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Quality of Life and Panic Disorder

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Dedicated to all of us who live in fear without reason

A wise friend once told me,
"Stay present in the present,
and remember to breathe!"

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My humble thanks to you all.

Hey Mom and Dad, I finally made it! Wish you were here.

ABSTRACT

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Rebecca J. Wyatt Kinnander

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Panic disorder has been associated with pervasive social and health consequences similar to or greater than those associated with major depression.

Studies have been found that support findings concerning diminished quality of life for persons currently being treated, or shortly after treatment for anxiety disorders, but little is said in regards to quality of life (QOL) in years that follow treatment. This research project attempts to ascertain if there is a difference between the findings of previous studies with this more recent examination of QOL in panic disorder patients.

Furthermore, implications for practice show use of quality of life assessment is helpful in the treatment of panic disorder and measuring treatment outcomes.

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CHAPTER I

Introduction to the Research Study

This thesis is a quantitative and qualitative research study exploring how panic disorder affects quality of life.

Background of the Problem

Anxiety is a universal emotion (Taylor & Arnow, 1988). In mild forms, everyone experiences it at one time or another. In more extreme forms, it leads to fears of impending death or catastrophe. The feeling of anxiety may occur without physical symptoms, or it may be accompanied by numerous overwhelming symptoms affecting many organ systems. It may cause no change in behavior, or it may lead to immobilization or chronic avoidance (Taylor & Arnow, 1988).

At the extreme end of the anxiety spectrum rests anxiety (or panic) disorders. The National Institute of Mental Health has conducted research that shows that anxiety disorders are the most common of all mental illnesses in America. It is estimated that more than 23 million people are affected each year (U.S. Department of Health and Human Services, 1996).

Statement of the Problem

Panic disorder is associated with poor quality of life (Candilis, McLean, Otto, Manfro, Worthington, Penava, Marzol, & Pollack, M.H., 1999; Weissman, 1991; Markowitz, Weissman, Oullette, Lish, Klerman, 1989; Hollifield, Katon, Skipper, Chapman, Ballenger, Mannuzza, & Fyer, 1997). Research on quality of life (QOL) and panic disorder shows serious impairment for individuals with the disorder (Candilis et

al., 1999; Starr, 1998; Hollifield et al., 1997; Beamish et al., 1996). The presence of panic disorder is associated with quality of life disruptions in areas such as physical functioning, role functioning, bodily pain, general health perception, social functioning, and mental health (Candilis et al., 1999; Spitzer, Droenke, Linzer, Hahn, Williams, DeGruy, Brody & Davies, 1995). The quality of life for people with panic disorder quality of life is nearly the same as for patients with major depression, and is comparable to effects of medical conditions such as low back pain, arthritis, diabetes and heart disease (Candilis, et al., 1999, Schonfeld, Verboncoeur, Fifer, Lipschutz, Lubeck & Buesching, 1997).

People with panic disorder have a high degree of functional disability, they tend to be high users of health care services, and they perceive their physical and emotional health to be much worse than those without panic attacks. They are also at higher risk for substance abuse, suicide attempts, marital problems, and financial dependency (Klerman, Weissman, Ouellette, Johnson, & Greenwald, 1991; Markowitz et al., 1989; Weissman et al., 1989).

Purpose and Significance of This Study

Due to the nature of research thus far, quality of life issues have not addressed long-term consequences of panic disorder. While there are indications that this is a chronic and persistent disorder, articles mostly contain information relative to short term interventions and treatments (Clark, Salkovski, Hackman, Middleton, Anastasiades, & Gelder, 1994; Craske, Brown & Barlow, 1991; Beck, Sokol, Greenberg, Wright & Berchick, 1992; Telch, Lucas, Schmidt, Hanna, Jaimez, & Lucas, 1993). This information leaves one to ponder the future for panic disorder sufferers.

