaviour that is misdiagnosed as a personality disorder. For some of these drug-using patients, effective substance abuse treatment may substantially reduce antisocial behaviour. In addition, failure to make an appropriate formulation of the nature of the personality disorder can lead to burnout for clinicians who may feel that the patient "doesn't want help" (Lehman, 1996, p. 34).

Identification of a person with a DD remains a challenge in most service settings as patients can be too intoxicated, impaired, or disorganized and may even deny the presence of one or both disorders (Crowley, Chesluk, Dilts, & Hart, 1974). They may also be familiar with the admission and exclusion criteria and tailor their presentation according to the service provider (Fayne, 1993).

After the de-institutionalization process primary care physicians in the United States were not only, recorded by national health services data as the initial case-finders of mental health problems, but were also the major providers of mental health treatment. A review of primary care physicians' diagnostic accuracy, carried by Borus et al. (1988), showed that they failed to recognize almost two-thirds of 88 patients afflicted with a current mental disorder. Using a structured clinical interview (SCID) for the primary care

setting, the Primary Provider Rating Scale (PPRS) and the General Health Questionnaire (GHQ), primary care physician's assessment (recognition and diagnosis of mental disorders in a sample of 88 patients) was compared with mental health professionals' assessment of the same patients. Results showed that primary care physicians identified only one of seven depressives (14 %), three of the 18 anxiety disorders (17 %), and none of the four alcohol or drug abuse disorders. In addition, 10 out of 54 patients (19 %) were falsely identified as having a mental disorder, when they had neither Axis I nor Axis II disorders identified by the SCID standard (Borus, Howes, Devins, Rosenberg, & Livingston, 1988).

Vocational rehabilitation professionals, who have limited exposure to DD patients, might not recognize the signs of substance abuse in their clients' behaviour or in the individual's psycho-social history. As substance use is not directly related to the vocational rehabilitation the client has presented for, the counsellors may feel that it is too sensitive or personal to discuss, even though they are aware of a substance abuse problem. The counsellors are therefore likely to avoid the issue, although the presence of a substance use disorder has the potential to affect rehabilitation outcomes (Brown & Saura, 1996).

In Lehman's (1996) opinion, the most common assessment problems in the mental health setting are "failure to assess and treat adequately the substance use disorder" as the focus tends to be on the non-substance Axis I disorder. An initial failure to detect substance-related problems can result in misdiagnosis; over-treatment of psychiatric syndromes with medications; neglect of appropriate interventions such as detoxification, substance abuse education, and substance abuse counseling; and inappropriate treatment planning and referral (Drake & Mercer-McFadden, 1995).

Failure to detect and address substance use problems can defeat efforts to engage the patient in treatment and has the potential to contribute to perceived "non-compliance" by professionals. As a result, the patient may perceive the treatment as irrelevant or any (non-identified) problems can consequently overwhelm the patient's capacity to participate in treatment (Lehman, 1996).

Remission of substance use disorders may reduce many of the associated mental health outcomes, as suggested by studies showing few clinical differences between severely mentally ill individuals with an earlier substance use disorder and those without a history of substance use disorder (Perkins, Simpson, & Tsuang, 1986). Improved recognition of substance use disorders seem to be of particular importance because research has demonstrated that feedback and advice can contribute to significant reductions in drinking (Anderson & Scott, 1992).

A study using 154 men recruited from 8 general practices were randomly allocated to either treatment or control groups, and given advice by their general practitioner to reduce their alcohol intake. The men in the study consumed between 350-1050 grams of alcohol per week. The study relied on self-reported alcohol consumption, which is always a methodological problem in studies of this kind as deception is likely to occur. However, the one-year follow-up showed that the men who received advice to reduce their drinking, had significantly reduced consumption of alcohol, in an excess of 65 gram per week compared to the control group (Anderson & Scott, 1992).

Babor, Ritson, and Hodgson (1986) carried out a review of studies that focused on early intervention strategies for alcohol related problems in the primary health care setting. Methodological issues such as length of follow-up period and criterion of success afflicted many studies. In addition, many studies were mainly experimental in nature and

the results only suggestive of their efficacy. Nevertheless, the researchers were able to conclude that modest but reliable effects of drinking behaviour and related problems can follow from brief interventions such as, information giving, brief advice, and periodic monitoring of progress by the health worker, especially with individuals who experience less serious type of problems due to their drinking (Babor et al., 1986).

Imhof (1991) has suggested that very little attention have been given to "that one factor, which often determines whether or not treatment will succeed: the attitudes and feelings of the treatment provider" (p. 931). Attitudes are evaluative and affective reactions that are learned. The process of evaluation involves a judgment of positive (good) or negative (bad). Clinicians view themselves as "helpers", and as part of society the clinician also brings to the therapeutic relationship a complex set of experiences, attitudes, and interactions with others that influence his/her experience of current relationships (O'Neill, 1995a).

According to Lamb (1982) the first task of psychotherapy with chronic psychiatric patients is to provide them with a sense of mastery that will permit them to cope with their impulses and their symptoms, as well as the realities of their external environment. If the clinician does not believe that this is possible, then this belief will ultimately reach the patient. The notion of the "difficult" patient derives from various sources, including the characteristics of the patient, the service systems, but also the service provider's perceptions.

An earlier study by Mogar, Helm, Snedeker, Snedeker, and Wilson (1969) examined staff attitudes toward the alcohol dependent patient. The study assumed that treatment outcome with an alcohol dependent patient is a function of the degree of congruence between staff attitudes and patient attitudes. This implies a shared belief that

the treatment will be effective. Seven independent samples of patients and staff were administered the Staff Attitudes Toward Alcoholism Questionnaire. The questionnaire comprised two sections, one scale measuring Optimism and Pessimism (likelihood of improvement) and the second scale Disease and Moralism (recovery unlikely or moral weakness). The results showed that the patients' viewed their condition in a manner similar to the staff in relation to their chances of recovery. In addition, Mogar et al. (1969) concluded that in this study, moralistic attitudes and treatment outcome pessimism among professional workers were related to ignorance and a casually held, stereotyped view of the alcohol dependent patient.

Segal, Egley, Watson, Miller, and Goldfinger (1995) in examining factors related to the quality of patient evaluations in general psychiatric emergency services, found that patients' clinical characteristics and clinicians' social biases have more influence on the quality of care provided than institutional factors. The study sought to examine the relationship between qualities of care (incorporating the perspective of patients, health care providers and administrators) and comprised 683 patients, in nine psychiatric emergency services in California, who were independently observed and evaluated by mental health professionals over a 5-year period. Structured instruments were used to gather data on patients including the Art of Care Scale, the Quality of Care Index, the Hospital Benefit Scale, and the Three Ratings of Involuntary Admissibility Scale (TRIAD). The "optimum time" allocated to the patient was also recorded (Segal et al., 1995).

