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EFFECTIVENESS OF A TREATMENT APPROACH FOR COMORBID PANIC
DISORDER, MAJOR DEPRESSIVE DISORDER, AND ALCOHOL DEPENDENCE:
A CASE STUDY

By
Vera Biryukova

A Thesis

Submitted in partial fulfillment of the requirements of the
Master of Arts Degree
of
The Graduate School
at
Rowan University
April 30, 2004

Approved by
Jim A. Haugh, Ph.D.

Date Approved 5/12/04

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ABSTRACT

Vera Biryukova

EFFECTIVENESS OF A TREATMENT APPROACH FOR COMORBID PANIC DISORDER, MAJOR DEPRESSIVE DISORDER, AND ALCOHOL DEPENDENCE: A CASE STUDY

2004/2004

Dr. James A. Haugh

Master of Arts in Mental Health Counseling

This case study evaluates the effectiveness of cognitive-behavioral therapy with a focus on therapeutic relationship in the treatment of an adult female who underwent treatment in a community mental health agency. The client was diagnosed with comorbid panic disorder, major depressive disorder, and alcohol dependence. In addition, the client experienced a variety of psychosocial stressors. The client's psychosocial assessment is presented, and the empirical treatment literature related to the client's diagnoses is reviewed. A variety of outcome measures were used. Results indicated that the treatment was effective: the client experienced a significant reduction in the severity of symptoms. However, further treatment is needed to extend the improvement in symptoms and to reduce the risk of future relapse. A comparison between the client's current treatment and what might be considered "best" treatment is presented. Suggestions for treatment improvement are made.

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Chapter 1

Psychosocial Assessment

Name: Ms. Gloria Williams¹

Date of Birth: 1962

Treatment Dates: March – June 2003 (14 Sessions)

Treatment Provider: Vera Biryukova, Mental Health Counseling Graduate Student

Presenting Problem

Ms. Williams is a 41-year old Caucasian female who was referred to this agency from a social service agency for people experiencing mental illness. She presented to treatment following a separation from her fiancé who she had been dating for four years. She reported that her fiancé did not want to put up with her alcohol abuse anymore and broke up with her. According to Ms. Williams, her fiancé bought her an airplane ticket to New Jersey in November of 2002 after telling her that the relationship was over. Ms. Williams reported that she has experienced severe depressive symptoms, high levels of anxiety, and frequent panic attacks following the break-up. In addition, she reported that she started to drink more frequently after the break up.

With regard to her anxiety symptoms, Ms. Williams stated that she was feeling shaky, agitated, and “edgy”. In addition, Ms. Williams reported having seven panic attacks a day, on average, during which she reported experiencing heart palpitations, breathing difficulties, chest pain, dizziness, sweating, shaking, and a fear that she was going crazy. Finally, Ms. Williams reported fear of having subsequent panic attacks, which had resulted in

the development of agoraphobic behavior such as avoiding driving on highways and being outside of her home alone.

With respect to depressive symptoms, Ms. Williams described feelings of sadness and hopelessness, difficulty concentrating, loss of pleasure in activities she previously enjoyed, feelings of guilt, loss of energy, and sleep/appetite disturbance. In addition, she reported that in the month preceding her referral for treatment, she had difficulty getting out of bed and did not shower or change clothes for 4-5 days in a row.

The final presenting problem reported by Ms. Williams was difficulty controlling her alcohol use. Specifically, Ms. Williams reported that during the past three months she engaged in several drinking binges where she consumed 2-3 pints of vodka and 1-2 six-packs of beer over the course of 2-4 days.

History of Presenting Problem

With regard to anxiety symptoms, Ms. Williams reported that she has been anxious as long as she can remember. For example, she recalled that she was extremely shy and withdrawn as a child and always felt insecure about her surroundings. In addition, she reported being teased at school and feeling anxious when talking to people, answering questions in class, and taking tests. While in high school, she reported that there were some days that she “just could not go to school” because of the anxiety.

Ms. Williams reported that she was able to cope with her anxiety somewhat when she started college and when she started her working career as a model. Specifically, she learned to effectively cope with her test anxiety and social anxiety by “talking herself out” of anxious thoughts so that they did not interfere with her job performance.

¹ Client’s name and demographics have been changed to protect the client’s confidentiality.

In regard to her history of panic symptoms and attacks, Ms. Williams could not remember the time and circumstances of the first panic attack she experienced. However, she stated that most of her panic attacks were related to interpersonal stress she experienced in the context of the “abusive” marriages she was in at that time. Ms. Williams stated that her most frequent panic attacks occurred following the recent break-up with her fiancé, when the number of attacks reached approximately 15 a day. She was diagnosed with Panic Disorder in 1992² when she entered inpatient treatment for her alcohol dependence.

In addition to her anxiety and panic, Ms. Williams also reported a significant history of experiencing depressive symptoms. Ms. Williams reported having one previous depressive episode similar in severity to her current episode. She reported that this period of depression occurred in 1992, when she was diagnosed with Major Depressive Disorder while undergoing inpatient treatment for her alcohol dependence. Ms. Williams reported that this depressive episode was triggered by her marriage, which she claims had become increasingly physically abusive. Ms. Williams denied any current or past experience of Manic or Hypomanic symptoms or episodes.

In regard to her drinking, Ms. Williams stated that she started drinking in her late teens, when she would drink 1-2 times a month at parties with friends. She reported that ever since she took the first drink at a party, she could not stop, wanted more and more, and usually would drink to the point of intoxication. It was in her late teens that she realized that drinking made her feel better by alleviating her anxiety. Ms. Williams was diagnosed with alcohol dependence in 1992 and 1997, when she voluntarily sought treatment for her drinking problem. Ms. Williams reported that her drinking increased to the point of dependence for the first time in her late twenties, when she increasingly relied on alcohol to cope with the stress

² Treatment dates are changed to protect the client’s confidentiality

associated with her abusive marriage. Ms. Williams reported that the other period of alcohol dependence was related to her second marriage, which she reported as being very stressful, although not abusive. Following treatment, Ms. Williams reported that she was able to abstain from alcohol use for varying periods of time, with her longest period of abstinence being 14 months.

In September 2001, his current employer transferred Ms. Williams' fiancé to another state. Ms. Williams joined him after two months, and reported that her alcohol use increased because of many stressors she experienced as a result of this transition. After Ms. Williams' fiancé broke up with her, she reported that she started drinking even more, engaging in drinking binges for several days.

Ms. Williams denied any current drug use, although she admitted to experimenting with marijuana in high school. She said that her experimentation with marijuana was unpleasant, and that she has refrained from drug use since then.

Treatment History and Other Agency Involvement

Ms. Williams was diagnosed with panic disorder, major depressive disorder and alcohol dependence in 1992, when she entered treatment for her alcohol dependence. The treatment included inpatient alcohol detoxification and rehabilitation and outpatient counseling that addressed her drinking problem, anxiety, and depression. She was prescribed Xanax for her anxiety. In addition, she joined Alcoholics Anonymous. In 1997, Ms. Williams became alcohol dependent again and went through the same treatment. Ms. Williams indicated that the treatments helped her to gain insight into the abusive nature of the marriages she was in and how her relationship with her husbands influenced the development of the depression and exacerbated her anxiety and alcohol problems. In addition, Ms.

Williams reported that in therapy she learned some techniques, such as meditation and biofeedback, which she used to alleviate her anxiety.

Ms. Williams reported that she was currently involved with a social service agency for people with mental illness. She was assigned a caseworker who was helping her to apply for welfare and disability compensation, and who had referred her to this agency for additional mental health treatment.

Family Relationships

Ms. Williams reported growing up in a family consisting of her parents, her fraternal twin brother, and herself. Her parents were married for over 30 years. However, Ms. Williams' father passed away six years ago. Currently, her mother lives alone. Ms. Williams stated that she still keeps contact with her mother. However, she reported that her relationship with her mother is currently strained because of her continued drinking. Ms. Williams stated that her brother lives in the area and that she keeps in contact with him as well, but that their relationship is also strained due to her continued drinking.

Ms. Williams described her family as "disorganized" while she was growing up. Specifically, she stated that her parents fought all the time. In addition, she reported that her father was frequently physically abusive to her mother in front of the children. Moreover, Ms. Williams recalled that their neighbors told her that she and her brother were often neglected in their early childhood. Ms. Williams stated that her parents were very controlling and emotionally abusive. For example, her mother would frequently say that she was stupid and that she would never amount to anything.

In addition to these problems, Ms. Williams also reported that her mother's mood was very hard to predict, that she abused alcohol, and that she was "obsessive-compulsive." To exemplify her mother's "obsessive-compulsive" features, Ms. Williams described how

her mother would not let the children do things like dressing themselves, cleaning, or helping her in the kitchen for fear that they would mess something up.

Ms. Williams reported that neither herself nor her siblings were physically or sexually abused during their childhood.

Relationship History

Ms. Williams reported being married twice. She first married at age 21 and has a 19-year-old daughter by her first husband. She stated that her first husband had an “anger problem” and that he was physically, sexually, and verbally abusive to her. Specifically, Ms. Williams reported that her husband frequently beat her in front of their daughter, forced her to have sex, called her names, and often told her that she was worthless and stupid. She divorced him in 1991 after eight and a half years of marriage.

In 1994, Ms. Williams married her second husband after dating him for 3 years. Her second husband at that time was allegedly recovering from alcohol dependence. Ms. Williams described this marriage as emotionally uninvolved, and stated that her husband was “totally indifferent” to her. According to Ms. Williams’ report, he did not like to spend time with her, repeatedly lied to her, was verbally abusive with her daughter, and abused prescription drugs. Ms. Williams divorced him after two years of marriage.

Ms. Williams reported that she met her last boyfriend four years ago while still married to her second husband. She described this relationship as “perfect” and mutually rewarding. However, Ms. Williams reported that there was a brief period of separation caused by her boyfriend’s desire to sort out his feelings about the relationship. According to Ms. Williams’ report, this separation was precipitated by a surgery that her boyfriend underwent due to prostate cancer and his ensuing depression. Ms. Williams described these difficulties as minor and stated that her boyfriend was talking about the two of them getting

married. However, she reported that he was transferred to Louisiana toward the end of 2001, and that the plan was for her to stay in New Jersey to get experience with her new job while he settled down in Louisiana. However, after two months, she reportedly decided to move to Louisiana as well because she felt lonely and insecure and was afraid that her fiancé would leave her.

While in Louisiana, Ms. Williams reportedly experienced many stressors. These included adjusting to the new place and difficulty finding a job. In addition, Ms. Williams reported that her fiancé worked about 80 hours a week and could not spend enough time with her. Ms. Williams recalled that this lack of attention resulted in her increasing feelings of loneliness, worthlessness, insecurity and depression, which lead to her increased alcohol use. Ms. Williams stated that her fiancé did not want to put up with her alcohol abuse any more and broke up with her.

Ms. Williams currently resides with her cousin and her cousin's family, although she sometimes stays with her mother as well. Ms. Williams' daughter currently lives with her biological father. Ms. Williams described her current relationship with her mother as strained and emotionally abusive. For example, her mother reportedly blames Ms. Williams for the break-up with her fiancé, and claims that Ms. Williams does not deserve to be married to "a good man" because she is a "drunk".

Ms. Williams' relationship with her brother is also reportedly strained because of Ms. Williams' alcohol dependency. For example, she stated that her brother and his wife kept her car at their house because they did not trust her ability to refrain from driving while she was under the influence of alcohol.

Early Developmental and Neurological History

Ms. Williams was not aware of any complications during her mother's pregnancy and delivery of her. In addition, she was not aware of any history of problems during her developmental years. Ms. Williams reported no history of neurological problems or head trauma.

Health History

When asked about her health, Ms. Williams reported several medical problems. Specifically, she reported that she was legally blind, and that she had been diagnosed with mitral valve prolapse and fibromyalgia. Ms. Williams also reported a history of migraine headaches about 1-2 times a year. Ms. Williams was not taking any medications or seeking any treatment for these health problems at the time of this assessment.

With regard to psychiatric history, Ms. Williams reported that she was diagnosed with Major Depressive Disorder, Panic Disorder and Alcohol Dependence in 1992 when she sought treatment for her drinking problem. She reported a history of two voluntary hospitalizations (in 1992 and 1997) for alcohol detoxification and rehabilitation. Additionally, she was in outpatient counseling following both hospitalizations.

Regarding the family psychiatric history, Ms. Williams stated that her grandfather was abusive and had an "anger problem". In addition, she reported that there is a history of alcohol abuse in the family. Specifically, Ms. Williams stated that both her mother and maternal grandmother abused alcohol. Finally, Ms. Williams described her mother as "obsessive-compulsive". For example, Ms. Williams' mother reportedly did not allow her to cook or clean in her house because she was afraid that Ms. Williams would mess things up. However, her mother was never professionally diagnosed with OCD or any other psychiatric

disorder. Ms. Williams was not aware of any history of psychiatric hospitalizations or outpatient psychological treatment in her family of origin.

Educational and Work History

Ms. Williams reported having a total of 14 years of education. She described herself as an average student throughout her education. She graduated from high school and completed two years of college. Ms. Williams indicated that she wanted to be a model after she graduated from high school, but that her parents were against this career choice. As a result, Ms. Williams reported that she ended up pursuing a degree in commercial arts. However, she reported that she started to get numerous offers to work as a photo model during her first year of college. Ms. Williams reported that after some deliberation, she finally decided to drop out of college and become a model. Ms. Williams spoke of her 20 years career in modeling as successful and satisfactory.

In addition to modeling, Ms. Williams reported always being interested in the field of health care, especially surgery. She reported that this interest was re-ignited after her fiancé had surgery for cancer and she had the opportunity to take care of him after the surgery. Reportedly, professional nurses expressed a very high opinion of the quality of care she provided, which, along with prompting from her fiancé, precipitated a change in her career. In 2001, she went to school to get a surgeon technician's degree. She reported that she had worked as a surgeon technician for about a year when her alcohol use started to interfere with her job performance and she quit her job.

Ms. Williams is currently unemployed. She stated that she currently lives off money she saved while she was still working. However, Ms. Williams indicated that her savings are insufficient for living independently and that she has no other source of income at this time.

To make the ends meet, Ms. Williams has applied for disability compensation and intends to apply for welfare.

Social Support

Ms. Williams reported having one close friend – her cousin. She stated that her cousin is a recovered alcoholic and that she is always emotionally supportive for Ms. Williams. Moreover, she offered to let Ms. Williams to live in her house until she is able to support herself financially. She is also Ms. Williams' only Alcoholics Anonymous (AA) sponsor at the present time. Ms. Williams stated that although she started to go to AA meetings, she does so infrequently and she has not established a good Alcoholics Anonymous support system yet.

Ms. Williams also cited her daughter as being a great support, but stated that they only communicate by phone about once a week because her daughter is away at college, living with her father.

Ms. Williams also reported that she could sometimes count on her mother for support in terms of finances and a place to stay. However, she said that she usually avoided turning to her mother for emotional support because her mother often drank heavily and her mood was very unpredictable.

Situational Stressors

Ms. Williams reported the existence of a variety of stressors at the current time. She spoke of the break-up with her fiancé as the major event with which she has had a very hard time coping. Specifically, she stated that she was very distressed about the fact that her ex-fiancé did not want to talk to her on the phone even to discuss practical matters such as shipping her furniture and clothing from Louisiana. In terms of other interpersonal stressors, Ms. Williams mentioned that her relationship with her mother was strained more than usual

because of Ms. Williams' drinking. Also, she was very upset because her brother and his wife treated her as if "she did not exist," as evidenced by making decisions about what she should and should not do and not allowing her to use her car. Finally, Ms. Williams stated that she greatly missed her daughter.

In addition to these stressors, Ms. Williams also reported a number of financial difficulties. For example, she is unemployed, has no sources of additional income, and is going to file for bankruptcy. At the same time, she has car payments due every month. In addition, she does not have her own place to live, and she has to stay at her cousin's house or with her mother when the mother is not drinking.

Coping Mechanisms and Strengths

Ms. Williams stated that she was very motivated for treatment, determined to work in therapy, and was hopeful that the treatment would be beneficial. She had insight into her problems demonstrated by her awareness of her psychiatric diagnoses and ability to actively seek professional help. For example, she described how she found a social service agency in the phone book, called the agency and asked for help with finding a community mental health agency where she could receive therapy and medication. Ms. Williams appeared to be of at least average verbal ability as evidenced by her ability to clearly communicate about different topics, including, but not limited to, the concerns that brought her to treatment, when her problems developed, and what she had done in the past to resolve her difficulties. She appeared to be engaging and easygoing, as evidenced by her warm and pleasant manner of speaking.

In terms of coping mechanisms, Ms. Williams stated that before the break-up with her fiancé, she would use walking, meditation and exercise to cope with the anxiety and panic attacks. In addition, although she was not actively involved in church, religion helped

her to get through some of her hard times. For example, Ms. Williams related that she often read the bible and other spiritual literature to “get stronger”. At the present time, however, she reported that aside from turning to her cousin for support, she did not engage in any healthy coping behaviors she used to utilize before the break-up with her fiancé. Ms. Williams stated that, presently, drinking and talking to her cousin are the only means by which she coped with the emotional pain she was experiencing.

Review of Prior Assessments

No prior evaluations or assessments were available for review.

Summary and Conceptualization

Ms. Williams is a 41-year-old Caucasian female who presented to treatment following a separation from her fiancé. At the time of the assessment, Ms. Williams reported high levels of anxiety and depression, and reported that she had been abusing alcohol. Ms. Williams’ problems with anxiety and alcohol abuse date back to her teenage years and she reported one previous episode of major depressive disorder. Ms. Williams underwent two voluntary hospitalizations for her alcohol problems, both of which were followed by outpatient counseling that incorporated treatment of her anxiety and depression. Ms. Williams has been married twice and has a 19-years old daughter. Ms. Williams is currently unemployed, has no financial sources, and her social support is limited.

Ms. Williams’s difficulties appear to have both biological and psychological roots. It may be concluded from the information that Ms. Williams revealed about her family of origin, that her mother appears to have untreated anxiety and alcohol use disorders, which might have genetically predisposed Ms. Williams to anxiety and alcohol problems. Additionally, she likely observed her mother using alcohol as a means of coping with anxiety

and other stressors, thereby modeling such behavior and increasing the likelihood of their use for the client.

Ms. Williams' account of her career as a model suggests that she was at least somewhat able to successfully cope with her anxiety in work related situations. Moreover, for the majority of her career, alcohol use did not appear to significantly negatively influence her work performance. On the other hand, Ms. Williams appears to have some deficits in the area of interpersonal relationships, as evidenced by the information she provided about her relationships with significant others. Specifically, she reported being involved in two abusive marriages and that the only rewarding relationship she has had resulted in a break-up.

The difficulties Ms. Williams experienced in the area of interpersonal relationships might have been influenced by her childhood experiences. Specifically, controlling parenting practices and alleged emotional abuse from her mother might have led to the development of negative beliefs about herself as worthless and unlovable. Moreover, Ms. Williams' parents' violent interactions with each other might have served as a dysfunctional model of a marital relationship. It may be that the negative beliefs about herself and the violence she witnessed in her parents' marriage served as a basis for Ms. Williams' own abusive marriages. Similarly, the negative beliefs about herself, together with traumatic experiences of the abusive marriage, appear to have influenced the development of Ms. Williams' first depressive episode and panic disorder. At the same time, Ms. Williams' alcohol use might have served simultaneously as a coping skill and as a factor exacerbating these disorders.

Although Ms. Williams was in treatment, apparently it focused on symptom relief and only in part addressed the negative beliefs underlying her symptoms. This was evidenced by the fact that she was finally able to stay away from abusive relationships and engage in a satisfactory relationship. However, when life stresses seemed to threaten this relationship,

and when it finally ended later, Ms. Williams' negative beliefs appear to have become activated again. This led to another depressive episode, exacerbation of panic disorder and, in the absence of adaptive coping skills and social support, to increased alcohol use.

Diagnostic Considerations and Differential Diagnosis

Based on the information gathered during the assessment, Ms. Williams appears to have symptoms that satisfy criteria for Panic Disorder, Major Depressive Disorder, and Alcohol Dependence.

The diagnosis of Panic Disorder, without Agoraphobia is given as the primary diagnosis. This diagnosis is designated as primary due to the severity of the current symptoms (e.g., approximately seven panic attacks a day) and because the client stated it as being the primary source of distress and impairment. The primary anxiety symptoms reported by Ms. Williams were recurrent, unexpected panic attacks, during which she reported experiencing heart palpitations, breathing difficulties, chest pain, dizziness, sweating, shaking, feelings of unreality, and fear that she was losing control and going crazy. In addition, Ms. Williams reported a fear of having another panic attacks. Finally, her behavior changed significantly, as evidenced by avoiding driving on highways and being outside of home alone. All of these symptoms satisfy Criterion "A" for Panic Disorder.