Research validates diminished QOL in panic disorder during treatment and shortly after, but how are people functioning two or more years following initial treatment? Are they still receiving some form of treatment? Has their QOL improved, stayed the same, or worsened?

Quality of life assessment can be used as a screening device for mental illness, a measuring gauge for depth of recovery (Spitzer et al, 1996), and as a clinical tool for planning long-term interventions (Massion, Warshaw, Keller, 1993; Markowitz et al., 1989). Because panic disorder coincides with diminished quality of life and functional impairment, these aspects of measuring quality of life can impact many systems, including individual, family, and societal systems. With information obtained through this study, practitioners will have yet another tool to track efficacy of long-term treatment outcomes. Results may be useful for mental health practitioners who may benefit from knowing that their panic patients suffer significant impairment, and will bring greater attention to psychosocial, physical and occupational deficits in panic disorder sufferers.

Before describing this study in more detail and looking at its results, an examination will be done of what is already known about quality of life and panic disorder.

Chapter II

Literature Review

This chapter will include criteria for panic disorder, address the history of the diagnosis, past and current treatment interventions, and quality of life factors for individuals recovering from panic disorder will be examined. Gender issues will also be considered.

Panic Disorder Defined

The word "panic" comes from Pan, the Greek god of the mountains and woodlands. The half-human, half-goat god's unpredictable behavior was associated with mountains rumbling and unforeseen events. Pan's loud voice was said to be capable of striking groundless fear into unwary travelers who passed through the woodlands and valleys.

The Diagnostic and Statistical Manual for Mental Disorders IV (DSM IV) (APA, 1994) lists thirteen different categories in its Anxiety Disorders section. Panic Disorder with Agoraphobia is characterized by both recurrent unexpected panic attacks and agoraphobia. For a good understanding of this disorder, we must look at the criteria for panic attacks, agoraphobia, and finally, panic disorder with agoraphobia.

Panic attacks are sudden episodes of intense fear and apprehension. The central feature of panic disorder is a series of unprovoked panic attacks involving overwhelming subjective feelings of terror and anxiety. In addition to this core symptom, individuals must exhibit four of the following behaviors to meet the criteria established by the DSM-IV (APA, 1994) to be considered panicked. These behaviors are dyspnea, palpitations, chest discomfort or pain, a choking or smothering sensation,

dizziness or physical unsteadiness, feelings of unreality, paresthesias, hot and cold flashes, sweating, faintness, trembling and shaking, plus a fear of losing control, going crazy, or dying (Wichowski et al., 1996).

Agoraphobia Defined

Agoraphobia occurs when anxiety about 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 and unexpected panic attack. Agoraphobic fears usually involve situations that include being outside the home alone, being in a crowd or standing in a line, being on a bridge, or traveling in a bus, train, or car (DSM IV, 1994).

Panic Disorder and Agoraphobia

If left untreated, panic disorder may develop into agoraphobia. (Beamish, Granello, Haag Granello, McSteen, Bender & Hermon, 1996; Wichowski & Benishek, 1996). Agoraphobia occurs when an individual fears being in places and situations in which help might not be available if a panic attack occurs, leading to increasing avoidance of public places. Panicked people try to reduce the number of attacks by avoidance of anxiety-provoking situations, making phobic behavior a standard method of coping with anxiety attacks. Between attacks, anticipatory anxiety is common and becomes pervasive (Beamish et al., 1996).

Quality of Life Defined

For the purposes of this study, the definition provided by Mobly's Medical, Nursing, & Allied Health Dictionary (1998) was used. Quality of life is:

> A measure of the optimum energy or force that endows a person with the power to cope successfully with the full range of challenges encountered in the real

world. The term applies to all individuals, regardless of illness or handicap, on the job, at home, or in leisure activities. Quality enrichment methods can include activities that reduce boredom and allow a maximum amount of freedom in choosing and performing various tasks (p 7543).