Institutional constraints included the physical setting, such as the availability of beds and work related issues for the clinician (workload, language matching patient's, patient's insurance cover). Sources of social bias focused on demographic descriptors of

the patient, such as age, sex, degree of nuisance in the community, and referral source.
The clinician's attitude toward the patient was measured by observing and recording direct verbalizations and other actions the clinician exhibited (Segal et al., 1995).

Multivariate analyses were used to see what factors affected the quality of care of patients' evaluations. Although the researchers used a small sample, making generalizations only suggestive, there were some interesting results. "Good" patients, who were treatable, likeable, and not a nuisance in the community, were among the patients more likely to receive correct evaluations, and patients with severe mental illness and dangerous patients were less likely to be involved by the clinician in the treatment process (Segal et al., 1995).

Addressing substance abuse among the chronic mentally ill has the potential to enhance the patient's potential for stabilization and improvement over the long run (Drake & Wallach, 1993). As many individuals often cease or moderate drinking when they become aware of the negative consequences associated with alcohol abuse, many health professionals such as physicians, nurses, and psychologists, can help to reduce their patients drinking by providing information and brief counselling regarding the risks associated with substance abuse. However, increased intervention in primary care setting, as in other settings, depends on improved recognition of substance use disorders (Johnson et al., 1995).

It has been suggested (Brown et al., 1989; Minkoff, 1989; Osher, 1996; Thacker & Tremaine, 1989) that mental health professionals are in need of additional education in diagnosing and treating dually disordered patients. Drake, Osher, and Wallach (1991) emphasized the need for attention to the clinical aspects of care, as well as the integration

of systems of care. Suggestions included increasing the clinical capacity of individual

clinicians to treat both severe mental illness and substance use disorder.

Lennox and Chaplin (1996) found that over 75 percent of psychiatrists reported

that they had insufficient training in the general and behavioral management of patients

with comorbid mental and intellectual disabilities. They were also of the opinion that the

current level of professional training in providing care to these patients was inadequate

and further training was needed. It was claimed this would not only improve assessment,

diagnosis, and treatment skills, but would further allow improved communication

between different services and disciplines (Lennox & Chaplin, 1996).

Brown et al. (1989) made some suggestions, based on results of a study funded by

the National Institute on Drug Abuse in the United States, that address approaches to

training professionals working with DD individuals. One of the significant parts of an

effective training program should focus on the attitudes of professionals. They reported

that changes in attitudes are necessary, both about the "other systems" of care and about

patients who are seen as "manipulative", "unchangeable", "difficult to work with", or

"treatment resistant" (Brown et al., 1989). To reduce the stigmatization of DD patients,

discouraging attitudes to treatment in clinicians must be addressed and enthusiasm for an

improved way of doing things must be maintained. Hopeful attitudes toward recovery by

patients, families, and clinicians, has been stressed to be significantly important and to be

associated with effective DD treatment programs (Osher, 1996).

To date, there have been no studies in Australia examining the attitudes of

psychologists towards working with DD patients. The aims of the present study are (1) to

better understand the attitudes and practice of psychologists in Australia towards

individuals with a dual disorder, (2) to determine how psychologists feel towards this

population, and (3) whether this has an impact on assessment and treatment. In addition, the study sought to examine the relationship between the ability to identify, diagnose, and treat DD patients and education in dual diagnosis.

Method

Participants

The sample for the study was selected from the list of registered psychologists in several states of Australia. Although the sample was not completely representative of the population of registered psychologists throughout Australia (the states of N.S.W. and S.A. were not included), the remaining states provide a good cross-section of participants who are likely to have different education and experiences of working with DD patients. The questionnaire was mailed to 200 registered psychologists throughout Australia and a total of 98 responded. There was a 48 % response rate. The sample consisted of 98 registered psychologists from urban, suburban, and rural areas in the states of Western Australia, Northern Territory, Queensland, Victoria, Australian Capital Territory, and Tasmania. The participants included 36 males and 62 females. Most of the respondents were between 31-50 years of age (64 %), while 12 % fell in the 20-30 age group, and 22% were over 51 years of age. The level of education varied: 21 % had completed a 4-year degree, 55 % had a Masters degree, while 20 % had a PhD. Two percent reported that they were educated overseas or had other additional education. Almost half (48 %) reported having undertaken education in dual diagnosis through a post-graduate course or professional development course.

Thirty seven percent of respondents reported working in the area of community mental health, 25 % were in private practice, and 10 % worked in a hospital setting while

23 % worked in other settings, including non-government organizations, prisons,

universities, or other government organizations. Twenty nine percent reported having

worked with dually disordered individuals for between 6-10 years, while 42 % had 1-5

years work experience with this client group. Six percent reported having no experience

of dually disordered patients, 6 % had 17-21 years experience, and 5 % had over 22 years

experience of working with DD clients.

Questionnaire

The questionnaire included behavior and attitudes related to the identification,

assessment, diagnosis and treatment of patients with a dual disorder and was specifically

constructed for this study on the basis of an extensive review of empirical and discussion

articles concerning dual disorders (Rosada, 2000). These behaviors and attitudes were

grouped into the following areas of concern: assessment, diagnosis, treatment, training,

subjective competence, and knowledge. Eighteen items required respondents to rate their

attitudes and behavior towards individuals with a dual disorder with regards to these

areas of concern. Eight of these items were modified (from a focus on individuals with

intellectual disability and other disorders to one of mental illness and substance use

disorder) from a questionnaire developed by Lennox and Chaplin (1996). The responses

for the 18 items were presented as a 7 point Likert scale ranging from 1= agree very

much, 2= agree moderately, 3= agree a little, 4= uncertain, neither agree nor disagree, 5=

disagree a little, 6= disagree moderately, to 7= disagree very much (See Appendix A).

The questionnaire was completed by 10 postgraduate clinical psychology students and

then revised following an analysis of their comments.

In addition there were two open-ended questions for the respondents to express

their concerns about dually disordered individuals and to provide any recommendations

to improve current services in this area of mental health. They were (1) "What concerns you the most about patients with a DD"? And (2) "What would you recommend to improve services to patients with a DD"? The three remaining questions sought information on (1) what percentage of your current patients has a mental illness/substance use disorder/dual disorder? (2) What are the three most common mental disorders you have assigned to patients with a co-occurring substance use disorder? (3) What assessment methods do you use when assessing for a substance use disorder?

