Background Characteristics and Clinical Correlates of Dual Diagnosis Inpatients

by

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Abstract

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Mentally ill patients who abuse alcohol and illicit street drugs pose a major challenge to mental health administrators and practitioners. These dual-diagnosis (DD) patients are susceptible to a deterioration of their medical, mental, and physical well-being. In order to determine the impact of a mental illness/substance abuse comorbidity, the medical records of 80 dual diagnosis inpatients treated at a small urban general hospital's psychiatry service were compared to the records of 80 psychiatric controls. Demographic, background, diagnostic, service use, and clinical variables were examined. It was hypothesized that the dual diagnosis patient would be younger, more likely to be male, and of African or Hispanic descent than the psychiatric controls (PC). It was also predicted that dually disordered patients would be more likely to carry a co-morbid affective disorder and have a personality disorder, be readmitted to the study hospital, and have a shorter length of stay. Clinically, DD patients were predicted to have a family history of

alcoholism, exhibit greater suicidality prior to their admissions, and have a history of childhood sexual abuse when compared to psychiatric patients who were not chemically dependent. The findings of this study indicate that a dual diagnosis is significantly associated with younger age, male gender, and with being African American. Patients with dual difficulties were also likely to carry an Axis II diagnosis, have a shorter hospital stay, a history of familial alcoholism, and were more suicidal compared to the controls. Contrary to expected results, they were not more likely to be readmitted, carry an Axis I mood disorder, or have a history of sexual abuse. Among the dual diagnosis group alone, the majority of admissions involved the use of polysubstances other than alcohol. In conclusion, substance abuse appears to be a devastating complication in psychiatric patients treated in urban general hospital settings.

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Dedication

This work is dedicated to the memory of my father Garcia Houanche, who instilled in me the importance of education and perseverance balanced by the enjoyment of life and living.

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Chapter I

Introduction

Definition

In recent years, the term "dual diagnosis" has been used to describe patients with a psychiatric illness and concurrent substance abuse disorder. Dual-diagnosis patients, i.e., individuals who meet the criteria of the DSM IV (Diagnostic Statistical Manual of Psychiatric Disorders, 1994) are particularly vulnerable to a worsening of their mental illness, organic disorders related to their addiction, suicide, and eventual death.

Brown, Ridgely, Pepper, Levine and Ryglewicz (1989) maintain that the current literature lacks a uniform understanding of dually disordered patients. Differences in terminology and labels used to identify patients with dual problems reflect often opposing philosophies in mental health and addiction camps.

The DSM IV's diagnostic criteria for substance dependence is based on the presence of at least 3 of the following within a one year period: substance use in large amounts or over a longer period of time than intended; a genuine desire or unsuccessful efforts to cut down; preoccupation with getting, using, or recovering from the

substance; frequent intoxication or withdrawal symptoms when use stops; tolerance; impairments in social, occupational, or recreational activities; and continued use despite detrimental consequences. Psychoactive substances include alcohol, sedative-hypnotics or anxiolytics, marijuana, inhalants, PCP, opiates such as heroin, and stimulants like cocaine and crack. Patients who meet the criteria for either substance abuse or dependence and have a major Axis I or II psychiatric disorder are the subject of this research.

Overview of Dual Diagnosis

The abuse of alcohol and drugs has reached epidemic proportions in the general population and has rapidly increased among psychiatric populations over the years. A growing number of psychiatric patients exhibit both a major mental illness and substance abuse problem. The National Institute of Mental Health's Epidemiological Catchment Area (ECA) conducted a survey of psychiatric disorders in 5 metropolitan cities across the United States with 20,291 respondents from institutions and the community populations (Regier, Farmer, Rae, Locke, Keith, Judd & Goodwin, 1990). In individuals with a drug diagnosis, more than half had at least 1 mental disorder. Thirty-seven percent of alcoholics surveyed also had a diagnosed mental illness. The most common co-morbid psychiatric illnesses observed were schizophrenia, mood disorders (i.e., bipolar) and personality disorders (i.e., antisocial). This data

suggests that substance abuse and psychiatric illness occur more frequently than previously thought. Prevalence rates of chemical dependence among the mentally ill range from 20% to 50% (Bauer, 1987). That is, nearly one of every two psychiatric patients will also suffer alcohol and/or drug dependency.

Substance abuse has been reported to be even higher among young adult psychiatric patient who fall between the ages of 18 and 35 (Bachrach, 1982). The reported rate of addiction for this target population approaches and/or exceeds 50% (Bergman & Harris, 1985; Safer, 1987). The most common reasons cited for substance abuse in this population include the following: to alleviate or self-medicate psychiatric symptoms or side effects of psychotropic medication (Schneier & Siris, 1987), to develop an identity as a substance abuser which may be deemed more acceptable than having a mental illness (Lamb, 1982), to attempt to facilitate social interactions (Bergman & Harris, 1985), and to reduce or manage depressive affect and anxiety (Khantzian, 1985).

The prevalence of polysubstance abuse among the young adult population is also on the rise. Davis (1984) compared patterns of chemical dependency in psychiatric patients with that of medical and surgical patients. He found that the mentally ill patients had a significantly greater use of a wide variety of drugs or were likely to be polysubstance

abusers. The days of the "pure" alcoholic or patient who abuses only one substance is the exception rather than the rule. Drake and Wallach (1989) found that 78% of their sample of 187 patients in a state psychiatric hospital were polysubstance abusers.

Miller and Fine (1993) point out that the variability of reported prevalence rates of dual disorders depends in part on the setting (psychiatric vs. addiction treatment). The authors report that clinical inpatient populations in public settings yield higher rates of comorbidity than outpatient private ones. The escalating rate of a mental illness and substance abuse comorbidity captured the attention of the National Institute of Mental Health (NIMH) which funded a nation-wide hospital discharge survey (HDS) in 1980 on dual diagnosis. An analysis conducted by Keisler, Simpkins and Morton (1991) revealed that roughly 12% of inpatient cases (about 208,000) in general hospitals involved dual diagnosis. An additional 19% (321,000) of cases had complex diagnoses (two primary psychiatric and two substance abuse disorders), and 31% (529,000) of cases were triply diagnosed (that is, a psychiatric, substance abuse, and physical disorder) were found. Keisler et al. (1991) concluded that dually-disordered patients might be "burdensome in general hospitals, in view of lack of resources for concurrent treatment of coexisting disorders." While these inpatient statistics are alarming, many studies

point to the underestimation of substance abuse in the psychiatric population due to underreporting, inaccurate assessment, and misdiagnosis (Ananth, Vandewater, Kamal, Brodsky, Gamal & Miller, 1989).

Given widespread substance abuse in the general populations, high and escalating prevalence of dual disorders in mental health settings, and questions regarding the dual diagnosis patient with respect to assessment and treatment, this subgroup of psychiatric patients warrant further study. While attention and interest in dual disorders among mental health service professionals has grown, research on patients suffering from mental illness and chemical dependence is in its infancy (Ries, 1993).

Study Rationale

Baseline data is needed on the dually diagnosed in a variety of treatment settings, particularly settings which report high comorbidity rates (i.e., public inpatient facilities). Little documentation exists examining the effect of co-morbidity in a general hospital's psychiatric unit, a setting which provides short-term acute care to chronically ill patients.

The proposed study will examine the medical records of dually disordered psychiatric patients admitted to a small urban general hospital and compare them to psychiatric patients who do not abuse substances. Patient demographic, background, clinical, and service utilization variables will

be investigated in order to establish baseline data and to delineate differences between the two groups. How do dual diagnosis patients differ demographically and clinically (in a public setting) from psychiatric patients who do not abuse substances?

The exploratory nature of this study can have numerous treatment implications and allow for more comprehensive services to dually disordered patients treated on general psychiatric units. While the literature suggests that substance abuse precipitates a psychiatric admission in many patients in acute-care facilities, limited data is available. Having baseline empirical research on dual diagnosis patients treated at such facilities would: (1) provide the groundwork for future research endeavors, (2) facilitate cross-training and education among service professionals, and (3) enhance treatment services and programming to so-called "double trouble" consumers that could lead to lowered re-hospitalization rates.

Chapter Two will review the theoretical, clinical, and empirical literature on dual diagnosis. This review will essentially be limited to dual diagnosis clients treated as inpatients only. This Chapter is divided into three sections. The first presents a brief historical overview and theoretical models used to understand the nature of the relationship between addiction and psychopathology. The clinical consequences of substance abuse and a discussion of

co-morbid psychiatric diagnoses will be considered in the second section of this Chapter. Treatment issues, inpatient service utilization among the general psychiatric population followed by service use patterns among the dual diagnosis population in particular will follow. The purpose of the present study, statement of problem, and hypotheses suggested by the literature review will conclude the Chapter.

Chapter II

Review of the Literature

Understanding the Relationship Between Psychopathology and Addiction

The relationship between psychopathology and addiction has been the subject of debate and controversy of the past few decades. Little is known about the etiology of what some in the field have termed a "dual crisis." The literature is filled with yet unresolved questions pertaining to whether alcohol and drug abusers are self-medicating their emotional difficulties, if chemical dependence precipitates mental illness in susceptible individuals, or both.

In a discussion of the interaction between mental illness and addictive disorders, Meyer (1986) points out that the two can be either correlationally, meaningfully, or etiologically related. The association between antisocial personality disorder and drug abuse, for example, is correlational. If one considers an individual's personal history, culture, and family, for instance, the relationship between their addiction and substance use would be viewed as meaningful and placed in a psychosocial context. The etiological explanation, a traditional and widely held

perspective, suggests that substance abuse is a consequence of an underlying psychiatric disturbance.

Historically, notions of drive-based libidinal impulses, orality, a death instinct, and the pleasure principle were used to explain the development of chemical dependence (Freud, 1905, 1920). In a similar vein, Rado (1933) wrote:

> The thing which the pharmacothymic [drug addicted] patient wishes the toxic agent to give him is the pleasure-effect. But this is not to be obtained without cost. The patient must pay for his enjoyment with severe suffering and self-injury--often, indeed, with self-destruction. These are assuredly not the effects desired. If, notwithstanding this fact, he clings to the use of drugs, it must be either because the pleasure gained is worth the sacrifice of suffering, or he is in a trap and is forced to act as he does. (p. 123).

Glover (1956) viewed alcohol dependence as an act of aggression and one of adaptation to harsh external realities and taxing emotional states. Krystal and Raskin (1970) introduced the notion that substance abusers lacked the ability to tolerate affective states like anxiety and that they were likely to become overwhelmed and use drugs. In his classic paper on compulsive drug use, Wurmser (1977) described the chemically addicted person as "acting out" a

vicious cycle. This so-called cycle begins with a "narcissistic crisis" (disappointment, sadness, loneliness, or rejection) which leads to a breakdown in the addict's defense structure resulting in the experience of overwhelming feelings or affect states. The chemically addicted person then attempts to bolster their defenses and may engage in splitting and resorting to the use of massive denial (projection, repression, avoidance). Wurmser states, "there is a wild driveness for action, for seeking an external concrete solution for the internal (and denied) conflict." Externalization is followed by the use of aggression, either directed inward or at others. This is followed by a "collapse of the superego . . . a surprising, abrupt change from more mature, more integrated functioning of conscience, responsibility, ideals, to a much more primitive one . . ." This essential component in Wurmser's view leads to the resolution of the narcissistic crisis. A chemically addicted person, therefore, seeks pleasure by obtaining a drug, or by "getting high" which temporarily, at best, results in feelings of omnipotence, entitlement, and of "being a cohesive, bounded self again." (Wurmser, 1977).

The management of uncomfortable feeling states by using drugs and alcohol is the fundamental premise underlying what Khantzian (1985) termed the self-medication hypothesis. This concept states that an individual chooses a specific drug with certain pharmacological properties to help

regulate their affective state. Inherent here, is the assumption that addiction is a consequence of psychopathology. In this view, a chosen or preferred drug is used, not arbitrarily, but because of its subjective effects which the person needs in order to cope with difficult and often unbearable feelings. In his early writings, Khantzian (1975) believed that it was the interplay between specific drug effects and an individual's vulnerabilities that set and intensified the addictive process. Later, he and Bell (1990) outlined the following ego-self deficits or impairments often seen among psychiatric and addicted populations: impaired affect regulation, fragile self-esteem or lack of positive self regard, problems in establishing and maintaining satisfying relationships with others, and defects in self-care functions. According to the authors, substances were used to alleviate or medicate these difficulties. Stimulants such as nasal cocaine, crack, and/or amphetamines work as "energizers" or mood elevators. Khantzian and Schneider (1981) observed, "from our clinical experience we know that these drugs take on a compelling quality for many users because they are effective in eliminating the depletion and fatigue states associated with depression." For dually diagnosed patients, Slaby (1991) points out that cocaine abuse poses special problems given the drug's multiple

routes of being administered and its rapid absorption through various organs. Slaby adds:

> Depression is found significantly more often in patients using cocaine than among opiate and depressant abusers. Remarkably, the incidence of affective disorder in first-degree relatives of cocaine abusers is also increased . . . suggesting that, in the dual-diagnosis patients, use of cocaine or crack may represent self-medication of an affective disorder. (p. 18).

Sedative-hypnotics such as alcohol were described by Khantzian as "releasing" drugs used to manage feelings associated with anxiety, drives, and longings. Analgesics such as opiates were referred to as "controlling-stabilizing" drugs by Khantzian and were used to mute or handle aggression, rage, whereby allowing the addicted person to achieve an inner sense of calm and stability.

A departure from the traditional psychoanalytic and dynamic formulations regarding the relationship between addiction and psychopathology is the idea that psychiatric symptoms and behaviors develop as a consequence of alcohol and drug abuse. Specifically, this <u>disease model</u> of addiction proposes that substance abuse is a separate illness with underlying biological processes that alter the brain structurally and chemically, resulting in uncontrollable cravings for substances and an inability on

the part of the user to regulate their intake. Dackis and Gold (1991) assert:

> Substance abusers are most effectively recognized, diagnosed, and treated when the crucial dynamics of addiction are understood. Drug-induced euphoria and drug craving are the major reinforcers of addiction. Euphoria resulting from the drug's pharmacological stimulation of reward centers in the brain serves as a positive reinforcer, motivating repetitive drug use . . . Nearly all psychiatric syndromes can be precipitated by addiction. Depression, anxiety, psychosis, and personality disorders may all result solely from the effects of addiction. (p. 206)

Implicit here is the assumption that a patient suffers primarily from a physiological disease and that psychiatric difficulties are subsequently observed. Addiction is viewed as a chronic, progressive illness. Proponents of this conceptualization would view a patient's psychosis as a consequence of their addiction primarily versus those who would place greater emphasis on the patient's conflicts, history of trauma, and feeling states. Supporters of the disease model would argue that to view alcoholism and drug abuse as a symptom of unresolved conflict (which suggests that once that conflict is treated and resolved, the patient would stop using) is an error or over-simplification.

Whether psychopathology is a risk factor for developing a chemical dependency problem or a consequence of it, the problem of a dual diagnosis remains. Lehman, Myers, and Corty (1989) put forth the following paradigm to facilitate classifying patients with dual disorders: (1) Primary mental illness with substance abuse sequelae, (2) Primary substance abuse with psychiatric sequelae, (3) Dual primary diagnosis, and (4) A common etiology. The first condition suggests that the patient suffers from a mental illness which leads him/her to alcohol and/or drugs to cope with their psychiatric symptoms (self-medication). The second condition proposes that the patient suffers primarily from addiction and that psychiatric symptoms are subsequently observed (disease model). In the third condition, the patient suffers two initially unrelated disorders that interplay and exacerbate his or her overall functioning. The last condition proposes that a common factor (for example, homelessness or family history) predisposes a patient to experience dual disorders.

This conceptual framework has given rise to what recent literature terms the integrated model or approach. This model proposes that co-morbid substance abuse and psychiatric disorders should be thought of as independent and autonomous rather than primary and secondary. Minkoff (1989) writes, "the integrated model states that the disease of addiction is primary and becomes independent of whatever

symptom relief was originally sought through substance use." Supporters of the integration approach recommend that a clinician consider the possibility that the patient has both a psychiatric and substance abuse problem, never presume the primacy of either difficulty over the other, and simultaneously address both difficulties whenever possible. (Lehman et al., 1989; Minkoff, 1989; Osher & Kofoed, 1989).

Clinical Correlates and Psychiatric Co-morbid Diagnoses

Persons suffering from dual diagnoses experience greater distress than single-diagnosis patients. Dual diagnosis (DD) patients often complain of feeling demoralized, embarrassed, guilt-ridden, depressed, and suicidal. They also have a poorer prognosis compared to patients who are not alcohol or drug dependent. Carey, Carey & Meisler (1991) compared persons with dual disorders with a group of non-substance abusing psychiatric patients using the SCL-90-R, a self-report inventory to identify and assess psychiatric symptoms. The dual-diagnosis patients had significantly higher scores on the following indices; somatization, obsession-compulsion, depression, anxiety, paranoid ideation, and psychosis compared to the non-abusing group.