Panic is a debilitating disorder. Individuals afflicted are at risk of severe anxiety attacks, depression, alcohol and drug abuse, and suicide (Candilis et al., 1999; Sherbourne, Wells, Meredith, Jackson & Camp, 1996; Spitzer et al., 1995; Hollifield et al., 1997; Johnson, J., Weissman, M.M., Klerman, G.L., 1990). Other consequences include impaired social functioning and poor emotional and physical health (Hollifield et al., 1997; Schonfeld, Verboncoeur, Fifer, Lipschutz, Lubeck, & Buesching, 1997). Individuals suffering from panic disorder frequently use prescription medication and emergency room and other health services (Sherbourne et al., 1996; Candilis et al., 1999).

Misdiagnosis of Panic Disorder

Misdiagnosis of panic disorder occurs frequently (Wichowski & Benishek, 1996; Spitzer et al., 1995; Starr, 1998). It is generally 12 years after the initial panic symptoms before individuals seek or are referred for psychiatric treatment (Wichowski & Benishek, 1996). Mental disorders are frequently overlooked because primary care patients with mental disorders typically present with physical symptoms rather than psychological symptoms (Spitzer et al., 1995).

Costs of Panic Disorder

Furthermore, panic disorder is expensive. It is estimated that more than 42 billion dollars a year are lost to misdiagnosis and undertreatment of this mental illness.

(Anxiety Disorders Association of America, 1999, U.S. Department of Health and Human Services, 1996).

Untreated or poorly treated anxiety disorders can add significantly to medical costs (Wilson, Ross & DuPont, 1997). Managed in the proper way, treatment can be highly effective. Managed poorly, health care and lost productivity costs can be enormous. Successful treatment protocols are available, but lack of such knowledge and skills by providers leads to poor and costly treatment outcomes (Wilson et al.,1997).

Quality of Life after Treatment

Little is known about the quality of life in the years that follow treatment. Identification of panic as a distinct disorder in the DSM III (APA, 1980) sparked research in clinical, epidemiological and therapeutic areas, and these studies raised questions concerning the long-term course, social morbidity and health consequences of panic disorder (Markowitz et al. 1989).

Similar questions arose in the 1960s and 1970s when treatment efficacy for depression was refined and since then, there has been much information generated documenting the social and health impairments associated with depression. However, the same cannot be said for panic disorder data (Weismann, 1991, Markowitz et al., 1989).

Like major depression, panic disorder is associated with the self-perception of poor physical and emotional health, increased risk of alcohol abuse and marital and family problems, increased medication and emergency room use, and suicide attempts. It becomes clear that these impairments should be considered in the long-term

Recognition of Anxiety Disorders in the Medical Community

Although panic attacks were discussed in Freud's work during the late 1800's (Barlow, Esler, & Vitali, 1998), the diagnostic criteria has only been in existence since 1980 when it was first included in the DSM-III (APA, 1980), and agoraphobia was officially targeted as being consequent upon panic attacks in the DSM-III-R (APA, 1987).

Agoraphobia has become perhaps the most widely recognized anxiety disorder in the eyes of the public, second only to simple phobia (Barlow, 1988). As late as the early 1970's, this was not the case. People who suffered from anxiety attacks resulting in phobias to the point of being housebound were most often considered to be extremely nervous or perhaps odd. As the condition of agoraphobia became widely publicized during the late 1970s and the 1980s, many people remembered an "eccentric" relative who seldom if ever left home. It is now known that agoraphobia is a fear of leaving a safe place or venturing into crowded areas and that the multitude of "eccentric" relatives suffered from this condition (Barlow, 1988).

Pharmacological Treatment of Anxiety Disorders

Pharmacotherapy is often used to treat anxiety disorders (Walley, Beebe & Clark, 1994). However, this may not be the most effective treatment (Howard, 1999; Marks, 1991; Wilson et al., 1997). More recent literature indicates that pharmacotherapy, combined with cognitive and behavioral treatment, presents a wider range of interventions possible for anxiety sufferers (Barlow, Esler & Vitali, 1998; Walley et al., 1994).