Nine demographic questions were included to gather respondent information in the areas of age, gender, educational level, place of employment, focus of work, age group of clients, years in practice, work experience with dually disordered individuals, and whether the employment setting specialized in substance abuse. The last question asked if the respondent had additional education in dual diagnosis and if yes, how this was obtained.

Procedure

The Psychologists Registration Board in each of the states involved in the study was contacted by phone and arrangements made to obtain the list of registered psychologists. Those from S.A and N.S.W. were not available due to cost and time constraints. It was decided that an equal number of participants from each state should be included in the study, as opportunities for further education differ among the different states. A total number of 200 psychologists were selected, with 33 names selected from the list of registered psychologists in each of the six states. The remaining 2 names were selected from W.A. Using the addresses, about half the sample in each state was selected as apparently working in settings that were likely to have clients with a dual disorder. These included settings such as substance abuse and rehabilitation centers, mental health

facilities, hospitals, prisons, university counseling centers, private organizations, and Vietnam Veterans Counseling Centers. The other half of the sample was selected at random, except that psychologists who were unlikely to see DD clients, such as those working with children and in schools, were deliberately excluded from the sample.

Participants were sent the questionnaire together with an explanation and rationale for the study during July 1999. A reminder letter was sent out the following month to those participants who had not yet responded. A second reminder letter with a questionnaire was mailed a month after the initial reminder letter. The completed questionnaires were returned in a pre-paid envelope.

Results

The answers indicating whether respondents agreed or disagreed with each of the 18 statements were first compared and analyzed using percentages (See Table 1). The results represent a range of views, with some items showing a high level of consensus (See Table 2). Ninety two percent of respondents indicated that they routinely assess for substance abuse in patients with a mental disorder. There was also a high level of agreement (90 %) that dual diagnosis training is needed as part of university education, personally always assessing for social problems related to substance abuse (89 %), and the statement DD patients are more difficult to treat (80 %). Most respondents (80 %) also agreed that DD patients receive a relatively poor standard of care in our present mental health system, and 70 % agreed with the statement that they personally had enough knowledge of the effects of substance on people's functioning.

Eighty-one percent of the respondents disagreed with the statement that there is seldom a need to investigate substance abuse in patients with a mental disorder, followed by disagreement (76 %) that psychologists generally receive sufficient training at

university. Sixty percent disagreed with the statement that it is easy to refer patients on to independent substance abuse treatment programs. The item with the greatest uncertainty amongst respondents (34 %) was in regards to whether psychological treatment of DD patients is generally more based on symptoms rather than diagnostic classification.

The psychologists were then divided into two groups, those with additional education in dual diagnosis ($\underline{n}$=47) and those without education in dual diagnosis ($\underline{n}$=51).

Discriminant Function Analysis

A discriminant function analysis was performed using the 18 variables as predictors of membership in the two groups, psychologists with and without education in dual diagnosis. Out of the original 98 cases, two were identified as multivariate outliers using Mahalanobis distance, with $\underline{p}$ <.001, and were deleted from the analysis. Both of the outlying cases were in the group of psychologists with education in dual diagnosis. For the remaining 96 cases (45 with education in dual diagnosis and 51 without education in dual diagnosis), evaluations of assumptions of linearity, normality, multicollinearity or singularity were found to be satisfactory.

Discriminant function analysis was performed using all 18 variables as predictors of membership in the two groups of psychologists, to assess which combination of variables would maximally separate the two groups. The discriminant function obtained was significant χ^2 (18) = 38.10, $\underline{p}$< .004. Using Fisher's classification procedure for the 96 psychologists, 77.1 % of cases were classified correctly, compared to 50 % that would be classified by chance alone. Figure 1 reveals the large degree of separation afforded by the discriminant function. The squared semi-partial correlation between the two groups of psychologists (with education in dual diagnosis and without education in dual diagnosis) is .56.

In order to determine the relative importance of each of the predictors to this separation, the associated structure coefficients, univariate F tests and correlations among predictor variables were examined. These indicators of the relative importance of particular predictors are summarized in Table 3, while the correlations among predictor variables can be seen in Table 4. Five of the predictors showed significant loadings (all in excess of .30) on the discriminant function, and are reported in Table 3.

Comparisons of Group Socio-Demographics

Comparisons were also carried out on some of the socio-demographic variables to see whether they differentiated those with and without education in dual diagnosis. Mann-Whitney U tests were used to compare the two groups on years in practice, frequency of contact with clients (children, adolescents, adults), and years in practice working with dually diagnosed patients. Only one significant finding was obtained that differentiated between the two groups. The psychologists with education in dual diagnosis reported more years of experience in working with dually disordered patients (U = 771.0, p = .004, Mean Rank for those with education = 56.87, for those without = 41.12).

Contingency tables were used to examine whether the following variables differentiated between the groups: participants age group, educational level (not including the additional education in dual diagnosis), place of employment, and focus of current work. There was one significant finding, focus of current work. Psychologists with education in dual diagnosis were more often working in the areas of clinical psychology, neuropsychology, and counseling than in other areas, χ^2 (1, N = 96) = 3.69, p < .048.

In the final section of the questionnaire, respondents made written comments about their main concerns about dually disordered patients and recommendations on how services could be improved. The comments were analyzed in terms of frequency with which a certain concern occurred, and placed under common themes of concern. Results are summarized in Table 5 for concerns. The most commonly identified themes in the concerns reported were: systems separation (29 %), treatment difficulties (27 %), lack of training (18 %), client characteristics (12 %), and attitudes (5 %).

The respondents' recommendations for improving the services to dually disordered patients are summarized in Table 6. The reported recommendations were analyzed in terms of the frequency with which a certain recommendation occurred, and placed under common themes of recommendations. The most frequent suggestions concerned training and education (32 %), followed by integration of services (25 %), more government resources (14 %), and coordinating services (12 %). Also, case management (2 %), changing formulations (3 %), and finally attitude change (3 %).

Discussion

The overall rate of those who had acquired further education in dual diagnosis was high, almost 50 % (45 out of 98) but this rate may simply reflect the sampling method used. As the respondents were not randomly selected, the survey may have resulted in an overestimated level of DD education in the psychologists who responded to the study.

The results of this study show that additional education in dual diagnosis is related to self-reported knowledge and practice of psychologists towards patients with a dual disorder. One of the main differences between the two groups of psychologists was found in relation to self-reported knowledge of the interactions between psychotropic

medications and substance abuse. This has significant implications for both the assessment and identification of individuals with a dual disorder. The results suggest that because the group of psychologists with education had more knowledge in this area, education in dual diagnosis is likely to have played a major part. This would be consistent with educational recommendations put forward by O'Neill (1993b), who recommends inclusion of diagnosis, differential diagnosis, and knowledge about pharmacology of substances of abuse and psychopharmacology in training.