To determine whether behavior changes related to panic attacks represent presence or absence of agoraphobia (criterion "B"), the diagnostic criteria for Agoraphobia were also considered. First, Criterion "A" for agoraphobia requires that a person experiences a fear of being in places or situations from which escape might be difficult (or embarrassing) or in which help may not be available in the event of having a panic attack. Ms. Williams reported that her fear of driving on the highway was related to the heightened anxiety she experienced

when driving at high speeds, but she did not report specific fears of having a panic attack in this situation. Thus, she does not meet the diagnostic criteria specified in Criterion “A.”

Criterion “B” for agoraphobia requires that the situations from which escape may be difficult or embarrassing are avoided or else endured with marked distress or anxiety. Ms. Williams reported that she feared to be alone outside of home. However, she reported that this fear was related to a concern that if she were to go to places where she previously was with her fiancé, the memories of times spent together would trigger feelings of loss and grief. Thus, Ms. Williams’ avoidance of being outside of home alone was related to difficulty coping with the end of the relationship rather than a fear of having a panic attack or a fear of not getting help when having one.

The panic attacks experienced by Ms. Williams were not due to the direct physiological effects of a substance or a general medical condition. Although sweating, hand tremors, and anxiety may be symptoms of alcohol withdrawal, Ms. Williams reported that she experienced panic attacks at times when she had not been using alcohol. Therefore, the panic attacks cannot be accounted for direct effects of alcohol use (Criterion “C”).

Because panic attacks may occur in other anxiety disorders, it was necessary to rule them out (criterion “D”). Social phobia was ruled out because Ms. Williams’ panic attacks were not related to a fear of embarrassment in social situations. Similarly, they were not related to specific phobic situations, as in Specific phobia, or to thoughts or exposure to the object or situation related to an obsession as in Obsessive-Compulsive Disorder. Finally, Ms. Williams’ panic attacks were not related to worry as in Generalized Anxiety Disorder, or to stimuli related to stressor as in Posttraumatic Stress Disorder.

Based on Ms. Williams’ report of depressive symptoms she experienced, the second diagnosis assigned was Major Depressive Disorder, Recurrent, Without Psychotic Features.

Ms. Williams' symptom picture was consistent with her having currently been experiencing a major depressive episode. Specifically, she had been experiencing symptoms for over 2-weeks, and she was experiencing a number of symptoms consistent with the diagnostic criteria. Specifically, she experienced depressed mood and loss of pleasure in previously enjoyed activities, hopelessness, feelings of worthlessness and guilt, disturbances in sleep and appetite, difficulty with concentration, and loss of energy. In addition, Ms. Williams' symptoms satisfied Criterion "B" for a major depressive episode in that she denied the presence of manic symptoms required to make a diagnosis of a Mixed episode. Criterion "C" for a major depressive episode was satisfied because Ms. Williams' depressive symptoms caused significant distress and impairment as evidenced by her report that she had difficulty maintaining self-care. Criterion "D" was satisfied because Ms. Williams' symptoms were not due to physiological effects of a substance or a medical condition, and Criterion "E" was satisfied because the symptoms did not represent bereavement.

Ms. Williams did not report any psychotic symptoms, such as hallucinations and delusions; therefore, Criterion "B" for Major Depressive Disorder has been met. Similarly, she reported no current or past history of Manic, Hypomanic, or Mixed episodes, which satisfies Criterion "C" of the Major Depressive Disorder.

The specifier Recurrent was assigned because Ms. Williams reported a history of one previous major depressive episode that occurred several years ago. The specifier Severe Without Psychotic Features was given because Ms. Williams experienced most of the symptoms required to make a diagnosis of Major Depressive Episode; she experienced severe impairment in functioning, and she denied the presence of any psychotic symptoms.

Ms. Williams' current symptom picture was also consistent with the presence of Alcohol Dependence, Without Physiological Dependence. To determine whether Ms.

Williams' pattern of alcohol use represents presence of alcohol abuse or alcohol dependence, the diagnostic criteria for substance abuse and substance dependence were considered. Criterion "B" for Substance Abuse requires that the substance use symptoms have never met the criteria for Substance Dependence for this class of substance. Ms. Williams was diagnosed with Alcohol Dependence in the past; therefore, the diagnosis of Alcohol Dependence was assigned. Ms. Williams' alcohol use symptoms met three criteria for alcohol dependence. First, she reported using larger amounts of alcohol than she initially intended, which satisfies Criterion 3 for substance dependence. For example, Ms. Williams described how she would go to a liquor store to buy "just a six pack" of beer, and then end up drinking for several days. In addition, Criterion 6 was satisfied because Ms. Williams reported that she many times was late for work or missed work because of drinking. Finally, Ms. Williams continued using alcohol despite knowledge that it would cause difficulties in her interpersonal relationships, which satisfies Criterion 7.

Since Ms. Williams did not report any symptoms of tolerance or withdrawal, the specifier Without Physiological Dependence was given.

With regard to the overall functioning, Ms. Williams exhibited serious impairment in several areas of her life. She reported that she was unable to work and financially support herself due to anxiety and depression symptoms. Additionally, she reported that her intimate and social relationships suffered because of her alcohol dependence. Based on these considerations, Ms. Williams's level of functioning was currently assessed at 44.

Based on the above information, the following DSM-IV diagnoses were provided for Ms. Williams:

AXIS I 300.01 Panic Disorder without Agoraphobia

296.33 Major Depressive Disorder, Recurrent, Severe Without Psychotic Features

303.90 Alcohol Dependence, Without Physiological Dependence

AXIS II *V71.09* No diagnosis

AXIS III None

AXIS IV Break-up with the boyfriend; strained relationship with mother and brother;
inadequate social support; unemployment; inadequate finances and housing.

AXIS V *GAF* Current – 44

Highest lifetime - 69

Chapter 2

Literature Review

The purpose of this literature review is to provide a general overview of the empirically supported treatments related to Ms. Williams' diagnoses. The empirical evidence related to treatment for each diagnosis is reviewed in order of the importance of the diagnostic symptoms to Ms. Williams. Specifically, treatments for panic disorder are reviewed first, treatments for major depressive disorder are reviewed second, and treatments for alcohol abuse and dependence are reviewed third. Since the treatment of comorbid anxiety and depression represents a separate clinical and research entity, the section on empirically supported treatments for comorbid panic and major depressive disorders is also included. In addition, the literature on the treatment of comorbid panic disorder, major depressive disorder, and alcohol dependence is also reviewed.

Panic Disorder

Panic disorder refers to a clinical syndrome encompassing recurrent, unexpected panic attacks, persistent concern about having other attacks, worry about the possible implications or consequences of the panic attacks (e.g., fear of losing control), and/or a significant behavioral change related to the attacks (e.g., avoiding physical exercise) (American Psychiatric Association, 2000).

The practice guidelines published by the American Psychiatric Association specify that cognitive-behavioral therapy and pharmacotherapy are the first-line treatments for panic disorder (American Psychiatric Association, 1998). In the following

sections, research literature related to these treatments is explored and a summary of the literature is provided.

Psychological Treatments of Panic Disorder

A number of psychological models have been developed in an attempt to explain the etiology of panic attacks and agoraphobia in panic disorder. One of the most thoroughly developed models is the model that conceptualizes panic disorder as an acquired fear of bodily sensations and agoraphobia as a behavioral response to the anticipation of such bodily sensations (Barlow & Cerny, 1988; Clark, 1994; Craske & Barlow, 2001). According to this model, panic attacks develop as the consequence of catastrophic misinterpretations of bodily sensations or cognitive processes. For example, in response to an increase in the heart rate, an individual may think, "I am having a heart attack." These catastrophic misinterpretations lead to increased anxiety, which in turn leads to additional, and often more severe, bodily sensations that culminate in a panic attack. Following repeated attacks, anxiety becomes associated with bodily sensations by the way of classical conditioning in that even small signs of arousal (e.g., quickened heart beat) lead to increasing anxiety, eliciting another panic attack. Because the experience of a panic attack is very unpleasant, the individual begins to experience anxiety about the recurrence of panic or its consequences. This anticipatory anxiety may lead to agoraphobic avoidance of situations associated with panic, which helps maintain the disorder (Margraf, Barlow, Clark, & Telch, 1993; Craske & Barlow, 2001).

Based on the above model, various cognitive-behavioral interventions focusing on treatment of panic attacks and agoraphobia have been developed. These interventions include exposure to feared external situations (e.g., going to shopping malls); cognitive

techniques designed to increase rational appraisals and decatastrophize thinking; inducing autonomic arousal and panic (i.e., interoceptive exposure) in order to promote habituation to physiological panic cues; breathing retraining to control breathing and prevent hyperventilation; and relaxation techniques to reduce physiological reactivity (Margraf et al, 1994; Willams & Falbo, 1996).

Several studies have investigated the comparative effectiveness of the specific therapeutic interventions mentioned above (e.g., cognitive restructuring, breathing and relaxation training, and exposure) used in the treatment of panic disorder (e.g., de Ruiter, Hanneke, Garsen, & Kraaimaat, 1989; Marks et al., 1993; Bouchard et al., 1996; Willams & Falbo, 1996; Ito et al., 2001). The results of these studies have generally demonstrated that different techniques work equally well in reducing the symptoms of panic attacks and agoraphobia. For example, exposure has been found to be as effective as breathing retraining (de Ruiter et al., 1989). Additionally, cognitive therapy and restructuring have been found as effective as exposure (Bouchard et al., 1996; Willams & Falbo, 1996) and relaxation training (Beck, Stanley, Baldwin, Deagle, & Averill, 1994).

In addition to these separate cognitive-behavioral interventions, two cognitive-behavioral treatment protocols for the treatment of panic disorder have been developed that combine several of the interventions into one treatment package. These treatment protocols are Panic Control Treatment (PCT; Barlow & Cerny, 1988) and Cognitive Therapy (CT; Salkovskis & Clark, 1991). In the subsequent paragraphs, the research evidence examining the efficacy of these two treatment protocols is reviewed.

Panic Control Treatment (PCT, Barlow & Cerny, 1988) is one of the most widely used, researched and empirically validated treatments. PCT is a manualized 15-session

treatment combining education, cognitive interventions, relaxation and controlled breathing procedures, and exposure techniques (Hofmann & Spiegel, 1999). The efficacy of PCT for the treatment of panic disorder with limited agoraphobia has been demonstrated in numerous clinical trials (e.g., Barlow, Craske, Cerny, & Klosko, 1989; Klosko, Barlow, Tassinari, & Cerny, 1990; Wade, Treat & Stuart, 1998). For example, in an initial study of PCT, 72 patients with panic disorder were assigned to one of four groups: PCT treatment consisting of interoceptive exposure and cognitive restructuring, relaxation alone, relaxation and PCT in combination, or a waitlist control group (Barlow et al., 1989). The results of this study indicated that the percentage of clients who were panic free at post-treatment was 87% for PCT in combination with relaxation, 85% for PCT alone, 60% for applied relaxation alone, and 36% for waitlist controls. Thus, PCT alone and in combination with relaxation were superior to relaxation alone and a waitlist condition in reducing panic frequency.

A follow-up study of the clients in the Barlow et. al. (1989) study indicated that the group receiving PCT treatment alone tended to maintain the treatment gains better than the groups receiving PCT with relaxation and those receiving relaxation alone. Specifically, at 2-year follow-up, the percentage of panic-free patients was 81% for PCT alone, 43% for PCT with relaxation, and 36% for relaxation alone. These results suggest that the addition of relaxation to standard PCT may reduce the long-term efficacy of PCT treatment (Craske, Brown, & Barlow, 1991).

In an attempt to investigate the comparative effectiveness of PCT and medication in treating panic disorder, Klosko et al., (1990) contrasted PCT to alprazolam, a drug placebo, and a waitlist control using a sample of 57 patients with panic disorder with

agoraphobia. Results of this study indicated that a significantly greater number of clients in PCT were panic free at termination of treatment (87%) than clients in both the placebo group (36%) and waitlist control group (36%) However, the percentage of clients treated with alprazolam who were panic free at termination (50%) did not differ significantly from either the PCT or placebo groups. These results suggest that PCT is superior to the waiting list or drug placebo control groups in the treatment of panic disorder.

The studies described above were conducted using strict research methodology, and subjects were randomly assigned to treatment conditions (i.e., randomized controlled trial methodology). While having high internal validity, randomized controlled trials may not generalize from research clinics to natural settings such as community mental health centers (CMHC) because of differences in factors such as clients, settings, and therapists, among others (Wade et al., 1998). In an attempt to investigate how well the results of randomized controlled trials generalize to natural settings, Wade et al. (1998) explored the effectiveness of PCT in the treatment of 110 community mental health clinic patients with a primary diagnosis of panic disorder. The results of this study indicated that after 15 sessions of PCT, 87% of patients were panic-free. Additionally, follow-up measures collected from the same patients indicated that, at 1-year follow-up, 89% of clients were still panic-free (Stuart, Treat, & Wade, 2000). Together, these results suggest that not only can PCT be generalized to naturalistic settings, but also the rates of treatment success are comparable with the rates obtained in the randomized controlled trials.

Another extensively researched, manualized cognitive-behavioral treatment for panic disorder is Cognitive Therapy (CT; Salkovskis & Clark, 1991). This 12- sessions treatment focuses more exclusively on directly changing misinterpretations of bodily

sensations, incorporates less interoceptive exposure compared to PCT, and does not include relaxation training (Clark, 1994). Several controlled trials have demonstrated the efficacy of CT in the treatment of panic disorder. For example, Beck, Sokol, Clark, Berchick, & Wright (1992) compared CT to supportive psychotherapy using a crossover design. In this study, 33 patients with panic disorder were randomly assigned to either 12 weeks of CT or 8 weeks of brief supportive psychotherapy based on principles of client-centered therapy. The patients who received supportive psychotherapy were subsequently given the opportunity to cross over to CT for 12 weeks. Results of this study indicated that at 8 weeks, 71% of CT patients were panic-free as opposed to 25% of the patients in brief supportive therapy. At the end of 12 weeks of cognitive treatment, 94% of CT patients and 63% of patients who crossed over from supportive therapy were panic free. Follow-up measures collected from these patients at 1-year indicated that 87% of CT patients and 79% of brief supportive therapy patients who crossed over to CT were still panic-free. The results of this study suggest that brief supportive therapy administered before CT might have interfered with CT for the crossover patients. However, these patients continued to improve during the follow-up period, thus suggesting the prophylactic value of CT.

In attempt to investigate the comparative effectiveness of CT and other psychological and pharmacological treatments, Clark et al., (1994) compared CT, applied relaxation, imipramine, and a wait-list control group. Participants in the study were 64 patients diagnosed with panic disorder with or without agoraphobia. Participants received twelve sessions of treatment over 3 months. The results of this study indicated that all three active treatments were superior to no treatment. Additionally, comparisons among

active treatments showed that CT was superior to both applied relaxation and imipramine. Specifically, 90% of patients in CT group were panic free at the end of treatment, compared to 50% in the relaxation group and 55% in imipramine group. At 6-months follow-up, CT and imipramine were both superior to applied relaxation (75%, 70% and 40% patients were panic free, respectively), and at 15-month follow-up, CT was again superior to both imipramine and applied relaxation (85%, 60%, and 47% of panic free patients, respectively). These results suggest that although the relative efficacy of the treatments varied with assessment occasion, cognitive therapy was the most consistently superior treatment.

In summary, ongoing research has documented the clear efficacy of cognitive-behavioral treatment for panic disorder and agoraphobia. Specific techniques such as cognitive restructuring, exposure, breathing retraining, and relaxation have been found to be equally effective in reducing symptoms of panic and agoraphobia. However, two integrative treatment packages, Panic Control Treatment and Cognitive Therapy, appear to be the treatments of choice for panic. Specifically, these two treatments have been shown superior to no treatment and to drug placebo in the treatment of panic disorder. In addition, PCT and CT have been shown to be superior to pharmacological treatments (e.g., alprazolam) and to other psychological interventions (e.g., relaxation) administered alone. The effectiveness of these treatment packages has been demonstrated both at treatment termination and in long-term follow-up studies. Moreover, PCT has been shown to generalize well to naturalistic settings, with the rates of treatment success comparable with those obtained in the randomized controlled trials.

Pharmacological Treatment of Panic Disorder

Antidepressants and benzodiazepines are the main types of medications that have been demonstrated to be effective in the treatment of panic disorder (Agras, 1993). In the following section, the literature supporting the effectiveness of these two types of medications in the treatment of panic disorder is reviewed.

Antidepressant medications.

Selective serotonin reuptake inhibitors (SSRIs), tricyclic antidepressants (TCAs), and monoamine oxidase inhibitors (MAOIs) are the main classes of antidepressant medications that have been used in treating panic disorder (Agras, 1993).

The SSRIs have recently become the preferred form of medication for treating panic disorder due to a number of factors, including that their effectiveness is similar to older antidepressants such as TCAs and MAOIs, they have fewer side effects and less prominent withdrawal reactions, and the risk of overdose is lower (Agras, 1993). Results from recent empirical investigations indicate that SSRIs are effective in the amelioration of panic symptoms. For example, Lydiard, Steiner, Burnham, & Gergel (1998) cited the results of three multicenter, double-blind, placebo-controlled studies of paroxetine (i.e., Paxil) that demonstrated paroxetine to be significantly more effective than a placebo in treating symptoms of panic disorder (Ballenger, Wheadon, Steiner, Bushell, & Gergel, 1998; Lecruiber, Bakker, Dunbar, & Judge, 1997; Oehrberg, et al., 1995).

The medications from the second class of antidepressants, tricyclic antidepressants, have also been shown effective in the treatment of panic disorder (Agras, 1993). For example, Ballenger (1994) cited the results of several controlled investigations suggesting that imipramine (i.e., Tofranil) is more effective than placebo in reducing

panic attacks and phobic avoidance (e.g., Sheehan, Ballenger, & Jacobson, 1980; Lydiard, & Ballenger, 1987; Zitrin, Klein, Woerner, & Ross, 1983). Additionally, Clark et al., (1994) compared cognitive therapy, imipramine, applied relaxation, and waitlist control and found imipramine to be superior to no treatment. When relative efficacy of active treatments was considered at different assessment points, imipramine was found to be as effective as applied relaxation at post-treatment (50% and 55% of panic free patients, respectively) and as effective as cognitive therapy at 6-month follow-up (75% and 70% of panic free patients, respectively).

Although less studied, clomipramine (i.e., Anafranil) also has been shown to be superior to placebo (e.g., Johnston, Troyer, & Whitset, 1988, cited from Ballenger, 1994).

Despite the effectiveness of TCAs in the treatment of panic disorder, these medications are often not the drug of choice because of their serious disadvantages. For example, TCAs have several unpleasant side effects often leading patients to discontinue treatment prematurely, and their narrow therapeutic range presents a high risk of accidental overdose. Tricyclic antidepressants have been used less frequently since the discovery of SSRI medications (Agras, 1993).

There are significantly fewer controlled trials with MAO inhibitors, the third class of antidepressants used in the treatment of panic disorder. Phenelzine (i.e., Nardil) has been demonstrated to be effective in a double blind, placebo-controlled trial (Tyrer, Candy, & Kelly, 1973, cited from Ballenger, 1994) and in the study comparing phenelzine with imipramine and placebo (Sheehan et al., 1980, cited from Ballenger, 1994). In this study, phenelzine was superior to imipramine on most outcome measures. Despite these encouraging results, MAO-Is are also not the drug of choice in the

treatment of panic disorder, mainly because of their side effects, their potential for serious adverse effects, and the requirement that individuals taking them avoid certain common foods and beverages.

Benzodiazepines.

The benzodiazepines used most in the treatment of panic disorder are alprazolam (i.e., Xanax) and clonazepam (i.e., Klonopin). Spiegel (1998) cited two pivotal studies of alprazolam in the treatment of panic disorder that found statistical superiority of alprazolam over placebo (Ballenger, et al., 1988; Cross-National Collaborative Panic Study (CNCPS), Second Phase Investigators, 1992). In addition, alprazolam has been found to be superior to placebo and as effective as imipramine in reducing symptoms of panic disorder in studies comparing alprazolam and imipramine (Schweizer, Rickels, Weiss, & Zavodnick, 1993, cited from Spiegel, 1998).

With regard to the efficacy of clonazepam in the treatment of panic disorder, Davidson and Moroz (1998) cited the results of two double-blind, placebo controlled trials of clonazepam in the treatment of panic disorder. Both studies reported that clonazepam was significantly more effective in reducing symptoms of panic disorder than placebo (Rosenbaum, Moroz, & Bowden, 1997; Moroz & Rosenbaum, 1999).