Benzodiazepines were first used in 1960s, and by the end of the 1970s they were widely popular (Bonn & Bonn, 1998). Alprazolam (Xanax) was one benzodiazepine that came into the therapeutic arena in the mid-eighties and was considered an effective antipanic agent because of its rapid action and low side effect profile. These features made the drug appear to have important therapeutic value, but studies (Fyer, Liebowitz, Gorman, Campeces, Levin, Davies, Moetz, & Klein, 1987; Fontaine, Chouinard & Annable, 1994; Liebowitz, Fyer & Gorman, 1986) showed complications when patients began withdrawing from the medication. A large number who had experienced reduced panic attacks while on benzodiazepines reported increased panic attacks while discontinuing the medication. Some reported attacks at a worse level than prior to treatment. Another disadvantage of benzodiazepine usage was vulnerability to drug dependence and withdrawal.

Most recent pharmacological-based research suggests the use of serotonin reuptake inhibitors (SSRI), antidepressants and high potency benzodiazapines such as alprazolam as the first line of treatment for panic disorder (Starr, 1998). These agents diminish the intensity and frequency of panic attacks and decreases anticipatory anxiety. They can also help many patients stop avoiding the circumstances that make them anxious (American Psychiatric Association, 1998).

However, anxious people react differently to medications for anxiety treatment. It has been recommended that treatment with medications begin with extremely small dosages because of strong side effects that mimic panic (Starr, 1998). Certain SSRIs can induce anxiety and nervousness, making it difficult for anxiety patients to tolerate prescribed regimens. The use of benzodiazepines used in conjunction with

antidepressants can be helpful to get through adverse side effects, which typically diminish as the dosage moves into the therapeutic range. This can prevent an anxious patient from discontinuing an effective medication before the transition period is over (Starr, 1998).

Cognitive and Behavioral Therapies For Anxiety Disorders

The very first type of behavioral therapy for depression was developed by Ellis in 1962, and was called Rational Emotive Therapy (RET). In 1975, Meichenbaum introduced Self-instructional training (SIT). Beck and Emery followed in 1985 with Cognitive Therapy (Chambless, 1993).

Combined with behavioral therapy, Cognitive Behavioral Therapy (CBT) began to show remarkable results in the treatment of panic in the mid-eighties when Beck and Emery, Barlow and his colleagues, and Clark, began to develop techniques for treating panic attacks directly, rather than the avoidance behavior often associated with panic disorder (Jacobson & Hollon, 1996).

Cognitive Behavioral treatment has been refined to include panic inoculation and panic information, cognitive restructuring, breathing retraining, and relaxation training. Results of studies have shown that these combined treatments can be effective in reducing anxiety symptoms including frequency and intensity of panic attacks (Beamish, et al., 1996).

Panic disorder patients fear panic attacks and worry endlessly about the next attack. (Beamish et al., 1996; Starr, 1998). Agoraphobic behavior begins when these powerful concerns leave patients vulnerable to future panic attacks and steers them away from any environment in which anxious episodes may occur (Beamish et al.,

1996; Starr, 1998). To help patients deal with this aspect of anxiety disorders, cognitive therapy focuses on education (Barlow, 1988; Starr, 1998). Patients are taught that attacks are a normal fear reaction, and while not fully understood, can begin without provocation. They are also reassured that the symptoms are not harmful, and this helps mitigate their apprehension. Distorted and irrational thinking patterns are identified and challenged (Barlow, 1988; Barlow et al., 1989; Barlow et al., 1998; Walley et al., 1994).

Behavioral therapy deals with physical symptoms and phobic avoidance (Barlow, 1988; Barlow et al., 1989; Barlow et al., 1998; Walley et al., 1994). Relaxation exercises and slow breathing techniques are taught and practiced. Some patients with panic disorder often hyperventilate in response to anxiety signals, such as shortness of breath and tightness in the chest, making symptoms worse (Starr, 1998).