In terms of treatment, the psychologists with additional education are therefore likely to be in a better position to offer psycho-education to the patient. Providing education about the consequences of substance use/abuse is often recommended in the literature as the first step for the user in gaining insight about the harmful effects of drugs and alcohol. Kaufman (1991) cautions that any intervention techniques with DD patients should be used without confrontation and focus on the use of substances as a problem, not on the person. Psycho-education provided by the appropriately educated professional is compatible with Kaufman's recommendations.

McDuff, Solounias, RachBeisel, and Johnson (1994) recommend trying brief psycho-educational therapy with DD patients. Awareness of the physical and psychosocial consequences of substance abuse can indeed motivate some abusers to stop. Knowledge of the effects of drugs of abuse and psychiatric medication is clearly important, as increasing the patient's knowledge might help to reduce excessive use and consequently, reduce many of the associated problems such as frequent relapses of mental illness due to substance use and re-hospitalization.

The analysis showed a significant difference between the two groups of psychologists in relation to knowledge of the effects of substance abuse on human

functioning. Psychologists with education in dual diagnosis reported having enough knowledge compared to psychologists without this education. This finding supports recommendations made to improve identification of DD individuals, suggesting that professionals need to have knowledge of basic psychopharmacology (addiction, tolerance, withdrawal) and the effects of substance use on both psychological and social processes (Westermeyer, 1991).

Although both groups reported that they always assess for any social problems related to substance use before diagnosing a patient, knowledge of the impact of abuse on human functioning would presumably make it easier to identify substance abuse when it is present. As many patients deny or conceal their use and abuse of substances (Crowley, Chesluk, Dilts, & Hart, 1974) it is important that the clinician have a thorough knowledge of how to determine whether a person is suffering from a DD. This knowledge may be critical as indicated by the finding that psychologists with education in dual diagnosis also reported that they diagnose individuals with a dual disorder more frequently than psychologists without additional education do. However, psychologists with dual diagnosis education and who are working in the areas of clinical psychology, neuropsychology, and counseling may have the opportunity to diagnose DD patients more often compared to psychologists working in other areas.

The psychologists with education in dual diagnosis reported more subjective feelings of competence in relation to identifying and diagnosing individuals with a DD compared to psychologists without education in dual diagnosis. The psychologists without education may as a result diagnose patients as having a dual disorder less frequently compared to those with education.

Imhof (1991) believes that it is not uncommon that mental health professionals have avoided DD patients perhaps more often due to the therapist's subjective feelings of ineffectiveness and inadequacy. A clinician who feels inadequate and unable to help a patient with a DD and consequently attempts to refer the patient to another service may inadvertently give the patient the message of being untreatable and unwanted. These responses can lead to inappropriate treatment decisions and alienate the DD patient from the clinician and prevent appropriate care.

As O'Neill (1993b) emphasizes, the therapeutic relationship can either be improved or damaged by issues of transference and counter transference depending on how they are managed by the clinician. Training and education that address counter transference issues in clinical practice with DD patients is regularly proposed as part of dual diagnosis training where attitudes and reactions to DD patients are examined through introspection and personal examination of the clinician's reactive process in the therapeutic relationship. Imhof (1991) also draws attention to the importance of the quality of the clinician's training, as knowledge about dual diagnosis and counter transference is necessary working with a particular clinical population, such as DD patients.

Psychologists with education in dual diagnosis not only felt more competent, but also reported identifying and diagnosing individuals with a DD more frequently. It is possible that the additional education in dual diagnosis helps the clinician to obtain accurate diagnostic determinations and to understand the relationship between substance abuse symptoms and other psychopathology.

One of the major recommendations in the literature is to provide routine screening for psychiatric patients, as they constitute a high-risk group for substance abuse (Drake et

al., 1990). The results suggest that having additional education in dual diagnosis and having knowledge of substance use and abuse issues is important in the assessment process. Those with education more often reported that they routinely assess for substance abuse by patients with a mental disorder, which increases the chances of successfully identifying the presence of a DD. Both groups believed that there is a need to investigate whether substance abuse is present, but those psychologists without education in dual diagnosis reported less often that they do routinely assess for substance abuse.

An alternative interpretation is that the results reflect the focus or orientation of the psychologists' employment setting, regardless of having additional education in dual diagnosis. This is supported by the finding that psychologists with education in dual diagnosis were more often working in the areas of clinical psychology, neuropsychology, and counseling rather than other areas. A possible explanation is that these areas of work are more involved with the treatment or management of dually disordered patients.

The two groups of psychologists held different opinions regarding psychologists training in dual diagnosis. The psychologists without education in dual diagnosis felt more strongly that universities did not provide sufficient training in assessment and management of patients with a DD. This could possibly reflect their personal lack of education in dual diagnosis, and their need to obtain it.

Both groups agreed (90 %) that additional education in the assessment and management of DD patients should be included as part of university training in clinical psychology. Those psychologists who had additional education in dual diagnosis reported that their dual diagnosis education was most often obtained through a professional development activity since qualifying as a psychologist.

The need for training and education is noted by several authors addressing DDs (Thacker & Tremaine, 1989; Minkoff, 1989) and would increase familiarity with psychiatric disorders that most co-occur with substance use disorders and increase the ability of clinicians to diagnose substance use disorders (O'Neill, 1993b). Training in integrated treatment approaches for DD patients has found that clinicians from both the mental health and addiction field have adopted the belief that once the primary psychosis is stabilized with medication, the addiction can be treated much like addiction in an individual without a DD (Minkoff, 1989).

Both groups of psychologists were in agreement that DD patients are more difficult to treat (80 %) compared to patients without a comorbid substance use disorder. This is compatible with other findings suggesting that professionals often view DD patients as "difficult" (Lehman, Myers, & Corty, 1989) or "hopeless" (Solomon, 1986). However, only twenty eight percent of the psychologists in this study expressed a wish to not want to treat these patients. This is a positive finding, suggesting that these psychologists have not been discouraged by the reported difficulties of dealing with this client group. Alternatively, the influence of "social desirability" may have played a part in the responses, as the psychologists perhaps did not want to be seen as holding negative attitudes towards a group of individuals requiring their services.

Questioned about the overall standard of care for DD patients, respondents were in agreement (71 %) that DD individuals receive a relatively poor standard of care in our present mental health system. Questioned about concerns and recommendations for improvements for DD patients, some of the respondents were of the opinion that often services are reluctant to deal with DD patients. Examples of these perceptions are provided in the following statements made by respondents, "there is a disinterest by

mental health systems to deal with DD patients", "it's someone else's problem", "services are reluctant to take on DD patients", and "a need for more friendly, understanding staff".