Substance abuse in psychiatric patients is associated with disruptive/criminal behaviors (Safer, 1987), verbal hostility (Alterman, Erdlen, McClellan & Mann, 1980), homelessness (Drake, Osher & Wallach, 1991), treatment

noncompliance (Wolpe, Gorton, Serota & Sanford, 1993), and low socioeconomic status. A dual diagnosis has also been associated with a family history of alcohol (Kay, Kalathara & Meinzer, 1989; Mirin & Weiss, 1983), suicidality (Drake and Wallach, 1989), and history of sexual abuse (Adams & Overholser, 1992). From a self-medication perspective, Bell and Khantzian (1990), observed:

> A significant proportion of patients in treatment for chemical dependencies and addictions reveal histories of abuse, neglect, violence, and incest and have grown up in dysfunctional and/or alcoholic families. A number of researchers find that long-term effects of childhood abuse include a psychological vulnerability and motivation to seek relief in drugs and alcohol use. (p. 192)

Adams and Overholser (1992) examined the substance abuse and suicidal psychiatric histories of 716 emergency room patients. Demographic and clinical distinctions were found between patients with suicidal ideas and attempts prior to their admission compared to nonsuicidal patients. Suicidality was significantly associated with younger age and the increased likelihood of unemployment. Suicidal patients were also more likely to carry a diagnosis of depression or adjustment disorder, have a history of previous suicide attempts, and have multiple psychiatric hospitalizations. Similarly, other studies have made

linkages between depression and suicide among substance abusers (Harris, Linn & Hunter, 1979; Marzuk & Mann, 1988; Hasin, Grant & Endicott, 1988; Hesselbrock, Hesselbrock, Syzmanski & Weidenman, 1988). In a recent study, Ries, Mullen, and Cox (1994) studied a cohort of dual diagnosis patients using the Computerized Diagnostic Interview Schedule-Revised (CDIS-R), the ASI (Addiction Severity Index), the Brief Psychiatric Rating Scale (BPRS) and the Symptom Checklist-90 (SCL-90). These investigators were interested in the impact of current versus past use of substances among dual diagnosis patients. Current substance abusers tended to be male, homeless, and unemployed. Depression-related symptoms were most common followed by complaints of being suicidal.

Although depression is quite common among substance abusing patients, chemical dependency frequently occurs with a variety of psychiatric disturbances such as schizophrenia, anxiety, and personality disorders. While co-morbidity is not limited to these disorders among substance abusing psychiatric populations, the following overview will focus on the aforementioned major psychiatric conditions typically seen and treated on general inpatient units.

Substance abuse has long been a factor in psychotic processes and disorders such as schizophrenia. Alterman (1980) concluded that chemical addiction, alcoholism in particular, is a significant problem among the schizophrenic

population. Estimated prevalence rates of chemical dependence among hospitalized schizophrenics is up to 60% and has accounted for a greater degree of psychotic illness. Lett (1988) points out that the abuse of alcohol and drugs by these patients can either mask underlying disorganization or be a consequence of years of abuse. Alcohol is the most common substance abused by this patient population. The abuse of stimulants such as cocaine and amphetamines are also highly correlated with schizophrenia but the literature suggests that drug preference is primarily determined by drug availability. For schizophrenic patients, intensification of hallucinations and paranoid delusions coupled with severe anxiety, lowered frustration tolerance, diminished esteem, social withdrawal, and grossly impaired judgment and problem-solving abilities may result for patients who are also chemically addicted. In addition, schizophrenics who abuse alcohol and illicit substances tend to be young, male, and of low socioeconomic status. Other salient findings include younger age at first hospitalization, non-compliance, and a high relapse rate with fewer previous hospitalization (Mueser, Bellack & Blanchard, 1990).

Affective illness and alcoholism have been closely linked in the literature (Dorus & Senay, 1980; Mirin & Weiss, 1986; Meyer, 1986; Stoffelmayr, Benishek, Humphreys, Lee & Mavis, 1989; Merikangas & Gelernter, 1990). Studies

suggest that the association may be due to overlapping presenting symptoms--insomnia, anergia, decreased libido, guilt and suicidality (Dackis & Gold, 1991). The prevalence of depressive symptoms among substance abusing psychiatric patients range from 30% to 60% (Lett, 1988). Dackis and Gold (1991) cautions, "the psychiatric evaluation should clearly distinguish patients requiring antidepressants from those likely to experience spontaneous resolution of depression with abstinence." Manic patients are 14.5 and 3.4 times as likely as normal controls to have an alcohol or drug-related diagnosis respectively (Hoffman, DiRito & McGill, 1993). Shuckit (1983) observed that bipolar patients suffering from mania abuse substances to manage and reduce their emotional states.

The prevalence of alcoholism in patients who suffer from generalized anxiety disorder and panic attacks consistently range from 10% to 15%. The experience of anxiety is a hallmark of many aspects of the course, treatment, and recovery of substance abusing patients in general regardless of a co-morbid psychiatric diagnosis. Drug intoxication and acute withdrawal often involve states and periods of anxiety and is appropriate. Dackis and Gold (1991) point out that normative anxiety should be distinguished from diagnosable anxiety disorders requiring pharmacological intervention. Hence, a "wash-out" period (allowing for detoxification and medical stabilization) is

essential before an anxiety disorder diagnosis can be made. Anxious patients are likely to drink alcohol to relieve their symptoms (Kushner, Sher & Beitman, 1990). Following initial symptom relief, however, these patients are prone to experience a worsening of anxiety long term. The authors add that alcoholism is more prevalent among agoraphobics, social phobics, and patients with obsessive-compulsive disorder. Panic attacks and anxiety symptoms also precipitate and are exacerbated by stimulants (cocaine, amphetamines).

O'Malley, Kosten, and Renner (1990) explore the co-morbidity of personality and substance abuse disorders. Rates of personality disorders among substance abusers are higher compared to the general population. Narcissistic issues are notable among cocaine abusers (Yates, Fulton, Gabel & Brass, 1989). O'Malley et al. (1990) point out that studies on character pathology among crack addicted patients has not been reported to date.

Chemically addicted patients with co-existing personality disorders tend to have more psychiatric symptoms, a reportedly higher rate of poly-drug abuse, and an earlier onset of substance use (Shuckit, 1983). Researchers also point out that character pathology may be a consequence of chronic addiction in patients with normal pre-morbid personality functioning. In some alcoholics for instance, issues of dependency, depression, and aggression

result from alcoholism as opposed to preceding it. Some authors would argue the benefits of making a distinction between primary personality disorders and those that are secondary to substance abuse.

Chemical dependency is also most frequently associated with cluster B personality disorders, specifically antisocial and borderline conditions (Galanter, Castaneda & Ferman, 1988; Walker, 1992). While the notion of an "addicted personality" (characterized by excessive dependency, manipulative behaviors, poor frustration tolerance) has been discounted, premorbid antisocial and borderline personality disorders may be risk factors for the development of substance abuse or dependence. O'Malley et al. (1990) suggest that impulsivity, emotional instability, chronic boredom, feelings of emptiness, and difficulty managing anger may propel a patient to medicate their uncomfortable affect with drugs and/or alcohol. Heroin, for instance, may be used to manage the aftermath of aggression and anger, and may possess some antipsychotic properties that would be especially attractive to the borderline patient (Khantzian and Shaffer, 1981). Dulit, Fryer, Haas, Sullivan, and Frances (1990) point out that little empirical research exists examining the comorbidity of substance use and borderline conditions. They report that 67% of borderline inpatients sampled were also diagnosed with

substance use disorders (specifically, alcohol and sedative-hypnotics).

Treatment Considerations

Dual disorders are difficult to diagnosis and treat. As highlighted in the previous section, patients present with a complex array of symptoms often baffling to even the most seasoned service professionals. Wolfe and Sorensen (1989) observed:

> When such people become acutely psychotic, suicidal, assaultive or bizarre and are brought to a public hospital for assessment and care, a situation develops that is often problematic. Diagnosis is confounded by the coexistence of substance abuse and mental illness, and differential diagnosis of psychiatric comorbidities is especially difficult . . . Neither the clinician or system is well prepared to go beyond the initial generic medical assessment to an in-depth and integrated approach to the dual diagnosis patient. (pp. 169-170).

A typical example would be patients admitted with positive laboratory results for a given substance (or a positive "tox"). As a result of their psychiatric and substance-related difficulties, they may deny use of any drug despite significant lab findings. Patients may insist, for example, that a vengeful neighbor spiked their food or drink in order

to harm them. Such patients could be admitted with several "rule out" diagnoses to be considered.

Many have contended that negative feelings or countertransference on the part of the treatment team associated with a dual patient's character pathology, sociopathy, and engagement/management problems adversely effects their care (Brown et al. 1989; Polcin, 1992). Weiss (1994) writes:

> However, it appears that institutions are vulnerable to unconscious reactions toward alcohol addiction. This may inadvertently result in forms of denial, disowning, and devaluation of the alcoholic and alcoholism treatment. These largely paradoxical and illogical responses occur in institutions that are usually quite logical and responsive to the needs of clients. This discrepancy points to ways that countertransference toward the alcoholic patient can reverberate throughout an institution. This notion is supported by the intensity of reactions toward the alcoholic patients that resounds in the health care systems that treat them. (p. 409)

Typical treatment and administrative team responses toward the substance abusing patient include feeling: bewildered, conned, angry, exploited, punitive, shut out, helpless, devalued, charmed, overwhelmed, and over-responsible or overly concerned (Weiss, 1994).

Moreover, persons with dual diagnoses may rely heavily on the use of denial or rationalization of not only their addiction but mental illness as well. Their use of such defenses may make them less motivated or willing to cooperate with treatment. Their co-existing illnesses further impair their ability to test reality, make sound judgments, and concentrate on aspects of their recovery and treatment.

A practitioner's views regarding the relationship between mental illness and addiction as well as his or her training effects the treatment of dually disordered patients. Drake, Teague and Warren (1990) point out that traditional interventions addressing either the psychiatric or chemical dependence problem alone have failed persons with dual difficulties. According to Brown et al. (1989), inadequate funding for non-traditional programming, separate funding sources for research, and lack of cross-trained professionals hinder the rendering of appropriate services. Wallen and Weiner (1989) argue that mental health professionals require (1) training in chemical dependence and diagnostic criteria for substance abuse, (2) familiarity with various treatment interventions, like 12-step programs, and (3) an appreciation of the disease model of addictive disorders.

Service Use and the Dual Diagnosis Patient

Chemical dependency coupled with any major psychiatric illness results in a more severe and complicated course of illness characterized by multiple psychiatric, detoxification, and rehabilitation admissions.

Deinstitutionalization has given way to what is commonly known as the revolving door syndrome. This phenomenon has been characterized by a shortened length of stay in a psychiatric hospital, rapid relief of symptoms, rapid discharge, relapse, and readmission. The literature has referred to psychiatric patients caught in this system as returnees, frequent users of psychiatric services, or recidivists. Geller (1992) states, "These are the persons with serious and persistent mental illness who have gone back and forth between public sector inpatient settings and the community in a pattern of care (or lack of care)." A brief review of the literature on recidivism in the general psychiatric population will be presented. This section will conclude with an overview of service use patterns among dual diagnosis inpatients.

Rosenblatt and Mayer (1974) found that the sole factor most consistently predictive of readmission was whether patients had previous admissions. That is, the more admissions a patient has, the more likely he or she will be readmitted. With respect to diagnosis, Buell and Anthony

(1973) found that a diagnosis of schizophrenia was slightly indicative of future recidivism.

Carpenter, Mulligan, Bader, and Meinzer (1985) found that multiple admission psychiatric patients were younger at first hospitalization, had more previous admissions, and a shorter length of stay. They found no significant differences in racial-ethnic background, IQ, education, and diagnosis. Havassy and Hopkins (1989) studied a three-month cohort (n = 300) of admissions over a twelve-month period and compared multiple to single admission patients in a general hospital. The two groups only differed on employment status and diagnosis. Specifically, multiple admission patients were found to be chronically unemployed are were likely to carry a diagnosis of schizophrenia or affective illness. A regression analysis revealed that the number of prior hospitalizations, Axis II personality disorders, and being unemployed, black, male, and self-referred to the hospital increased the likelihood of a multiple admission. In a descriptive study, Goodpastor and Hare (1991) investigated factors associated with multiple readmission to an urban public psychiatric hospital. They obtained data records of patients who were psychiatrically readmitted three times or more between 1986 and 1988. They found a significant relationship between length of stay and gender. That is, their study revealed that women tended to stay in the hospital five days longer than men. No

relationship was found between race and length of stay or race and diagnosis. Noncompliance with medication and therapy were significant predictors of a rapid relapse. Interestingly, the authors found that substance abuse precipitated readmission in 29.5% of the sample and that those patients had a somewhat shorter length of stay.

Deinstitutionalization has also had an impact on the incidence of drug and alcohol dependence among the mentally ill. Bachrach (1982) writes:

> The increasing prominence of young adult chronic mental patients results from the confluence of two primary forces: the deinstitutionalization movement that encompasses basic and far-reaching changes in patterns of service delivery to individuals with chronic mental disorders, and demographic trends in the nation's population. These factors provide a backdrop for other contributing conditions, such as the access of these young patients to street drugs, which distort their symptomatology and clinical course and complicate their treatment requirements. (p. 190)

As Bachrach suggests, deinstitutionalization has resulted in a psychiatric patient obtaining most of their treatment needs in the community where drugs and alcohol are readily accessible. Moreover, the advent of community mental health has paralleled the growing epidemic of drugs and alcohol in this country. Chemically addicted psychiatric patients are

therefore highly susceptible to relapse and rehospitalization.

Harris et al. (1986) studied the reasons for rehospitalization for 31 chronic psychiatric patients and found that substance abuse was a major factor, second only to psychosis. Khan and Jones (1981) found that alcoholics were more likely to be readmitted than other diagnostic groups and were more likely to have five or more previous admissions. In their study cited earlier, Carpenter et al. (1985) found that patients with multiple admissions were significantly more non-compliant with medication and more likely to abuse drugs and alcohol than her single admission group. They concluded, "If we want to reduce readmissions, we would do well addressing the problems of . . . substance abuse manifested by multiple-admission patients."

In conclusion, the recidivism literature widely reports that previous psychiatric admission is highly predictive of future recidivism. There is little agreement as to what factors relate to or predict readmission. Patient demographics such as age, gender, race, marital status, and employment have been significantly linked to recidivism in some studies and not in others. Recidivism in general appears to be associated with a diagnosis of schizophrenia, shorter length of stay, treatment non-compliance, and substance abuse in psychiatric patients. While the studies cited earlier have suggested a link

between recidivism and substance abuse, they fail to explore the role of a mental illness/substance abuse co-morbidity on use of inpatient psychiatric services.

Lyons and McGovern (1989) point out that variables related to service utilization such as length of stay and rate of rehospitalization have been investigated in psychiatric patients, substance abusing patients, but not in patients who suffer both. This represents a major gap in both the dual-diagnosis and recidivism literature. This paper will now review the handful of studies that have looked at dual diagnosis and use of mental health services.

Caton, Gralnick, Bender, and Simon (1989) compared adolescent and young adult dually disordered patients to a psychiatric control group in a state hospital. The authors investigated demographic (age and gender) variables along with number of previous admissions (to that facility) and psychiatric diagnosis. The groups did not differ with respect to age or gender. Although not statistically significant, substance abusing patients had a higher mean number of prior hospitalizations. Fifty percent abused three or more drugs. Sixty-seven percent did not abuse drugs until after the onset of psychiatric symptomatology. The dually disordered patients were more likely to have a diagnosis of depression, followed then by schizophrenia and conduct disorder. Half of the sample of dual patients were diagnosed as also having as Axis II personality disorder.

In a similar setting, Safer (1987) compared two groups of chronic psychiatric patients in a state hospital; individuals between 19-39 and those between 40-49. The groups were divided into three groups according to their patterns of substance abuse--(1) no history of substance abuse, (2) those with two or more years but no abuse within the last three months, and (3) ongoing users. Safer found that substance abuse was the characteristic that most distinguished the two groups of patients. Age was significantly related to ongoing use, polysubstance abuse, and a greater number of previous psychiatric hospitalizations. Safer found that the young adult group had up to eight psychiatric hospitalizations by age 29.

Drake and Wallach (1989) sampled 187 mentally ill patients discharged from a state hospital and followed them up for one year. Substance abuse was strongly correlated with age and gender. Dual-diagnosis patients were nearly twice as likely to be rehospitalized within a one-year period. Kay et al. (1989) found that dual diagnosis patients in a state facility were younger than non-abusing patients by ten years, were male, had two years less ongoing hospitalization, and were least likely to be diagnosed schizophrenic.