Benzodiazepines have many advantages that often make them a drug of choice for the treatment of panic disorder. For example, they are well tolerated by patients, have a rapid onset of action, and have a little risk of accidental overdose. However, some disadvantages of this class of medications should not be overlooked. For example, benzodiazepines can cause sedation, coordination difficulties, and short-term memory impairment. Perhaps the most serious adverse effect of benzodiazepines is their high

potential for development of physiological and psychological dependence, especially for people currently dependent on alcohol or drugs.

In summary, several types of pharmacological agents have been shown to be superior to placebos in the treatment of panic disorder. The use of medications in the treatment of panic disorder has its advantages such as rapid effect, ease of use, and accessibility. However, numerous side effects of antidepressants, especially TCAs and MAO-Is, and a potential of benzodiazepines to create dependency are clear disadvantages to this type of treatment.

Combined Psychological and Pharmacological Treatment of Panic Disorder

Research on combined psychological and pharmacological treatment for panic disorder is limited and inconclusive. Several studies have investigated the relative and combined efficacy of psychological and pharmacological treatments of panic disorder and agoraphobia. For example, Telch and Lucas (1994) conducted a meta-analysis of eight studies investigating the efficacy of combined psychological and pharmacological treatments for panic disorder. Results indicated that combined treatments (imipramine plus exposure or alprazolam plus exposure) had a modest but significant short-term advantage over psychological and pharmacological treatments alone. However, long-term effects of combined treatments were less encouraging, as results indicated that although the majority of patients treated with a combination of imipramine and exposure maintained the treatment gains at 12-24 months follow-up, the combined treatment was no more effective than exposure alone.

In contrast to these results, in the study investigating the relative and combined efficacy of alprazolam and exposure, the combination of alprazolam with exposure

resulted in higher relapse and poorer long-term outcome than exposure therapy alone (Marks et al., 1993). In this study, 154 patients were assigned to four groups: alprazolam plus exposure, alprazolam plus relaxation, placebo plus exposure or placebo plus relaxation treatment. The treatment lasted 8 weeks, and then medication was tapered to zero over next 8 weeks. The results indicated that, at the end of eight-week treatment, clients in all treatment groups demonstrated improvement on panic measures; although, there were no significant differences between groups. However, at 10 months follow-up, the proportion of patients maintaining their gains were 62% for placebo plus exposure, 36% for alprazolam plus exposure, 29% for alprazolam plus relaxation, and 18% for placebo and relaxation. This suggests that not only does discontinuation of alprazolam result in higher level of relapse compared to exposure, but also that exposure is less effective when combined with alprazolam.

In another study of the effectiveness of combined treatment for panic disorder, Sharp et al. (1996) found no statistically significant difference between combined psychological and pharmacological treatment and each treatment alone. In this study, 190 patients with panic disorder with or without agoraphobia and four active treatment conditions were compared to a placebo control group. The four active treatment conditions were Panic Control Treatment (PCT), fluvoxamine (FL), combined PCT and FL (PCT+FL), and combination of PCT with placebo (PCT+PL). The results indicated that all active treatments were effective in reducing the symptoms of panic disorder compared to the placebo group. At the end of treatment, the proportion of panic-free patients was 70% in PCT group, 68.9% in FL group, 82.7% in FL+PCT group, and 75.7% in PL+PCT group. The differences between active treatment groups were not

significant. However, the fluvoxamine plus PCT group showed statistically significant differences from the placebo group two weeks earlier than any other active treatment group. In addition, this group had the largest proportion of patients noted to have required no subsequent treatment at the 6-months follow-up. Overall, these results suggest that the addition of an SSRI medication may enhance the effects of psychological treatment (Sharp et al., 1996).

In an attempt to investigate short- and long-term effectiveness of single and combined effects of cognitive-behavioral treatment and imipramine, Barlow, Gorman, Shear, & Woods (2000) contrasted combined imipramine and PCT treatment to PCT alone, imipramine alone, PCT plus placebo, and placebo alone. In this study, 312 patients with panic disorder with and without agoraphobia underwent three months of acute treatment, and six-months of maintenance treatment. Participants were also followed-up 6 months after treatment discontinuation. Results indicated that both imipramine and PCT alone were as effective as combined treatment and superior to placebo at the end of acute phase. At the end of the maintenance phase, the combination of PCT and imipramine was superior to PCT alone, PCT plus placebo, and imipramine. However, at the 6-months follow-up, a substantial number of patients taking medication relapsed with the combined treatment group producing the highest relapse rate. Thus, the addition of imipramine to psychological treatment resulted in limited benefit over single treatments in the acute phase and appeared to reduce the long-term durability of CBT after the medication was discontinued.

In summary, contradictory evidence based on a small number of studies makes it difficult to arrive at definite conclusions about the efficacy of the combined

psychological and pharmacological treatments for panic disorder. Combined treatments seem to have relatively small impact on short-term treatment effectiveness. With regard to long-term effectiveness, psychological treatments appear to be less effective when combined with benzodiazepines and tricyclic antidepressants, particularly after withdrawal of medication. In contrast, SSRIs seem to enhance the long-term impact of the psychological treatment.

Summary

Based on the literature review, best practice in the treatment of panic disorder with and without agoraphobia would include manualized treatment packages such as Panic Control Treatment or Cognitive Therapy. Their effectiveness in the treatment of panic disorder was supported in controlled and naturalistic studies. Some evidence indicates that, when used separately, specific techniques such as cognitive restructuring, exposure, breathing retraining, and relaxation may be less effective than more comprehensive treatment packages such as PCT and CT.

Antidepressant medications and benzodiazepines have been shown effective in the treatment of panic disorder. However, their use warrants caution because of the side effects of all classes of medications, tendency of their therapeutic effects to diminish rapidly after discontinuation, and, in case of benzodiazepines, high addictive potential. Combination of cognitive-behavioral therapy and medication in the treatment of panic disorder does not seem to have short-term advantages over each treatment alone. With regard to long-term effectiveness of combined treatment, addition of an SSRI appears to enhance the effectiveness of panic control treatment. In contrast, addition of

benzodiazepines and TCAs to psychological treatment seems to have a long-term disadvantage in that it may reduce the long-term effects of psychological treatment.

Major Depressive Disorder

Major Depressive Disorder (MDD) is characterized by the presence of one or more major depressive episodes in the absence of any manic, hypomanic, or mixed episodes (American Psychiatric Association, 2000). A major depressive episode is characterized by the presence of a depressed mood most of the day, nearly every day and/or the loss of interest or pleasure in almost all activities. In addition to these primary symptoms, the individual must also experience at least five of the following: disturbances in appetite, weight, and/or sleep; decreased energy; difficulties in concentrating and thinking; feelings of worthlessness or guilt; hopelessness and thoughts of death or suicide or suicidal attempts.

In the following sections, research on the effectiveness of various psychological and pharmacological treatments for major depressive disorder are explored and a summary of the literature is provided.

Psychological Treatment of Major Depressive Disorder

The most convincing evidence supporting the efficacy of structured psychotherapies in treating MDD comes from meta-analytic studies. For example, Robinson, Berman and Neimeyer (1990) reviewed 58 studies conducted to explore the comparative efficacy of various treatments of MDD. The therapies compared in this study included behavioral, cognitive, cognitive-behavioral, and general verbal therapies. General verbal therapy was defined as treatments such as psychodynamic, client-centered, and interpersonal therapies. Generally, the results of this meta-analysis

indicated that any therapy was superior to placebo or waitlist controls, with an effect size of .73 at termination and .68 at follow-up. In regard to efficacy of specific treatments, results indicated that behavioral, cognitive, and cognitive-behavioral therapies were moderately effective (1.02, 0.96, and 0.85, respectively), whereas verbal therapies demonstrated a more modest effect size (0.49). However, after controlling for investigator's allegiance effects, there remained no differences in the effectiveness of different types of therapy. These results suggest that psychotherapy in the treatment of MDD is more effective than no treatment. In addition, different types of therapy seem to be equally effective in the treatment of MDD.

A second method that has been used to understand the most effective treatment of MDD has been randomized controlled trials of treatments for depression. One of the most comprehensive and methodologically sound studies of this sort was the National Institute of Mental Health' Treatment of Depression Collaborative Research Program (TDCRP) which examined the differential effectiveness of cognitive-behavioral therapy (CBT), interpersonal therapy (IPT), and imipramine, which is considered a standard reference treatment for depression (Elkin et al., 1989). CBT is a structured approach to the treatment of depression in which patients are trained to identify and modify negative beliefs and negative interpretations of the past, present, and future (CBT; Beck, Rush, Shaw, & Emery, 1979). In comparison, IPT focuses on four types of interpersonal problem categories that are viewed as etiologically related to depression. The focus of treatment is to help the patient identify and better understand their interpersonal problems and conflicts and to develop more adaptive ways of relating to others (IPT; Klerman, Weissman, Rounsaville, & Chevron, 1984).

In the TDCRP study (Elkin et al., 1989), 239 patients diagnosed with major depressive disorder were randomly assigned to one of four treatment conditions: CBT, IPT, imipramine plus clinical management (IMI-CM), or placebo plus clinical management (PLA-CM). Each treatment was conducted over a 16-week period. The results of this study indicated that all treatment conditions, including PLA-CM, were effective in reducing depressive symptoms. Further analysis of the relationship between initial severity of symptoms and treatment outcome revealed that, for the less depressed group, there were no significant differences between treatments. However, for the more depressed group, the patients in the IMI-CM and IPT treatment conditions improved significantly more than patients in the PLA-CM group. The improvement of patients in CBT group was not significantly different from patients in the PLA-CM group. With regard to the comparative effectiveness of IPT and CBT, no significant differences between these therapies were found. These results suggest that initial depression severity may be an important factor in considering treatment allocation: less severely depressed patients may be successfully treated with IPT, CBT, or imipramine. For the more severely depressed patients, IPT and imipramine appear to be more effective than CBT.

A follow-up study of the 198 TDCRP patients over 18 months (Shea et al., 1992) showed that only 24% of the patients remained recovered (no MDD relapse) over the 18 months follow-up period. With regard to the proportion of patients who remained recovered at 18 months, recovery rates in different treatment conditions were 30% of those receiving CBT, compared with 26% for IPT, 20% for PLA-CM and 19% for IMI-CM. Among those patients who met criteria for recovery at the end of treatment, but relapsed during the 18-months follow-up, the relapse rates were 50% for IMI-CM group,

36% for CBT group, 33% for IPT group, and 33% for PLA-CM group. Despite the presence of a trend for psychotherapy to be superior to IMI-CM, the differences among these rates were not significant. The major conclusion from this follow-up study was that 16 weeks of these particular treatments is not a sufficient period to achieve full recovery and lasting remission for most outpatients with MDD (Shea et al., 1992).

Another attempt to investigate the comparative efficacy of cognitive-behavioral and psychodynamic/ interpersonal therapy was carried out by Shapiro and colleagues in the Second Sheffield Psychotherapy Project (Shapiro et al., 1994). In this study, 117 patients diagnosed with major depressive disorder were randomly assigned to either CBT or IPT treatment according to initial symptom severity (e.g., low, medium, or high) and treatment length (e.g., 8 or 16 weeks). Results of this study indicated that both therapies were equally effective and had equivalent results for patients at all three levels of the symptom severity. However, treatment length was found to interact with initial symptom level. Specifically, patients with mild or moderate depression had equivalent results with either 8 or 16 weeks of therapy. In contrast, more severely depressed patients showed significantly better outcomes when they received 16 weeks of therapy, compared to those who received only 8 weeks. These results suggest that longer periods of therapy may be associated with better outcomes for more severely depressed patients

Follow-up of 103 of Shapiro et al. (1994) patients indicated that only 29% of patients who completed treatment remained recovered (defined as BDI score of 8 or less) at 1-year follow-up (Shapiro et al., 1995). Of the subjects classified as treatment responders (defined as BDI score of 8 or less at the end of treatment), 57% maintained their gains. Equal response rates between the two therapies continued to be present, but

the interaction between initial symptom severity and duration of treatment was no longer maintained. However, patients who had eight sessions of IPT appeared to fare less well than those receiving eight sessions of CBT. In addition, there was a non-significant trend for patients treated with 16 weeks CBT to maintain the treatment gains to a greater extent than those treated in the three other combinations. These results suggest that longer periods of therapy may be associated with better long-term outcomes, particularly in the case of IPT. In addition, there may be a greater prophylactic effect of CBT compared to IPT.

In an attempt to investigate the differential effectiveness of CBT and medication, Hollon et al., (1992) randomly assigned 107 outpatients diagnosed with major depressive disorder to one of four treatment conditions. The first three conditions were 12 weeks in length and included imipramine plus clinical management (IMI-CM), cognitive-behavioral therapy (CBT), and cognitive-behavioral therapy plus imipramine (CBT-IMI). The fourth treatment group received imipramine plus clinical management (IMI-CM) for one year after initial 12 weeks period. Results of this study indicated that CBT and imipramine did not differ in overall efficacy. Unlike in the TDCRP study, no interaction between initial symptom severity and treatment outcome was found. A 2-year follow-up of 74 patients from Hollon et al. (1992) study revealed clear differences between treatments. Patients in 12-weeks IMI-CM group showed the greatest rate of relapse (50%), and relapse occurred earlier than in other three groups with mean survival time in the IMI-CM group equal to 3.3 months. In contrast, relapse rates in both CBT and CBT-IMI groups were 18% with the mean survival time of 17.4 months. In the IMI-CM group that continued for one year, relapse rate was higher than in CBT (32%) and CBT-IMI

groups (32%). However, the mean survival time, 17.3 months, was similar (Evans et al., 1992). These results suggest that even relatively short CBT treatment appears to have a prophylactic value. However, when generalizing these results, care should be used due to high dropout rates and small sample sizes at follow-up in this study.

To summarize, research on the psychological treatment of MDD suggests that although psychotherapy for major depressive disorder is more effective than no treatment, a substantial number of patients will relapse in the 12-18 months following the end of the treatment. Two manualized psychological treatments of major depressive disorder, cognitive-behavioral therapy and interpersonal therapy, have been developed. These treatments have been shown to have effectiveness similar to that of medication in the treatment of patients with less severe levels of depression. Research findings regarding the comparative effectiveness of CBT, IPT and antidepressant medication in the treatment of more severely depressed patients are inconsistent. Similarly, research regarding differential effect of initial depression severity on outcomes of patients treated with CBT or IPT has yielded conflicting results.

Some evidence indicates that although IPT and CBT offered for a brief period of time may lead to clinically significant improvement in depressive symptoms, longer periods of therapy may be needed to achieve more lasting effect. In addition, although CBT and IPT have been shown to be equally effective in the short-term treatment, CBT appears to have greater prophylactic effect than IPT in that it is associated with longer periods to relapse.

Pharmacological Treatment of Major Depressive Disorder

Three types of antidepressants are used most frequently in the treatment of major depression: selective serotonin reuptake inhibitors (SSRIs), tricyclic antidepressants (TCAs), and monoamine oxidase inhibitors (MAO-Is). Considerable research evidence has accumulated demonstrating the efficacy of all three classes of antidepressants in treating depressive disorders (Schulberg, Katon, Simon, & Rush, 1999; Williams et al., 2000; Geddes, Carney, & Davies, 2003).

Results from controlled, double-blind studies indicate that TCAs and MAOs are effective in the treatment of depression, with 50 to 60 percent of depressed patients showing significant improvement (Schulberg, et al. 1999; Davis, Wang, Janicak, 1993). For example, in the review of 300 double-blind, randomized controlled studies of drug treatment for depression, Davis et al. (1993) concluded that the proportion of depressed patients who achieved at least 50% improvement in depressive symptoms with TCAs (65%) was significantly greater than that of patients treated with placebo (37%). These rates were similar for MAO-Is in that 65% of patients treated with MAO-Is showed significant improvement compared with 35% of patients treated with placebo. However, the side effects of TCAs make them less desirable as first-line therapeutic agents (Speigel, 2003). For example, when patients are treated with TCAs, side effects (e.g., sedation, dizziness, dry mouth, increased sweating and palpitations) often lead them to discontinue their treatment or to reduce the drug dose, which involves a great risk in view of the high relapse rate and danger of suicide in depression (Speigel, 2003). Similarly, MAO-Is are also not the drug of choice in the treatment of major depressive disorder, mainly because of their side effects (e.g., constipation, dry mouth, hypertension, muscle

aches, nervousness, problems with urination, sedation), their potential for serious adverse effects, and the requirement that individuals taking them avoid certain common foods and beverages.

In contrast, SSRIs have fewer side effects, and the side effects are better tolerated by patients (Nemeroff, 1994). The side effects of SSRIs may include sexual inhibition, weight gain, nausea, and headaches. The effectiveness of SSRIs in the treatment of depression has been supported by a number of studies. For example, the results of the recent review of 315 double-blind, randomized placebo-controlled trials of SSRIs in treating depression indicated that SSRIs were significantly more efficacious than placebo (Williams et al., 2000). Overall, 51% of patients experienced at least 50% improvement in depressive symptoms compared to 32% of patients who received placebo. In addition, results of this review indicated that SSRIs had the same effectiveness as TCAs and MAO-Is in reducing symptoms of depression. Fifty four percent of patients who received an SSRI and 54% of those who received a TCA or MAO-I experienced at least 50% improvement in depressive symptoms.

In an attempt to investigate the long-term efficacy of pharmacological treatments of depression, Geddes et al. (2003) conducted a review of 31 randomized controlled trials of antidepressants. All trials investigated the effectiveness of continuing antidepressant therapy into various maintenance therapy periods after the remission of the major depressive episode. The maintenance periods in the studies investigated ranged from 6 to 36 months. Results indicated that, overall, the rate of relapse for patients who continued to take antidepressant medication for 6 to 36 months after achieving remission of the acute depressive episode was significantly lower (18%) compared to patients taking

placebo (41%). The treatment effect was similar across different classes of antidepressants.

In summary, double-blind, randomized controlled studies showed several types of pharmacological agents to be effective in the treatment of major depressive disorder. TCAs, MAO-Is, and SSRIs have been shown to be superior to placebo in reducing depressive symptoms in both short-term and long-term trials. Moreover, the rates of improvement have been shown to be similar for patients treated with different classes of antidepressants. Despite similar effectiveness, TCAs and MAO-Is are no longer the treatment of choice because of their toxicity and adverse effects. On the other hand, the better tolerability and lower side effect profile of SSRIs make them a first-line pharmacological treatment for depression.

Combined Psychological and Pharmacological Treatment of Depression

Research on the effectiveness of combined psychological and pharmacological treatment for depression has produced contradictory findings. One of the first studies to evaluate the concurrent use of pharmacotherapy and psychotherapy was conducted by Blackburn, Bishop, Glen, Whalley, and Christie (1981). In this study, 64 patients diagnosed with major depressive disorder were randomly assigned to either cognitive therapy, TCA antidepressant medication (amitriptyline or clomipramine), or a combination of cognitive therapy and medication. The results of this study indicated that the combination of cognitive therapy and medication was superior to either treatment alone. Specifically, results indicated that 79% of the combination group showed a significant improvement (as measured by the BDI) at the end of treatment, compared

with 59 % of the medication group and 48% of the cognitive therapy group. The severity of depression did not have an impact on the outcome for either treatment.

A 2-year follow-up of the patients from Blackburn et al. (1981) study revealed a different pattern of results: 78% of patients in the medication group relapsed, compared to 23% in the CT group and 21% patients in the combined treatment group. The difference between the medication group and the two CT groups was significant, suggesting a prophylactic effect of CT, either alone or in combination with medication (Blackburn, Eunson, & Bishop, 1986). The results of these studies suggest that, although an addition of medication appears to enhance the effect of cognitive therapy in the short-term treatment, it does not have a significant additive effect on the maintenance of treatment gains.

Another study provided evidence suggesting the superiority of combined IPT and pharmacotherapy to CBT or IPT alone. Thase et al. (1997) performed a meta-analysis of pooled data of 595 depressed patients from 6 studies investigating the effectiveness of CBT, IPT, or IPT in combination with medication. In this study, the superiority of IPT combined with medication was particularly evident in the treatment of more severe, recurrent depression. Specifically, in less severely ill patients, no significant differences were seen between single treatments (37% of improved patients) and combined treatments (48% of improved patients). For more severely depressed patients, however, remission rates were significantly higher with combined treatments (43%) than with psychotherapy alone (25%). These results suggest that for more severely depressed patients, combined IPT psychotherapy and medication can enhance the treatment effectiveness compared to either IPT or CBT psychotherapy alone.