In vivo exposure includes the therapist and patient confronting the feared situation together with the use of relaxation techniques to control anxiety (Walley et al., 1994). Panic inoculation includes the intentional induction of the particular physical symptom that most agitate patients. For example, the patient may sit in a spinning chair so that he or she can learn to experience dizziness, another anxiety symptom, without undue distress.

Cognitive and behavioral therapies provide patients with skills they can use once they finish therapy (Starr, 1998). It is well known that anxiety disorders have a high relapse rate (Yonkers et al., 1998; Margraf, Barlow, Clark & Telch, 1993), and with coping skills learned through cognitive and behavioral therapies, subsequent experiences may be less serious than the first (Starr, 1998).

Long Term Outcomes of Anxiety Treatment

The identification of panic as a distinct disorder in the DSM III (1980) sparked research in the clinical, epidemiological and therapeutic aspects of panic disorder. Pharmacological and behavioral interventions were introduced and tested, resulting in a number of questions about the long-term course, social morbidity, and health consequences of panic disorder (Markowitz et al., 1989). Panic disorder has been described as a chronic, recurring illness with periods of remission (Schonfeld et al., 1997; Yonkers et al., 1998; Starr, 1998).

Given the chronic nature of the illness, it has been recommended that treatment plans include quality of life assessments as outcome measures (Markowitz et al., 1989). Used as a tracking measure, baseline QOL scores can be used to measure progress in treatment (Wilson & Cleary, 1995).

Current research literature does not always include long-term treatment outcomes (more than one year), with exception, a study by Brown & Barlow (1995) evaluated long-term outcomes of drug treatment for panic-related symptoms. They found evidence of a possible advantage to cognitive behavioral treatments for producing lasting treatment gains. This advantage is most evident in contrasting the long-term results of high-potency benzodiazepines (e.g., alprazoram), given the latter's association with relapse and rebound panic on medication discontinuation. Findings showed that in the aggregate, patients maintained and in some instances improved on the substantial gains achieved from a time-limited, cognitive-behavioral treatment protocol. These gains were maintained from 3 to 24 months on three of four continuous measures of outcome.

In a follow-up study conducted 8 years after behavioral treatment, Burns, Thorpe and Cavallaro (1986) found that agoraphobic clients reported continued improvement in general, but few felt completely relieved of phobic behavior.

Studies have demonstrated that gains made in cognitive-behavioral interventions with panic are longer lasting than those made with pharmacological interventions (Beck et al., 1992; Clum, 1989, Shear et al., 1991; Sokol et al, 1989). These studies also indicate that, unlike pharmacological interventions, cognitive-behavioral treatments demonstrate relatively low rates of relapse and the absence of side effects.

Given the overwhelming evidence of these studies, it would be easy to dismiss pharmacological interventions. However, Starr (1998) makes a strong point in her discussion of treatment options. She suggests patient preference play a major factor when charting a therapeutic course. Some patients may be adamantly opposed to taking medication or unable to tolerate side effects. Other patients may be reluctant to complete the exercises required by cognitive-behavioral interventions, such as panic inoculation. A therapist skilled in cognitive-behavioral treatment may not be available, or medication can be used to ease disabling symptoms more promptly. Starr's key remark is that whichever therapy is chosen, it should generally be replaced or supplemented if patients do not experience substantial improvement in symptoms after six to eight weeks.

Gaps in the Literature

As was stated earlier, little is known about the quality of life in the years that follow treatment. Previous studies raised questions concerning the long-term course, social morbidity and health consequences of panic disorder (Markowitz et al. 1989).

However, there are no studies that support the consequences of panic disorder in individuals during the years after initial diagnosis. It is hoped this study will give practitioners an idea as to the role panic disorder plays in the every day lives of individuals with panic disorder.