Lyons and McGovern (1989) compared dual-diagnosis patients to psychiatric controls (non-abusers) and investigated their length of stay and rate of readmission to

a state hospital. One hundred sixty-eight patients admitted to a state hospital were administered the CUAD (Chemical Use, Abuse, and Dependence) scale the authors developed. The length of the index admission and the number of rehospitalizations within 30, 60, 90 days were obtained from patient's medical records. Dually-disordered patients stayed in the hospital 9.9 days compared to a 23-day stay for the non-abusing patients, a significant difference. With respect to rehospitalization, the groups did not differ. That is, of the dual diagnosis patients, 30% were readmitted within 60 days and 36% within 90. For the non-abusers, 18.2% were readmitted within 60 days and 25% within 90 days of discharge. However, it was found that alcoholics were more likely to be readmitted within 60 days of discharge than non-abusing patients. This study concluded that dual diagnosis patients have shorter lengths of stay compared to other psychiatric patients. The authors caution, however, that "looking at the length of only one hospitalization might lead to the inaccurate conclusion that seriously mentally ill patients with substance abuse comorbidities are less expensive to treat."

In summary, a paucity of research exists examining the service use of dually disordered patients. Those studies which have, however, suggest that a dual diagnosis may be associated with a higher mean number of psychiatric hospitalizations, diagnoses other than schizophrenia, Axis

II pathology, a brief hospital stay, and demographics such as younger age and male gender. However, all of the aforementioned studies were conducted in state facilities raising the question of whether such findings could be generalized to patients treated at other settings, particularly acute-care public ones.

Statement of Problem

While the body of literature on the dually-disordered is rapidly expanding, few studies have compared dual diagnosis patients demographically or clinically to nonsubstance abusing patients in acute care public facilities. This proposed study will retrospectively examine the medical records of dual diagnosis patients admitted to a small general hospital's psychiatry service over a five-year period. A comparison of dual diagnosis patients and psychiatric controls will be made. The following patient variables will be collected for either investigation or for descriptive purposes: age, gender, race, marital status, education, residential arrangement, household composition, employment, payment source, and source of referral to study hospital. Background characteristics such as residential arrangement, household composition, payment source, and source of referral have not been addressed elsewhere and will be collected in order to describe the sample population. Variables of interest include readmission, length of hospital stay, discharge

diagnosis, clinical history, and drug of choice for the dual diagnosis group.

This investigation will significantly add to the existing literature on dual-diagnosis by building upon and furthering the work of previous research. While this proposed work is similar to that of other investigations, key factors distinguish it from past studies.

Brown et al. (1989) argue that epidemiological studies are needed to further define the dual diagnosis population in a wide variety of treatment settings. Most studies have been conducted in state or private mental health settings and not on dual diagnosis patients admitted to a public general hospital's psychiatric unit. Limited research data is therefore available to mental health practitioners who work in acute-care, short-term, public facilities.

If factors associated with service utilization (like readmission and length of stay) are not known for patients in this setting, how can appropriate services be delivered and therapeutic interventions made? The proposed study will be conducted in an under-researched setting, one that services an ethnically diverse and economically disadvantaged inner-city community.

This research differs in its focus and attention to a subgroup of psychiatric patients--those with co-existing mental illness and chemical dependence. Few empirical studies have been conducted on dual diagnosis patients.

The overall purpose of this research is to describe how dual-diagnosis patients differ from psychiatric patients who do not abuse substances and therefore determine the impact of chemical addiction in a psychiatric population.

Hypotheses

The following hypotheses are based on the findings of existing research highlighted earlier. Predictions are made regarding the dual diagnosis group compared to a psychiatric control group on demographic, diagnostic, service use, and clinical variables. The last hypothesis pertains to the dual diagnosis group alone and involves a comparison of alcohol-related admissions to those involving other drugs.

Hypothesis 1

Hypothesis 1 involves a comparison of the dually disordered patients and the psychiatric controls. Here, the two groups will be compared demographically. The following three variables will be examined: age, gender, and race. Background characteristics such as marital status, employment status, source of referral, payment source, residential arrangement, and household composition at the time of the target admission will be collected for descriptive purposes. All demographic variables will be obtained from the patient's admission note (see Appendix B). It is expected that the dual diagnosis patients will differ significantly with respect to age, gender, and race from the psychiatric control group. While the literature reports

inconsistent findings with respect to demographics, it is hypothesized that a dual diagnosis will be significantly associated with these variables. That is to say, a significant proportion of dually disordered patients will be young, male, and likely to be from African or Hispanic origins compared to patients whose records indicate no substance abuse problem.

Hypothesis 2

Similarly, Hypothesis 2 involves a comparison of the dual diagnosis and psychiatric control groups. Here, the interest is diagnostic. It is expected that the findings in this area support the findings of prior research. Specifically, a significantly larger proportion of the dual diagnosis group is expected to be diagnosed with an affective illness as well as carry an Axis II cluster B personality disorder compared to the controls.

Hypothesis 3

In Hypothesis 3, the dual diagnosis patients and the psychiatric control group will be compared along the following service utilization measures: (a) readmission status; and (b) length of stay. Readmission is operationally defined as a patient's return to the study hospital following a previous psychiatric admission. Recent literature indicates that length of stay is an important indicator of resource utilization in general hospitals (Keisler, Simpkins & Morton, 1990). It is expected that the

dual diagnosis patients will differ significantly from the psychiatric controls. Specifically, that psychiatric substance-abusing patients will be more likely to be readmitted to the study hospital and have a shorter length of hospital stay for the index or target admission.

Hypothesis 4

Hypothesis 4 addresses clinical factors which have been found to be relevant among psychiatric and substance-abusing populations. Family history of substance abuse, suicidality preceding the target admission, and history of childhood sexual abuse will be collected pending the availability of this clinical data in the medical records. It is predicted that dual diagnosis patients report a significant family history of alcoholism, childhood sexual abuse, and have a greater incidence of suicidal behaviors (ideation, attempt, command hallucinations, for example) leading to the target admission compared to the psychiatric control group.

Hypothesis 5

Hypothesis 5 pertains to the dual diagnosis group alone. Galanter et al. (1988) states, "because of changes in the kinds of drugs abused . . . it is important that the epidemiology of specific drugs abused be examined." Here, the focus will be on drug preference or reported drug of choice. The literature suggests a crack cocaine epidemic and a resurgence of heroin in many communities. It is expected that the proportion of admissions involving crack

cocaine and/or heroin will be greater than alcohol-related admissions among the dual diagnosis group.

Chapter III

Method

Subjects

The sample consisted of a total of 160 psychiatric patients admitted to a public general hospital between 1989 and 1993. Nearly half of the sample (48.8%) were male, and over half (51.3%) were female. With respect to ethnicity, 41.3% were African American, 36.3% Hispanic, 17.5% White, and 5% were Asian. Patients ranged in age from 16 to 73. The mean age of the sample was 36.1 years. With respect to background characteristics, the vast majority of the sample (90%) were unemployed prior to the index admission. Most of the sample had a high school education or less (66.3%). A large proportion were on Medicaid (50.3%). Nearly one third of the sample (31.3%) were previously admitted to the study hospital. The average length of stay for the target admission was 33.5 days. Nearly half of the sample (49.1%) were never married. The modal category for household composition was "living with spouse/other." The sample were also more likely to have been referred to the hospital by a family member or friend (38%). The majority (84.4%) lived in a private residence. Some patients (12.5%) were homeless at the time of the admission.

Procedure

Sample Selection

The medical records of psychiatric patients admitted to the study hospital between January 1, 1989 and December 31, 1993 (a five-year period) were requested by this writer. The presence or absence of substance abuse or dependence (the independent measure) stratified the patient population into two groups. The selection criteria was made on the basis of the psychiatric patient's discharge diagnoses. A list of specific diagnoses (see Appendix A) from the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) used in DSM, the classification system used by clinicians and other service professionals at the hospital, was submitted to medical records personnel to facilitate chart retrieval. While substance-related disorders in DSM IV are divided into two groups; substance-use disorders (namely, abuse or dependence) and substance-induced disorders (including intoxication and withdrawal states), this study focussed exclusively on substance use disorders. Medical records of patients diagnosed with psychoactive substance-induced organic mental disturbances were excluded from this study.

The following major psychiatric categories were considered co-morbid: schizophrenia, other psychotic disorders not classified elsewhere, mood disorders, and anxiety disorders. Diagnostic categories such as organic,

somatoform, sexual, sleep, adjustment, impulse control, and factitious disorders were not considered co-morbid illnesses in the present study and were therefore excluded from the sample regardless of co-existing chemical dependence.

Personality disorders coded on Axis II were also of interest and were recorded for all patients. Patients, however, with no Axis I diagnosis but who had a specific personality and substance abuse diagnosis were not selected to be a part of the dual diagnosis sample. In sum, the medical records of patients admitted between January 1989 and December 31, 1993 who were diagnosed with a substance use disorder and one of the aforementioned psychiatric illnesses on Axis I were considered dual diagnosis for the purposes of this study. Of the records that met this criteria, 80 were randomly selected for review. This group made up the dual-diagnosis group.

Psychiatric patients admitted during the study period who had been diagnosed as having a major psychiatric illness on Axis I (see previous criteria) and no substance use disorder constituted the "control" group. While this group was not matched diagnostically to the dual diagnosis group, the control sample was taken from the same Axis I pool (see Appendix A). Eighty patients' records were randomly selected from those who had a psychiatric illness and no substance abuse diagnosis at the time of the last admission served as controls. Records that indicated a past history

of substance use but no current or past diagnosis also served as controls given the prevalence of chemical dependency among general and psychiatric populations.

The minimum sample size of 80 cases per group was selected on the basis of a power calculation. An analysis of variance comparing the two groups on one of the interval scale variables of interest (for instance, length of stay) had a statistical power of .91 with 80 cases in each group, assuming a medium effect size (f = .30) and an alpha level of .05 (Cohen, 1988).

Data Collection Tasks

Data was obtained from a retrospective review of 160 medical records of patients admitted to psychiatry at an urban general hospital (see Appendices B and C) over a five-year period beginning January 1, 1989 through December 31, 1993. Data collection took place in the department of medical records at the study hospital.

The target or index hospitalization in this study was the patients last admission to the hospital. Medical records with missing or illegible information relevant to this study were excluded. That is, if a patient record lacked dates on admissions, diagnoses, and whether or not substances were used, the record was excluded.

A cover sheet was devised by this writer (see Appendix D) to record a patient's chart number, age, gender, race, and whether they fell into the dual diagnosis or control

group. No identifying patient information was recorded to ensure confidentiality. A patient's known readmission history to the study hospital was also recorded on the cover sheet. Whether or not a patient had been previously admitted to the hospital's psychiatry service was recorded. Patients who had been admitted to psychiatry once and readmitted at a later date to medicine or other units were not considered readmitted. Those who had been transferred from psychiatry to medicine or who returned from an elopement within 48 hours were excluded and were not considered a recidivist for the purposes of this study. Patients who were either hospitalized at the time of data collection or were admitted after the study period (i.e., 12/31/93) were excluded from the sample. A visit to either the medical or psychiatric emergency room did not constitute an admission.

All demographic and background variables were obtained by reviewing the admitting record's entry and service data forms (see Appendix B). A data collection sheet was devised (see Appendix D) to record all pertinent information from the patient's chart uniformally and systematically. One such collection sheet was used to record all background variables as well as those pertaining to service utilization (i.e., readmission status and length of stay). Length of hospital stay for the target admission was obtained from the hospital's "face sheet/discharge summary" (Appendix B).

Admission and discharge dates located on the computerized top portion of the face sheet were used to calculate length of stay in days.

Psychiatric discharge diagnoses were recorded for the target admission. Here a distinction between an admitting or initial diagnosis and one at discharge was made. Misdiagnoses notwithstanding, it was assumed that a patient's discharge diagnosis would be a more reliable measure compared to an admitting or early one. Patients diagnosed with a provisional discharge diagnosis, albeit rare, were excluded from the study sample. All diagnostic information was recorded on page two of the data collection sheet (see Appendix D). The following broad diagnostic categories on Axis I (based on the DSM IV) were considered co-morbid: (1) Psychotic Illness (including all psychotic disorders); (2) Mood Disorders (depressive and bipolar disorders); (3) Anxiety Disorders (GAD, agoraphobia, etc); and (4) Substance Use Disorders (abuse & dependence). The categories above and diagnosis codes were based on the DSM III-R, the revised classification system used at the study hospital during the study period (1989-1993). A list of specific diagnoses falling into the classifying groups above are shown in Appendix A.

On Axis II, personality disorders (if any) were recorded using the following clusters: A--paranoid, schizoid, schizotypal; B--antisocial, borderline,

histrionic, narcissistic; C--avoidant, dependent, obsessive-compulsive, passive-aggressive; D--personality disorder nos. For dual diagnosis patients alone, drug(s) of choice was recorded on page two of the data collection sheet. Drug(s) of choice was recorded for all dual-diagnosis patients.

In summary, descriptive data was collected on the following background variables: age, gender, race, marital status, education, residential arrangement, household composition, payment source, and source of referral to the study hospital for the dual diagnosis and psychiatric patients admitted between 1989 and 1993. The two groups were compared with respect to readmission, length of stay, and discharge Axis I and II diagnoses. Within group differences were investigated among the dual diagnosis group alone in order to determine whether clusters or distinguishing factors by drug preference existed.

In addition to the aforementioned variables, supplemental clinical variables were also investigated. Family history of substance abuse or dependence, suicidality preceding the target admission, and history of sexual abuse were noted for all patient records sampled. This data was obtained from a review of the "entry data" form used in the psychiatric emergency room (Appendix B), the "48-hour note" used by the patient's primary clinician upon admission to a psychiatric unit, as well as a perusal of progress notes

throughout the hospital stay addressing these issues (Appendix C). In the case of family history, whether or not a history of substance abuse or dependence exists was noted. With respect to suicidal behaviors prior to the target admission, a distinction between suicidal ideation, an actual attempt, and other situations (i.e., drug overdose or command hallucinations) was recorded. If a record indicated some type of suicidal behavior or thought directly preceding the target admission, the specific nature of the patient's dangerousness to self was noted. Finally, history of childhood sexual abuse (occurring before the age of 18) was recorded for all patients sampled. Whether or not the perpetrator was a relative was documented along with any details regarding the abuse for future research.

Data Analysis

The primary question of this research pertained to the degree to which psychiatric patients with concurrent substance abuse differed significantly from non-abusing psychiatric patients demographically and clinically as well as on variables related to service utilization in a public, acute-care facility. Independent sample t-tests were used to test the significance of the differences between the dual diagnosis and psychiatric control groups on continuous variables (age and length of stay). Chi-square tests were used to determine the significance of differences between

the groups on categorical variables including gender, race, and diagnosis (Hypotheses 1 through 3).

Hypothesis 4 focused on the dual diagnosis group alone and stated that a greater proportion of admissions would involve the use of crack, cocaine, or heroin rather than alcohol. This Hypothesis was tested by comparing admissions where the use of crack, cocaine, or heroin was the drug of choice to those where only alcohol was abused. Since data from each record sampled indicated whether alcohol was a drug of choice and whether cocaine, crack, or heroin were preferred, the comparison involved correlated samples. Accordingly, a McNemar test was used to test whether a greater proportion of admissions involved alcohol versus other drugs.

Chapter IV

Results

Introduction

This study was designed to examine and retrospectively compare the medical records of dual diagnosis (DD) patients with a concurrent major mental illness and substance abuse disorder to a psychiatric control (PC) group who were not diagnosed as chemically dependent. These groups were compared along a number of characteristics including background demographics, discharge diagnosis, readmission status and length of hospitalization, and clinical history. This study also examined within group differences among the dually disordered group in order to compare the effects of specific substances abused. Chi-Square tests were used to test the difference between the means of the DD and PC groups on categorical variables. T-tests were performed on interval scale variables such as age and length of stay.

In this Chapter, the Hypotheses outlined in Chapter II along with relevant data has been organized under the following 6 headings: (1) demographic comparison; (2) diagnostic comparison; (3) readmission and length of stay; (4) clinical history; (5) within group differences

among the DD; and (6) additional exploratory analyses. Each section will be considered in turn.

Demographic Comparison

Hypothesis 1 involves a comparison of the dual diagnosis to the psychiatric control group on demographic variables. It was hypothesized that the dual diagnosis group would differ significantly with respect to age, gender, and race. That is, that the DD group would be younger, male, and more likely to be of African or Hispanic decent compared to the PCs.