In attempt to examine long-term effectiveness of combined treatment, Reinolds et al. (1999) investigated the efficacy of combined treatment with interpersonal therapy and nortriptyline in maintenance of treatment gains in depression. In this study, 107 elderly patients who recovered from a major depressive episode were randomly assigned to four maintenance treatment conditions: IPT and nortriptyline, nortriptyline and medication clinic, placebo and IPT, and placebo and medication clinic. Results of this study indicated that, at the end of 3-year maintenance treatment, all three active treatments were superior to placebo plus medication clinic condition. With regard to the effectiveness of three active treatment conditions in preventing recurrence of depression, combination treatment was superior to IPT alone but not to nortriptyline. The relapse rates were 64% for the IPT group, and 43% for nortriptyline group, compared to 20% for combination group. These results suggest an advantage of combined psychotherapy and pharmacotherapy over psychotherapy alone in maintenance of treatment gains in elderly patients recovered from depression.

Despite these promising results, conclusions from other studies regarding the advantages of combined therapy over either therapy alone are less definitive. For example, in an early trial, Murphy, Simons, Wetzel, & Lustman (1984) randomly assigned 87 patients with major depressive disorder to 12 weeks of either cognitive therapy (CT), nortriptyline, combination of these treatments, or CT and placebo. Results of this study indicated that at the end of treatment, a significant improvement of depressive symptoms (as measured by BDI) was evidenced in 78% of combined CT and medication patients, 65% of CT and placebo patients, 56% of nortriptyline patients, and 53% of CT patients. Although the number of improved patients was highest in the

combined group, the difference between combined group and other groups did not approach significance. These results suggest that the combination of treatments did not lead to additive effects over either psychotherapy or medication.

Similarly, Hollon et al. (1992) found no advantage of combined psychotherapy and pharmacotherapy over single treatment. This study investigated the differential effectiveness of combined CBT and imipramine treatment compared to CBT and medication alone. These researchers found no significant differences in effectiveness between imipramine, CBT, and their combination in reducing symptoms of depression. Moreover, patients with different levels of depression severity responded equally to all three treatments. A 2-year follow up of the patients of Hollon et al. study indicated that the difference in relapse rates in combined therapy group and CBT group was not significant (15% and 21% of relapsed patients, respectively). Patients treated with imipramine alone differed significantly from both CBT and combined groups and had a 50% rate of relapse (Evans et al., 1992). These results suggest that adding pharmacotherapy to psychotherapy does not have an advantage over psychotherapy alone.

In summary, contradictory research evidence on effectiveness of combined psychological and pharmacological treatment for depression makes it difficult to arrive at definite conclusions regarding the advantage of combining psychotherapy and pharmacotherapy in the treatment of depression. It appears that patients with less severe depression may be treated successfully with either interpersonal therapy or cognitive-behavioral psychotherapy alone. With regard to patients with more severe levels of depression, it seems that the addition of a TCA may enhance the treatment effectiveness

when these patients are treated with interpersonal therapy. In contrast, when these patients are treated with cognitive-behavioral therapy, it appears that the addition of a TCA to the cognitive-behavioral treatment does not have an advantage over CBT alone.

Summary

Based on the literature review, best practice in the treatment of major depressive disorder would include at least 16 weeks of structured psychotherapy, such as cognitive-behavioral therapy or interpersonal therapy and pharmacotherapy. CBT or IPT alone seem to be sufficient when treating clients with mild to moderate degree of depression severity. These treatments have been shown to be as effective as medication in the treatment of patients with less severe levels of depression.

With regard to pharmacotherapy, SSRIs appear to be the best pharmacological treatment for depression. The effectiveness of these medications is comparable to the effectiveness of older medications such as TCAs and MAO-Is, and their better tolerability and lower side effect profile make them a treatment of choice. In addition, similarly to TCAs and MAO-Is, the effectiveness of SSRIs have been shown in both short-term and long-term trials. Treatment with TCAs and MAO-Is is warranted when a client does not respond to the treatment with SSRIs.

Combined psychotherapy and pharmacotherapy appears to be indicated in the treatment of more severely depressed clients, especially when using interpersonal therapy. An addition of a TCA to the cognitive-behavioral treatment warrants caution, given the absence of compelling evidence of superiority of combined CBT and TCA pharmacotherapy over CBT alone.

Alcohol Dependence

Alcohol dependence is characterized by a maladaptive pattern of alcohol use leading to clinically significant impairment or distress as indicated by the presence of three or more alcohol use symptoms occurring at any time in the same 12-months period. The first two symptoms of alcohol dependence specified in the DSM-IV-TR criteria are tolerance and withdrawal. Tolerance is defined as a need for markedly increased amounts of alcohol to achieve intoxication or the desired effect, or markedly diminished effect with continued use of the same amount of alcohol. Alcohol withdrawal is defined as the presence of two or more of the following symptoms after cessation of, or reduction in, heavy and prolonged alcohol use: autonomic hyperactivity, increased hand tremor, insomnia, nausea or vomiting, transient hallucinations, psychomotor agitation, anxiety, grand mal seizures). Other symptoms of substance dependence may include: drinking larger amounts or over longer periods of time than was intended; a persistent desire or unsuccessful efforts to cut down or control drinking; a great deal of time spent in activities necessary to obtain alcohol, drink, or recover from its effects; important activities are given up because of alcohol use; and drinking is continued despite knowledge of having persistent psychological or physical problems caused by alcohol use (American Psychiatric Association, 2000).

In the following section, the literature on empirically supported psychosocial and pharmacological treatments for alcohol dependence is reviewed and the summary of the literature is provided.

Psychosocial Treatments for Alcohol Dependence

Several reviews of alcohol treatments have identified effective approaches for the treatment of alcohol dependence and abuse. For example, Miller and Hester (1986) reviewed controlled outcome research related to the treatment of alcohol dependence. The results of their review identified several effective treatment approaches. These approaches were aversion therapies, skills training, community reinforcement approaches, and marital and family therapy. In another review of treatments for alcohol dependence and abuse, Holder, Longabaugh, Miller, and Rubonis (1991) identified effective treatments taking into account their cost to implement. In this review, the approaches with good evidence of effectiveness and relatively low cost were brief interventions, skills training, marital behavioral therapy, and community reinforcement. In the most recent review (Miller et al., 1995), the treatment outcome literature was summarized while taking into account the methodological quality of the studies, which makes the results of the review more valid. Based on the results of this review, the treatment approaches that have the strongest evidence supporting their effectiveness include brief interventions, motivational enhancement strategies, and broad spectrum skill training, including coping and social skills training and community reinforcement. In the following section, the literature on brief interventions, motivational enhancement strategies, and broad-spectrum skill training are reviewed and a summary of the literature regarding their efficacy is provided.

Brief interventions.

Among approaches that have been investigated as treatments for alcohol problems, brief interventions have been one of the most thoroughly investigated (Miller et al., 1995). Brief interventions vary in length from a few minutes to three sessions.

They usually have several common components, including assessment of drinking behavior and providing feedback about effects of drinking on client's life, encouraging client's responsibility for change, offering advice to reduce or stop drinking, providing a menu of alternative strategies for reducing drinking, using an empathic approach and reinforcing client's self-efficacy (Bien, Miller, & Tonigan, 1993; Brown, 2001). The primary targets for brief interventions are individuals who drink above suggested guidelines for safe drinking, but are not alcohol dependent and individuals with low levels of alcohol dependence (Brown, 2001).

Several studies have compared brief interventions to no treatment. In the first clinical trial of this kind, 585 problem drinkers with high scores on liver enzyme (GGT) indicative of heavy drinking were randomly assigned to either a brief intervention or control condition. The brief intervention group was counseled to moderate their drinking habits by a physician. After their initial appointment, they met with a nurse every month and a physician every four months for four years. Individuals in the control condition received no treatment and were followed-up every other year. Results of this study indicated that over 6 years of follow-up, the GGT values in both groups had significantly decreased, with no difference evident between the groups. However, significant differences were observed between the two groups with regard to sick absenteeism, hospitalization, and mortality. The individuals in the brief intervention group had 80% fewer sick days, 60% less days in the hospital, and 50% fewer deaths than individuals in the control condition. These results suggested that a brief treatment program might be effective in preventing medico-social consequences of heavy drinking (Kristenson, Ohlin, Hulte-Nosslin, Trell, & Hood, 1983).

Another attempt to compare brief interventions to no treatment was carried out by Wallace, Cutler, and Haines (1988). In this study, brief intervention was defined by advice to reduce drinking given by a general medical practitioner. Participants were 709 heavy-drinking patients who were randomly assigned to either advice group or control group. The results of this study indicated that, at 1-year follow-up, 46% of patients in the advice group significantly reduced their alcohol consumption, compared to 27% of patients in the control group (Wallace et al., 1988, cited from Heather, 1995). These results suggest that even brief intervention such as advice to reduce alcohol consumption may be effective in reducing drinking behavior.

Several studies investigated the comparative effectiveness of brief interventions and more extensive treatments. For example, a pioneering trial in this area was Orford and Edwards's (1977) study of 100 male married problem drinkers. After a comprehensive three-hour assessment of alcohol consumption patterns and their effect on subjects' life, the participants were randomly assigned either to extensive treatment or to a single session of advice. The extensive treatment lasted several months and consisted of a mixture of outpatient and inpatient, psychiatric and social work care. An advice session consisted of a 60-minute counseling session with a psychiatrist. The results at 1 and 2 year follow-up indicated that patients in both groups significantly improved on most outcome measures, including drinking behavior, alcohol-related problems, and social adjustment. No significant differences between treatments were found on any of the outcome measures (Orford & Edwards, 1977, cited from Heather, 2001). This lack of differences in outcomes was repeated in a follow-up of this cohort 12 years after entry to treatment, suggesting that many of alcohol dependent patients do not need prolonged and

relatively expensive treatment programs to show marked and sustained improvements in drinking behavior. (Edwards, Duckitt, Oppenheimer, Sheehan, & Taylor, 1983).

Orford and Edwards's (1977) study was criticized on several grounds. Some of the criticisms were that the findings of this study were not likely to generalize to female populations and that married and socially stable drinkers without significant psychiatric disturbance in this study had a generally good prognosis regardless of what treatment was provided. Thus, they were more likely to benefit from the brief intervention than unmarried or less socially stable individuals who are often seen in treatment (Heather, 2001).

In an attempt to overcome methodological limitations of Orford and Edwards's (1977) study, Chick, Ritson, Connaughton, Stewart, and Chick (1988) attempted to replicate their findings using a modified design. In this study, 152 male and female, married and unmarried patients at an alcohol clinic were randomly allocated to extended inpatient or outpatient treatment or to one of two forms of brief interventions. The first brief treatment group received "simple advice," consisting of no more than 5 minutes standardized advice to stop drinking. The second group received 30-60 minutes of "amplified advice" in which a psychiatrist tried to increase the client's motivation to make a radical change in drinking behavior. Results of this study indicated that, at 2-year follow-up, there was no difference between extended treatment and advice groups in abstinence rates, employment, or marital status. For example, the number of abstinent days was increased in 73% of the extended treatment group and 67% of the advice only group; 75% of the extended treatment and 72% of the advice only group remained employed; and 69% of the extended treatment and 68% of the advice only group were

still married. In addition, no differences were observed between the simple and amplified advice groups. However, the extended treatment group was experiencing less harm from their drinking during the follow-up period. The results of this study suggest that abstinence or problem-free drinking that is achieved in the standard treatment program can be achieved with much briefer and less expensive treatment. However, the question still exists regarding the long-term outcome of such interventions, as the results of this study failed to support the long term benefit of brief interventions with regard to harm experienced from drinking.

Motivational enhancement.

Motivational enhancement strategies seek to initiate a client's intrinsic motivation to change. Central to this approach is understanding of the client's ambivalence about change and using encouragement and empathy to discover what makes it worthwhile to change (Brown, 2001).

Interventions guided by motivational enhancement strategies have often followed the format of a "Drinker's Check-Up" (DCU; Miller, Sovereign, & Krege, 1988). This intervention consists of two stages. First, drinking behavior and its effect on a drinker's physical health and family life are assessed. Then, the results of this assessment are presented to the client in the feedback session where the client is encouraged to change his/her drinking behavior through the use of motivational interviewing strategies (Miller & Rollnick, 1991).

Several studies have been conducted to evaluate motivational enhancement approaches. For example, Bien (as cited in Bien et al., 1993), examined how the addition

of a motivational intervention to a standard inpatient treatment for alcohol dependence influences the outcomes of treatment. In this study, 32 participants were randomly assigned to either a DCU or to no intervention prior to entering outpatient treatment. Results at 3-months follow-up indicated that patients receiving the motivational interview reported significantly less drinking and more abstinent days compared to those who received no additional intervention. These results suggest that motivational induction may enhance the results of traditional treatment.

Using a similar design, Brown & Miller (1993) randomly assigned 28 clients admitted to a residential substance abuse program to receive or not receive a DCU prior to entering treatment. Results of this study indicated that clients who received motivational induction were more fully involved in the treatment (by therapist's blind ratings), and they had significantly lower levels of alcohol consumption 3 months after discharge.

Additional evidence regarding the effectiveness of motivational enhancement strategies comes from the results of Project MATCH, the largest study of the treatments for alcohol problems ever carried out (Project MATCH Research Group, 1997a, 1997b, 1998). The goal of the study was to match patient characteristics with several different psychotherapeutic approaches in order to obtain optimal patient-to-treatment matching. A total of 1726 clients were divided into two parallel but independent clinical trials. One trial was conducted with alcohol dependent patients receiving outpatient therapy. The other trial was conducted with alcohol dependent patients receiving aftercare therapy following inpatient or day hospital treatment. Clients within each arm were randomly assigned to one of three 12-week, manual-guided interventions: Twelve-step Facilitation

Therapy (TSF), an approach following the principles of Alcoholics Anonymous; Cognitive-behavioral Coping Skills Therapy (CBT), with emphasis on overcoming social and coping skills deficits; and Motivational Enhancement Therapy (MET) which employed motivational strategies to mobilize the individual's own resources. CBT and TSF consisted of 12 weekly sessions, while MET consisted of four sessions spread over 12 weeks. The results indicated that all three treatments resulted in significant reductions in the number of abstinent days and in the number of drinks per drinking day. However, there were no statistically significant differences among treatments. These results were consistent across the entire range of clients in the sample and applied not only to clients with fewer symptoms of dependency or of lesser problem severity. These findings suggest that, although delivered in a fewer number of sessions, motivational enhancement is comparable in effectiveness to two other manualized and more intensive treatments, twelve-step facilitation therapy and cognitive-behavioral therapy.

Broad spectrum skills training.

“Broad spectrum” treatment approaches place a primary focus not on alcohol consumption per se but on life problem areas often functionally related to drinking and relapse. Among skill training treatments for alcohol problems, coping and social skills training and community reinforcement approaches have the strongest empirical support (Miller et al., 1995).

With regard to the coping and social skills training, the underlying assumption of this treatment approach is that drinking problems arise because the individual lacks specific coping skills for sober living, including a lack of skills to regulate mood states

and to cope with interpersonal situations, including work, parenting, or marital relationships (Monti, Rohsenow, Colby, & Abrams, 1995). Coping and social skills training includes interpersonal skills training for building better relationships, cognitive-emotional coping for mood regulation, coping skills for dealing with stressful life events, and coping in the context of substance use cues.

Numerous studies have investigated the effectiveness of skills training in the treatment of alcohol dependence. For example, Chaney O'Leary, & Marlatt (1978) assigned clients receiving standard inpatient treatment to one of three groups: assertiveness training, emphasizing the analysis of problematic situations and practicing assertive responses in these situations; discussion control, where patients were encouraged to express and discuss personal feelings about these same situations without practicing new responses; and a no additional treatment control group. The results at one-year follow-up indicated that, compared to both control groups, the patients in the assertiveness training group had six times less drinking days. In addition, they consumed four times less alcohol than controls when they did drink, and the drinking period was eight times shorter. The differences between the assertiveness training group and both control groups were significant. These findings suggest that social skill training was superior to traditional inpatient treatment in the treatment of alcohol dependent patients.

Oei and Jackson (1980, 1982) attempted to further explore the effectiveness of skills training in the treatment of alcohol dependence in a series of studies. In the first study, 32 alcoholics were randomly assigned to 12 sessions of either social skills training or traditional supportive therapy treatment, with each condition delivered in both individual and group formats (Oei & Jackson, 1980). Results indicated that individuals in

both group and individual social skills training experienced significantly greater reductions in alcohol consumption and greater improvements in social functioning throughout a 12 months follow-up period in comparison to both individual and group traditional supportive therapy. Additionally, patients in group skills training demonstrated improvement in social skills earlier in the course of treatment than did patients in individual training, with equivalent reductions in drinking. These results suggest that social skills training may be more effective than traditional supportive psychotherapy. This may be particularly true when social skills training is provided in a group format

In the second study, Oei and Jackson (1982) expanded the findings from their first study. Participants in this study were 32 hospitalized alcoholics with mild to severe assertiveness deficits. They were randomly assigned to one of four treatment combinations: social skills training using role playing, videotaping, feedback, and homework assignments; cognitive restructuring encouraging positive self-talk and attempting to modify irrational beliefs; both of those treatments combined; and traditional supportive therapy. The treatment consisted of 12 group sessions conducted over a 3-week period. Results indicated that, at 12-months follow-up, clients from the traditional supportive therapy group had significantly poorer social and assertion skills and evidenced significantly less improvement on alcohol consumption measures than clients in the other three groups. When administered alone, social skills training led to greater immediate improvements, whereas cognitive restructuring alone and in combination with social skills training was associated with better maintenance of treatment gains at later 3, 6 and 12 months follow-up intervals. The results of this study suggest that social skills training, cognitive restructuring, and their combination all appear to provide effective

treatments for alcohol dependent clients with assertiveness deficits. However, cognitive restructuring in combination with social skills training results in the greatest long-term benefit.

Another skill training approach that has been shown to be effective in the treatment of alcohol dependence is the Community Reinforcement Approach (CRA, Hunt & Azrin, 1973). CRA attempts to restructure clients' environments so that the rewards associated with alcohol use are reduced and the costs of excessive drinking are increased. The treatment consists of several components, including communication training, learning how to find and keep a job, helping the client develop satisfying social and recreational activities that compete with alcohol use and support sobriety, relationship counseling, and instruction in relapse prevention strategies. CRA is appropriate for individuals who are striving for either lifelong abstinence or moderation (Smith & Meyers, 1995).

The effectiveness of CRA has been demonstrated in several controlled trials. For example, Hunt & Azrin (1973) conducted a matched control study with 16 patients undergoing standard inpatient treatment for alcohol dependence. For participation in the study, eight patients were selected arbitrarily, and then matched individually with eight others on the basis of employment history, family stability, previous drinking history, age, and education. By a coin flip, one member of each pair was assigned to receive CRA counseling in addition to their standard treatment program, whereas the other member received no additional intervention. Results indicated that, throughout a 6-months follow-up, subjects who received CRA treatment were drinking on 14% of days, compared to 79% of drinking days for control patients. Unemployment days were 12 times higher in

the control group, and controls spent 15 times more days in institutions. In addition, all marriages in the CRA group remained intact, whereas 25% of marriages ended in separation or divorce for the control group. These results suggest that CRA is superior to a standard treatment approach to the treatment of alcohol dependence.

In another matched control study of 18 inpatients, Azrin (1976) used an improved version of CRA. This version included administration of disulfiram, a medication designed to help prevent relapse after abstinence has been achieved; a behavioral program aimed to increase disulfiram compliance; daily self-monitoring of mood as an early warning system for relapse; and a “buddy” system as a source of continued social support. This package was compared to standard hospital treatment. Results indicated that, during a 6 months follow-up, the percent of days spent drinking averaged 2% for the CRA group and 55% for control group. In addition, 20% of CRA group was unemployed compared to 56% of the control group. Significant differences also were found for the number of days spent away from one’s family and for the number of days spent institutionalized. These results were stable over a 2-year follow-up period, with CRA clients showing more than 90% abstinent days at 12, 18, and 24 months. These results suggest that the CRA has a long-term protective benefit.

In summary, research has documented the efficacy of several approaches to the treatment of alcohol problems. Brief interventions such as advice to reduce alcohol consumption have been shown to be effective for individuals abusing alcohol and for those with low levels of alcohol dependence. For these populations, brief interventions have been shown to be more effective than no treatment and to have the same efficacy as more extensive treatments.

Additionally, motivational enhancement strategies, such as Drinker's Check –Up and motivational interviewing have been shown to enhance the results of standard inpatient and outpatient alcohol treatment and to be comparable in effectiveness to more intensive treatments such as twelve-step facilitation therapy and cognitive-behavioral therapy.

Finally, broad spectrum skill training, such as social and coping skills training and community reinforcement approach has been shown to be superior to traditional inpatient treatment.

Pharmacological Treatments for Alcohol Dependence

Pharmacological treatments for alcohol dependence are not intended to be a primary treatment, but are to be used as part of a multimodal treatment program to help patients avoid drinking while they are restructuring their lives (Fuller, 1995). Two classes of pharmacological agents have been shown to be effective adjuncts in the treatment of alcohol dependence. These are opioid antagonists and acamprosate.