There was a significant concern expressed over the separation of different treatment services. Most of the psychologists (60 %) reported having difficulties in referring patients on to independent substance abuse services. However, they did not report any major difficulties with trying to liaise with the service once involved. This is in contrast to the findings of Lennox and Chaplin (1996), who found that the psychiatrists in their study had difficulties in liaison with some other service providers. One explanation to this difference between the psychologists and psychiatrists may lie in the "process of normalization" and the sometime preferred use of alternative treatments to using medications. It may be speculative but a non-medical professional may be perceived by the public as being more familiar with alternative therapies and more willing to use them.

The respondents expressed support for an integration of services, and the development of "specialist clinics", especially for adolescents. The researched literature provides evidence that long-term, integrated mental health and substance abuse treatment is effective in reducing the severity of substance use disorder and in reducing hospitalization for DD patients (Drake et al., 1998). Integrated treatment requires a combination of treatment principles which prevents the patient from receiving conflicting messages from different treatment plans and thus provides a better chance of compliance (Osher & Kofoed, 1989). Treating adolescents may prevent further "revolving door" use of services, and may also help to encourage the patient, at an early stage, to address the issues relating to substance abuse.

Comments on improvement in services showed that there was agreement that more training and education for professionals involved in managing dually disordered patients is needed and for trained specialists in helping to educate other professionals. The call for specialists may indicate that respondents are agreeing that DD patients are difficult to treat and need "specialized" treatment and that this is currently lacking. This would be consistent with the previous reports by Bachrach (1982), Brown, Ridgely, Pepper, Levine, and Ryglewiscz (1989), and Lennox and Chaplin (1996) indicating that professionals feel a need for action to be taken in improving services for DD patients.

The suggestions for improvements to be made in the present service delivery system include the provision of 24-hour access to care, with a range of treatment options that could be tailored to suit individual needs. Many of the respondents expressed the need for more individualized treatments and to increase availability of treatment options so that services can be tailored to the unique needs of the DD individual. This is compatible with the views expressed by Minkoff (1987) who states that the most important factor in engagement and continuity in treatment is the degree to which individualized, ongoing, and sustaining clinical relationships can be developed between the patient and the caregivers in the service system.

On the other hand, the results could also be interpreted as the respondents not wanting to be involved in the management of DD patients. They may feel that if "specialized" clinics and services are provided, they can avoid dealing with DD patients by deciding not to engage in further education. Although the psychiatrists in Lennox and Chaplin's (1996) study were of the opinion that there is a need for "specialized" services in relation to caring for individuals with both intellectual disabilities and mental

disorders, only 28 % were interested in further training. Thirty nine percent of the psychiatrists reported that they would prefer not to treat these individuals.

In terms of treatment, most of the psychologists (63 %) believed that individual psychotherapy was a useful approach with dually disordered patients. As there are various approaches to treating dually disordered patients, the rationale for choosing a certain approach often depend on the knowledge and ability of the professional involved. One interpretation of the support for psychotherapy is that it may reflect respondents' own perceived ability to be able to provide this intervention with DD patients. With this in mind, it is important to remember that psychotherapy is a general term covering many different approaches to therapy, and as such was not clearly defined in this study.

Bachrach, Talbott, and Meyerson (1997) stress that reaching out to the DD patient on an individual basis activates them to other elements of treatment that are fundamental to their care. Initial engagement of the patient is crucial as a first step in treatment as it reduces the drop out rate during treatment. The results may indicate that these psychologists feel that if they were able to provide individual supportive psychotherapy to their patients, they may be in a better position to provide quality or continuity of care.

It appears that the psychologists who responded to the present study are well aware of the many problems experienced by the DD population and by clinicians in assessing and treating this group of patients. Most (90 %) expressed a need for DD training as part of psychologists' education at university, while very few (3 %) were of the opinion that the training received at university was sufficient to meet the needs of DD patients.

A positive finding was that the respondents in this study reported knowledge about the difficulties in treating DD patients but many were still prepared to treat them.

Twenty-eight percent of psychologists reported a preference not to treat DD patients. The concerns and recommendations for improvements given in response to the open-ended questions conveyed a generally sympathetic view and an awareness of the need for improvements in resources and treatment.

In terms of instilling hope and affecting change, O'Neill (1993a) states that believing in a "difficult" patient's value as a human being enhance that person's own ability to care for her/him self. Minkoff (1987) agrees and believes that "regardless of how the clinician conceptualizes treatment, making empathic connection with the chronic patient is crucial to the success of any therapeutic intervention" (p. 15).

It could be argued that the respondents with a positive attitude towards helping DD patients may not have been exposed to DD patients long enough in a clinical setting to have experienced the reported feelings of "hopelessness" and as a consequence never developed negative attitudes towards them. Positive attitudes and the clinician's own need to change people could also result in an expectation of too much change, too quickly, especially when unfamiliar in dealing with DD patients (Minkoff, 1987).

The overall results support many of the reported findings in the literature discussing barriers to the care of dually disordered patients such as identification and diagnosis, and especially in relation to professional education. Having education in dual diagnosis is clearly a necessary requirement in the assessment process and in treating DD patients. Without specialist training many professionals risk neglect in the assessment and care of substance abusing patients, and may inadvertently contribute to the development and maintenance of DDs. It also follows that those psychologists with education in dual diagnosis, not only feel better equipped and competent in carrying out the requirements

of assessing for a dual disorder, but also more often diagnose an individual as having a DD.

One implication of the present study is that health practitioners should always be willing to acknowledge the possible presence of substance abuse in psychiatric patients. This may lead to increased responsibility by the primary clinician to adequately assess for the presence of a substance use disorder. It may also help the patient to build trust with the clinician, which is an important first step with treatment resistant DD patients (Bachrach, et al., 1997).

In addition, support or actions by the clinician in helping the DD patient can encourage the person to seek additional help in other systems when referred on. Most importantly, acknowledging substance use disorders as a problem in providing appropriate treatment may encourage the obvious failure of the providers of treatment systems to face up to and deal with this apparently "neglected" population of patients.

Service planners will need to gain a greater awareness of the unique needs of DD patients and become more flexible when planning for the delivery of services. Perhaps as consensus develops among clinicians about the importance of identifying DD patients and providing integrated treatment, positive and helpful changes in reducing both organizational barriers such as agency collaboration and financial barriers will follow. Until these changes happen, a more achievable step would be to improve the ability of staff, in both addiction services and mental health facilities, to recognize and manage patients with a DD.