Table 1 presents a comparison of the dual diagnosis (DD) to the psychiatric controls (PC) on all categorical background variables including gender and race. The data in this table indicate that the two groups did differ significantly with respect to gender ($\underline{x}(1) = 19.61$, $\underline{p} < .001$). The DD group was 66.3% male, whereas the PC group was nearly 69% female. The two groups differed significantly with respect to race as well ($\underline{x}(3) = 14.47$, $\underline{p} < .01$). The data in the table indicate that the largest proportion of the DD group were African-American (53.5%), whereas the most frequently occurring race category for the PC group was Hispanic (38.8%). No significant differences were found between the two groups on the following background variables: employment status, education, marital status, household composition, residential arrangement,

Table 1

A Comparison of Dual-Diagnosis (DD) and Psychiatric Control (PC) Groups on Nominal Scale Background Variables

		Group				
		DD		PC		x^2
Variable	Value	n	%	n	%	(df)
Gender	Male	53	66.3	25	31.3	19.61*** (1)
	Female	27	33.8	55	68.8	
Race	White	11	13.8	17	21.3	
	African Am.	42	52.5	24	30.0	14.47** (3)
	Hispanic	27	33.8	31	38.8	
	Asian	0	0.0	8	10.0	
Employment	Yes	9	11.4	6	7.5	.704 (1)
	No	70	88.6	74	92.5	
Education	High School	55	75.3	51	66.2	
	College	16	21.9	23	29.9	1.50[1] (2)
	Grad School	2	2.7	3	3.9	
Marital Status	Never Married	40	50.6	38	47.5	
	Married	19	24.1	18	22.5	1.77 (3)
	Divorced	9	11.4	15	18.8	
	Other	11	13.9	9	11.3	

Table 1 is continued on page 50

A Comparison of Dual-Diagnosis (DD) and Psychiatric Control (PC) Groups on Nominal Scale Background Variables

(continued)

		Group				
		DD		PC		x^2
Variable	Value	n	%	n	%	(df)
Household						
Composition	Alone	20	25.0	17	21.5	
	Spouse	37	46.3	40	50.6	.553 (3)
	Parents	7	8.8	8	10.1	
	Other	16	20.0	14	17.7	
Residential						
Arrangements	Homeless	12	15.0	8	10.1	
	Pvt. Res.	68	85.0	71	89.9	0.86 (1)
Payment Source	Medicaid	32	91.4	39	97.5	
	Pvt. Ins.	3	8.6	1	2.5	0.43 (1)
Source of						
Referral	Self	18	23.1	9	11.3	
	Family/ Friend	24	30.8	36	45.0	5.33 (2)
	Police	20	25.6	20	25.0	

[1] Due to expected cell frequencies less than 5.0 in two of the six cells, the college and graduate school categories were collapsed and the Chi-square test rerun. The result was not significant ($X^2(1) = 1.50$, $p > .05$).

** $p < .01$. *** $p < 001$.

payment source, and source of referral to the study hospital.

Table 2 presents a comparison of the two groups on age, an interval scale variable. The data in this Table indicate that the DD and PC groups differed significantly on age as well (t = 2.06, df = 158, p <.05). The psychiatric controls had a higher mean age (38.0 years) than the DD patients (34.2 years).

Table 2

Comparison of Dual-Diagnosis and Psychiatric Control Groups on Age

	Group						
	DD			PC			
Variable	n	mean	SD	n	mean	SD	t
Age	80	34.2	8.7	80	38.0	13.7	2.06*[t]

*p < 05 (two-tailed). [t]separate variance estimate.

The first research hypothesis suggested that the DD group would be significantly younger, more likely to be male, and more likely to be of African-American or Hispanic descent compared to the PCs. This research hypothesis was

supported fully regarding age and gender but only partially with respect to race as indicated in the section above. The DD patients did include a higher proportion of African-Americans than the PC patients (52.5% versus 30% respectively). However, Hispanics were more or less equally distributed among both groups (DD = 38.8%; PC = 33.8%), which was not expected. Interestingly, all Asians sampled in this study (approximately 5%) were psychiatric control patients and did not carry a dual diagnosis.

Diagnostic Comparison

Hypothesis 2 specifies that the DD would be more likely to be diagnosed with an affective illness and as well as an Axis II cluster B personality disorder compared to the PC group. This hypothesis involving a comparison of discharge diagnoses was confirmed in part. Table 3 presents a comparison of the DD and PC groups with respect to several Axis I diagnostic categories including psychosis, mood disorder, and anxiety disorder. It also compares the DD and the PC groups with respect to the presence of an Axis II diagnosis. The two groups did not differ significantly on any of the three major psychiatric categories considered co-morbid in this study: Psychosis ($\underline{x}(1) = 0.64$, ns); Mood Disorder ($\underline{x}(1) = 0.23$, ns); or Anxiety Disorder ($\underline{x}(1) = 0.00$, ns). Thus contrary to predictions, affective illness was not more prevalent among DD patients than among the controls.

Table 3

Comparison of Dual-Diagnosis (DD) and Psychiatric Control (PC) Groups on Axis I and Axis II Diagnoses

		Group				
		DD		PC		χ^2
Variable	Value	n	%	n	%	(df)
Diagnosed With:						
Psychosis?	No	32	40.0	37	46.3	0.64 (1)
	Yes	48	60.0	43	53.8	
Mood Disorder?	No	49	61.3	46	57.5	0.23 (1)
	Yes	31	38.8	34	42.5	
Anxiety Disorder?	No	77	96.3	77	96.3	0.00[1] (1)
	Yes	3	3.8	3	3.8	
Axis II?	No	56	70.0	71	88.8	8.59** (1)
	Yes	24	30.0	9	11.3	

**p <.01.

[1] Due to expected cell frequencies less than 5.0 in two of the four cells, a Fisher Exact Probability test was also calculated for this Table. The test was not significant.

The two groups did differ significantly, however, with respect to carrying an Axis II personality disorder ($\chi(1) = 8.59$, p <.01). Whereas 30% of the DD patients had

an Axis II personality disorder, only 11.3% of the PCs did. A cluster B diagnosis, typically borderline personality disorder, was most frequent among the DD group.

Readmission Status and Length of Stay

Hypothesis 3 stated that the DD group would be more likely to be readmitted to the study hospital and have a shorter length of stay compared to the PCs. Table 4 presents a cross tabulation of readmission status by group, and Table 5 presents a t-test comparing the two groups with respect to length of stay. The data in these tables partially confirm Hypothesis 3. The Chi-Square test used to determine the significance of differences between the two groups with respect to readmission was not significant ($\chi(1) = 0.47$, ns). The mean length of stay for the DD group (30.6 days) shown on Table 5, however, was significantly shorter ($t = 1.93$, $df = 158$, $p < .028$, one-tailed) than the mean hospital stay for the PCs (36.5 days).

Clinical Comparison of the DD and PC

Hypothesis 4 specified that the DD and PC groups would differ with respect to the following clinical variables: family history of substance abuse, suicidality prior to the index admission, and history of sexual abuse. It was predicted that the DD group would be more likely to report a family history of alcohol abuse and childhood sexual abuse. It was also expected that the DD patients would be significantly more likely to exhibit suicidal behaviors

Table 4

Comparison of Dual-Diagnosis and Psychiatric Control Groups on Readmission to the Hospital

Readmitted to Hospital?	Group				x^2 (df)
	DD		PC		
	n	%	n	%	
Yes	27	33.8	23	28.8	0.47 (1) NS
No	53	66.3	57	71.3	

NS = not significant.

prior to their admission compared to the PCs. This research hypothesis was supported for both family history and suicidality, but not for history of sexual abuse.

Table 6 presents a clinical comparison of the DD and PC groups with respect to the aforementioned variables. A significantly greater proportion of the DD group's medical records indicating substance abuse in the family (38.9%) compared to the PC group (17.2%). The difference between the two groups with respect to substance abuse was significant ($x(1) = 6.55$, $p < .01$).

Table 5

Comparison of Dual-Diagnosis and Psychiatric Control Groups on Length of Stay

	Group						
	DD			PC			
Variable	n	mean	SD	n	mean	SD	t
Length of Stay	80	30.6	18.9	80	36.5	20.0	1.93*[t]

*p <.05 (one-tailed). [t]separate variance estimate.

With respect to suicidality, the DD group had a significantly greater likelihood of having suicidal ideas or attempts before the target admission compared to the PC group ($\chi^2(1) = 10.86$, $p < .001$).

Contrary to expected results, the groups did not differ significantly on history of sexual abuse ($\chi^2(1) = 0.51$, ns). differences among the DD group alone. This research hypothesis specified that the proportion of admissions involving crack/cocaine or heroin would be greater than alcohol-related admissions among the DD group.

Table 7 presents a crosstabulation of the variable alcohol chosen as a drug of choice by the variable cocaine, crack, or heroin chosen as drug of choice. As indicated in

Table 6

Comparison of Dual-Diagnosis and Psychiatric Control Groups on Clinical Variables

		Group				
		DD		PC		x^2
Variable	Value	n	%	n	%	(df)
Family						
History?	Yes	21	38.9	10	17.2	
	No	33	61.1	48	82.8	6.55** (1)
Suicide?	Yes	38	50.0	19	24.4	
	No	38	50.0	59	75.6	10.86***
Sexual Abuse						
History?	Yes	9	16.7	14	21.9	
	No	45	83.3	50	78.1	0.51 (1) NS

***p <.01. ** p < .05.

Table 7, 39 of the DD group indicated that either cocaine, crack, or heroin was a drug of choice and not alcohol. Whereas only 10 of the DD patients indicated that alcohol was their sole drug of choice. A McNemar test for correlated proportions was used to compare the means of the

Table 7

Alcohol As Drug Of Choice Versus Cocaine, Crack, Or Heroin As Drug Of Choice

		Cocaine, Crack, or Heroin Drug of Choice?			
		Yes		No	
Variable		n	%	n	%
Alcohol Drug of Choice?	No	39	58.2	2	16.7
	Yes	28	41.8	10	83.6

McNemar text p = .0001.

DD alcoholics versus the DD patients who abuse illicit drugs. This test was highly significant (p = .0001). Among the DD group, patients were significantly more likely to choose cocaine, crack, or heroin as opposed to alcohol. This finding fully confirms Hypothesis 5.

Additional Exploratory Analyses

Twenty-seven out of 80 PCs were found to have a past history of substance abuse or dependence but no current alcohol and/or drug diagnosis. These 27 PCs had a reported record of either moderate past use or had been in remission or abstinent for many years. They were therefore included among the control group patients in this study. Table 8 presents a comparison of the DD group to the 53 PCs whose

Table 8

Comparison of 80 Dual Diagnosis and 53 Psychiatric Controls With No Past History of Substance Abuse on Significant Nominal Background Variables

		Group				
		DD		PC		x^2
Variable	Value	n	%	n	%	(df)
Gender	Male	53	67.1	14	26.4	20.99*** (1)
	Female	26	32.9	39	73.6	
Race	White	11	13.9	11	20.8	
	African Am.	41	51.9	15	28.3	14.25*** (3)
	Hispanic	27	34.2	21	39.6	
	Asian	0	0	6	11.3	
Residential Arrang.	Homeless	12	15.2	1	1.9	6.17*** (1)
	Pvt. Resid.	67	84.8	51	98.1	
Referral Source	Self	18	23.4	5	9.4	
	Family/Friend	23	29.9	31	58.5	
	Police	20	26.0	7	13.2	12.16*** (3)
	Other	16	20.8	10	18.9	

*** $p < .01$.

records indicated no past history of substance abuse or dependence. Demographically, gender and race were very significant ($\underline{x}(1) = 20.99$, $\underline{p} < .01$) and ($\underline{x}(3) = 14.25$, $\underline{p} < .01$) respectively.

With respect to background variables, the DD patients were more likely to be homeless (15%) compared to the controls (nearly 2%). Furthermore, source of referral to the study hospital was significant at the alpha level $\underline{p} = .007$. The DD patients were also more likely to be either self-referred to the hospital or brought in by the police, compared to the PCs, who tended to be referred by a family member or friend.

Table 9 presents a comparison of the DD group and the 53 PCs on interval scale measures. As shown in this table, the PCs were significantly older ($\underline{t} = 2.07$, $\underline{df} = 130$, $\underline{p}<.05$, two-tailed) than the DD group and had a longer length of hospital stay ($\underline{t} = 2.04$, $\underline{df} = 130$, $\underline{p}<.05$, two tailed). Other salient findings include the DD group being more likely to carry an Axis II cluster B personality disorder, being at greater risk for suicide, and being more likely to have a family history of alcohol dependence.

In order to further differentiate the sample of DD patients, crosstabulations were done by reported drug of choice. Primary alcohol DD patients were significantly older (mean age 37 years) than the DD patients who preferred other substances (31 years). DD marijuana abusers were less

Table 9

Comparison Of DD And 53 PCs With No Past History Of Substance Abuse On Interval Scale Variables

	Group						
	DD			PC			
Variable	n	x	SD	n	x	SD	t (df)
Age	79	34.2	8.7	53	38.2	13.0	2.07* (130)
Length of Stay	79	30.5	19.1	53	37.5	20.2	2.04* (130)

*p <.05 (two-tailed).

educated and somewhat more likely to live with family compared to non-cannabis abusing DD patients.

As shown in Table 10, primary cocaine abusers among the DD group were more likely to be readmitted to the study hospital ($\chi(1) = 4.58$, $p < .05$). The DD primary cocaine abusers were also significantly more likely to have either an anxiety or personality disorder ($\chi(1) = 4.83$, $p < .05$) and ($\chi(1) = 5.27$, $p < .05$) respectively. DD patients who preferred to smoke crack cocaine were least likely to be employed ($\chi(1) = 11.27$, $p < .01$), have an Axis II disorder ($\chi(1) = 4.75$, $p < .05$), but were significantly more likely to

Table 10

A Comparison Of DD Cocaine Abusers On Readmission Status And Diagnosis

		Cocaine Abused				
		Yes		No		x^2
Variable	Value	n	%	n	%	(df)
Readmitted?	Yes	15	48.4	12	25.0	
						4.58** (1)
	No	16	51.6	36	75.0	
Anxiety Disorder?	Yes	28	90.3	48	100.0	
						4.83** (1)
	No	3	9.7	0	0	
Axis II Disorder?	Yes	14	45.2	10	20.8	
						5.27** (1)
	No	17	54.8	38	79.2	

** $p < .05$.

be on Medicaid ($x(2) = 9.43$, $p < .01$) compared to DD patients who preferred nasal cocaine or other drugs. And finally, primary heroin abusers among the DD patients were somewhat more likely to be homeless ($x(1) = 3.61$, $p < .05$) compared to those patients whose records did not indicate heroin as a primary drug of choice.

Summary of Results

The medical records of 80 dual diagnosis patients were compared to the records of 80 non-substance abusing psychiatric control patients. The two groups were compared with respect to demographics, discharge diagnosis, readmission status, length of stay, and clinical history prior to their last admission. The groups differed significantly on age and gender. The DD patients were younger and more likely to be male compared to the PCs. Regarding ethnicity, a significantly greater proportion of the DD group were of African decent. Hispanics were more or less equally distributed among both groups. All Asians sampled were psychiatric control group patients. With respect to diagnosis, no significant differences were found between the groups on a major mental illness coded on Axis I. The DD group was, however, more likely to have an Axis II cluster B personality disorder which supports existing research. Regarding readmission and length of stay, the DD group was not more likely to be readmitted to the study hospital but did have a significantly shorter stay than the PCs. Clinically, the DD group were more likely to have a family history of alcohol abuse. They also exhibited greater suicidality (ideation and attempts) compared to the PC group. A history of childhood sexual abuse was nonsignificant. When records of PC patients indicating a past history of substance abuse were excluded and compared

with the DD patients, a greater number of background variables were found to be significant including residential arrangement and source of referral to the study hospital. Exploratory analyses also indicated within group differences among the DD patients based on drug of choice.

Chapter V

Discussion

Summary of Findings

The aim of this study was to delineate differences between psychiatric patients with concurrent substance abuse problems (or dual diagnosis patients) and psychiatric patients with no substance abuse. The medical records of 80 dual diagnosis (DD) patients were compared to the records of 80 psychiatric control (PC) patients along demographic, diagnostic, service use, and clinical history variables. Overall, the groups did differ significantly and were distinguishable from each other with respect to many of the variables under investigation.

Patients in the DD group were younger and more likely to be male than patients in the PC group. These findings are consistent with previous research (Drake & Wallace, 1989; Caton et al., 1989; Safer, 1989; Kay, Kalathara & Meinzer, 1989). In comparison to the PC group, more of the DD patients were of African descent. With respect to background variables, the majority of the patients were unemployed, had a high school education or less, were unemployed, and were on Medicaid.

Diagnostically, it was predicted that both affective illness and Axis II character pathology would be more prevalent among DD inpatients than among the PCs. Surprisingly, no diagnostic differences were found between the two groups on Axis I. However, as expected, the DD group were more likely to have an Axis II personality disorder which supports existing research as well (Caton, 1989; O'Malley et al., 1990).

With respect to service utilization variables, readmission was not associated with a dual diagnosis in this study. In other words, a patient suffering from co-occurring mental illness and substance abuse was not significantly more likely to be readmitted to the study hospital than a non-abusing psychiatric patient. The DD group, did, however, have a shorter length of hospital stay, a finding that has been reported elsewhere (Lyons & McGovern, 1989; Goodpastor & Hare, 1991).

Clinically, the results of this study suggest that DD inpatients treated in acute-care, short-term, public hospitals are more likely to have a family history of alcoholism and exhibit greater suicidal ideation or attempts prior to their admission than general psychiatric patients. These findings were similar to Kay et al. (1989) and Drake and Wallach (1989) who found an association between a dual diagnosis and these clinical variables. Contrary to

expected results, however, a dual diagnosis was not related to having a significant history of childhood sexual abuse.