Among the opioid antagonists, naltrexone (i.e., Nalorex) has been shown to be efficacious in preventing relapse in alcohol dependent patients. Naltrexone is thought to suppress the positive, reinforcing effects of ethanol by blocking the transmission of the brain's own opiate transmitters that are involved in producing the pleasurable effect associated with alcohol consumption (Chick, 2001). Results from placebo-controlled trials have consistently revealed that the only one adverse effect of this medication is nausea (Chick, 2001).

Several studies have examined the effectiveness of naltrexone as an adjunct in the treatment of alcohol dependence. For example, Volpicelli, Alterman, Hayashida, and

O'Brien (1992) conducted a double-blind, placebo-controlled study of naltrexone in 70 male alcohol dependent inpatients undergoing a comprehensive psychosocial treatment following alcohol detoxification. In addition to the standard treatment, study participants were randomly assigned to treatment with either naltrexone or placebo. Results indicated that, at the end of 12-weeks treatment, significantly fewer of the naltrexone-treated patients (23%) relapsed, compared to patients in the placebo group (54%). In addition, those individuals in the naltrexone group reported significantly less craving than the individuals in the placebo group. These results suggest that naltrexone appears to be an effective adjunct to the treatment of alcohol dependence.

Another pharmacological agent that has been shown effective in alcohol relapse prevention is acamprosate (i.e., Campral EC). Acamprosate is thought to reduce glutamate transmission in the brain. The excess of glutamate in the brain's reward system is believed to lead to sub-acute withdrawal symptoms that trigger drinking in the patient who is withdrawn from alcohol. Acamprosate alters the sub-acute withdrawal state, thereby reducing drinking (Chick, 2001). With regard to side effects of acamprosate, mild diarrhea and abdominal discomfort have been reported (Chick, 2001).

The effectiveness of acamprosate compared to a placebo control group has been well documented (Chick, 2001). For example, the first randomized controlled study of acamprosate in recently detoxified patients found that 33% of acamprosate-treated patients relapsed during the 3-month outpatient treatment period, compared to 66% of placebo patients (Lhuintre et al., 1985). In addition, Chick (2001) cited the results of other large randomized controlled studies (e.g., Whithworth et al., 1996; Sass, Soyka, Mann, & Ziegelgansberger, 1996; Poldrugo, 1997) that have shown acamprosate

efficacy. In these studies, the proportion of patients achieving complete abstinence with acamprosate typically was approximately two times greater than proportions of patients who achieved complete abstinence with placebo. These studies also found that the cumulative total number of days abstinent was significantly greater in the acamprosate-treated patients.

In summary, naltrexone and acamprosate have been shown to be effective adjuncts to the treatment of alcohol dependence. These medications have been shown to be superior to a placebo in preventing relapse in patients diagnosed with alcohol dependence. Naltrexone and acamprosate do not result in potentially harmful effects if the patient ingests alcohol. In addition, neither drug has serious side effects.

Summary

Based on the literature review, there does not seem to be any one-treatment approach adequate to the task of treating all individuals with alcohol problems. Best practice in the treatment of alcohol dependence would be a multimodal therapeutic approach comprising psychosocial and pharmacological treatments and tailored to the needs and characteristics of each individual client. Psychosocial treatments should include brief interventions, motivational enhancement strategies, and broad spectrum skills training. Specific types of skills that might be provided include social and coping skills training and community reinforcement. The efficacy of these treatment approaches has been established in comparison to the standard inpatient and outpatient treatment. Pharmacological treatments such as naltrexone and acamprosate can be used in conjunction with psychosocial approaches to help a client to establish a change in

lifestyle. Results of research to date suggest that these medications are effective in preventing relapse in alcohol dependence in comparison to placebo.

In closing, it is important to note that most of the alcohol dependence treatment studies investigated the effectiveness of treatments in comparison to placebos or standard treatment. Virtually no studies systematically examined the comparative effectiveness of various treatment approaches. Therefore, the conclusions regarding the effectiveness of these treatments should be considered tentative until more definitive conclusions can be gleaned from the literature.

Comorbid Panic Disorder and Major Depressive Disorder

Research evidence suggests that major depression is frequently and systematically associated with panic disorder (Grunhaus, 1994). According to some estimates, one-third to one-half of patients presenting with one disorder have some symptoms of the other (Johnson & Lydiard, 1998). The two conditions may occur together during the index episode or they may appear at different times. For example, depression appears to be secondary to panic disorder or agoraphobia with panic attacks in approximately 70% of patients with comorbid panic disorder and major depressive disorder, and panic disorder is secondary to major depression in the remaining 30% of patients (Grunhaus, 1988).

Growing evidence suggests that patients with comorbid panic disorder and major depression may have a more severe illness and may be at greater risk for poor treatment outcomes. For example, Coryell et al. (1988) analyzed the clinical symptoms and the course of illness in 91 patients diagnosed with depression with panic attacks and panic disorder with major depressive disorder. These data were compared to the data of 417 patients with only major depression. The treatment in this study was an antidepressant

medication. All patients were assessed with Longitudinal Interval Follow-up Evaluation (LIFE; Keller, Lavori, & Friedman (1987) at 6, 12, 18, and 24 months after the beginning of treatment. In addition, treatment was monitored through weekly reviews of medical records. Results indicated that depressed patients with panic attacks had significantly more severe depressive symptoms at intake and at 24-months follow-up than patients with depression alone. Moreover, significantly fewer depressed patients with panic attacks (75.3%) and panic disorder patients with secondary major depression (71.4%) recovered over the follow-up period compared to those with depression alone (86.1%). In addition, 66.7% of individuals with panic disorder and secondary major depression experienced work impairment compared to 28.7% of patients in the major depression alone group and 28% in the major depression with secondary panic attacks group.

Grunhaus, Pande, Brown, and Greden (1994) provided additional evidence suggesting that comorbid conditions are more severe than pure clinical conditions. Participants in this study were 119 patients with major depression alone and 57 patients with major depression and comorbid panic disorder. Participants were assessed with the Schedule for Affective Disorders and Schizophrenia (SADS; Endicott & Spitzer, 1978). In addition, all available past medical records were reviewed. Results indicated that, compared to patients in depression only group, patients with comorbid panic disorder and depression experienced more severe symptoms during the current episode of illness, reported symptoms earlier in life, sought treatment at younger age, and required hospitalization earlier and more frequently. In addition, patients in the comorbid group experienced more feelings of inadequacy, symptoms of somatic anxiety, and phobic symptoms than patients in depression only group.

The results of these studies suggest that comorbid panic disorder and major depressive disorder is a more complicated clinical condition compared to each disorder in its “pure” form. Therefore, the treatment of comorbid disorders may require a different treatment strategy. In the following section, the literature examining psychological and pharmacological treatment for comorbid panic disorder and major depressive disorder is reviewed and a summary of the literature is provided.

Psychological Treatment of Comorbid Panic Disorder and Major Depressive Disorder

At the present time, there are no psychological treatments designed specifically for the treatment for comorbid panic disorder and major depressive disorder. In addition, only few studies have examined the treatment outcomes in patients with comorbid disorders. For example, in a preliminary study, Laberge, Gauthier, Cote, Plamondon, and Cormier (1993) attempted to determine whether or not patients with comorbid panic and depression could be treated as successfully as patients with panic disorder only. Participants were eight subjects with comorbid panic disorder and major depression and seven subjects with only panic disorder. The treatment was a two multiple baseline A-A1-A-B across subjects design. In baseline A, subjects monitored their panic attacks daily. During the A1 phase, a program of information on panic attacks presented as psychotherapy was instituted. This was followed by a second baseline phase (A). Finally, CBT for the treatment of panic disorder (B) was introduced. Treatment lasted 15 sessions, and subjects were assessed 1, 3, and 6 months after the end of treatment. The results of the study indicated that at the end of 15-weeks CBT treatment, all patients in both comorbid and panic disorder only groups were panic free, and 87% of them were still panic free at the 6-month follow-up. Patients who were not panic free at the 6-

months follow-up were equally distributed across both comorbid and panic disorder only groups. In addition, patients in the comorbid group evidenced a significant reduction in depressive symptoms at the end of the treatment. These results suggest that, for patients with comorbid panic disorder and major depression, CBT for panic disorder may effectively reduce both panic and depressive symptoms, even though it does not specifically focus on the treatment of depression.

In another study, Brown, Antony, and Barlow (1995) explored the comparative effectiveness of CBT for panic in individuals with and without comorbid psychological disorders. Participants were 126 patients diagnosed with panic disorder and 64 patients who had at least one additional diagnosis. Of those 64 patients, 16 had a comorbid MDD or dysthymia diagnosis. The treatment consisted of 11 sessions of CBT for panic disorder spread over 12 weeks. Effectiveness of treatment was evaluated by looking at the frequency of panic attacks and the proportion of patients who were defined as functioning at a high end-state. High end-state functioning was defined as (a) an Anxiety Disorders Interview Schedule-Revised (ADIS-R; Di Nardo & Barlow, 1988) clinical severity rating less than 3, and (b) a report of no panic attacks experienced within the past month.

Results indicated that the presence of comorbid depression was associated with differential outcomes at the end of treatment. Specifically, significantly fewer (11.1%) patients with comorbid panic disorder and depression met high end-state functioning criteria at post-treatment than those without comorbid depression (42.9%). In addition, when panic free status was considered in a separate analysis, significantly fewer (22.2%) patients with comorbid depression were panic free, compared to 65.7% of patients with panic disorder only. However, at 3-months follow-up, the differences between these

groups were no longer significant in that 33.3% of comorbid patients and 43.5% of panic disorder only patients met high end-state functioning criteria, and 55.6% of patients with comorbid panic and depression and 68.1% of patients with panic disorder only were panic free. With regard to the depressive symptoms in the comorbid group, although a decline in depressive symptoms was evident at the end of treatment and at 3-months follow-up, the magnitude of reduction did not reach significance. Moreover, when comorbid patients were assessed at the 24-months follow-up, their depressive symptoms returned to the pretreatment level. These results suggest that the presence of comorbid depression does not significantly affect the outcome of CBT for panic disorder. However, contrary to the results from Laberge et al. (1993) study, treatment of panic in patients with comorbid disorders did not result in a reduction in depressive symptoms.

Another attempt to examine whether a comorbid major depressive disorder affects the outcome of CBT for panic disorder was carried out by McLean, Woody, Taylor, and Koch (1998). Ninety patients participated in the study. Of these, 53 were diagnosed with panic disorder only and 37 were diagnosed with both panic disorder and major depressive disorder. The treatment consisted of ten 60-90-minute sessions of CBT for panic disorder. A separate group of patients diagnosed with major depressive disorder only was placed on a minimal therapist contact waiting list. The results indicated that, in regard to rates of improvement, there were no significant differences between the two groups at the end of treatment. Fifty two percent of comorbid group and 61% of panic disorder only group achieved high end-state functioning, as defined in the Brown et al. (1995) study. With regard to depressive symptoms in the comorbid group, no significant improvement was evident when compared to a group of patients with major depression who were on

the waitlist. These results again suggest that comorbid depressive disorders do not interfere with CBT for panic disorder. In addition, the results again suggest that CBT for panic disorder does not result in the reduction of depressive symptoms in patients with comorbid conditions.

While the studies described previously examined the impact of the treatment for panic disorder on major depression, Frank et al. (2000) investigated the impact of comorbid panic symptoms on psychological treatment of depression. Participants in the study were 61 female patients diagnosed with recurrent major depressive disorder. For the purpose of the study, a panic-agoraphobic spectrum symptom threshold defined as a score of 35 and above on Panic-Agoraphobic Spectrum Self-Report (PAS-SR; Cassano et al., 1997), was developed to differentiate between clinically significant and non-significant panic symptoms. Of 61 patients, 23 were categorized as scoring high (e.g., 35 and above) on the PAS-SR, and 38 as scoring low (e.g., 34 and lower). Patients were treated with interpersonal therapy (IPT) for 12-24 weeks until remission was achieved or determination of treatment non-response was made. For those patients who did not respond to IPT treatment alone, an SSRI fluoxetine was added to the treatment regimen. The results indicated that significantly fewer patients with high PAS-SR scores (43.5%) responded to IPT alone compared to patients with low PAS-SR scores (68.4%). In addition, when paroxetine was added for those patients who did not respond to IPT alone, patients with high PAS-SR scores took longer (18.1 vs. 10.3 weeks) to respond to this sequential treatment. These results suggest that presence of panic-agoraphobic spectrum symptoms appears to negatively affect the outcome of IPT for depression.

To summarize, no specific treatments for comorbid panic disorder and major depressive disorder have been developed. Instead, research to date has focused on the impact that the comorbid disorder may have on the treatment of the other disorder. Preliminary evidence seems to suggest that when patients with panic disorder and comorbid major depressive disorder are treated with CBT for panic, depressive symptomatology does not negatively influence the outcome of panic disorder treatment. However, CBT for panic does not appear to result in significant improvement in depressive symptoms for patients with comorbid conditions.

In contrast, when patients with comorbid major depressive disorder and panic-agoraphobic symptoms are treated with interpersonal therapy for depression, the presence of panic symptoms seems to interfere with treatment of depression and to decrease the likelihood of successful outcome. However, this conclusion is based on only one study, and further research is needed before more definitive conclusions can be drawn.

Pharmacological Treatment of Comorbid Panic Disorder and Major Depressive Disorder

Pharmacological treatment of comorbid panic disorder and major depressive disorder is similar to that of either disorder in its uncomplicated form. It involves primarily monotherapy with antidepressant agents such as monoamine oxidase inhibitors (MAO-Is), tricyclic antidepressants (TCAs) and selective serotonin reuptake inhibitors (SSRIs) (Johnson & Lydiard, 1998). Although MAO-Is and TCAs have been proven to be effective in the treatment of panic disorder and major depressive disorder, they are not widely used because of their adverse side effects. As a result, they tend to be reserved for patients who fail to respond to, or tolerate, other antidepressants. At the present time,

SSRIs have become the most common first-line treatment for panic disorder with concurrent major depression, due to their documented efficacy in reducing the symptoms associated with both conditions and the fact that they typically result in patients experiencing less severe side-effects (Johnson & Lydiard, 1998).

With all classes of antidepressants, it may take several weeks before the antidepressants start to have an effect on panic and depressive symptoms. Therefore, an addition of a benzodiazepine may be helpful as an adjunct to antidepressant medications, as it provides immediate relief of panic attacks before antidepressant therapy starts to take an effect (Johnson & Lydiard, 1998). In addition, SSRIs and TCAs may be associated with an increase in anxiety and panic attacks early in the course of treatment, and the addition of a benzodiazepine can reduce any antidepressant-related anxiety symptoms during the first few weeks of therapy (Johnson & Lydiard, 1998).

Only a very few studies have been conducted to explore the impact of comorbidity on the effectiveness of pharmacological treatment for panic disorders and major depressive disorders. One such study was conducted by Albus and Scheibe (1993), who investigated the efficacy of tricyclic antidepressants imipramine and doxepine. Participants in the study were 32 patients with panic disorder only and 20 patients with panic disorder and comorbid major depression. Results indicated that, after 6 to 8 months of treatment, significantly more patients with only panic disorder recovered (75%) after 6 to 8 months of treatment, compared to those with comorbid panic disorder and major depressive disorder (35%). These results suggest that TCAs may be less effective in the treatment of panic disorder when a comorbid major depressive disorder is present.

Another study investigated the relative efficacy of a MAOI (moclobemide) and a SSRI (paroxetine) in the treatment of comorbid depression and anxiety disorders (Pini et al., 2003). In this study, 123 patients diagnosed with major depression and concurrent panic disorder, generalized anxiety disorder, or other anxiety disorder were randomly assigned to either moclobemide or paroxetine treatment lasting 4 months. Results indicated that both medications significantly reduced depressive and anxious symptoms for all patients. However, in the group of patients with depression and comorbid panic disorder, patients treated with paroxetine evidenced significantly greater improvement of depressive and panic symptoms compared to patients treated with moclobemide. In addition, patients treated with paroxetine evidenced improvement earlier in treatment than patients treated with moclobemide. These results suggest that paroxetine may be more effective than moclobemide in the treatment of comorbid depression and panic disorder.

In summary, the paucity of research data makes it difficult to draw any definite conclusions regarding the implications of comorbidity on pharmacological treatment of panic disorder and major depressive disorder. Available data suggest that the presence of comorbid depression appears to complicate treatment of panic disorder in patients treated with a tricyclic antidepressant. SSRIs and MAO-Is seem to be effective for both panic and depressive symptoms. However, MAO-Is appear to be less effective than SSRIs.

Summary

Growing evidence suggests that patients with comorbid panic disorder and major depressive disorder may have a more complicated nature and course of illness than patients with either disorder alone. It has been shown that such patients experience

greater severity of both panic and depressive symptoms, and may have poorer treatment outcomes.

In the absence of specific psychological treatments for comorbid disorders, research to date has focused on the impact that the comorbid disorder may have on the treatment of the other disorder. Although limited, available research data suggests that the presence of depression does not negatively affect the outcome of CBT for panic disorder. At the same time, CBT for panic disorder does not appear to reduce symptoms of depression. However, panic symptomatology appears to negatively affect the outcome of interpersonal therapy for depression.

With regard to pharmacological treatment of comorbid panic disorder and major depression, limited research data suggests that the presence of comorbid depression may complicate treatment of panic disorder in patients treated with a TCA. In addition, SSRIs and MAO-Is seem to be effective for both panic and depressive symptoms. However, SSRIs appear to be more effective than MAO-Is.

Comorbid Panic Disorder, Major Depressive Disorder, and Alcohol Dependence

Research has documented that anxiety and depressive disorders are the most common comorbid problems in people with alcohol abuse and dependence (Mueser & Kavanagh, 2001). According to the Epidemiologic Catchment Area (ECA) study, among people with an alcohol disorder, 19% have an anxiety disorder and 13% have an affective disorder. Conversely, the rates of comorbid alcohol abuse are 30% for people diagnosed with affective disorders and 17% for people with anxiety disorders (Reiger et al., 1990).

Despite the high comorbidity rates, little research has been conducted to address the implications of comorbidity on management of co-occurring anxiety disorders, major

depressive disorders, or alcohol use disorders. The majority of this research has focused on the treatment of comorbid depression and alcohol dependence. This reviewer was not able to identify any controlled outcome studies of psychological or pharmacological treatment for comorbid panic disorder and alcohol dependence. Similarly, no studies were identified that related to the treatment of clients where the presence of all three disorders was indicated.

In the following section, available research literature regarding psychological and pharmacological treatments for individuals diagnosed with a comorbid major depressive disorder and alcohol dependence is reviewed, and a summary of the literature is provided.

Psychological Treatment of Comorbid Major Depressive Disorder and Alcohol Dependence

Only a very few studies examining the psychological treatment of comorbid major depressive disorder and alcohol dependence have been conducted. One such study was conducted by Turner & Wehl (1984), who reviewed three studies of cognitive-behavioral therapy (CBT) for major depressive disorder in alcohol dependent inpatients. Each of these studies investigated the effectiveness of CBT for major depressive disorder in patients undergoing standard inpatient treatment for alcohol problems. In the first study, Turner, Wehl, Cannon, & Craig (as cited in Turner & Wehl, 1984) investigated the effectiveness of CBT in 30 alcohol dependent inpatients diagnosed with major depressive disorder. In addition to standard inpatient treatment for alcohol dependence, participants were randomly assigned to individual treatment with behavioral therapy (BT), cognitive therapy (CT), or a non-directive (control) therapy. All treatment conditions consisted of 6 sessions spread over a period of 5-6 weeks. Results indicated that behavioral therapy was

superior to cognitive and non-directive therapy in reducing depressive symptoms. In addition, a significantly greater number of patients achieved remission (defined as BDI score of 10 or less) in both BT and CT groups than in non-directive therapy group.

In the second study, Wehl, Turner, Cannon, & Craig (as cited in Turner & Wehl, 1984) compared the relative efficacy of 6 sessions of group versus individual CBT in a sample of 64 alcohol dependent inpatients diagnosed with major depressive disorder. The participants were randomly assigned to CBT for depression conducted in an individual or group format, or standard inpatient treatment. The last condition did not receive specific treatment for depression and served as a control group. Results indicated that individual CBT was superior to standard inpatient treatment in reducing depressive symptoms. In addition, a significantly greater proportion (75%) of patients in the individual CBT condition achieved remission, compared to standard inpatient treatment, where 38% of patients achieved remission. Although patients in group CBT condition evidenced greater improvement in depressive symptoms than controls, the difference was not significant.