There are some limitations to this study, including the fact that the response rate of 48 % although higher than many mailed surveys, was relatively low. This resulted in a small sample of respondents. Although two states were not represented in the sample,

there is no reason to think that they differ as DDs occur everywhere. As the study used a self-report questionnaire, respondents may have been influenced by social desirability in their responses, as they may not want to be seen as holding negative attitudes towards individuals who need help. In addition, it is not known if the psychologists with education in dual diagnosis actually worked in settings relevant to meeting the needs of DD patients and whether those psychologists held more positive views compared to those that did not work with this population.

This study answers some important questions but also raises further issues. Additional education is clearly important in the management of DD patients and is likely to change discriminating and stigmatizing attitudes among professionals, leading to better care of DD patients. Further research could assess the impact of dual diagnosis training on professionals' attitudes towards DD patients, and analyze whether negative and pessimistic attitudes and beliefs have been successfully modified. In addition, examining the impact of dual diagnosis training in clinicians by studying the attitudes of DD patients towards clinicians and treatment may be useful. Finally, analyzing whether dual diagnosis training in clinicians has an indirect effect on treatment compliance of DD patients and treatment outcome is another area of interest.

The main purpose of this research was to examine whether additional education in dual diagnosis is related to psychologists' attitudes and practice toward DD patients. Dual diagnosis training is a necessary requirement for identifying and treating DD patients. Improved recognition of DD patients appears to be of particular importance as research has demonstrated that feedback and advice can contribute to significant reductions in substance use. The results are clearly consistent with the literature stressing the need for further education for professionals involved in the management of DD patients.

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Table 1

Percentages of Agreement and Disagreement to the 18 Items concerning DDs.

	Item	Agree	Uncertain	Disagree
1	Knowledge effects of substance use	70	4	26
2	Knowledge medications & substance use	42	5	53
3	Subjective competence	56	0	44
4	Investigate substance abuse	19	0	81
5	Assessing substance abuse	92	3	5
6	Assess social problems & substance use	89	5	6
7	Diagnose DD	44	14	42
8	Sufficient DD training at university	10	14	76
9	DD training at university needed	90	7	3
10	Psychotherapy useful treatment	63	26	11
11	Treatment based on symptoms	61	34	5
12	Workplace suit DD patients	46	16	38
13	DD patients more difficult to treat	80	11	9
14	Poor standard of care for DD patients	71	18	11
15	Easy to refer patients on	34	6	60
16	Easy to liaise with services	41	32	27
17	Prefer not to treat	28	24	48
18	Specialist DD clinics useful	62	22	16

Note. "Agree" is the sum of those responding to 1, 2 and 3 on the questionnaire.

"Disagree" is the sum of those responding to 5, 6 and 7 on the questionnaire.

Table 2

Means and Standard Deviations of the Six Variables for Psychologists With Education in Dual Diagnosis and Psychologists Without Education in Dual Diagnosis.

	Dual diagnosis education		No education			
	M	SD	M	SD	t	p
Q1. Knowledge	2.70	1.64	3.57	1.68	2.58	.011
Q2. Knowledge	3.77	1.81	4.99	1.78	3.35	.001*
Q3. Subjective competence	2.28	1.36	3.27	1.66	3.23	.002*
Q5. Assessing substance	1.40	.85	2.24	1.59	3.25	.002*
Q7. Diagnose DD	3.68	1.66	4.39	1.74	2.07	.042
Q8. Training	5.11	1.82	6.00	1.36	2.74	.008
N	45		51			

Note. Degrees of freedom vary between 85 to 96.

* $p \leq .003$

Table 3

Results of Discriminant Function Analysis.

Predictor variable		Correlations of predictor variables with discriminant function	Univariate F(1,94)	
2.	Knowledge medications & substance use	.49	12.97	****
3.	Subjective competence	.48	12.39	****
5.	Assessing substance abuse	.43	9.80	***
1.	Knowledge effects of substance use	.39	7.95	**
8.	Training	.37	7.16	**
12.	Workplace suit DD patients	.27	3.94	
7.	Diagnose DD	.27	3.87	
6.	Assess social problems & substance use	.26	3.64	
16.	Easy to liaise with services	.26	3.48	
14.	Poor care for DD patients	-.17	1.63	
11.	Treatment based on symptoms	-.14	1.09	
15.	Easy to refer patients on	.13	.91	
18.	Specialist DD clinics useful	-.18	.73	
4.	Investigate substance abuse	.11	.61	
10.	Psychotherapy useful treatment	.08	.34	
9.	DD training at university needed	-.06	.18	
17.	Prefer not to treat DD patients	-.03	.04	
13.	DD patients more difficult to treat	-.00	.00	
	Canonical R	.601		
	Eigenvalue	.566		

* p ≤.05   ** p ≤.01   *** p ≤.005   **** p ≤.001

Table 4

Correlations among Predictor Variables.

Correlation	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18
Q2	.70	1.0																
Q3	.33	.34	1.0															
Q4	.00	.13	-.25	1.0														
Q5	.12	-.04	.34	-.42	1.0													
Q6	.29	.16	.36	-.29	.40	1.0												
Q7	.22	.24	.45	-.14	.18	.31	1.0											
Q8	.13	.14	.11	.11	-.20	.11	.07	1.0										
Q9	-.02	.02	.20	-.20	.23	-.05	.19	-.42	1.0									
Q10	.16	.23	.34	-.08	.12	.22	.15	.23	.02	1.0								
Q11	.17	.19	.19	-.16	.06	.03	.08	-.00	.04	.24	1.0							
Q12	.33	.45	.33	.06	.03	.18	.14	.18	-.10	.16	.10	1.0						
Q13	-.09	-.13	.06	-.18	.08	.01	.03	-.05	.09	.02	.03	.14	1.0					
Q14	.09	.13	.15	-.13	.18	.12	.21	-.08	.12	-.13	.05	.03	.21	1.0				
Q15	-.13	-.10	-.16	-.03	.03	-.16	-.23	.07	.07	.02	-.11	.07	-.09	-.41	1.0			
Q16	.04	-.07	.05	-.11	.15	.04	-.11	.02	.03	.11	-.11	.12	-.06	-.45	.61	1.0		
Q17	-.02	-.03	-.07	.13	-.23	-.16	-.15	.15	-.06	-.19	-.17	.08	.15	-.20	.13	.03	1.0	
Q18	-.17	-.03	-.18	.00	-.01	-.09	-.13	-.04	.08	-.15	.04	-.20	.03	-.11	-.06	-.13	.13	1.0