Among the DD patients alone, admissions involving crack/cocaine or heroin were more frequent than admissions involving alcohol as the primary or sole drug of choice, a finding that supports the growing prevalence of polysubstance abuse. Auxiliary analyses further point to the impact that specific illicit street drugs have had on the DD inpatients sampled. Among the DD group, alcohol abuse was related to older age. A marijuana dependency was associated with less education and living with family. Cocaine abuse was associated with an increased incidence of readmission, Axis II pathology, and anxiety disorders. Smoking crack was associated with an increased incidence of unemployment and reliance on Medicaid. Primary opiate addiction was related significantly to homelessness. Overall, these data indicate that specific drugs have differential social and environmental consequences upon DD patients (Drake, Osher, & Wallach, 1991).

Interpretation of Data and Recommendations

The results of this study suggest that substance abuse coupled with a psychiatric disorder negatively impacts upon the lives of patients treated in urban settings. Overall, this study confirms that the dual diagnosis population is indeed complex, diverse, and clinically challenging. While the difficulties in the understanding and treatment of dual

diagnosed patients have been fairly well-established in state facilities and on specialized units, this study provides data in an under-researched public, general hospital setting.

The study hospital, a city-operated medical facility serves primarily the Bronx, a borough of New York City. For the northwest region (the area immediately surrounding the study hospital), current statistics report disproportionately many youth (under age 15), elderly residents, and Hispanic residents. The median income is $22,235 and 26.3% of the residents are Medicaid enrollees (Annual Update, 1995). With the exception of race, the patients sampled in this retrospective study were representative of the community closest to the hospital, a low-income and ethnically diverse section of the northwest Bronx. The finding that the DD and PC groups did not differ on any background variables suggests that the likelihood of socioeconomic or environmental factors accounting for the variability between the groups is low.

With respect to ethnicity, these data indicate that a greater proportion of the DD sample were of African decent, suggesting that African Americans suffer disproportionately from dual disorders in this urban setting in comparison to other ethnic groups sampled. This finding is particularly interesting in light of the fact that African Americans constitute only 16.3% of the northwest region immediately

surrounding the study hospital, compared to Whites (55.2%) or Hispanics (23%) (Annual Update, 1995). The ECA study of the general population cited in chapter one, showed that African Americans had lower lifetime rates of affective illness compared with Whites and that Black males, in particular, had lower rates than White males, White females, and African American females (Reiger et al., 1990). This suggests that the racial differences found between the DD and PC groups in the present study may be linked to nonsignificant findings regarding the prevalence of affective illness among the DD group. Recent literature indicates that although African Americans acknowledge feeling dysphoric (which may or may not be diagnosed as their having a depressive syndrome), they tend to report more neurovegetative symptoms of depression (Ziedonis, Rayford, Bryant, Rounsaville, 1994; Somervell, Leaf, Weissman, 1989). This study suggests that Blacks suffer more from dual diagnosis compared to Whites, specifically, that African American males are less able to manage their lives in the community due to co-existing psychiatric and substance abuse problems. Future research should therefore address the significance of race and cultural differences as it pertains to the psychiatrically ill substance-abusing patient.

With respect to an Axis I co-morbid psychiatric diagnosis; psychosis, mood, and anxiety disorders were

normally distributed among both groups. Affective illness failed to be more prevalent among the dually diagnosed patients as hypothesized or reported in previous studies (Dorus & Senay, 1980; Mirin & Weiss, 1986; Meyer, 1986; Stoffelmayr et al., 1989; Merikangas & Gelernter, 1990). This finding suggests that an Axis I diagnosis may vary from one treatment setting to the next. An alternative explanation of this finding involves this study's methodology (i.e., classifying schizoaffective patients on the psychotic versus the mood disturbance continuum). In addition, the fact that no one psychiatric disorder was over-represented in either group suggests that factors such as the drugs abused and character pathology may have accounted for the variability between the DD and PC groups, rather than concurrent mental illness. Future research may consider targeting specific clusters of DD patients, such as the schizoaffective cocaine abuser or the depressive alcoholic, in order to achieve greater understanding of the interplay between a major mental illness and substance abuse in a public setting.

In the present study, a dual diagnosis was complicated by the presence of a personality disorder. Borderline conditions were found to be most prevalent among DD patients, particularly young Black males. These DD patients may disproportionately suffer from maladaptive responses to stress, trauma, serious impairments in relationships, lack

of boundaries, impulsivity, pervasive anger, and hypersensitivity. This suggests that these patients self-medicate and split-off disavowed parts of themselves by using illicit substances. This finding raises the question of how and to what extent particular characterological issues and deficits impact upon a patient's mental illness, addiction, and treatment course. In addition to examining the incidence of personality disturbance among substance abusers like Miller, Abrams, Dulit, and Fyer (1993) who investigated substance use among borderlines, future studies should explore specific combinations of dual disorders coupled with specific personality disorders (Walker, 1992). For example, how might a crack addicted Bipolar patient diagnosed with an antisocial personality differ from one with a narcissistic or borderline constellation?

In the service use domain, unlike Drake and Wallace (1989) and many others, for example, a dual diagnosis was not associated with being readmitted to the study hospital. Whether or not patients had been readmitted to other psychiatric services in various facilities in the City was not available or known. The interpretation that perhaps dually disordered patients are not more likely to be readmitted compared to general psychiatry patients may be a false or inaccurate assumption. Readmission to the study hospital may not have been fully captured by this study's methodological procedures. More refined measures and a

city-wide computer database would be better suited to provide information regarding service utilization among these patients.

The association between carrying a dual diagnosis and a shortened length of stay was found in the present study and has been consistently documented in previous research (Lyons & McGovern, 1989; Goodpastor & Hare, 1991). While shorter hospital stays may be desirable to administrators and be cost-effective short-term, this finding underscores the importance of training mental health service providers (with diverse clinical backgrounds and interests) who work on acute-care units to meet the needs of the dually diagnosed patient in a brief time period. A short stay presents the service delivery teams with a unique challenge to stabilize and treat these patients, who according to this and other studies, spend fewer days in the hospital. These data suggest that while DD patients have shorter stays, they are not more likely to return to the index or study hospital following relapse or psychiatric decompensation.

Clinically, one of the more interesting, although intuitive, findings in this study pertains to DD patients being more likely to engage in suicidal behaviors (ideas and attempts) prior to their psychiatric admission compared to PCs. In other words, a DD is a risk factor for suicidal ideas and attempts for patients, particularly among Black males and younger patients with an array of diagnoses not

just depressive disorders. The relationship between suicide, mental illness, and chemical dependency warrants further study. Marzuk, Tardiff, Leon, Stajic, Morgan, and Mann (1992) reported that in the mid-1980's, an alarming 1 out of every 5 individuals who committed suicide in New York City during a one-year period used cocaine a day before their death. They concluded that suicide was the most prevalent self-destructive behavior associated with cocaine. The impact of intervening co-morbid psychiatric disturbances like depression and/or anxiety was not investigated and would be a worthy subject for future research.

In addition to suicidality, this research supported the hypothesis that DD patients would be more likely than PC patients to report a family history of alcoholism. However, the DD and PC groups did not differ significantly on history of childhood sexual abuse. One explanation for this finding is that patients may have been too psychotic, depressed, thought disordered and/or intoxicated or in withdrawal from substances to report a sexual abuse history. An alternative understanding is that patients deliberately choose not to report sexual abuse due to associated feelings of shame and humiliation. While progress notes were perused by this writer during data collection, data were obtained mainly from admitting and discharge forms (Appendices B and C), and information regarding sexual abuse in these notes may have been missed. Semi-structured interviews upon psychiatric

and medical stabilization would be more appropriate measures to address the relationship between a dual diagnosis and history of sexual abuse.

As noted earlier in this Chapter, psychiatric admissions involving cocaine, crack, or heroin were significantly greater compared to the proportions of alcohol-related admissions. This finding is consistent with recent studies like Bunt, Galanter, Lifshutz, and Castaneda (1990) that report a growing epidemic of polysubstance abuse. This finding supports the view that DD patients self-medicate their psychiatric difficulties with a variety of available drugs and that patients who use only one drug, say alcohol, are rare.

While the effects of specific drugs of abuse coupled with a major mental illness was not formally addressed in this study, the decision to look at within group differences among the DD patients suggested potentially interesting directions for future research. Exploratory analyses show links between alcoholism and older age, suggesting that fewer young people, specifically those suffering from dual disorders, are abusing solely alcohol. Illicit street drugs were found to be associated with negative consequences like homelessness for opiate addicts or less education among cannabis abusers. When PC patients with a past history of substance abuse were excluded from the analyses and compared to the DD group, DD patients had a greater likelihood of

being homeless and brought to the study hospital by the police rather than by family or friends. These findings, coupled with the absence of Axis I differences or background variables between the DD and PC groups, suggests that substance abuse, has a detrimental impact upon the lives of psychiatric patients in the inner-city and warrants continued study.

Exploratory analyses also point to associations between cocaine abuse and (1) readmission, (2) anxiety disorders, and (3) personality disorders. Crack abusing DD patients were more likely to be unemployed and on Medicaid than abusers of alcohol or other drugs. It should be noted that distinguishing nasal cocaine users from those who free-base primarily was a daunting task by chart review alone. Given the broad subject of this exploratory study (i.e., dual diagnosis patients), future studies may want to both narrow the scope of their target population (i.e., focussing on crack-addicted DD patients exclusively) and test hypotheses regarding the relationships between drug of choice and socio-economic status, perceived opportunities, and social support for example.

Treatment Implications

Based on the results of this research, a recommendation to administrators and service planners would be to provide more structured inpatient treatment and programming to the dual diagnosis client using an integrated model suggested by

authors like Ries (1993), Minkoff (1989), and Osher and Kofoed (1989). A few guidelines based on the integrated approach and recovery model used in AA and NA are: (1) modification of traditional recovery goals and practices (i.e., required abstinence, use of labels such as "drunk" or "addict," daily meetings); (2) modification of step work (the study of incorporating the 12-steps in order to achieve spiritual, psychiatric, emotional wellbeing); and (3) increased attention to establishing support systems (i.e., sponsorship, sober peers). In addition, DD patients may or may not meet the diagnostic criteria for substance abuse or dependence but may need to be educated about even mild to moderate use of illicit substances as well as the interplay between their use and taking psychotropic medication. Moreines (1991) writes:

> Patients have to accept that their prior drug usage, which typically had been associated with recurrence or worsening of symptoms (such as paranoid delusions, hallucination, mania, suicidal or other self-inflicted injury, and impulsive and aggressive behavior, or panic anxiety), is dangerous <u>for them</u>. One can demonstrate to patients how their lives are unmanageable when intoxicated exacerbates other symptoms and connect substance use to the crises that led to the current hospitalization. (Moreines, 1991)

Moreines (1991) also describes similarities between the brain-injured or cognitively impaired patient and the psychiatric population. He suggests simplifying the 12-step principles of AA for dual diagnosis patients to facilitate their understanding and incorporation of them. Examples include: Classic step 1--"we admitted we were powerless over alcohol--that our lives had become unmanageable." Revised--"you must tell yourself and others that drug use or drinking will make your life more out of control." Classic step 4--"made a searching and fearless moral inventory of ourselves." Revised--"make a list of your strengths and weaknesses, of the behaviors that are good and the behaviors that are not so good."

Moreines (1991) asserts that group treatment is fundamental to the recovery of substance abusing inpatients but that group work may require adjustments to patients with a co-existing psychiatric disorder. In treatment groups, indirect or less confrontational strategies may need to be employed when engaging some DD patients. Similarly, staff may have to protect more fragile DD patients (those chronically psychotic or depressed) from more character disordered (especially antisocial and borderline) patients in treatment groups. DD patients may also benefit from learning how to set realistic goals regarding 12-step meetings. The recommendation of 90 meetings in 90 days (suggested to newcomers in the 12-step fellowship) may not

be appropriate for some DD patients whose limitations should be discussed with their peers. Furthermore, a DD patient's paranoia, social inhibitions, or narcissism, for example, may prevent them from establishing and sustaining relationships with appropriate sponsors. A group forum is therefore ideal for working through interpersonal and character issues of dual diagnosis patients.

In light of these data, it is recommended that the psychiatry service at the study hospital continue to provide bi-weekly treatment groups (which began in the Spring of 1992 and were co-led by this writer) for dual diagnosis patients and encourage them to obtain in-hospital passes to attend 12 step meetings. Specialized units or beds for substance abusing patients treated on general psychiatry wards should also be considered and would allow for more comprehensive services, which would be cost-effective long-term.

Case Illustrations

The following clinical cases were selected from the records reviewed in this study as illustrations of co-existing psychiatric and substance abuse difficulties. The following vignettes highlight issues pertaining to dual diagnosis. These clinical case examples serve as a reminder to the reader that while this exploratory study was empirically-based and involved archival data by way of a chart review, the data obtained and presented here are from

actual people who happen to suffer from two or more concurrent and devastating conditions.

Case Example 1

X. is a married, 43 year old Hispanic female and mother of five who has a history of major depression and polysubstance dependence. She was admitted to the study hospital for suicidal ideation with intent. On the night of her admission, X. threatened to kill herself and placed a loaded gun in her mouth. According to her family, X. had been drinking (approximately a fifth of rum) that evening and was intoxicated. X. told admitting staff, "I want to die. I can't take it anymore . . . I can't stop drinking." In addition to feeling dysphoric and hopeless, X. complained of diminished sleep, poor appetite, and weight loss prior to her admission. Precipitants to X.'s serious suicide threat included a week-long alcohol binge and a revelation to her husband (an active alcoholic) that she had been sexually molested at age 7 by an older male relative.

X. has an extensive drug history. X. abused heroin intravenously for 10 years and reported last using in 1978. Her use of alcohol intensified following abstinence from heroin. X. entered an alcohol detox program, followed by rehabilitation in 1980. She was alcohol and drug-free for 5 years, relying on AA and NA meetings for support. In 1985, X. began abusing Tylenol with codeine following the death of her 12-step sponsor. In 1990, she relapsed to alcohol

during her fifth and last pregnancy. At that time, she was first admitted to the study hospital following a suicide attempt in which she ingested 20 antidepressant pills she obtained from a friend. This attempt was accompanied by feelings of hopelessness, despair, and family conflict as well.

During her index stay at the study hospital, X. was treated with Prozac with good effect. X. and her primary therapist addressed her childhood sexual abuse, her alcoholism, and conflicts with her adult children. X. was discharged on Prozac, referred to an outpatient dual diagnosis program, and strongly encouraged to rejoin AA.

Case Example 2

Y. is a homeless, 33 year old African American male diagnosed with paranoid schizophrenia whose substance abuse history dates back to 1980. According to his estranged family, Y. had been doing well up until 1980. As the youngest of 11 children, Y. reportedly had a unremarkable childhood and adolescence. He served 4 years in the army and was granted an honorable discharge. He completed 2 years at a local community college before experiencing his first psychotic episode at age 23. His drug and alcohol use prior to his break is not known.

With respect to the index admission, Y. was self-referred to the study hospital and complained of auditory and visual hallucinations. Y. told the emergency room staff

that he saw "gorillas" who were telling him to slash his wrists. Y. explained that these hallucinations were most intense following combination crack cocaine and alcohol binges.

When contacted by the treatment team, Y.'s family reported being "fed up" with Y.'s non-compliance with medication and follow-up treatment. They refused to take him in or to get involved in his treatment. While on the unit, Y. was described as being withdrawn and occasionally non-compliant with oral neuroleptic medication. He often refused to participate in unit activities or to discuss his chemical dependency problem. He did inform treatment staff that two of his brothers had died of drug overdoses but believed that he could "cope" with his addiction on his own. Y. was referred to Veteran's Services for housing and substance abuse treatment, and was discharged on decanoate neuroleptics.

Case Example 3

Z. is a 41 year old White male with a history of schizoaffective illness and polysubstance dependence who was found on the street and brought to the psychiatric emergency room by police. Z. was intoxicated, appearing labile, disorganized, and internally preoccupied.

Upon his admission, Z. was delirious, highly anxious, and remained grossly disoriented several weeks into his hospital stay. He was placed in seclusion for agitated and

threatening behavior many times during the early part of his admission. Z. was unable to respond to verbal limits and often wandered into other patients' rooms, Confused and child-like, Z. was nicknamed "Beetlejuice" by other patients. Despite potent neuroleptic medication and an organic work-up with normal results, Z. remained poorly-oriented. The treatment team considered transferring Z. to a long-term state facility. Previous medical records obtained from another hospital indicated that Z. had a long history of mania and responded well to mood-stabilizing medication. Z.'s medication was changed from a high to a low-dose neuroleptic and combined with lithium citrate.