In the third study, Turner, Wehl, and Moreno (as cited in Turner & Wehl, 1984) analyzed the results of data collected during a follow-up of the patients previously described in the study by Wehl and colleagues. During a 1-year follow-up, data regarding drinking status were gathered every month. Results indicated that patients treated with individual CBT for depression drank less frequently. In addition, they less frequently drank to the point of intoxication when they did drink.

Similarly to the studies reviewed above, Brown, Evans, Miller, Burgess, and Mueller (1997) examined whether the addition of CBT to standard alcohol treatment would result in reduced levels of depressive symptoms and in reduced quantity and

frequency of alcohol use. In this study, 35 patients who were diagnosed with alcohol dependence and who had a BDI score of 10 or greater were assigned to one of two groups. The first group received treatment with CBT, whereas the second group received relaxation training (RTC) and served as a control group. Both treatment conditions lasted 8 weeks and were provided in addition to standard alcohol treatment. Random assignment was not used in this study because of concerns about the possibility of treatment contamination should participants compare treatment manuals and procedures. Instead, patients were treated in sequential non-overlapping cohorts with a washout period between cohorts so that only one treatment condition was conducted at a given time.

Results indicated that patients treated with CBT experienced a significantly greater reduction in depressive symptoms compared to patients treated with RTC at the end of treatment. With regard to drinking, at 6-months follow-up, a significantly greater number (47%) of patients treated with CBT were abstinent than those in the RTC condition (13%). Of those who continued drinking during the follow-up period, patients in the CBT condition were abstinent on significantly more days (90%) than patients treated with RTC (68% of abstinent days). In addition, on those days when they drank, CBT patients consumed significantly fewer drinks per day (0.46 vs. 5.71) than RTC patients.

Taken together these studies suggest a number of conclusions. First, the results of these studies suggest that comorbid alcohol dependence does not appear to interfere with CBT for depression. Second, available research evidence suggests that CBT of depression in alcohol dependent patients may effectively reduce depressive symptoms.

Finally, treating major depressive disorder comorbid with alcohol dependence with CBT for depression appears to reduce drinking behaviors as well. Despite these encouraging initial conclusions, it should be noted that they are made on a basis of a limited number of studies using small sample sizes. Thus, drawing of definitive conclusions is difficult. As a result, additional research must be conducted before more definitive conclusions can be made.

Pharmacological Treatment of Comorbid Major Depressive Disorder and Alcohol Dependence

With regard to pharmacological treatment of depression in alcohol dependent patients, limited evidence suggests that antidepressants may effectively reduce depressive symptoms in individuals diagnosed with major depressive and alcohol dependence disorders. For example, Mason, Kocsis, Ritvo, and Cutler (1996) attempted to determine the effectiveness of a tricyclic antidepressant desipramine in reducing both depressive symptoms and alcohol consumption in patients diagnosed with alcohol dependence. Participants in the study were 71 patients diagnosed with alcohol dependence. Of these patients, 28 were also diagnosed with secondary major depressive disorder, (i.e., with onset following the onset of alcoholism). Patients were randomly assigned to 6-months of double-blind treatment with either desipramine or placebo. Equal proportions of patients with comorbid major depressive disorder were present in each treatment condition.

Results indicated that significantly more patients with comorbid major depressive disorder and alcohol dependence (82%) achieved a significant decrease in depressive symptoms compared to such patients in the placebo group (22%) at the end of treatment. With regard to drinking outcomes, patients in desipramine group remained abstinent

significantly longer (167 days) than patients receiving placebo (117 days) during the 6 months of the study. This was true for patients diagnosed with alcohol dependence only and for patients diagnosed with alcohol dependence and comorbid major depressive disorder. However, when results of the depressed subgroup were analyzed separately, a different pattern of results emerged. There were no significant differences between the number of days abstinent in patients treated with desipramine (109 abstinent days) and placebo (65 abstinent days). Similarly, there were no significant differences in relapse rates between depressed patients treated with desipramine (8.3% of relapsed patients) and placebo (40% of relapsed patients). In the non-depressed group, relapse rates in patients treated with desipramine (14.3%) did not differ significantly from those of placebo patients (26.7%). These results suggest that desipramine may effectively reduce symptoms of secondary depression in patients with alcohol dependence. In addition, using desipramine to treat depression secondary to alcohol dependence may reduce risk for drinking relapse in some depressed patients but not in non-depressed patients.

Another study (McGrath et al., 1996) investigated the effectiveness of a TCA imipramine in reducing depressive and alcohol dependence symptoms in 69 patients diagnosed with comorbid major depressive disorder and alcohol dependence. In this study, major depressive disorder was primary (i.e., with onset prior to onset of alcoholism). Participants were randomly assigned to a 12-weeks treatment with either imipramine or placebo. Results indicated that imipramine was significantly more effective than placebo in reducing depressive symptoms. With regard to drinking outcomes, patients treated with imipramine evidenced a non-significant decrease in the number of drinking days and in the number of drinks per drinking day. These results

suggest that imipramine may effectively reduce symptoms of primary major depressive disorder in patients with alcohol dependence, but it may not have a significant impact on drinking behaviors.

Studies reviewed above investigated the effectiveness of TCAs in the treatment of comorbid major depressive disorder and alcohol dependence. Cornelius et al. (1997) attempted to examine the effectiveness of an SSRI (fluoxetine) in the treatment of these comorbid conditions. Participants were 51 patients diagnosed with major depressive disorder and alcohol dependence. Participants were randomly assigned to 12-weeks of double-blind treatment with either fluoxetine or placebo. Results indicated that the improvement in depressive symptoms was significantly greater in the fluoxetine group than in the placebo group at the end of treatment. In addition, compared to patients treated with placebo, patients treated with fluoxetine drank three times less alcohol during 12-weeks treatment, had two times fewer drinking days, two times fewer drinks per drinking day, and three times fewer days of heavy drinking (defined as 5 or more drinks per day). Moreover, patients treated with fluoxetine remained abstinent twice as long as those in the placebo group. These results suggest that fluoxetine may be effective in reducing both depressive symptoms and symptoms of alcohol dependence for patients with comorbid major depressive and alcohol dependence disorders.

In summary, the limited number of studies makes it difficult to draw definitive conclusions regarding the effectiveness of pharmacological treatments for comorbid major depressive and alcohol dependence disorders. Some evidence indicates that TCAs and SSRIs may effectively reduce depressive symptoms in patients with alcohol dependence. However, the limited evidence available suggests that only the SSRIs may

be effective at improving both the symptoms of depressive and alcohol dependence disorders.

Summary

Despite high comorbidity of panic, major depressive, and alcohol use disorders, limited research evidence exists regarding the effective treatment of clients with comorbid conditions. The evidence that is available has focused solely on the treatment of comorbid major depressive disorder and alcohol dependence. Limited evidence suggests that cognitive-behavioral therapy may be effective in improving depressive symptoms in patients with comorbid major depressive disorder and alcoholism. In addition, some evidence suggests that CBT for depression may improve drinking behaviors in these patients.

With regard to pharmacological treatment of comorbid major depressive disorder and alcohol dependence, limited evidence indicates that SSRIs may be effective in reducing both depressive symptoms and drinking behaviors. TCAs also may effectively improve depressive symptomatology in patients with comorbid major depressive and alcohol dependence disorders. However, evidence regarding the effectiveness of TCAs in reducing alcohol consumption for these patients is inconclusive at best.

In summary, future research must be conducted to provide more data regarding psychological and pharmacological treatment of patients with comorbid major depressive disorder and alcohol dependence.

Chapter 3

Normative Practice and Outcomes

The agency

Ms. Williams' treatment took place at a community mental health center. The agency is a non-profit agency that provides an array of behavioral health and human services across several treatment programs, including outpatient services, adult partial care, MICA partial care, and residential programs. The primary population the agency serves includes clients discharged from state, county or local psychiatric hospitals, those referred from crisis centers, clients with a history of repeated psychiatric hospitalizations, and chronically mentally ill clients. Among these categories of clients, the agency gives priority to mentally ill children and elderly clients, minorities, clients with Medicaid or Medicare, and those who do not have any medical insurance.

The agency receives funding from the New Jersey Department of Human Services, Division of Mental Health Services. It operates on a sliding fee scale and limits its services to Camden County residents.

Ms. Williams' intake session was scheduled four days after she contacted the agency. Following the intake, Ms. Williams was accepted into the outpatient services program. The program offers services such as individual, group, and family therapy, psychiatric evaluation and medication monitoring, and assessment and referral. Due to high volume of clients and large caseloads, therapists in the outpatient program typically see clients every two to four weeks. However, as a graduate student, Ms. Williams' therapist had a limited caseload that allowed her to see Ms. Williams every week. Two

days after the intake, Ms. Williams underwent a psychiatric evaluation performed by a psychiatrist in the agency, and she was prescribed Paxil, a selective serotonin reuptake inhibitor with antidepressant and anxiolytic properties. The initial dose was 25mg a day.

Although Ms. Williams emphasized her need for individual therapy during intake, she did not begin therapy until three weeks later, reportedly due to financial difficulties. In the first therapy session, the possibility that Ms. Williams may receive a new therapist in the near future was discussed. She was informed that the therapist would leave the agency in approximately four months due to the end of the internship term. Ms. Williams agreed to work with this therapist for the time being and to transfer to another therapist in the agency to continue her individual treatment after this therapist left. Ms. Williams also consented to participate in this single-subject study and to have her therapy sessions audio taped.

Over the 17-weeks of treatment, Ms. Williams attended 14 individual therapy sessions with this therapist and 5 medication-monitoring sessions with agency's psychiatrist. Three individual therapy sessions were missed during the course of treatment. One missed session was due to a death in Ms. Williams's family, and the two other missed sessions were due to her drinking binges.

Treatment planning

In developing a treatment plan for Ms. Williams, several factors were considered. First, Ms. Williams's problems were conceptualized in cognitive-behavioral terms; therefore, planning began with the premise that cognitive-behavioral therapy would be the treatment of choice for her. In addition, the choice of cognitive-behavioral therapy as a preferred treatment was supported by the extensive empirical evidence of effectiveness

of cognitive-behavioral strategies in the treatment of panic disorder, major depression and alcohol dependence. The specific techniques utilized in Ms. Williams's treatment will be discussed in subsequent sections. In addition to cognitive-behavioral techniques, psychoeducational strategies were thought to play a significant role in the treatment process, because they are an integral part of the cognitive-behavioral approach.

Second, Ms. Williams' symptoms were conceptualized as stemming from both a lack of adequate coping skills to deal with a stressful life situation she experienced and negative beliefs that were thought to underlie her symptoms. Therefore, there seemed to be three broad treatment goals: (1) reducing her of symptoms of distress (2) decreasing her emotional suffering and (3) identification and modification of long-standing patterns of thinking and behavior that prevent long-lasting resolution of symptoms.

Third, Ms. Williams reported having great difficulty dealing with the break-up with her fiancé. Apparently, she experienced strong feelings of loss and grief associated with this event, and these feelings might have contributed to her current symptoms. Therefore, the exploration and resolution of grief over the lost relationship needed to be incorporated into Ms. Williams' treatment.

With regard to other aspects of treatment planning, the importance of a strong therapeutic alliance and a safe and trusting client-therapist relationship could not be overlooked, as it is strongly emphasized in the application of any approach to psychological treatment. To establish a working therapeutic relationship, intervention strategies such as empathy, active listening, communication of respect and acceptance would be utilized. Finally, some psychodynamic intervention strategies, such as

interpretation, confrontation, and other techniques were to be used during treatment implementation to aid in the exploration of issues relevant to treatment.

With regard to the timing of sessions and duration of treatment, it was thought that Ms. Williams would benefit from 50-55-minute sessions of individual therapy once a week. The medication monitoring sessions with a psychiatrist usually lasted 15 minutes, and it would be scheduled every four weeks. Consistent with the agency's policy, the treatment plan was developed for a period of six months. If Ms. Williams did not achieve adequate symptom reduction, a new treatment plan for a period of another six months would be developed and implemented. Given the severity and complexity of Ms. Williams' current symptoms and the need to work on changing her negative beliefs preventing a long-term resolution of the symptoms, the duration of her treatment was anticipated to be at least six months. The new treatment plan would be developed after this initial treatment period.

The treatment plan

I. Treatment goals and objectives.

1. The client will report a reduced number of panic attacks.
 - a) The client will keep self-monitoring records documenting the frequency of panic attacks, levels of anxiety and depression, and the amount of fear related to panic attacks.
 - b) The client will be educated about the role of negative cognitions, catastrophic imagery, and misinterpreted physical sensations in the development of panic attacks.

- c) The client will learn and practice progressive muscle relaxation to manage her anxiety symptoms.
 - d) The client will learn and practice cognitive restructuring related to catastrophic misinterpretation of panic symptoms.
 - e) The client will explore, identify, and modify negative beliefs maintaining her anxiety symptoms.
2. The client will report a reduction in depressive symptoms.
- a) The client will be educated about the role of negative cognitions in the development and maintenance of depressive symptoms.
 - b) The client will learn and practice identifying and modifying negative cognitions leading to depression and hopelessness.
 - c) The client will identify self-defeating behaviors maintaining her depressive symptoms and identify and engage in more self-rewarding behaviors.
 - d) The client will enter the Women's Support Group in the agency to develop a better social support network.
 - e) The client will explore, identify, and modify automatic thoughts and core beliefs maintaining her depressive symptoms.
3. The client will report a reduction in alcohol use.
- a) The client will identify intrapersonal and interpersonal cues precipitating her drinking.
 - b) The client will identify and practice alternative ways to cope with intrapersonal and interpersonal stressors leading to the alcohol use.
 - c) The client will attend Alcoholics Anonymous meetings at least once a week.

d) The client will develop a network of Alcoholics Anonymous sponsors to create a social support network for herself.

4. The client will report a reduction in the level of distress and emotional suffering associated with the loss of her relationship with her fiancé.

a) The client will explore her feelings regarding the break-up with her fiancé and how these feelings might contribute to anxiety, depression, and alcohol use she is experiencing.

b) The client will identify and modify cognitions and behaviors maintaining her feelings of rejection and hopelessness associated with the break-up.

5. The client will comply with the medication regimen.

a) The therapist will educate the client about the importance of medication compliance and provide the client with the information about medication.

b) The client will attend medication-monitoring sessions with Dr. Jones, MD³ every four weeks and report on the effectiveness of the medication in reducing symptomology, and on the side effects of the medication.

II. Interventions: Primarily cognitive-behavioral, with a focus on the therapeutic relationship. In addition, some psychodynamic therapy elements will also be incorporated.

III. Timing of sessions: 50-55 minutes sessions of individual therapy, once a week; 15–minutes sessions of medication monitoring every four weeks.

IV. Duration of treatment: 6 months.

³ The name is fictional to protect the client's confidentiality

Assessment of progress and outcome

Assessment of Ms. Williams' progress in treatment was achieved using several measures.

Outcome Questionnaire – 45.2 (OQ-45.2; Lambert, Hansen, et al., 1996). The OQ-45.2 was completed by Ms. Williams at the beginning of each session. The OQ-45.2 is a brief 45-item self-report instrument designed for repeated measurement of the client's progress throughout the course of therapy. The OQ-45.2 takes, on average, 5-7 minutes to complete. Clients are asked to rate how often they experience a variety of behaviors and symptoms on a 5-point Likert scale ranging from "not at all" (0) to "almost always" (4).

The OQ-45.2 measures client's functioning in three domains that correspond to three subscales. The first subscale, Symptom Distress (SD), emphasizes anxiety, depression, and substance abuse symptoms. The second subscale, Interpersonal Relations (IR), represents problems with relationships, family life, marriage; and elements of isolation, feelings of inadequacy, withdrawal, or conflict. The third subscale, Social Role Performance (SR), gauges client's level of dissatisfaction, conflict, or distress in their employment, family roles, and leisure life. In addition, the OQ-45.2 contains risk assessment items for suicide potential and potential violence at work.

The OQ-45.2 yields four scores: the Total Score representing generalized distress and the three subscale scores (SD, IR, and SR). Greater scores represent greater distress. Each score obtained by the client is compared against a cut-off score to see if the client's score falls in the "dysfunctional" range. In addition, data on the OQ-45.2 has indicated various Reliable Change Indices (RCI) that represent a size of the difference needed to achieve a clinically significant change for all four scores. The score ranges, cut-off scores

and Reliable Change Indexes (RCI) for Total Score and SD, IR, and SR subscales are as follows:

Total Score: range = 0 -180; cut-off = 63; RCI = 14.

Symptom Distress (SD): range = 0 – 100; cut-off = 36, RCI = 10.

Interpersonal Relations (SR): range = 0 = 44; cut-off = 15; RCI = 8.

Social Role (SR): range = 0 – 36; cut-off = 12; RCI = 7.

With regard to the psychometric properties of the OQ-45.2, this measure has high reliability. Internal consistency coefficients have been reported to range from .70 to .93 (Lambert, Burlingame, et al., 1996). Test-retest reliability coefficients have been reported to range from .78 to .84 over a 3-weeks period (Lambert, Burlingame, et al., 1996).

With regard to validity, concurrent validity of the OQ-45.2 has been reported to be high for the Total Score and for the Symptom distress subscale (Umpruss, Lambert, & Smart, 1997). The correlations between the OQ-45.2 and the Global Severity Index of the Symptom Checklist-90 (SCL-90; Derogatis, 1983) ranged from .78 to .88 for the Total Score and from .82 to .92 for the Symptom Distress score. The concurrent validity of the Interpersonal Relations and Social Role subscales has been reported to be moderate to high. The correlations between the Interpersonal Relations and Social Role subscales of the OQ-45.2 and the Inventory of Interpersonal Problems (IIP; Horowitz, Rosenberg, Baer, Ureno, & Villesenor, 1988) have been reported to range from .49 to .64.

CAS – Combined Alliance Scale (CAS; Hatcher & Barrends, 1996) is a brief 33-items questionnaire designed to assess the quality of the therapeutic relationship. Items are rated on a 7-point Likert scale ranging from “not at all” (1) to “very much” (7). The CAS takes, on average, 5-7 minutes to complete. The CAS has five subscales. The first

subscale, Confident Collaboration, represents the client's confidence that the therapy is working. The second subscale, Goal and Task Agreement, reflect the degree to which the client and the therapist agree on what should be the focus of treatment. Items on the third subscale, Bond, measure the degree to which the client perceives the therapist as caring about him/her. The fourth subscale, Idealized Relationship, measures the degree to which clients disagree with the therapist and believe that the therapist is not helpful. The last subscale, Dedicated Patient, represents the degree to which the client is willing to be open and forthcoming in the treatment, despite feelings of frustration and worries about the progress and outcome of treatment.

CAS subscale scores are expressed as percentiles that are used for interpretation, with the greater percentiles representing greater therapeutic alliance and better therapeutic relationship quality.

The CAS has adequate reliability. The internal consistency coefficients for five subscales have been reported to range from .40 to .78 (Hatcher & Barrends, 1996). Concurrent validity of the CAS has been reported to be adequate to good. The correlations between the CAS and the Working Alliance Inventory (WAI; Horvath & Greenberg, 1989), the California Psychotherapy Alliance Scales (CALPAS; Gaston, 1991), and the Penn Helping Alliance Questionnaire (HAQ; Alexander & Luborsky, 1986) averaged .59, .55, and .54, respectively.

Due to the therapist mistake, the CAS was not given to Ms. Williams until the 11th session into treatment. To gather data about how Ms. Williams perceived the therapeutic relationship throughout treatment, the scale was modified, and Ms. Williams was asked to rate each item three times. For each item, she first retrospectively estimated

the highest rating, then the lowest rating, and then she rated her current experience in therapy for that item.

Informal assessment of the therapeutic alliance was done two times throughout the treatment by asking Ms. Williams what was the worst thing in today's session and what she would like to change in how the treatment is going.

Panic Attack Record (Barlow & Cerny, 1988). Beginning with the third therapy session, Ms. Williams was instructed to fill out the panic attack record every time she had a panic attack and bring the records to each session. The panic attack record was adopted from the panic disorder treatment manual. For each panic attack, Ms. Williams recorded it's time of onset, duration, maximum intensity, physical sensations she was experiencing, and whether the attack was expected or not. In addition, Ms. Williams was asked to record a brief description of the situation in which the panic attack occurred, any thoughts that occurred just prior to or during the attack, and the perceived cause of the attack (see Appendix B).

Weekly Record of Anxiety and Depression (Barlow & Cerny, 1988) was introduced in the third therapy session. Ms. Williams was instructed to fill out the weekly record of anxiety and depression every night before bedtime and bring the record to every session. For each day of the week, using the scale from 0 ("none") to 8 ("as much as you can imagine"), she recorded average levels of anxiety, depression, pleasantness, and fear of a panic attack throughout the day. In addition, she recorded the maximum level of anxiety she experienced that day, and the dosages and amounts of the medication she took (see Appendix B).