Table 5

Frequency of Concerns for DD Patients and Sample Comments

Theme	Frequency
Systems separation	29 %
lack of collaboration between services	
client is lost during referrals	
services passing the buck, someone else's problem	
Treatment difficulties	27 %
separate treatment priorities depending on service	
usually no treatment response and poor prognosis	
one disorder masks the other, substance use disorder overlooked	
drug interactions (alcohol and medications) interferes with treatment	
Lack of training	18 %
insufficient identification of a dual disorder	
lack of accurate assessment, potential for misdiagnosis due to focusing on one disorder	
identifying symptoms of substance abuse, insufficient knowledge about drug interactions	
Client characteristics	12 %
lack of insight and commitment to treatment, denial of substance abuse, or don't want to stop	
high risk for self-harm and suicide, unpredictable and may exhibit violent behaviour	
potential for irreversible brain damage, potential for becoming socially isolated	
Attitude change	5 %
moral perceptions among professionals, reluctance to deal with a patient with a dual disorder	

Table 6

Frequency of Comments for Improved Services for DD Patients and Sample Statements

| Theme	Frequency
Training and education	32 %
dual diagnosis education, trained specialists	
both mental health and substance rehabilitation centers have specialists	
Integration of services	25 %
develop specialist clinics, integrate treatment programs	
adolescent specific services that address dual disorders	
Increased government resources	14 %
more friendly and accessible detoxification centers, follow-ups in the community	
provide a range of treatment options, including. detox., short-term, medium, or long-term	
provide access to treatments, 24-hour care, more staff in drug & alcohol centers	
Coordinating services	12 %
increase liaison between mental health and drug & alcohol centers	
mutual treatment goals between services, joint treatment protocols between services	
Case management	2 %
first service approached is the one responsible for patient, individual management plans	
Changing formulations	3 %
less diagnosis and more focus on functional behaviour	
understand coping responses, change the word patient to client	
Attitudes	3 %
change community attitudes to dually disordered individuals	
change professional attitudes	
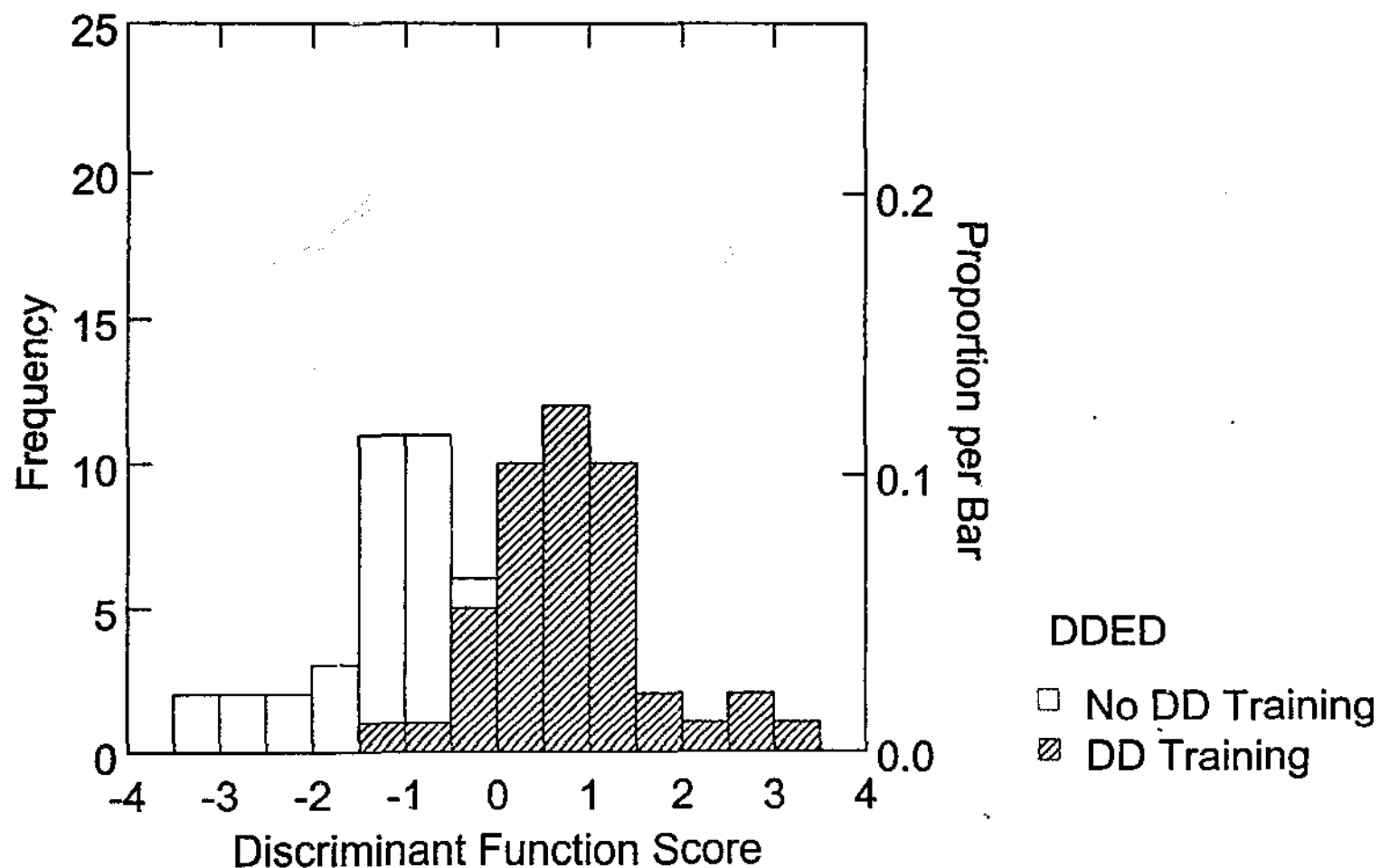
Figure 1. Frequency of responses for the group of psychologists without DD training ($\underline{N}$ = 51) and the group of psychologists with DD training ($\underline{N}$ = 45), in answers to the questionnaire measuring attitudes and behaviors to DD patients.

APPENDIX A: Questionnaire

Please ensure that you do not write your name, or any other comments that will make you identifiable, on the questionnaire. By completing the questionnaire you are consenting to take part in this research. As such you should first read the enclosed Disclosure Statement carefully as it explains fully the intention of this project.