Six weeks into his stay, Z. showed signs of improvement and became fully oriented. Evidence of a non-specific personality disorder emerged over time. Z. struck the treatment staff as being grandiose, demanding, intrusive, and hypersexual. A college graduate, Z. informed staff that he had been a "MICA" (Mentally Ill Chemical Abuser) peer counselor, had been active in both AA and NA, and had credits towards a CAC (Credential in Alcoholism Counseling) degree. He stated that he had used an array of drugs (including opiates, cocaine, hallucinogens, PCP, and alcohol) to temper his manic episodes over the years. Z. became an active participant on the unit's newly formed "sobriety group" for patients with dual diagnoses.

Limitations of the Study

The data reported here were collected at a single public hospital in the Bronx, New York. These findings may not be generalizable to other populations of DD or PC patients being treated in other facilities in different areas of the country.

The use of survey data obtained through a retrospective review of medical records raises the question of subjectivity. The data obtained from this sample of psychiatric patients, whether single or dually diagnosed, were highly variable. This design could not control for extraneous factors like misdiagnoses, underestimation of substance abuse, documentation errors, unavailable data, differing philosophies regarding addiction and substance abuse, variations in history-taking, or gaps in training among practitioners. In an attempt to address these factors, the records of psychiatric patients with missing or questionable data were excluded, discharge diagnoses versus admitting and provisional assessments were collected, and the scope of co-morbid psychiatric diagnoses were narrowed and specified. While the present study accomplished its overall goal of establishing baseline data in an under-researched inpatient setting, investigators might want to further our knowledge and understanding of patients suffering concurrently from mental illness and addiction with more rigorous and clinically astute designs (structured

clinical interviews, self-report questionnaires, reports from family and significant others). While reviewing hospital records was adequate for this exploratory study, it is recommended that greater emphasis be placed on systematizing patient health care information and documentation particularly as it pertains to substance use and readmission.

Methodologically, roughly 20 Chi-Square tests were performed to test the differences between the means of the DD and PC groups. Statistically, about one of those tests may have been significant by chance alone. Re-setting the alpha level using the Bonferroni correction or similar procedure would yield a probability value of .0025, resulting in the loss of many significant findings at the .05 and .01 level. Since 5 hypotheses were made in this exploratory study and involved relatively few variables, the chances of having made a type I error is unlikely. Therefore, the Bonferroni correction was not used. In light of this issue, this research's significant findings should be interpreted with caution. Future research should replicate this study using larger samples.

In conceptualizing this study, this writer had hoped to place greater emphasis on recidivism among DD inpatients. However, consistent data regarding where patients had been previously admitted and the nature of those admissions were not available. This study was therefore limited to solely

addressing readmission status and length of stay. While no relationship was found between recidivism and dual diagnosis, the lack of a centralized computer database precluded access to and may have resulted in nonsignificant differences between these groups in this domain.

Another limitation was the absence of detailed information regarding chemical dependency. Clearly documented drugs of abuse, amounts, method of administration, frequency of use, consequences, age at first use, date of last use, periods of abstinence, history of inpatient and outpatient drug treatment, involvement in specialized groups, and participation in twelve-step meetings were documented in relatively few records. However, it was observed by this writer that the records of patients whose target admission was later (i.e., 1992 or 1993 as opposed to 1989 or 1990) reflected greater attention to substance abuse in general and to co-morbidity in particular. This observation seems to reflect the ever-growing interest in dual diagnosis patients.

Concluding Remarks

The purpose of this study was to shed light on the role of substance abuse among psychiatrically ill inpatients by comparing dual diagnosis patients to psychiatric patients who are not chemically dependent. This work focussed primarily on the relationship between dual diagnosis and demographic, background, clinical, diagnostic, and service

use variables. The overall findings of this research confirm some of the existing literature while highlighting areas for further study. These data suggest that substance abuse complicates the clinical presentation of psychiatric patients treated in acute-care, public general hospitals. In light of this research, service providers in similar treatment settings should: develop cultural competency (given this study's racial differences), be sensitive to the impact of Axis II character pathology among dual diagnosis patients, educate patients while assessing their suicide potential, and familiarize themselves with addiction and recovery issues. Patients suffering from concurrent psychiatric and substance abuse problems are challenging and worthy of continued study aimed at clarifying existing theory and providing more effective intervention and treatment.

Appendix A

Co-morbid Psychiatric Diagnoses and Code

292.00* withdrawal
292.81* delirium
292.82* dementia
292.83* amnestic disorder
292.11* delusional disorder
292.12 hallucinosis
292.84* mood disorder
292.89* anxiety disorder
292.89* personality disorder
292.90* organic mental disorder NOS

Organic Mental Disorders associated with Axis III physical disorders or conditions, or whose etiology is unknown. (162)

293.00 Delirium (100)
294.10 Dementia (103)
294.00 Amnestic disorder (108)
293.81 Organic delusional disorder (109)
293.82 Organic hallucinosis (110)
293.83 Organic mood disorder (111)
Specify: manic, depressed, mixed
294.80* Organic anxiety disorder (113)
310.10 Organic personality disorder (114)
Specify if explosive type
294.80* Organic mental disorder NOS

PSYCHOACTIVE SUBSTANCE USE DISORDERS (165)

Alcohol (173)
303.90 dependence
305.00 abuse

Amphetamine or similarly acting sympathomimetic (175)
304.40 dependence
305.70* abuse

Cannabis (176)
304.30 dependence
305.20* abuse

Cocaine (177)
304.20 dependence
305.60* abuse

Hallucinogen (179)
304.50* dependence
305.30* abuse

Inhalant (180)
304.60 dependence
305.90* abuse

Nicotine (181)
305.10 dependence

Opioid (182)
304.00 dependence
305.50* abuse

Phencyclidine (PCP) or similarly acting arylcyclohexylamine (183)
304.50* dependence
305.90* abuse

Sedative, hypnotic, or anxiolytic (184)
304.10 dependence
305.40* abuse

304.90* Polysubstance dependence (185)
304.90* Psychoactive substance dependence NOS
305.90* Psychoactive substance abuse NOS

SCHIZOPHRENIA (187)
Code in fifth digit: 1 = subchronic, 2 = chronic, 3 = subchronic with acute exacerbation, 4 = chronic with acute exacerbation, 5 = in remission, 0 = unspecified.

Schizophrenia,
295.2x catatonic, _____
295.1x disorganized, _____
295.3x paranoid, _____
Specify if stable type
295.9x undifferentiated, _____
295.6x residual, _____
Specify if late onset

DELUSIONAL (PARANOID) DISORDER (199)
297.10 Delusional (Paranoid) disorder

Specify type: erotomanic
grandiose
jealous
persecutory
somatic
unspecified

PSYCHOTIC DISORDERS NOT ELSEWHERE CLASSIFIED (205)

298.80 Brief reactive psychosis (205)
295.40 Schizophreniform disorder (207)
Specify: without good prognostic features or with good prognostic features
295.70 Schizoaffective disorder (208)
Specify: bipolar type or depressive type
297.30 Induced psychotic disorder (210)
298.90 Psychotic disorder NOS (Atypical psychosis) (211)

MOOD DISORDERS (213)

Code current state of Major Depression and Bipolar Disorder in fifth digit:
1 = mild
2 = moderate
3 = severe, without psychotic features
4 = with psychotic features (*specify* mood-congruent or mood-incongruent)
5 = in partial remission
6 = in full remission
0 = unspecified

For major depressive episodes, *specify* if chronic and *specify* if melancholic type.

For Bipolar Disorder, Bipolar Disorder NOS, Recurrent Major Depression, and Depressive Disorder NOS, *specify* if seasonal pattern.

Bipolar Disorders

Bipolar disorder, (225)
296.6x mixed, _____
296.4x manic, _____
296.5x depressed, _____
301.13 Cyclothymia (226)
296.70 Bipolar disorder NOS

Depressive Disorders

Major Depression, (228)
296.2x single episode, _____
296.3x recurrent, _____
300.40 Dysthymia (or Depressive neurosis) (230)
Specify: primary or secondary type
Specify: early or late onset
311.00 Depressive disorder NOS

ANXIETY DISORDERS (or Anxiety and Phobic Neuroses) (235)

Panic disorder (235)
300.21 with agoraphobia
Specify current severity of agoraphobic avoidance
Specify current severity of panic attacks
300.01 without agoraphobia
Specify current severity of panic attacks
300.22 Agoraphobia without history of panic disorder (240)
Specify with or without limited symptom attacks
300.23 Social phobia (241)
Specify if generalized type
300.29 Simple phobia (243)
300.30 Obsessive compulsive disorder (or Obsessive compulsive neurosis) (245)
309.89 Post-traumatic stress disorder (247)
Specify if delayed onset
300.02 Generalized anxiety disorder (251)
300.00 Anxiety disorder NOS

PERSONALITY DISORDERS (335)
Note: These are coded on Axis II.
Cluster A
301.00 Paranoid (337)
301.20 Schizoid (339)
301.22 Schizotypal (340)
Cluster B
301.70 Antisocial (342)
301.83 Borderline (346)
301.50 Histrionic (348)
301.81 Narcissistic (349)

Appendix B

Blank Psychiatric Admitting Record

EMERGENCY PSYCHIATRIC EVALUATION: Entry Data

CLERICAL

FACILITY North Central Bronx

FACILITY CODE: 2001

NAME Last _____ First _____ MI ____

Alias (if any) _____

ADDRESS Street _____ Apt.# _____

City _____ State _____ Zip _____

MOTHER'S FIRST NAME & MAIDEN NAME _____

FATHER'S FULL NAME _____

DATE — Jan / Feb / Mar / Apr / May / Jun / Jul / Aug / Sep / Oct / Nov / Dec — DAY — YEAR

TIME ARRIVED — AM / PM

HOSPITAL NUMBER

CATCHMENT AREA

Inpatient	Outpatient
Bronx Lebanon	Bronx Lebanon Hospital Ctr
Bronx Municipal	Bronx Municipal Hospital Ctr
Lincoln	Crotona Park CMHC
Montefiore	Fordham-Tremont CMHC
North Central Bronx	Lincoln Hospital CMHC
Our Lady of Mercy	Lincoln Hospital Center
St Barnabas	Montefiore Moses Division
Other	Morrisania Neighborhood Family Care Ctr
	North Central Bronx Hospital
	Our Lady of Mercy Hospital Ctr
	Soundview-Throgs Neck CMHC
	South Bronx Mental Health Council
	St Barnabas Hospital
	Other

DATE OF BIRTH — Jan / Feb / Mar / Apr / May / Jun / Jul / Aug / Sep / Oct / Nov / Dec — DAY — YEAR

SOCIAL SECURITY NO. ___-___-____

TELEPHONE NO. ___-____

RACE
- White
- Black
- Asian Indian
- Other Asian
- Native American
- Other

RELIGION
- Catholic
- Protestant
- Jewish
- Moslem
- Other

HISPANIC
- Yes
- No

SEX
- Male
- Female

VETERAN STATUS
- Yes
- No

CURRENT MARITAL STATUS
- Never married
- Living cooperatively
- Married
- Separated
- Divorced
- Widowed

RESIDENTIAL ARRANGEMENT
- On street (homeless) or shelter
- Private residence/household
- Group home or adult home
- Nursing home or HRF
- Jail or correctional facility
- Other residential setting

CURRENT HOUSEHOLD COMPOSITION
- Lives alone
- Lives with parents
- Lives with spouse and/or children
- Lives with non-related persons
- Other

EDUCATION
- Less than high school
- Some high school
- Completed high school
- Some college
- Completed college
- Post-graduate work

EXPECTED PAYMENT SOURCE
- Medicaid# _____
- Medicare# _____
- Private Insurance _____
- Veterans Administration
- CHAMPUS
- Self-pay
- Information not available
- None

Mark Reflex by NCS EP-39684 321 A9107 Printed in U.S.A.

Patient's Name _____ Chart # _____

EMPLOYER Name _____ Telephone Number _____

Address _____

ARRIVED VIA _____ ACR#: _____ FROM: _____ POL PCT: _____ BADGE#: _____

SOURCE OF REFERRAL

- Self
- Family or friend
- Police
- Court or correction agency
- Private physician
- Medical emergency room
- School
- Outpatient mental health program
- Ambulance/Emergency medical service
- Nursing home/HRF
- Crisis visit return appointment
- Clergy
- State mental hospital
- Municipal or county hospital
- Other inpatient psychiatric service
- Alcohol abuse treatment facility
- Drug abuse treatment facility
- Shelter for the homeless
- Community mental health center
- Community residence
- Other _____

Name & Phone Number of Referral Source (where applicable):

_____

_____

_____

_____

CONTACT PERSONS

PRIMARY Relationship _____

Name _____

Address _____

_____

Telephone Number _____

SECONDARY Relationship _____

Name _____

Address _____

_____

Telephone Number _____

CURRENT PRIMARY THERAPIST OR CASE MANAGER _____

Telephone Number _____

Treatment Facility _____

CLERK'S SIGNATURE _____

PRINT NAME _____

EMERGENCY PSYCHIATRIC EVALUATION: Service Data

FACILITY: North Central Bronx

FACILITY CODE: 2001

PATIENT'S NAME _____

Chief Complaint, Present Illness, and Psychiatric History (Continue on reverse side)

HOSPITAL NUMBER

DATE

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

DAY YEAR

TIME SEEN AM PM

HISTORY OF PRESENT PROBLEM:

STRESSORS, PRIOR TO ER VISIT

- ◯ Marital/family problem
- ◯ Social-interpersonal (other than family)
- ◯ Problems with coping with daily roles and activities (includes jobs housework daily grooming financial management etc.)
- ◯ Medical/somatic disorder
- ◯ Abuse/assault/rape victim
- ◯ Runaway behavior
- ◯ Involvement with criminal justice system
- ◯ Information not available
- ◯ Other _____

SYMPTOMS ASSOCIATED WITH ER VISIT

- ◯ Anxiety or panic
- ◯ Depression or mood disorder
- ◯ Thought disorder
- ◯ Organic mental symptoms
- ◯ Attempt threat or danger of suicide
- ◯ Attempt threat or danger of violence
- ◯ Alcohol abuse
- ◯ Eating disorder
- ◯ Drug abuse (list doses frequency and time of last ingestion)
  - ◯ Cocaine or crack
  - ◯ Heroin or other narcotic
  - ◯ Hallucinogenic
  - ◯ Marijuana
  - ◯ Prescription drugs (list) _____
  - ◯ Other drugs (list) _____
- ◯ Other symptoms (list) _____
- ◯ Visit to ER was primarily to obtain social services

PLEASE ENTER NOTES ON REVERSE SIDE

NORTH CENTRAL BRONX HOSPITAL

PSYCHIATRIC EMERGENCY SERVICE

EMERGENCY ROOM PSYCHOSOCIAL EVALUATION

(PLEASE COMPLETE ALL CATEGORIES, WRITE "NONE", IF IT APPLIES. DO NOT LEAVE ANY CATEGORIES BLANK.)

(PATIENT'S NAME AND CHART NO.)