Summary

Panic disorder is associated with poor quality of life (Candilis et al., 1999; Weissman et al, 1991; Markowitz et al., 1989; Hollifield et al., 1997). To understand the impact of the problem, one only needs to consider research by Telch, et al. (1995) that showed pre-treatment baseline QOL scores for panic sufferers were similar or greater than scores reported for patients with alcoholism, schizophrenia, and personality disorders, but somewhat less than those reported for persons with acute depression. Patients showed QOL impairment in the area of work inside the home, social and leisure activities, and functioning as a family unit.

Assessments of the impact of anxiety disorder on quality of life are important not only as outcome measures but also as guides for treatment decisions (Massion et al., 1993; Markowitz et al., 1989). Furthermore, the use of quality of life measurement tools could help clinicians prioritize treatment and track progress toward recovery. Used as a screening tool for mental illness, low scores of QOL could suggest undetected mental disorders. (Spitzer et al., 1996).

There has been a growing recognition that quality of life is an outcome in its own right (Massion et al., 1993). "It may be that patients' perceptions of how they feel, function, look, etc., is more important than the actual reality. In fact, it is not only the

incongruity of the expected versus the actual, but the actual versus the perceived" (Strain, 1990).

Chapter III

Theoretical Framework

Systems Theory will be used as the framework for the foundation of this study. Because quality of life is measured both subjectively and objectively, this approach can be used in examining the results of this study.

Systems Theory

Social work practice with persons who have chronic mental illness requires a conceptual framework that fully accounts for the complexities of human beings, the environments in which they live, and their transactions with these environments. Systems theory is a basic component of such a conceptual framework and it provides an alternative to the disease or medical models.

Systems theory assumes a person-in-environment focus. This approach sees people dynamically involved with sub-systems that include "the individual (biophysical, cognitive, emotional, behavioral, motivation); interpersonal systems (parent-child, marital, family, kin, friends, neighbors, cultural reference groups, and others in social networks); organizations, institutions and communities; and physical environment (housing, neighborhood, buildings, other artificial creations, water and weather, and climate)" (Hepworth, Rooney and Larsen, 1997).

Application of Theory

Systems theory can be used to help understand the scope of the problem of diminished quality of life in other systems. The systems perspective enables practitioners to understand the impact of environment, both social and physical, on a client's mental health, and more important, to use the environment to support the coping

and adaptive efforts of individual clients and groups of clients in dealing with the stress of daily living.

This concept will allow us to see how others in the lives of panic disorder sufferers are also affected by diminished quality of life. Because QOL encompasses so many aspects, or systems, in one's life, it is hoped the Systems theory will provide a means of understanding the dynamics and impact of diminished QOL.

Chapter IV

Methodology

The literature reviewed earlier indicated decreased quality of life (QOL) levels in association with panic disorder (Candilis, McLean, Otto, Manfro, Worthington, Penava, Marzol, & Pollack, M.H., 1999; Weissman, 1991; Markowitz, Weissman, Oullette, Lish, Klerman, 1989; Hollifield, Katon, Skipper, Chapman, Ballenger, Mannuzza, & Fyer, 1997). While research shows an increase in QOL during treatment and shortly after, there is a lack of studies addressing QOL in the years that follow treatment for panic disorder. Panic disorder is a chronic and persistent disorder (Barlow, 1988), which leads this researcher to believe that, even though there may be an immediate increase in QOL during and shortly after treatment, panic disorder sufferers experience a continual diminished sense of well being in the years that follow.

This study further explored how the dimensions of panic disorder can affect QOL. This chapter presents research design, research questions, operational definitions, and characteristics of the study population, instrumentation, data collection, data analysis, and protection of participants.

Research Question

The connection between chronic and persistent panic disorder and its impact on quality of life was examined. This study hoped to address the following question:

1. What is the quality of life for people with panic disorder at least two years after initial treatment?

Research Design

Objective ways of measuring quality of life for participants with panic disorder include analyzing facts relative to utilization of treatment, such as medications used, or number of anxiety-related emergency room visits. Alcohol and/or drug use, financial status, and number of suicide attempts are also measured and compared in this manner (Klerman, Weissman, Ouellette, Johnson, & Greenwald, 1991; Markowitz et al., 1989; Weissman et al., 1989).