Please complete statements by circling the number of the alternative, which best represents your thoughts and behaviour towards patients/clients with a Dual Disorder (DD). In this case, Dual Disorder refers to the presence of a substance use disorder in a person with a concurrent mental illness. Use the following scale;

1 = Agree Very Much
2 = Agree Moderately
3 = Agree a little
4 = Uncertain, Neither Agree nor Disagree
5 = Disagree a little
6 = Disagree Moderately
7 = Disagree Very Much

1 - I have enough knowledge of the effects of substance abuse on people's functioning.   1 2 3 4 5 6 7

2 - I have enough knowledge of the interactions between psychotropic medications and substance abuse.   1 2 3 4 5 6 7

3 - I feel competent in identifying and diagnosing patients with a DD.   1 2 3 4 5 6 7

4 - There is seldom a need to investigate substance abuse in patients with a mental disorder.   1 2 3 4 5 6 7

5 - I routinely assess for substance abuse in patients with a mental disorder.   1 2 3 4 5 6 7

6 – I always assess for any social problems relating to substance use before diagnosing a patient   1 2 3 4 5 6 7

7 - I often diagnose patients as having a DD.   1 2 3 4 5 6 7

8 - Psychologists generally receive sufficient training at University in the assessment and management of patients with a DD.   1 2 3 4 5 6 7

9 - As part of clinical psychologists' University training, additional education in the assessment and management of patients with a DD should be included. 1 2 3 4 5 6 7

10 - I find individual psychotherapy a useful treatment for DD patients. 1 2 3 4 5 6 7

11 – I think that psychological treatment of DD patients is generally more based on symptoms than on diagnostic classification. 1 2 3 4 5 6 7

12 - My work place is adequately suited to the needs (assessment and treatment) of DD patients. 1 2 3 4 5 6 7

13 - Patients with a DD are more difficult to treat compared to patients without a comorbid substance use disorder. 1 2 3 4 5 6 7

14 - Patients with a DD receive a relatively poor standard of care in our present mental health system. 1 2 3 4 5 6 7

15 - It is easy to refer DD patients on to independent substance abuse treatment services. 1 2 3 4 5 6 7

16 - I find it easy to liaise with independent substance abuse treatment services to which I refer patients. 1 2 3 4 5 6 7

17 - Personally, I would prefer not to treat patients with a DD. 1 2 3 4 5 6 7

18 – Specialist DD clinics would be a useful model for treatment 1 2 3 4 5 6 7

Please provide your thoughts and views on the following questions:

1 - What concerns you the most about patients with a DD?

_____

_____

_____

_____

2 - What would you recommend to improve services to patients with a DD?

_____

3 – What percentage of your current patients have a

(i) mental illness? _____%

(ii) substance use disorder? _____%

(iii) dual disorder? _____%

4 - What are the three most common mental disorders you have assigned to patients with a co-occurring substance use disorder?

_____

_____

_____

DEMOGRAPHICS

(Please provide the following information for statistical purposes only)

Gender; Female ☐   Male ☐

Age; 20-30 ☐   31-40 ☐   41-50 ☐   51-60 ☐   >61 ☐

Educational level; 4 years ☐   Masters ☐   Post-graduate/Phd ☐   Other (overseas) ☐

Main focus of current work;

Clinical ☐   Neuropsychology ☐   Organisational ☐   Vocational ☐   Counselling ☐

Educational/Developmental ☐   Research ☐   Teaching ☐   Forensic ☐   Other ☐

If other, please specify; _____

Place of employment;

Private practice	Hospital	Community M.H.	Other (Please specify)
☐	☐	☐	☐ _____

_____

Please indicate the age group of your clients by ticking the appropriate box(es)

	All	Most	Some	None
Child	☐	☐	☐	☐
Adolescent	☐	☐	☐	☐
Adult	☐	☐	☐	☐

Employment setting specialise in substance abuse	Yes	No
	☐	☐

Years in practice;

1-5	6-10	11-16	17-21	>22
☐	☐	☐	☐	☐

Years in practice involving working with dually diagnosed patients;

0	1-5	6-10	11-16	17-21	>22
☐	☐	☐	☐	☐	☐

Have you received training in Dual Diagnosis?

	No	Yes
	☐	☐

If Yes, please specify details;

	Yes	No
In a undergraduate psychology course	☐	☐
In a University postgraduate psychology	☐	☐
Non-psychology University course	☐	☐
In a professional development activity since qualifying as a psychologist	☐	☐
Other, please specify;	☐	☐

THANK YOU VERY MUCH
FOR YOUR INVALUABLE HELP
WITH THIS PROJECT!

Please contact me if you would like a copy of the results.

APPENDIX B: Disclosure statement

Dear Psychologist,

I am writing to ask your help in conducting a research project. The study is designed to investigate the attitudes and practice of psychologists towards patients with a dual disorder (mental illness plus substance use disorder) and is being conducted by Eva Rosada, a student at Edith Cowan University in Western Australia. This survey comprises part of the research component of the Masters in Clinical Psychology course. This survey conforms to guidelines by the University's Committee for the Conduct of Ethical Research.

In the survey you will be presented with 18 statements related to the identification, assessment, diagnosis, and treatment of patients with a dual disorder. You will be asked to rate your response according to whether you Agree or Disagree with a particular statement. This will take approximately 10 minutes. In addition, there are several questions where you can expand your thoughts and views regarding the mental health service provided to individuals with a dual disorder.

The aim is to examine how psychologists feel about working with this population and to see whether additional education in Dual Diagnosis makes a difference in this process. The benefits of conducting this research (for society and the discipline of psychology) is that it provides important information to evaluate our present mental health service and may be useful in further service planning.

Your name was selected at random from the published list of psychologists registered in your state. Please understand that participation in this survey is totally voluntary and you are free to refuse to participate. If you consent to participate, please return the questionnaire in the pre-paid envelope. If you choose not to participate, please return the blank questionnaire in the envelope provided.

The information gathered will be used in this thesis and may be used in a publication. Please be assured that any information you provide will be held in strict confidence by the researcher. All data will be reported in group format only. The names of participants will be confidential and will only be known to my supervisor, Andrew Ellerman, and myself. At the conclusion of this study a summary of the results will be available for participants upon request.

A code number is written on the back of the envelope to enable a reminder to be sent to those who do not respond within a 2-week period. When questionnaires are returned, the envelope with the code number will be immediately separated from the questionnaire and discarded to maintain anonymity of responses. I would be forever grateful if you consent to participate, as a high response rate is essential. There are only a small number of psychologists who have been selected to receive this questionnaire. Thank you.

Any questions concerning the project titled "Dual disorders and implications for assessment and treatment: the attitudes, practice, and education of psychologists", can be directed to Eva Rosada of Edith Cowan University, on (08) 9277 99 23. If you have any concerns about the project or would like to talk to my supervisor, you may contact Associate Professor Andrew Ellerman on (08) 9400 56 28.

Yours sincerely,

Eva Rosada
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Edith Cowan University
100 Joondalup Drive
Joondalup 6027, W.A.

Andrew Ellerman
Associate Professor
Edith Cowan University
100 Joondalup Drive
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