Current family composition/Living situation (including who patient lives with):

Current financial/employment status:

Education:

Marital/Domestic Status:

Ethnic and Spiritual background (including impact on current condition, if relevant.):

History of sexual, physical, domestic abuse:

Alcohol/substance abuse history (amount, frequency, rehab?, etc.):

History of criminal activity/legal difficulty:

CLINICIAN: (PLEASE PRINT NAME AND TITLE) NAME: TITLE:

CLINICIAN'S SIGNATURE: DATE:

PHYSICIAN: (PLEASE PRINT NAME AND TITLE) NAME: TITLE:

PHYSICIAN'S SIGNATURE: DATE:

/mv

DSM III R CODES

Circle code and enter on page 7

DISORDERS USUALLY FIRST EVIDENT IN INFANCY, CHILDHOOD OR ADOLESCENCE

DEVELOPMENTAL DISORDERS
Note: These are coded on Axis II

Mental Retardation
317.00 Mild mental retardation
318.00 Moderate mental retardation
318.10 Severe mental retardation
318.20 Profound mental retardation
319.00 Unspecified mental retardation

Pervasive Developmental Disorders
299.00 Autistic disorder
Specify if childhood onset
299.80 Pervasive developmental disorder NOS

Specific Developmental Disorders

Academic skills disorders
315.10 Developmental arithmetic disorder
315.80 Developmental expressive writing disorder
315.00 Developmental reading disorder

Language and speech disorders
315.39 Developmental articulation disorder
315.31* Developmental expressive language disorder
315.31* Developmental receptive language disorder

Motor skills disorder
315.40 Developmental coordination disorder
315.90* Specific developmental disorder NOS

Other Developmental Disorders
315.90* Developmental disorder NOS

Disruptive Behavior Disorders
314.01 Attention-deficit hyperactivity disorder

Conduct disorder
312.20 group type
312.00 solitary aggressive type
312.90 undifferentiated type
313.81 Oppositional defiant disorder

Anxiety Disorders of Childhood or Adolescence
309.21 Separation anxiety disorder
313.21 Avoidant disorder of childhood or adolescence
313.00 Overanxious disorder

Eating Disorders
307.10 Anorexia nervosa
307.51 Bulimia nervosa
307.52 Pica
307.53 Rumination disorder of infancy
307.50 Eating disorder NOS

Gender Identity Disorders
302.60 Gender identity disorder of childhood
302.50 Transsexualism
Specify sexual history: asexual, homosexual, heterosexual, unspecified
302.85* Gender identity disorder of adolescence or adulthood, nontranssexual type
Specify sexual history: asexual, homosexual, heterosexual, unspecified
302.85* Gender identity disorder NOS

Tic Disorders
307.23 Tourette's disorder
307.22 Chronic motor or vocal tic disorder
307.21 Transient tic disorder
Specify: single episode or recurrent
307.20 Tic disorder NOS

Elimination Disorders
307.70 Functional encopresis
Specify: primary or secondary type
307.60 Functional enuresis
Specify: primary or secondary type
Specify: nocturnal only, diurnal only, nocturnal and diurnal

Speech Disorders Not Elsewhere Classified
307.00* Cluttering
307.00* Stuttering

Other Disorders of Infancy, Childhood, or Adolescence
313.23 Elective mutism
313.82 Identity disorder
313.89 Reactive attachment disorder of infancy or early childhood
307.30 Stereotypy/habit disorder
314.00 Undifferentiated attention-deficit disorder

ORGANIC MENTAL DISORDERS

Dementias Arising in the Senium and Presenium

Primary degenerative dementia of the Alzheimer type, senile onset
290.30 with delirium
290.20 with delusions
290.21 with depression
290.00* uncomplicated
(Note: code 331.00 Alzheimer's disease on Axis III)

Code in fifth digit: 1 = with delirium, 2 = with delusions, 3 = with depression, 0* = uncomplicated

290.1x Primary degenerative dementia of the Alzheimer type, presenile onset
(Note: code 331.00 Alzheimer's disease on Axis III)
290.4x Multi-infarct dementia _____
290.00* Senile dementia NOS
Specify etiology on Axis III if known
290.10* Presenile dementia NOS
Specify etiology on Axis III if known (e.g., Pick's disease, Jakob-Creutzfeldt disease)

Psychoactive Substance-Induced Organic Mental Disorders

Alcohol
303.00 intoxication
291.40 idiosyncratic intoxication
291.80 Uncomplicated alcohol withdrawal
291.00 withdrawal delirium
291.30 hallucinosis
291.10 amnestic disorder
291.20 Dementia associated with alcoholism

Amphetamine or similarly acting sympathomimetic
305.70* intoxication
292.00* withdrawal
292.81* delirium
292.11* delusional disorder

Caffeine
305.90* intoxication

Cannabis
305.20* intoxication
292.11* delusional disorder

Cocaine
305.60* intoxication
292.00* withdrawal
292.81* delirium
292.11* delusional disorder

Hallucinogen
305.30* hallucinosis
292.11* delusional disorder
292.84* mood disorder
292.89* Posthallucinogen perception disorder

Inhalant
305.90* intoxication

Nicotine
292.00* withdrawal

Opioid
305.50* intoxication
292.00* withdrawal

Phencyclidine (PCP) or similarly acting arylcyclohexylamine
305.90* intoxication
292.81* delirium
292.11* delusional disorder
292.84* mood disorder
292.90* organic mental disorder NOS

Sedative, hypnotic, or anxiolytic
305.40* intoxication
292.00* Uncomplicated sedative, hypnotic or anxiolytic withdrawal
292.00* withdrawal delirium
292.83* amnestic disorder

Other or unspecified psychoactive substance
305.90* intoxication
292.00* withdrawal
292.81* delirium
292.82* dementia
292.83* amnestic disorder
292.11* delusional disorder
292.12 hallucinosis
292.84* mood disorder
292.89* anxiety disorder
292.89* personality disorder
292.90* organic mental disorder NOS

Organic Mental Disorders associated with Axis III physical disorders or conditions, or whose etiology is unknown

293.00 Delirium
294.10 Dementia
294.00 Amnestic disorder
293.81 Organic delusional disorder
293.82 Organic hallucinosis
293.83 Organic mood disorder
Specify: manic, depressed, mixed
294.80* Organic anxiety disorder
310.10 Organic personality disorder
Specify if explosive type
294.80* Organic mental disorder NOS

PSYCHOACTIVE SUBSTANCE USE DISORDERS

Alcohol
303.90 dependence
305.00 abuse

Amphetamine or similarly acting sympathomimetic
304.40 dependence
305.70* abuse

Cannabis
304.30 dependence
305.20* abuse

Cocaine
304.20 dependence
305.60* abuse

Hallucinogen
304.50* dependence
305.30* abuse

Inhalant
304.60 dependence
305.90* abuse

Nicotine
305.10 dependence

Opioid
304.00 dependence
305.50* abuse

Phencyclidine (PCP) or acting arylcyclohexyls
304.50* dependence
305.90* abuse

Sedative, hypnotic, or [illegible]
304.10 dependence
305.40* abuse
304.90* Polysubstance dependence
304.90* Psychoactive substance dependence NOS
305.90* Psychoactive substance abuse NOS

SCHIZOPHRENIA

Code in fifth digit: 1 = subchronic, 2 = chronic, 3 = subchronic with acute exacerbation, 4 = chronic with acute exacerbation, 5 = in remission, 0 = unspecified

Schizophrenia
295.2x catatonic _____
295.1x disorganized _____
295.3x paranoid _____
Specify if stable type
295.9x undifferentiated _____
295.6x residual _____
Specify if late onset

DELUSIONAL (PARANOID) DISORDER
297.10 Delusional (Paranoid) disorder
Specify type: erotomanic, grandiose, jealous, persecutory, somatic, unspecified

CODES CONTINUED ON BACK OF PAGE 5

PAST HISTORY
PSYCHIATRY

HOSPITAL NUMBER

DATE: Jan / Feb / Mar / Apr / May / Jun / Jul / Aug / Sep / Oct / Nov / Dec; DAY; YEAR

PATIENT'S NAME _____

For patients previously entered into the computer system, record only those items that have changed since the last visit

NEW ITEMS RECORDED. ○ Yes ○ No

PREVIOUS RX BY ANY MENTAL HEALTH ORGANIZATION OF ANY KIND.

○ Yes ○ No

○ Inpatient _____
○ Outpatient _____
○ Drug Abuse or Alcoholism _____
○ Partial Hospitalization _____
○ Crisis Unit _____
○ Residential _____
○ Emergency _____
○ History of major depression
○ History of manic episode
○ History of bipolar manic episode
○ History of anxiety or panic disorder
○ History of mental retardation
○ History of violent assaultive behavior
○ History of suicide attempts/behavior
○ History of substance abuse
○ Involvement with criminal justice system
○ History of drug abuse
○ Cocaine or crack
○ Heroin or other narcotic
○ Pot/weed
○ Stimulants
○ Mood regulators
○ Prescription drugs not: _____
○ Other drugs _____
○ Other _____
○ Information not available

○ Currently taken psychiatric medication(s) _____

FAMILY HISTORY (include family history of psychiatric hospitalization, suicide, violence, substance abuse, etc.)

○ Bipolar disorder _____
○ Major depression _____
○ Schizophrenia _____
○ Suicide _____
○ Substance abuse _____
○ Mental illness, unspecified _____
○ Information not available _____
○ Other _____
_____

MEDICAL HISTORY PATIENT'S NAME _____ CHART # _____

ORGAN SYSTEMS

- ○ Breast
- ○ Cardiovascular
- ○ Dermatologic
- ○ Endocrine
- ○ Eyes, ENT
- ○ Gastrointestinal
- ○ Genitourinary
- ○ Gynecologic
- ○ Hematologic
- ○ Musculoskeletal
- ○ Neurologic
- ○ Psychiatric
- ○ Other _____

DISEASE SYSTEM

- ○ Autoimmune
- ○ Degenerative
- ○ Hemorrhagic
- ○ Immune deficiency
- ○ Infectious
- ○ Metabolic
- ○ Multisystem involvement
- ○ Vascular
- ○ Neoplastic
- ○ Toxic
- ○ Traumatic
- ○ Other _____

PLEASE USE BACK OF PAGE FOR PHYSICAL EXAM AND DESCRIPTION OF MEDICAL FINDINGS

_____

_____

_____

_____

_____

○ Other (please list the [illegible] non-psychiatric medications) _____

_____

ALERT

- ○ Serious medical illness _____
- ○ Drug allergies, serious adverse reactions _____
- ○ History of suicidal behavior _____
- ○ History of violent assaultive behavior _____
- ○ History of serious suicidal behavior _____
- ○ History of giving false medical information _____

PHYSICIAN'S SIGNATURE _____ MD

PRINT NAME _____

OTHER CLINICIAN'S SIGNATURE _____

PRINT NAME _____

PIN

0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9

DSM III R DIAGNOSIS: (see reverse side for codes) PATIENT'S NAME _____ CHART # _____

(Enter V codes using 0 for V)

AXIS I (1)	AXIS I (2)	AXIS II	AXIS I — DIAGNOSIS	AXIS IV – SEVERITY OF PSYCHOSOCIAL STRESSORS
0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	◯ Chronicity (this patient is seriously and persistently mentally ill)	(One Year) None ① ② ③ ④ ⑤ ⑥ Catastrophic ◯ Inadequate information

AXIS V – GLOBAL ASSESSMENT OF FUNCTIONING

(Past year) Low 0 10 20 30 40 50 60 70 80 90 High ◯ Inadequate information

(Past 2 weeks) Low 0 10 20 30 40 50 60 70 80 90 High

EMERGENCY ROOM TREATMENT PLAN

Problems _____

Immediate objective(s) _____

Intervention(s) _____

Recommendations _____

PHYSICIAN'S SIGNATURE _____ PRINT NAME _____

CLINICIAN'S SIGNATURE _____ PRINT NAME _____

DISPOSITION:

No Referral

◯ Patient left prior to evaluation
◯ Discharged additional services advised no referral (self, family, friend took responsibility)
◯ Discharged, treatment completed, no referral made
◯ Patient terminated services against advice
◯ Patient died

Referred for Medical Treatment

◯ Referred for non-psychiatric medical care ◯ Inpatient _____ ◯ Outpatient _____

Referred for Psychiatric Treatment

◯ Patient admitted for psychiatric inpatient care Ward _____

INPATIENT

◯ Bronx Lebanon Hospital Center
◯ Bronx Municipal Hospital Center
◯ Bronx State Psychiatric Center
◯ Lincoln Hospital Center
◯ Montefiore Hospital, Moses Division
◯ North Central Bronx Hospital
◯ Our Lady of Mercy Hospital Center
◯ Rockland State Psychiatric Center
◯ St. Barnabas Hospital Center
◯ Veterans Administration Hospital
◯ Other municipal or county hospital _____
◯ Other inpatient psychiatric organization _____

PATIENT'S NAME _____ CHART # _____

Residential Placement

- Alcohol treatment residential organization
- Drug abuse treatment residential organization
- Nursing home or extended care facility
- Personal care/boarding home
- Group home

Referred or Returned to Penal/Correctional Institution

Outpatient Care

OUTPATIENT

- Bronx Lebanon Hospital Center
- Bronx Municipal Hospital Center
- Crotona Park CMHC
- Fordham-Tremont CMHC
- Lincoln Hospital CMHC
- Lincoln Hospital Center
- Montefiore Hospital Moses Division
- Morrisania Neighborhood Family Care Ctr
- North Central Bronx Hospital
- Our Lady of Mercy Hospital Center
- Riverdale Mental Health Center
- Soundview-Throgs Neck CMHC
- South Bronx Mental Health Council
- St Barnabas Hospital Center
- Returned to court for adjudication
- Alcohol treatment organization
- Drug abuse treatment organization
- Crisis team
- Visiting Nurse Service
- Private psychiatrist
- Other private physician
- Other private mental health practitioner
- Other _____

Legal Status at Time of Disposition

- No special status
- Voluntary admission
- Emergency admission
- 2 PC
- Other

Notes: _____

PSYCHIATRIC MEDICATIONS AT TIME OF DISPOSITION

		TOTAL DAILY DOSAGE	DOSE FORM AND NUMBER SUPPLIED
Antipsychotics	1) _____		
	2) _____		
Antidepressants	1) _____		
	2) _____		
Anxiolytics	_____		
Hypnotics	_____		
Lithium	_____		
Anticonvulsants	_____		
Other	_____		

PHYSICIAN'S SIGNATURE _____ M.D

PRINT NAME _____

OTHER CLINICIAN'S SIGNATURE _____

PRINT NAME _____

PIN

PATIENT LEFT ER

DATE

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

DAY

YEAR

TIME

AM PM

COMPREHENSIVE MENTAL HYGIENE TREATMENT PLAN

II. Date of Treatment Plan:

Treatment Plan Review Dates:		Dates of Completion:	
1. _____	4. _____	1. _____	4. _____
2. _____	5. _____	2. _____	5. _____
3. _____	6. _____	3. _____	6. _____

I. *Imprint Area*

III. LEGAL STATUS. ☐Voluntary ☐Minor Voluntary ☐9:39 (Emergency) ☐Court Remand ☐2 P.C. ☐OPD

IV. DSM III Diagnosis (es):

Axis I _____

Axis II _____

Axis III _____

Axis IV _____

Axis V _____

V. Risk Factors - Past &/or Current:

☐Self Harm _____

☐Assaultive (specify): _____

☐Elopement _____

☐Substance Abuse _____

☐Fire Setting _____

☐Other (specify): _____

VI. Presenting Problems:

VII. Patient's and/or Family's Statement of His/Her Problems and What Should Be Done About Them:

VIII. Strengths and Assets:

IX. Weaknesses/Liabilities:

Treatment Objectives	Interventions	Expected Time Plan For Achievement of Goal	Date Goal Was: Attained (A) Revised (R) Discontinued (D)

Treatment Objectives - Those steps that precede the achievement of goals. State in measurable, behavioral terms. Examples include "patient will sleep 6-8 hours per night within 2 weeks." "Patient will no longer act upon command hallucinations." "Patient will attend and participate in grooming group."

Interventions - Specify all services to be provided including medication (type and dosage) and referrals. Indicate frequency of intervention i.e., daily, once/weekly, etc. Indicate assigned staff and title. Examples include psychotherapy 3 times per week, daily exercise group, adult home referral, family therapy intervention once per week, etc.

Date Goal Was Attained - Date goal is attained (A), revised (R), or discontinued (D). A progress note should be entered reflecting details.

Treatment Plan Review - Follow time frames in date section above. Continue numbering of problems in goal log. Progress notes should explain additions and deletions in plan. Primary therapists and M.D. must sign a written progress note indicating changes in the treatment plan as a result of the treatment plan review.

Appendix C

Blank Psychiatric Inpatient Record

NORTH CENTRAL BRONX HOSPITAL

DEPARTMENT OF PSYCHIATRY

AFTERCARE SUPPORT SERVICES PLAN _____

NAME_____DATE OF BIRTH_____WARD_____

MEDICAL RECORD #_____ADMISSION DATE_____DISCHARGE DATE_____

ADDRESS:_____ZIP CODE_____

APT./FLOOR_____TELEPHONE #_(___)_____

CONTACT PERSON/NEXT OF KIN:_____RELATIONSHIP_____

ADDRESS_____ZIP CODE_____

TELEPHONE # HOME_____BUSINESS #_____

RECOMMENDATIONS	CONTACT PERSON	DATE 1ST APPT	PATIENT COOPERATION YES	PATIENT COOPERATION NO
1. **LIVING ARRANGEMENTS:** Indicate recommended residential setting and delineate patient's need for supervision within that setting. Delineate additional and specialized need for supervision and/or child welfare related support services if discharge setting is also residence of dependent children.	*	*	*	
2. **TREATMENT SERVICES:** Identify specific type of program and modalities.	*	*	*	
3. **REHABILITATION/** VOCATIONAL & EDUCATIONAL SERVICES: (Please specify):	*	*	*	
4. **MEDICATION:** Indicate specific instructions, i.e., need for supervision, side effects, etc.	*	*	*	

PATIENT COPY

(2)

NORTH CENTRAL BRONX HOSPITAL
DEPARTMENT OF PSYCHIATRY
AFTERCARE SUPPORT SERVICES PLAN

RECOMMENDATIONS	CONTACT PERSON	DATE 1ST APPT	PATIENT COOPERATION YES	NO
5. **HEALTH CARE SERVICES:** (including special instructions concerning diet and home care services).	*	*	*	
6. **FINANCIAL ENTITLEMENTS:** Indicate needs in this area and arrangements made (i.e., SSI, PA, Food Stamps, etc.).	*	*	*	
7. **INTENSIVE CASE MANAGEMENT:** Identify whether or not client meets eligibility criteria and when application was filed.	*	*	*	
8. **OTHER:** Please specify	*	*	*	

9. **COMMENTS:** Number to correspond with recommendations.