Course of treatment

Assessment

During intake session, only basic information about Ms. Williams' presenting problems and background information was obtained. To more clearly understand the client, the first three individual therapy sessions with Ms. Williams were devoted to learning more details about her symptoms and psychosocial history, establishing rapport between Ms. Williams and the therapist, and gathering baseline data. In the second session, the Outcome Questionnaire-45.2 was introduced and informed consent for participation in the study was obtained. In addition, Ms. Williams consented to having her sessions audio taped. In the third session, the therapist introduced the self-recording forms for documenting panic attacks (Panic Attack Record), and daily levels of anxiety, depression, and fear of panic attacks (Weekly Record of Anxiety and Depression). Ms. Williams was instructed to begin using the forms and to bring them with her to each session.

Because Ms. Williams was diagnosed with three disorders, it was necessary to prioritize on which problem she wanted to work first. Ms. Williams stated that panic disorder symptoms caused her the greatest distress. She also reported that besides panic attacks, she had the most difficult time dealing with the end of her relationship with her fiancé. Her depression was precipitated by this event, and it was thought that working with thoughts and feelings associated with the break-up would help decrease depressive symptoms. Finally, Ms. Williams stated that alcohol dependence problems were of the least concern for her at the present time. She reported that since she started taking medication and coming to therapy, she was able to abstain from alcohol.

Ms. Williams canceled one session during the assessment period because her cousin's husband died and she was helping her cousin with the funeral.

Treatment

In the fourth session, the therapist introduced cognitive-behavioral therapy for panic disorder and major depressive disorder. The theoretical foundations of cognitive-behavioral therapy were explained, and examples from Ms. Williams' life were discussed to illustrate the major concepts. Since the primary goal of treatment was to decrease panic disorder symptoms, panic attacks were explained to Ms. Williams in cognitive-behavioral terms and cognitive-behavioral methods for treatment of panic disorder were presented. In addition, the importance of homework and the client's active participation in the treatment was emphasized. The therapist also provided Ms. Williams with a hand-out that contained information on the nature and causes of panic disorder and cognitive-behavioral treatment for panic disorder. (Leahy & Holland, 2000).

In the following sessions, the therapist introduced progressive muscle relaxation as a method for reducing anxiety. The relaxation exercises consisted of tensing and relaxing 16 different groups of muscles. In the following session, relaxation with discrimination training for the 16 muscle groups was introduced. During this phase of training, Ms. Williams was asked to tense her muscles only half as much as usual in order to learn to discriminate between high and low levels of muscle tension. In later sessions, the discrimination training procedure was shortened to eight and then to four muscle groups. For each relaxation exercise, Ms. Williams was instructed to practice relaxation twice a day at home and to fill out the *Relaxation Practice Record* every time she practiced. The Relaxation Practice Record was adopted from the Barlow and Cerny's

(1988) manual. For each relaxation practice, Ms. Williams was asked to note the date and time of the practice and her anxiety level before and after practice. Using a scale from -10 (“extreme increase in tension”) to +10 (“extreme increase in relaxation”), she was asked to note the degree to which she was able to relax. Finally, she was to briefly describe her experiences during the relaxation, including any thoughts, feelings, or problems (see Appendix B). Ms. Williams was instructed to bring the Relaxation Practice Record to every session in order to discuss any problems that might have occurred during the practice.

Ms. Williams was enthusiastic about the relaxation exercises, practiced them at home, and reported that her anxiety had decreased somewhat since she started the relaxation practice. However, she reported that when tensing muscles, she experienced muscle pain caused by fibromialgia. To deal with this problem, Ms. Williams was advised to skip the tension part of the exercise and do only the relaxation part.

According to Barlow and Cerny (1988), after the relaxation is introduced and practiced, in the next session the therapist should introduce techniques for monitoring cognitions. The authors also suggest that the client has to be taught to monitor cognitions pertaining to panic attacks, such as “I am going crazy”, or “I am having a heart attack”. However, from analysis of Ms. Williams’ panic attack records, it became evident that the majority of Ms. Williams’ panic attacks were precipitated by her thoughts about how she missed her ex-fiancé, her feelings of loneliness and hopelessness, and her fear of the future. The therapist hypothesized that working with cognitions related to these issues would help to decrease symptoms of both panic and major depressive disorder. Instead of focusing on cognitions specific to panic disorder, as specified in the manual, the therapist

decided to teach Ms. Williams to identify and modify cognitions using her thoughts related to issues such as her relationship with her fiancé, hopelessness, etc. Ms. Williams was instructed to monitor her thoughts by asking herself “what is going through my mind right now?” whenever she felt sad or anxious. She was asked to try to monitor her thoughts at home and to write them down for discussion in the session. Although Ms. Williams seemed to understand the concept of thought monitoring, she experienced difficulties with identifying automatic thoughts. While this difficulty is normal for people learning to monitor their cognitions and their effect on mood (Beck, 1995), the therapist’s inexperience in applying cognitive techniques made it even more difficult for Ms. Williams to learn to identify her automatic thoughts. Therefore, instead of assigning a thought monitoring homework, the therapist decided to work on identifying and modifying Ms. Williams’ negative thoughts in session.

In later sessions, the therapist introduced cognitive therapy techniques that were used to examine the evidence for and against negative thoughts and to explore alternative explanations. These techniques were used to modify negative thoughts Ms. Williams expressed in sessions, such as “I am weak”, “I will never get better”, etc. After examining evidence for and against these negative cognitions, positive statements counteracting them were formulated, and Ms. Williams was asked to write them down and read them at home. Ms. Williams reported that reading positive statements helped her to feel less depressed and hopeless.

Other issues discussed in the first therapy sessions were Ms. Williams’ lack of social support and alcohol use. With regard to social support, Ms. Williams reported that her cousin still was the only person who provided emotional support for her. However, at

that time, her cousin had to deal with her own feelings of loss and grief over the death of her husband, and needed emotional support herself. Thus, Ms. Williams found herself providing support for her cousin and realized that it helped her to take her mind off her own issues. With regard to Ms. Williams' relationship with her mother, Ms. Williams reported that it became less strained and emotionally abusive after Ms. Williams started therapy. Ms. Williams reported that she talked to her mother about how depressed, hopeless, and unhappy she felt after the break-up with her fiancé. Her mother was able to empathize with Ms. Williams' feelings and expressed her willingness to support Ms. Williams in her efforts to overcome her difficulties. However, Ms. Williams' relationships with her brother and sister-in-law were still strained. To help Ms. Williams develop a social support network and to have more opportunities for socializing outside her immediate family, the therapist recommended that Ms. Williams joined the Women's Support Group in the agency. Ms. Williams stated that she herself thought about joining the group and would do that in the nearest future.

With regard to the alcohol use, Ms. Williams reported that she had been abstinent since she started taking an antidepressant. Ms. Williams also reported that her cousin continued to be the only Alcoholics Anonymous (AA) sponsor she had, and that she attended an average of one AA meeting a week. The therapist encouraged Ms. Williams to develop a network of AA sponsors. Other alcohol related issues were not discussed in these sessions.

In the fifth therapy session Ms. Williams reported feeling less depressed, attributing the change to an increased dose of Paxil. The dose had been increased to 37.5mg a day, and she had been taking this dosage for a week prior to this session.

By the sixth session, Ms. Williams' total score on OQ-45.2 had dropped by 23 points compared to the beginning of the treatment, and it was 3 points higher than scores in the "functional range." (see Figure 1). The decrease of 14 points on the total score represented a clinically significant change in overall symptomatology. In addition, Ms. Williams' scores on Symptom Distress and Interpersonal Relationships scales decreased by 10 and 12 points respectively, also representing a clinically significant change. However, while the score on the Interpersonal Relationships scale reached the normal range, the Symptom Distress score was still in the dysfunctional range. Ms. Williams' score on the third subscale, Social Relationships, was in the functional range from the beginning of the treatment and never reached the dysfunctional score range. With regard to the panic attacks, their number decreased from 30 per week in the 4th session to 20 per week at session 6 (see Figure 2).

The next six weeks (7th to 10th session) proved to be a very difficult period for Ms. Williams. While her anxiety symptoms were gradually decreasing due to continued relaxation practice, the depressive symptoms worsened despite the initial good response to an increased dose of Paxil. Ms. Williams described how spring brought memories of happy times with her fiancé, and how her feelings of loneliness and grief intensified during Easter holidays, which she had previously spent with her fiancé and her daughter. Ms. Williams reported that the memories of times spent with her fiancé were so painful that it was difficult for her to fill out the panic attack records. She stated that this difficulty was related to the need to focus on these memories in order to write them down, which would bring additional pain. At Ms. Williams' request, it was agreed that

every session she would verbally report to the therapist the number of panic attacks per week and their average intensity instead of filling out the panic attack records.

Unable to cope with overwhelming feelings of sadness, loneliness, and hopelessness, Ms. Williams started drinking again. During a six-week period she missed two scheduled therapy sessions because of drinking and reported one drinking episode between sessions. In addition to the feelings of loneliness and grief over the lost relationship, Ms. Williams experienced intense guilt and anger towards herself for not being able to stay abstinent.

Cognitive techniques were used to help Ms. Williams overcome feelings of loss and grief over the relationship with her fiancé and her feelings of powerlessness over alcohol. In addition, empathy, emotional support, and encouragement were used. The therapist frequently communicated to Ms. Williams respect for and encouragement of, her continued efforts to overcome her problems.

Gradually, a positive shift in Ms. Williams' mood began to occur. She began to re-evaluate her relationship with her fiancé, and her perception of the relationship as being "perfect" began to change to more realistic and objective one. Instead of attributing the blame for the break-up entirely to herself, she began to see how both she and her fiancé were responsible for the relationship deterioration and end. With regard to alcohol use, Ms. Williams began to attend AA meetings three times a week. However, she was still reluctant to contact her AA sponsors when she experienced alcohol cravings, because it was "difficult for her to ask for help". After Ms. Williams got intoxicated for the third time in four weeks, her mother and brother insisted that she enter a 30-day inpatient treatment for alcohol dependence. To avoid hospitalization, Ms. Williams made a

commitment to attend 90 AA meetings in 90 days. In therapy, almost the entire session during this time was devoted to identification of external and internal drinking cues and to development of constructive ways to cope with them.

Other issues discussed in sessions 7 to 10 were relaxation practice, lack of self-rewarding activities and continued lack of social support. Ms. Williams continued to do the relaxation exercises at home and reported no problems. To help her generalize the relaxation skill to different situations, she was instructed to practice relaxation in different rooms in the house and at different times during the day. With regard to self-rewarding behaviors, Ms. Williams was reluctant to engage in activities outside of home despite the therapist's continuing encouragement to do so. She argued that all the things she liked to do, such as gardening, walking, or fishing, she was previously doing with her fiancé. She feared that if she was to engage in these activities alone, the memories of times spent happily together would provoke intense sadness and panic attacks. In addition, when Ms. Williams' cousin or other members of her family invited her to go shopping or to attend a family gathering, she would refuse because she "did not want to spoil their fun with her misery". Thus, the vicious cycle of avoiding activities and experiencing a lack of self-reward perpetuated her feelings of depression and loneliness.

The struggle and increased distress Ms. Williams experienced in these six weeks was reflected in increase of the OQ-45.2 score and the number of panic attacks. Between seventh and tenth session, Ms. Williams' OQ-45.2 score increased by 32 points, reaching the level higher than in the beginning of therapy (see Figure 1). In addition, the number of panic attacks, which decreased to 6 in week 10, increased sharply and reached 20 in week 12 (see figure 2).

The last four therapy sessions with Ms. Williams were marked by sudden improvement in the symptoms of panic, depression, and alcohol use. In the 11th session Ms. Williams reported that in the previous week she did not experience any panic attacks, she felt significantly less depressed, and did not experience alcohol cravings. The sudden improvement in symptomatology was brought on by significant changes in Ms. Williams' behavior. Consistent with the commitment made in the previous weeks, she attended AA meetings daily. The emotional support she received from other AA members helped her to feel hopeful about her struggle with alcohol. One of the men she met invited her to a wedding reception held by his friend. Ms. Williams reported that, contrary to her previous attitude towards going out, she decided to accept the invitation. She described a week-end spent with the man, his grown-up children, and other AA members as "the best thing that happened to me in the past several months." Ms. Williams reported that, contrary to her expectations, she was able to fully enjoy the reception and felt liked and accepted by her new acquaintances. Since that event, Ms. Williams started going out with her fellow AA members and her family members.

While all these exciting changes were happening in her life, in therapy, the work on the grief over the lost relationship continued. Ms. Williams gradually began to accept the fact that her relationship with her fiancé ended and that she had to continue her life without him. She began to think about her future and, though she was not able to make any plans yet, she did not feel hopeless anymore. She even started to make small steps towards starting a new period in her life. For example, she described how, following the therapist's recommendations, she went alone to one of the places that she often visited with her fiancé. She reported that although she still felt that she missed him, she spent an

enjoyable day there. Contrary to her predictions, she experienced neither panic attacks nor depression on that day. This experience helped Ms. Williams realize that her fear of having panic attacks at places that would bring up memories of her fiancé was unjustified.

Another issue discussed in the last four sessions was Ms. Williams' developing relationship with a man she recently met. Consistent with the AA philosophy, she was cautious not to get involved with the man emotionally for at least a year after she achieved abstinence from alcohol. On the other hand, she longed for intimacy and companionship. Cognitive and psychodynamic techniques were used to explore Ms. Williams' ambivalence about engaging in a romantic relationship and her intense fear of loneliness. Additionally, cognitive techniques were used to uncover Ms. Williams' belief that she was worthless and unlovable, and she expressed her willingness to work on changing these beliefs. To start with this task, cognitive therapy techniques were used to raise Ms. Williams' self-esteem. With the help from the therapist, Ms. Williams created positive statements about herself. She then was instructed to write them down, place them at prominent places at home, and read them several times a day. In addition, a self-help book on self-esteem (McKay & Fanning, 2000) was recommended to Ms. Williams for reading at home.

Other issues discussed in these sessions were finishing the relaxation part of the panic disorder treatment and termination of work with this therapist. With regard to relaxation, Ms. Williams was instructed on how to do relaxation by recall, which involves identifying any feelings of tension in the muscles and then relaxing them by recalling how the relaxed muscles feel. In later sessions, cue-controlled relaxation was introduced, where the relaxation of all muscle groups was achieved by thinking the word "relax". Ms.

Williams reported no difficulties in practicing either relaxation by recall or cue-controlled relaxation. To generalize the cue-controlled relaxation skill, she was instructed to practice it first in different places at home and then outside of home. She also was instructed to use cue-controlled relaxation to release tension whenever she felt anxious and stressed out.

The final issue discussed in the last four sessions was termination of treatment with this therapist and transfer to another therapist in the agency. Given Ms. Williams' recent history of loss of a significant relationship, her feelings about termination were explored several times during concluding sessions of treatment. While reacting with apparent distress when the issue was discussed for the first time, gradually Ms. Williams was able to accept still another change in her world. With the help of the therapist, she developed a summary of her experience in therapy. She was encouraged to recall all her struggles and ups and downs, as well as accomplishments and skills learned in therapy. To ease the transition from one therapist to another, some anticipated differences between her current and future treatment were discussed, such as possible difference in therapists' styles and greater spacing between sessions. In the final session with this therapist, her new therapist's contact information along with the next appointment time was given to Ms. Williams.

The improvement in Ms. Williams' condition was reflected in her OQ-45.2 Total Score which remained within normal range for the last four weeks of therapy. The Symptom Distress score, however, was still above the cut-off point, suggesting that some work still had to be done. For the last four therapy sessions, Ms. Williams reported experiencing two mild panic attacks when driving on highway. She was able to cope with

them well, using her relaxation skills. In addition, Ms. Williams reported that she still felt depressed sometimes, although the periods of depression were less frequent and their intensity was much lower. Ms. Williams also reported that she did not experience alcohol cravings anymore.

Results of Treatment Outcome and Process Measures

The results of measures taken during the course of treatment are presented in Figures 1 through 4.

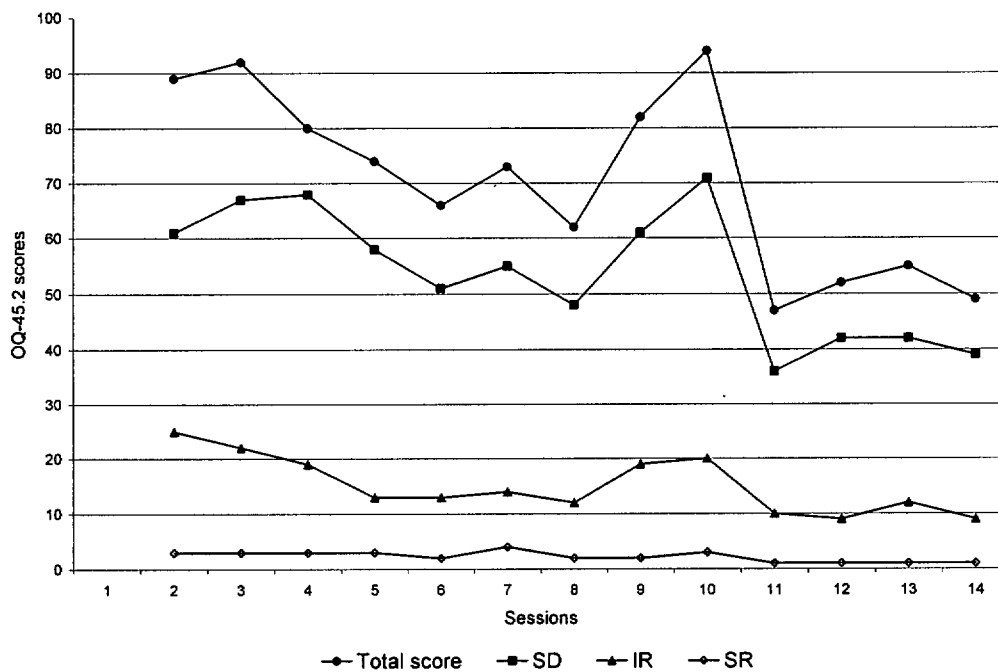


Figure 1. Change in OQ-45.2 total score and subscale scores over the course of treatment. Cut-off scores: total score=63, SD=36, IR=15, SR=12.

Figure 1 indicates that Ms. Williams' total score on the OQ-45.2 decreased from 89 in the beginning of treatment to 49 at termination, falling in the normal range. Ms. Williams' score on the Symptom Distress subscale decreased from 61 at the beginning of

treatment to 39 at termination, falling in the dysfunctional range slightly above the cut-off point. Ms. Williams' score on the Interpersonal relationship subscale decreased from 25 in the beginning of the treatment to 9 at termination, falling in the normal range. Finally, the Social Relationships subscale score never reached the cut-off point and remained in the normal range throughout treatment. These results suggest that therapy was effective in reducing Ms. Williams' problems in interpersonal relationships domain. Additionally, therapy was effective in reducing distress Ms. Williams experienced from her symptoms. However, further therapy is needed to further reduce Ms. Williams' symptomatic distress to the normal level.

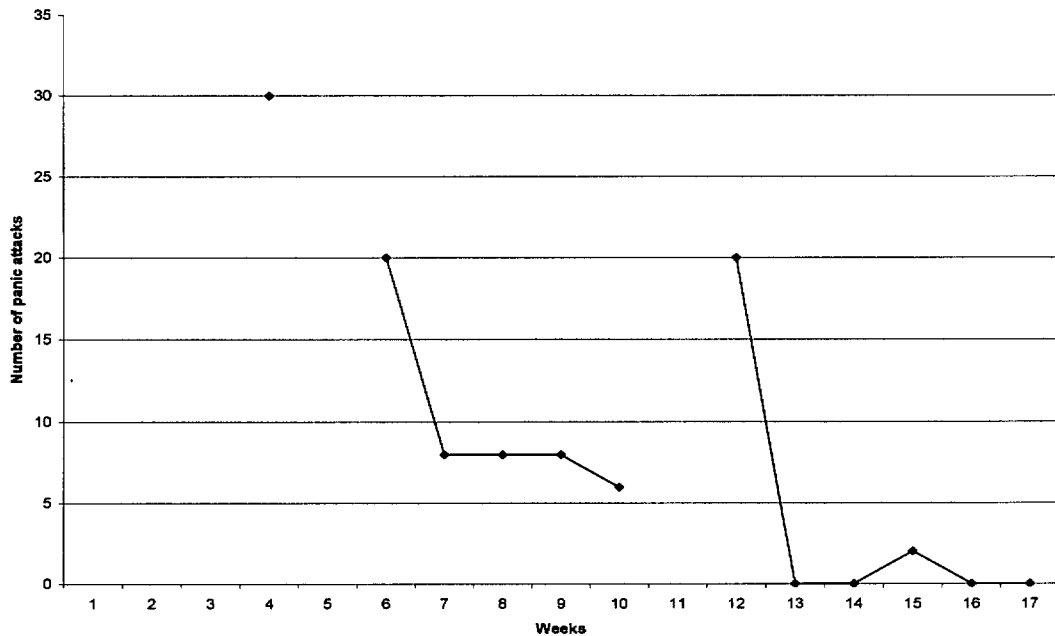


Figure 2. Number of panic attacks per week (data were not reported by the client for weeks 5 and 11).