_____/_____
Signature/ Print
Social Worker

_____/_____
Signature/ Print
Psychiatrist/Primary Therapist

_____/_____
Signature/ Print
Patient (Guardian)

_____/_____
Signature/ Print
Attending Psychiatrist

Date signed and copy given to patient:_____ Given by:_____

CHART COPY

NORTH CENTRAL BRONX HOSPITAL
INPATIENT PSYCHIATRY

UNIT _____

PHYSICAL EXAMINATION FORM

PATIENT'S NAME: _____

EXAMINING DOCTOR: _____

ADDRESS: _____

_____

PAST MEDICAL HISTORY:

Medical Illness: _____

Neurological Illness: _____

Surgical Problems: _____

Accidents: _____

Allergies: _____

Significant Family Medical History: _____

REVIEW OF SYSTEMS:

	YES	NO
HEENT	[ ]	[ ]
Cardiovascular	[ ]	[ ]
Respiratory	[ ]	[ ]
GI	[ ]	[ ]
GU	[ ]	[ ]
Neurological-Muscular	[ ]	[ ]
Endocrine	[ ]	[ ]
Dermatologic	[ ]	[ ]
Hematologic	[ ]	[ ]

CURRENT MEDICATIONS:

_____

_____

_____

_____

_____

PLEASE CHECK EVERY ITEM USED BELOW N= Normal X= Abnormal ND= Not Done

Physical Examination

General Appearance _____ Neck _____

Skin _____ Chest _____

Head _____ Heart _____

NORTH CENTRAL BRONX HOSPITAL
DEPARTMENT OF SOCIAL WORK
SOCIAL WORK PSYCHO-SOCIAL

CARD

DATE: _____

REASONS FOR REFERRAL:

_____

_____

_____

DX' Medical Provider

_____ _____

CHIEF COMPLAINTS (Your view): _____

_____

_____

_____

PATIENT'S CHIEF COMPLAINTS (Their words): _____

_____

_____

_____

ADDRESS:
CURRENT: _____
MAILING IF DIFFERENT: _____
TELEPHONE: (H) _____ (W) _____

LIVING ARRANGEMENTS:
Homeless: (Y) (N) If, (Y) Shelter's Name: _____
Own apt/shared?, with whom _____
Walk up/# of rooms _____
Sleeping arrangements: _____

PRIMARY LANGUAGE SPOKEN: _____ Translator Used: _____

_____

Cultural and ethnic factors important to patient presentation:

_____

Religious/Spiritual beliefs: _____

Emergency Contact: Name _____ Relationship _____

Address: _____

Phone: _____

Marital Status (Circle One): S M Sep W D DP Ethnicity _____
Children? Y or N If Yes, How many? _____ I.W.A. _____
Children(s) Name(s)
(1) _____ (2) _____ (3) _____ (4) _____
DOB _____ _____ _____ _____
Who cares for Them? _____
Who do they live with? _____
Legal Rx: _____ Military/Branch: _____

NORTH CENTRAL BRONX HOSPITAL
DEPARTMENT OF SOCIAL WORK
SOCIAL WORK PSYCHO-SOCIAL

Caro

DATE:_____

Infant-Parent bonding/Child-Parent Relationship:_____

SOCIAL SUPPORTS/SIGNIFICANT OTHERS:
(Names and telephone of friends, family, church, siblings, etc.)

Use of Leisure time:_____

MEDICAL HX. (Include: HIV Status, Risk Factors; reaction to current or chronic illness, hospitalizations, reaction and adjustment, family hx)

PSYCHOLOGICAL HX: (Include current or chronic illness, hospitalizations, family hx)_____

Name of Therapist or Clinic:_____
Suicidal/Homicidal thoughts or Hx:_____

Impulse Control:_____

NORTH CENTRAL BRONX HOSPITAL
DEPARTMENT OF SOCIAL WORK
SOCIAL WORK PSYCHO-SOCIAL

Card

DATE:_____

Comments/Impressions:_____

Tentative Discharge Plan:_____

COMPLETED BY:_____ Tel#_____
Print Name

Date Signature Title

Consent form should be signed, if sending material to other agencies.

6/93

TREATMENT PLAN

DATE	PROBLEM/DESCRIPTION	TREATMENT GOALS	INTERVENTIONS	Date Goal was: Attained (A) Revised (R) Discontinued (D)

48 HOUR ADMISSION NOTE
Department of Psychiatry
North Central Bronx Hospital

INPATIENT PSYCHIATRY (Ward)

PATIENT NAME: CHART#:

ADMISSION DATE: AGE: SEX:

CATCHMENT AREA:

REASON FOR ADMISSION: (What behaviors/symptoms resulted in the patient's admission?)

HISTORY OF PRESENT ILLNESS: (Precipitants, first signs of illness, time course of symptom

PRIOR PSYCHIATRIC HISTORY:
Previous episodes of illness, hospitalization, or other treatment

Prior psychotropic medication:

1. 3.
2. 4.

Side effects? What was helpful?

PAST MEDICAL HISTORY: (medical diagnosis, treatment, medication)

PERSONAL HISTORY:

Highest level of education:
Current financial support:

Work history:

Substance abuse: No( ) Yes( ) Describe:

Family reaction to substance abuse?

DEVELOPMENTAL HISTORY-PERSONAL NARRATIVE: (birth history, developmental milestones, school, adolescence, sexual history)

History of sexual abuse: YES NO

FAMILY HISTORY: (genogram, recent changes, separations, deaths, marital history)

Psychiatric illness in family members? No( ) Yes( ) Describe

MENTAL STATUS EXAMINATION
Include direct quotes.

Overall Description of Patient: (appearance, attitude, mannerisms, relatedness, level of activity)

Speech and Language:

Mood:

Perception: (hallucinations, body feelings, aura)

Thought process: (loosening of associations, tangentiality, circumstantiality)

Thought content: (delusions, homocidal/suicidal ideas)

Orientation:
Estimated intelligence:

Cognitive testing: (serial 7's, calculations, proverbs)

Memory: (short and long term, digit span)

Impulse control: (example)

Judgement: (example)

Insight: (example)

Motivation: (Does the patient acknowledge their problem? Do they want treatment?)

INITIAL DIFFERENTIAL DIAGNOSIS: (DSMIII-R)

Axis I

Axis II

Axis III
Axis IV
Axis V

INITIAL FORMULATION: (What has happened to this person? What bio-psycho-social factors are involved?)

Problem List	Treatment Plan
1.	
2.	
3.	

Where will the patient live after discharge?

PRIMARY THERAPIST

Date form completed:

DEPARTMENT OF PSYCHIATRY

DISCHARGE SCAN SHEET

(If not admitted via ER, ER scan sheet must be completed.)

NAME:

Last First M.I.

FACILITY

- ○ BMHC
- ○ MMC
- ○ NCB

SEX

- ○ Male
- ○ Female

FACILITY CODE

HOSPITAL NO.

SOCIAL SECURITY NO. – –

DATE OF BIRTH

	DAY	YEAR
○ Jan	0 0	0 0
○ Feb	1 1	1 1
○ Mar	2 2	2 2
○ Apr	3 3	3 3
○ May		4 4
○ Jun		5 5
○ Jul		6 6
○ Aug		7 7
○ Sep		8 8
○ Oct		9 9
○ Nov		
○ Dec		

ADM DATE			DISCH. DATE			INSURANCE	INSURANCE NO.	THERAPIST NO.	SOC. WORKER NO.	ATTENDING NO.
	DAY	YEAR		DAY	YEAR					
○ Jan			○ Jan			○ Medicaid				
○ Feb			○ Feb			○ Medicare				
○ Mar			○ Mar			○ BC/BS				
○ Apr			○ Apr			○ Veterans				
○ May			○ May			○ CHAMPUS				
○ Jun			○ Jun			○ Other				
○ Jul			○ Jul							
○ Aug			○ Aug							
○ Sep			○ Sep							
○ Oct			○ Oct							
○ Nov			○ Nov							
○ Dec			○ Dec							

DISPOSITION

RESIDENCE	CODE	REFERRAL 1	CODE	REFERRAL 2	CODE	REFERRAL 3	CODE	FINANCIAL SUPPORT
○ Home		○ State Hosp		○ State Hosp		○ State Hosp		○ Private
○ Group		○ Other Hosp		○ Other Hosp		○ Other Hosp		○ SSI
○ SNF		○ Day Hosp		○ Day Hosp		○ Day Hosp		○ Veterans
○ HRF		○ OPD		○ OPD		○ OPD		○ Disab. Ins.
○ State Hosp		○ Drug Rehab		○ Drug Rehab		○ Drug Rehab		○ Jobs
○ Other Hosp		○ Alco Rehab		○ Alco Rehab		○ Alco Rehab		○ Family
○ Jail		○ AA		○ AA		○ AA		
○ Other Res.		○ NA		○ NA		○ NA		
○ Shelter		○ CSS		○ CSS		○ CSS		
○ AWOL (>7d)		○ Voc. Rehab		○ Voc. Rehab		○ Voc. Rehab		
○ Expired		○ Retardation		○ Retardation		○ Retardation		
○ Other		○ ICM		○ ICM		○ ICM		
		○ Child Protect		○ Child Protect		○ Child Protect		
		○ None						

Mark Reflex ... by NCS EP 40338 321 ... A91C1 ... Printed in U.S.A.

DIAGNOSIS

AXIS I (1)	AXIS I (2)	AXIS II	AXIS IV STRESSORS	AXIS V
			○ None ○ ○ ○ ○ ○ Severe	Yr 2Wks 0 ○ ○ 10 ○ ○ 20 ○ ○ 30 ○ ○ 40 ○ ○ 50 ○ ○ 60 ○ ○ 70 ○ ○ 80 ○ ○ 90 ○ ○

Significant co-morbidity from substance abuse?
○ Yes
○ No

Significant Axis III Illness?
○ Yes
○ No

DISCHARGE MEDICATION

MEDICATION # 1

CODE | DOSE ○ mgs

○ daily
○ q 1 wk
○ q 2 wks
○ q 3 wks
○ monthly

MEDICATION # 2

CODE | DOSE ○ mgs

○ daily
○ q 1 wk
○ q 2 wks
○ q 3 wks
○ monthly

SIDE EFFECTS

○ EPS
○ Antichol
○ Hematological
○ Tardive
○ Allergy
○ NMS
○ Other

MEDICATION # 3

CODE | DOSE ○ mgs

○ daily
○ q 1 wk
○ q 2 wks
○ q 3 wks
○ monthly

MEDICATION # 4

CODE | DOSE ○ mgs

○ daily
○ q 1 wk
○ q 2 wks
○ q 3 wks
○ monthly

ALERT!

○ Serious medical
○ Serious drug
○ Criminal
○ Violent/assaultive
○ Serious suicidal
○ Giving false

The patient appears ○ highly ○ somewhat ○ poorly motivated to follow OPD plan

	Adm	Dis
Hamilton	____	____
PANS	____	____

PLEASE DO NOT MARK IN THIS AREA

0717

NORTH CENTRAL BRONX HOSPITAL OTHER LAB REPORT

PLACE TOP OF REPORT #5 HERE

PLACE TOP OF REPORT #4 HERE

PLACE TOP OF REPORT #3 HERE

PLACE TOP OF REPORT #2 HERE

PLACE TOP OF REPORT #1 HERE

HORIZONTAL

INSTRUCTIONS

To mount first report, pull off the two plastic tabs indicated by the arrows. Position report edges to top and side guide lines, then press the report down over the exposed adhesive.

The adhesive is *pressure-sensitive;* be sure to press the report over the two adhesive areas.

Press lightly to attach temporarily. Press firmly to attach securely and permanently.

DAMER BUSINESS FORMS, INC. (212)601-7494

Appendix D

Cover and Data Collection Sheets

COVER SHEET

1) ID # _____

2) **GROUP:** (check only one)

[] DUAL DIAGNOSIS (1)

[] PSYCHIATRIC CONTROL (2)

3) **READMITTED TO HOSPITAL?**

[] YES (1)

[] NO (2)

3a) **BACKGROUND CHANGES OVER ADMISSIONS?**

MARITAL STATUS	[] YES (1)	[] NO (2)
EMPLOYMENT STATUS	[] YES (1)	[] NO (2)
HOUSEHOLD COMPOSITION	[] YES (1)	[] NO (2)
LIVING ARRANGEMENT	[] YES (1)	[] NO (2)
SOURCE OF REFERRAL	[] YES (1)	[] NO (2)
DIAGNOSIS	[] YES (1)	[] NO (2)
DRUG PREFERENCE	[] YES (1)	[] NO (2)

Nature of Change?_____

4) **GENDER:**

[] MALE (1)

[] FEMALE (2)

5) **NUMBER OF PREVIOUS ADMISSIONS:**

0 1 2 3

5 6 7 8 (+

6) RACE: (check one)

[] WHITE (1) [] AFRICAN-AMERICAN (2) [] HISPANIC (3)

[] ASIAN (4) [] EAST INDIAN (5) [] NATIVE AMERICAN (

[] BI-CULTURAL (7) [] OTHER (8)

DATA COLLECTION SHEET

ID # _____

7) DATE OF ADMISSION: _____

8) AGE

_____YEARS
DOB _____

9) EMPLOYMENT

[] YES
[] NO
[] OTHER
_____

10) EDUCATION

[] < H.S. [] SOME H.S.
[] GED [] SOME COLLEGE
[] COLLEGE GRAD.
[] OTHER
_____

11) CURRENT MARITAL STATUS

[] NEVER MARRIED
[] LIVING W/ PARTNER
[] MARRIED
[] SEPARATED
[] DIVORCED
[] WIDOWED

12) HOUSEHOLD COMPOSITION

[] LIVES ALONE
[] LIVES WITH SPOUSE/FAMILY
[] W/ PARENTS
[] W/ NON-RELATED PEOPLE
[] OTHER
_____

13) RESIDENTIAL ARRANGEMENT

[] HOMELESS OR SHELTER
[] PRIVATE RESIDENCE
[] GROUP OR ADULT HOME
[] NURSING HOME
[] JAIL OR CORR. FACILITY
[] OTHER SETTING

14) PAYMENT SOURCE

[] MEDICAID
[] MEDICARE
[] SELF-PAY
[] PVT INSURANCE
[] OTHER
_____

15) SOURCE OF REFERRAL

[] SELF [] FAMILY/FRIEND [] MENTAL HEALTH AGENCY
[] POLICE/COURT [] SUBSTANCE ABUSE AGENCY
[] OTHER _____

16) LENGTH OF STAY

_____ DAY (s)

17) TIME BETWEEN THIS ADMISSION & PREVIOUS

_____ DAY(s)

ID # _____ ADMISSION # __

18) AXIS I DIAGNOSIS

[ ] PSYCHOSIS_____

[ ] MOOD _____

[ ] ANXIETY_____

[ ] SUBSTANCE _____

[ ] OTHER

_____

_____

_____

19) AXIS II DIAGNOSIS

[ ] CLUSTER A _____

[ ] CLUSTER B _____

[ ] CLUSTER C _____

[ ] NO AXIS II

[ ] OTHER

_____

_____

_____

20) SUBSTANCE ABUSE

[ ] YES
[ ] NO

_____
_____
_____

21) DRUG(s) OF CHOICE

[ ] ALCOHOL _____
[ ] MARIJUANA _____
[ ] COCAINE _____
[ ] "CRACK" COCAINE _____
[ ] HEROIN _____
[ ] PILLS _____
[ ] OTHER _____
[ ] POLY _____

22) SUBSTANCE ABUSE ADDRESSED?

[ ] YES; GROUP or MEETINGS _____
[ ] YES; OTHER _____
[ ] NO
[ ] N/A

SUPPLEMENTAL CLINICAL VARIABLES

23) FAMILY HX OF SUBSTANCE ABUSE

[ ] YES; ALCOHOL _____
[ ] YES; NON-ALCOHOL _____
[ ] NO
[ ] NOT AVAILABLE

24) SUICIDALITY BEFORE ADMISSION?

[ ] YES; IDEATION _____
[ ] YES; ATTEMPT _____
[ ] YES; OTHER _____
[ ] NO
[ ] NOT AVAILABLE

25) HISTORY OF SEXUAL ABUSE

[ ] YES; RELATIVE _____
[ ] YES: NON-RELATIVE _____
[ ] NO
[ ] NOT AVAILABLE

NOTES

Appendix E

Research Approval Letter

MONTEFIORE MEDICAL CENTER
The University Hospital
for the Albert Einstein
College of Medicine
[illegible] Affiliation

3424 Kossuth Avenue
Bronx, New York 10467-2490

MONTEFIORE

MEMORANDUM

TO Mildred M. Houanche

FROM Susan Meehan
Administrator, Clinical Services

DATE December 16, 1994

SUBJECT Research Protocol

Your dissertation research protocol entitled **"Mental Health Service Utilization of Dual-Diagnosis Patients"** was approved by the Health and Hospitals Corporation.

The approved project year is: **12/1/94 to 11/30/95**. In all future correspondence please refer to the **Affiliate ID# 9411**.

If this protocol will extend past the approval period, contact me by 10/31/95 to discuss re-approval and or renewal.

Additionally, please notify me as soon as possible if there are any changes or adverse events pertaining to this protocol.

Thank you.

SJM:twh

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