Figure 2 presents the number of panic attacks per week reported by Ms. Williams during the 17 weeks of treatment. Weeks of treatment rather than sessions are used in the Figure 2 because Ms. Williams continued collecting data on her panic attacks during periods when she missed sessions. Figure 2 shows that Ms. Williams experienced 30 panic attacks during 4th week of treatment. The number of panic attacks decreased to six per week in week 10. In week 12, the number of panic attacks increased to 20 and then dropped to zero in weeks 13 to 17 with the exception of two panic attacks occurring in week 15. These results suggest that therapy was effective in reducing the frequency of panic attacks Ms. Williams experienced. However, further therapy is probably needed to eliminate panic attacks completely. In addition, further exploration of what factors contribute to the increased number of panic attacks at various times is warranted. For example, in week thirteen, it can be seen that the frequency of panic attacks Ms. Williams experienced increased dramatically to 20 attacks. Further treatment should address more specifically the causal factors associated with these dramatic changes.

Figure 3 presents the severity ratings (on 0-8 scale, with higher scores indicating greater levels of distress) reported by Ms. Williams for anxiety, depression, and fear of panic attacks (average rating per day each week). Figure 3 indicates that fear of panic attacks evidenced the greatest decrease throughout the course of treatment. Although less pronounced, anxiety and depression severity ratings also showed a trend toward continuing decreases in symptoms. These results suggest that treatment Ms. Williams received was effective in reducing the severity of her anxiety, depression, and fear of panic attacks.

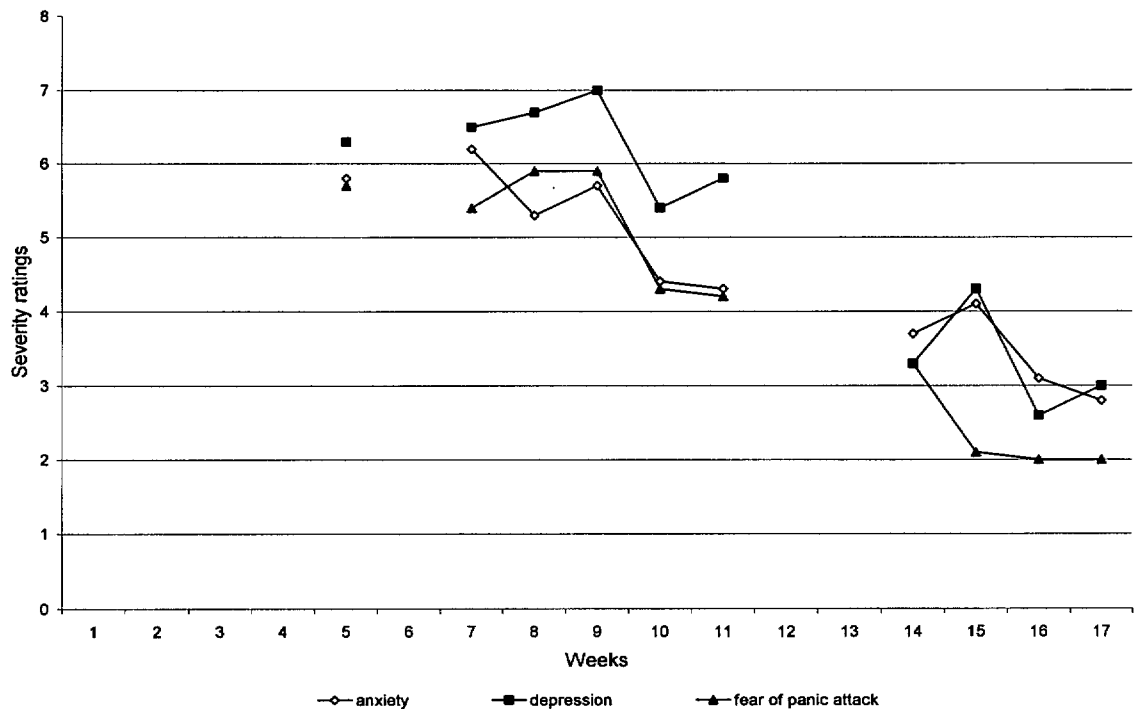


Figure 3. Average severity ratings of anxiety, depression, and fear of panic attacks (data were not reported by the client for weeks 6, 12, and 13).

Ms. Williams' scores on the Combined Alliance Scale are presented in Table 1. As mentioned previously, Ms. Williams was administered the CAS in the 11th session. The scores in Table 1 represent Ms. Williams' retrospective estimate of highest and lowest ratings on each of the five subscales of the CAS, and the ratings for her current experience in therapy. In addition, percentiles corresponding to each score are presented. Table 1 indicates that when Ms. Williams evaluated her current experience in therapy, the scores on all five CAS subscales corresponded to high percentile ratings. These results suggest that at the time of assessment (11th session) Ms. Williams experienced high confidence that the therapy is working (Confident Collaboration subscale) and Ms. Williams and the therapist agreed to a great degree on what should be the focus of

treatment (Goal and Task Agreement). In addition, Ms. Williams perceived the therapist as caring about her to a great degree (Bond). Further, Ms. Williams believed that the therapist was helpful and experienced a little degree of disagreement with the therapist (Idealized Relationship). Finally, Ms. Williams was highly willing to be open and forthcoming in the treatment (Dedicated Patient).

Table 1. Scores on the Combined Alliance Scale

Subscale	Highest rating (percentile)	Lowest rating (percentile)	Current rating (percentile)
Confident Collaboration	35 (90)	25 (30)	35 (90)
Goal and Task Agreement	28 (78)	23 (50)	29 (80)
Bond	33 (90)	28 (67)	35 (90)
Idealized Relationship	35 (90)	34 (80)	34 (80)
Dedicated Patient	35 (90)	30 (80)	35 (90)

Summary

Ms. Williams has had 14 sessions of therapy over 17 weeks of treatment. Ms. Williams' major problems concerned her panic, depressive, and alcohol use symptoms. In addition, her recent break-up with her fiancé was an issue of great concern. The choice of the therapeutic approach was guided by research evidence regarding effective treatments, and Ms. Williams' problems and personal characteristics. The treatment consisted of cognitive-behavioral and psychodynamic techniques provided within a solid therapeutic relationship.

At the beginning of treatment, reducing the frequency and severity of panic disorder symptoms was the main focus of therapy. Behavioral and psychoeducational interventions were used to decrease frequency and intensity of Ms. Williams' panic attacks. Ms. Williams' feelings regarding the loss of the relationship with her fiancé became the focus of therapy in the middle and late stages of the treatment. In addition, therapy focused on improvement in depressive symptoms and alcohol use symptoms. Cognitive and behavioral interventions were used to reduce Ms. Williams' distress related to the break-up with her fiancé and to reduce her symptoms of depression and alcohol dependence. In addition, cognitive and behavioral interventions were used in the later stages of treatment to work on Ms. Williams' negative beliefs, to further the improvement in panic and depressive symptoms, and to prepare Ms. Williams for termination with this therapist.

Treatment results indicated that Ms. Williams experienced improvement in her symptoms. Specifically, she evidenced the greatest improvement in the alcohol use and panic symptoms. In addition, her interpersonal relationships were not the area of concern anymore. However, further treatment is needed to bring Ms. Williams' symptoms to normal level. Specifically, she continued to experience mild depressive symptoms and needed to work on improving her self-esteem.

Chapter 4

Normative Versus Best Practice

Although Ms. Williams' symptoms responded favorably to the therapy that was provided to her, there are several ways in which Ms. Williams' treatment could have been improved.

First, the treatment of Ms. Williams' panic disorder significantly deviated from the treatment outline by Barlow and Cerny (1988). While the research literature indicates that treatment of panic disorder is most effective when it includes cognitive restructuring of catastrophic cognitions characteristic of panic attacks, interoceptive exposure, and relaxation with breathing retraining; only the relaxation part of the treatment package was utilized in the current treatment. This was in part due to significant distress Ms. Williams experienced after her relationship with her fiancé ended. Work on the issues related to this loss needed to be incorporated in therapy sessions, thus shifting the therapy focus. Still, cognitive restructuring and interoceptive exposure should have been implemented after the grief over the lost relationship ceased to be acute. Additionally, treatment may have been improved by more clearly attempting to relate the types of thoughts Ms. Williams was having about the end of her relationship to the onset of her panic symptoms/attacks.

The second major area where Ms. Williams' treatment could have been improved was how her alcohol dependence was treated. Growing consensus in the field of treatment of dually diagnosed patients (i.e., those diagnosed with substance use disorder and another psychiatric disorder) suggests that the treatment of both disorders should be

done concurrently (Brown, 2001). However, the therapist's unfamiliarity with the current alcohol and dual diagnosis treatment literature and inexperience in alcohol use treatment lead to insufficient attention being given in therapy to Ms. Williams' alcohol use.

A related issue was a lack of therapist's knowledge about the importance of group therapy and self-help groups in the treatment of alcohol dependence. Although evidence about the effectiveness of self-help groups such as Alcoholics Anonymous in the treatment of alcohol dependence is inconsistent (Miller et al., 1995), some authors suggest that group therapy is a treatment of choice for substance dependent clients. For example, Flores (1997) argues that the majority of substance abusers have a character pathology that prevents them from developing mutually satisfying and emotionally intimate relationships. This difficulty in developing healthy relationships is believed to be one of the major factors leading to substance dependence. Furthermore, it has been suggested that group treatment might be more helpful than individual treatments because it would allow the client to work on interpersonal issues with other members in the group.

Clearly, Ms. Williams' pattern of relationships suggests a deficiency in the area of interpersonal relationships and group therapy addressing this deficiency might have been especially beneficial for her. Therefore, the therapist could have been more persistent in recommending that Ms. Williams get involved in Alcoholics Anonymous and group therapy at the agency. In addition, although Ms. Williams finally started attending AA meetings, greater involvement in AA earlier in treatment would have helped address the profound lack of social support she experienced.

Similarly, the therapist's inexperience in application of cognitive therapy techniques made it difficult to use cognitive therapy systematically and with maximum efficacy. For example, while listening to Ms. Williams, the therapist often had difficulty identifying negative automatic thoughts embedded in her narrative. Once the therapist learned to tune in to Ms. Williams' automatic thoughts, it was difficult to choose on which cognition to focus. In addition, once the cognition was chosen the therapist often experienced difficulty going through the process of disputing and modifying the thought. Despite these limitations, the therapist did gain some experience in cognitive therapy while working with Ms. Williams and hopes to expand and improve her skills. Additionally, Ms. Williams' progress in treatment indicates that the cognitive techniques that were introduced in treatment did appear to be efficacious in helping the client to reduce symptomatic distress.

While the shortcomings of the treatment discussed previously were a consequence of the therapist's inexperience and lack of knowledge, some factors accounting for the deviation of Ms. Williams' treatment from the best practice lied beyond the therapist's control. For example, the therapist's clinical supervisor in the agency was unfamiliar with the empirically validated approaches the therapist attempted to use in treatment. In addition, although the therapist's supervisor used some cognitive-behavioral techniques in her work with the clients, she did not use them systematically and did not have a sufficient expertise in cognitive therapy. Because of that, the therapist has had little guidance in application of cognitive interventions and had to seek additional consultation from the study advisor at the Rowan University.

Another factor that lied beyond the therapist's control was an insufficient attention that research literature has given to the treatment of dually diagnosed clients in general and to application of empirically validated treatments to these clients in particular. This lack of research combined with the therapist's inexperience made it difficult for the therapist to make clinical decisions regarding the client's treatment.

Chapter 5

Summary and Conclusions

The purpose of the current project was to track the progress of one client throughout her involvement with the author who served as her mental health provider. In doing so, the client's psychosocial assessment was presented, the empirical treatment literature related to her diagnoses was reviewed, her progress over the course of treatment was summarized, and a comparison between her current treatment and what might be considered "best" treatment was presented.

The client was a 41 year-old Caucasian, female. The results of her psychosocial assessment indicated that she was experiencing a variety of clinical conditions. Specifically, she was diagnosed with comorbid panic disorder, major depressive disorder, and alcohol dependence. Her history indicated long-standing anxiety and alcohol abuse problems and one previous episode of major depressive disorder. Prior to beginning the current treatment, the client underwent two voluntary hospitalizations for her alcohol problems, both of which were followed by outpatient counseling that incorporated treatment of her anxiety and depression. She had been married twice and has a 19-years old daughter. The client's current struggles with similar symptomology were conceptualized as arising from multiple stressors including relationship loss, unemployment, financial strain, and limited social support.

After completing the psychosocial assessment and coming to a conceptual and diagnostic understanding of the client, a literature review was conducted to explore the best type of treatment that might be provided to the client. The results of this literature

review led to a number of conclusions regarding the best type of treatment for a client with a clinical presentation similar to the current client. These suggestions are briefly reviewed below.

One conclusion that can be drawn from the literature is that efficacious psychological and pharmacological treatments exist for each of the client's disorders. With regard to psychological treatments, results from controlled outcome studies of treatments for panic disorder have indicated that two manualized treatment packages, Panic Control Treatment and Cognitive Therapy, are effective at reducing symptoms of panic disorder. With regard to the treatment of major depressive disorder, results from controlled outcome studies indicated that two manualized treatment protocols, Interpersonal Therapy and Cognitive-Behavioral Therapy, are effective at reducing depressive symptoms. With regard to the treatment of alcohol dependence, various approaches have been shown to be more effective than standard treatments at reducing alcohol use and maintaining abstinence. These approaches include brief interventions, motivational interviewing, and broad-spectrum skills training.

Another conclusion that can be drawn from the literature concerns pharmacological treatments for panic disorder, major depressive disorder, and alcohol dependence. SSRIs appear to be the treatment of choice for panic disorder and major depressive disorder, given their effectiveness and low side effect profile. The literature also suggested that although benzodiazepines are effective in the treatment of panic disorder, they should be used cautiously because of their addictive potential. This is particularly true with clients who have a history of substance dependence. In regard to the treatment of alcohol dependency, the addition of naltrexone and acamprosate to

psychosocial treatments has been shown to be effective in the treatment of alcohol dependence.

Another conclusion that can be drawn from the literature concerns combined psychological and pharmacological treatments for panic disorder and major depressive disorder. Some evidence indicates that a TCA or benzodiazepine added to panic disorder treatment may have short-term, but not long-term advantage. In contrast, an addition of a SSRI to panic disorder treatment may have both short- and long-term benefit. With regard to the treatment of MDD, the literature suggested that the addition of a TCA antidepressant appears to be indicated for clients with severe levels of depression when they are treated with interpersonal therapy. On the other hand, evidence regarding the effectiveness of combined CBT and medication was inconclusive.

While fairly definite conclusions can be drawn from the literature on the treatment of “pure” disorders, conclusions that can be made on the basis of the literature on psychological and pharmacological treatment of comorbid disorders are tentative. With regard to psychological treatments, some evidence suggests that comorbid major depressive disorder does not appear to negatively influence outcome of cognitive-behavioral treatment for panic disorder and that depressive symptoms do not improve with the treatment of panic. On the other hand, comorbid panic symptoms appear to negatively affect the outcome of interpersonal therapy for depression. With regard to comorbid major depressive disorder and alcohol dependence, cognitive-behavioral therapy for depression appears to reduce the number and severity of symptoms of both depression and alcohol use.

Similarly tentative conclusions can be drawn with regard to pharmacological treatments of comorbid disorders. Some evidence suggests that SSRIs may effectively reduce both panic and depressive symptoms in comorbid panic disorder and major depression. Similarly, SSRIs may be effective in the treatment of comorbid depression and alcohol dependence, reducing both depressive and alcohol use symptoms.

In addition to reviewing the empirical literature, and in keeping with the recommendations gleaned from the literature, the next goal was to develop a treatment plan for the client. The client's treatment plan focused on cognitive-behavioral therapy with a focus on therapeutic relationship and included elements of psychodynamic therapy. In addition, significant attention was paid to creating and maintaining strong therapeutic alliance. The therapy focused on reducing symptoms of panic disorder, exploration and resolution of grief over the ending of a significant relationship, reducing depressive symptoms and problematic use of alcohol, and exploring the client's negative beliefs. Assessment of the quality of the therapeutic relationship indicated that strong therapeutic alliance between the client and the therapist was developed over the course of treatment.

Overall, the results of the treatment indicated that the treatment was effective. Specifically, the client experienced a significant reduction in the severity of symptoms that she was experiencing. This was indicated by both self report and a decrease in overall symptomatology as measured by the Outcome Questionnaire-45.2. In addition, the client reported that she was experiencing less panic attacks, that her panic attacks were not as severe, that she was less fearful of additional panic attacks, and that she was experiencing lower levels of depressive and anxious symptomatology. In addition to

improved scores on these outcome measures, the client's improvement was evidenced by behavioral, cognitive, and emotional changes. Specifically, the client became more engaged in social activities and her engagement in problematic drinking decreased. In addition, she accepted the fact that her relationship with her fiancé was over, and she was more hopeful about her future.

Although the client's symptoms improved, further therapy is needed because the client continued to experience symptoms of depression. In addition, she expressed her willingness to work on changing her negative beliefs. A focus on changing these beliefs may be particularly important in reducing the risk of future relapse in the symptoms the client has experienced. Since the therapist was leaving the agency, the client was referred to another therapist to continue her treatment.

In exploring the efficacy of the treatment provided to Ms. Williams, it became apparent that several factors could have improved the treatment. These factors include greater use of cognitive and behavioral interventions to reduce symptoms of panic disorder, greater attention to the client's alcohol use, greater emphasis on AA attendance and participation in group therapy, and exploring the use of interpersonally based treatments for this client. In addition, greater research base regarding the treatment of dually diagnosed clients and better supervision quality at the therapist's agency were the factors that could have improved Ms. Williams' treatment.

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Appendices

Appendix A. Consent forms

Informed consent for participation in the study

Consent for audio taping

Appendix B. Self-monitoring forms

Panic attack record

Weekly record of anxiety and depression

Relaxation practice record

Appendix A. Consent Forms

INFORMED CONSENT

For participating in a study

I agree to participate in a case study which is being conducted by Vera Biryukova under the supervision of Dr. James Haugh of the Psychology Department, Rowan University. The purpose of this case study is to help evaluate the effectiveness of the treatment being provided for by the South Jersey Behavioral Health Resources. The outcomes collected for this study will be used to help evaluate treatment for _____ disorders.

I understand that this study will not affect my treatment in any way. I will be asked to fill out some additional tests or measures to better evaluate my treatment. These measures will not affect my treatment time. The results of the assessments will be shared with me by my clinician.

I understand that these measures will not leave the agency and will follow the same confidentiality rules of the SJBHR. I agree that any information obtained from this study may be used in any way thought best for publication or education, provided that I am in no way identified and my name is not used.

I understand that there are no physical or psychological risks involved in this study and that I am free to withdraw my participation at any time without penalty.

I understand that my participation or refusal to participate does not affect any of the services I receive from the SJBHR.

If I have any questions or problems concerning my participation in this study, I may contact Vera Biryukova's supervisor Dr. Jim Haugh at 856-256-4500 ext. 3781 or Dr. Janet Cahill at 856-256-4500 ext.3520.

Signature of participant _____ Date _____

Signature of investigator _____

Signature of the faculty supervisor _____

CONSENT
FOR AUDIO TAPING

I, _____

permit my therapist _____ to audiotape my therapy sessions.

I understand that audiotaping is for educational purposes only. The information on the audiotape will be shared with my therapist's supervisor _____ only.

Signature _____ Date _____

Therapist _____

Appendix B. Self-recording Forms

Panic Attack Record

Name _____

Date _____ Time _____ Duration _____ (minutes)

With: Spouse _____ Friend _____ Stranger _____ Alone _____

Stressful situation: yes / no _____ expected: yes / no _____

Please briefly describe the situation or thoughts that occurred prior to and /or during the panic attack you are reporting _____

What caused this panic attack? _____

Maximum anxiety (circle)

0-----1-----2-----3-----4-----5-----6-----7-----8
none slight moderate a lot as much as
you can imagine

Sensations (check)

Pounding heart	_____	Nausea	_____
Tight/painful chest	_____	Unreality	_____
Breathless	_____	Numb/tingle	_____
Dizzy	_____	Hot/cold flash	_____
Trembling	_____	Fear of dying	_____
Sweating	_____	Fear of going crazy	_____
Choking	_____	Fear of losing control	_____