Another method often used to measure quality of life is with the use of self-reporting. Panic disorder participants in various QOL studies (Katerndah, 1999; Markowitz et al., 1989; Massion et al., 1993; Sherbourne et al., 1996; Telch et al., 1995) were asked their perceptions of current functioning levels in such areas as personal happiness, role fulfillment, social and marriage functioning, and physical and emotional health. Because self-reporting involves individuals' perceptions, and those beliefs can vary from day to day, this type of surveying should be considered subjective.

This study was a quantitative study that utilized cross-sectional survey design. In addition, an open-ended questionnaire was used to augment information found in the survey.

The use of a survey research design brings several strengths to social work research. It allows one to make descriptive statements regarding a specific population (Rubin & Babbie, 1997). Survey research is highly reliable. By presenting all subjects with a standardized questionnaire, unreliability of observations made by the researchers is eliminated (Rubin & Babbie, 1997).

Survey research is not without weaknesses. Surveys cannot measure the context of social life. Survey researchers can seldom develop the feel for the total life situation in which respondents are thinking and acting, unlike the participant observer can (Rubin & Babbie, 1997).

Operational Definitions

The DSM IV criteria for panic disorder are listed in the literature review chapter. This is the operational definition that was used for this study. For the purposes of this study, the definition provided by Mobly's Medical, Nursing, & Allied Health Dictionary (1998) for quality of life will be used. It is also found in the literature review.

Study Population

A nonprobability convenience sampling was used to generate this study's population. It included both male and female adults over the age of 21 who have been diagnosed with panic disorder, either with or without agoraphobia. They must have received some form of treatment prior to 1998. Subjects were recruited through the use of the Internet. The researcher posted messages on the Anxiety Association of America's bulletin board with an email address listed to allow individuals to respond to if they were interested in participating. This Web site was chosen because of the familiarly of the site by the researcher and also because the site has been well established and supported by professionals in the field of panic disorder research. Twelve surveys and questionnaires were emailed to prospective participants and ten were returned for a return rate of 83%.

Instrumentation

This is a triangulated study in that it uses two instruments, the Rand 36-Item Health Survey 1.0 and a researcher-designed questionnaire. Application was submitted to the Augsburg IRB. Once IRB approval was granted, research began.

Participants were recruited through the Internet, using a recruitment message (Appendix A) posted on a bulletin board located on the website of the Anxiety Disorders Association of America. Subjects that responded to the recruitment message were informed about the research project with a written statement (Appendix B), and were asked if they wanted to participate. If the reply was yes, the researcher-designed questionnaire (Appendix C) and The Rand 36-Item Health Survey 1.0 (Hays, Sherbourne & Mazel, 1993) (Appendix D) was e-mailed to participants.

Once completed surveys were returned to the researcher, results were computed, analyzed, and reported using methods recommended by the measurement survey authors. Questionnaires were analyzed using content analysis.

Data Collection and Measurement Issues

The quantitative aspect of this study refers to the implementation of a self-administered quality of life (QOL) questionnaire. The Rand 36-Item Health Survey (SF-36) consists of 36 items included in long-form measures developed for the Medical Outcomes Study (Hayes et al., 1993). The SF-36 taps eight health concepts: physical functioning, bodily pain, role limitations due to physical health problems, role limitations due to personal or emotional problems, general mental health, social functioning, energy/fatigue, and general health perceptions. It also includes a single item that provides an indication of perceived change in health. MOS Trust, Inc distributes the SF-

36 items and scoring rules. Strict adherence to item wording and scoring recommendations is required in order to use the SF-36 trademark (Hays et al., 1993).

Two separate surveys, The RAND 36-Item Health Survey 1.0 and the Medical Outcomes Study 36-Item Short Form Health Survey (MOS SF-36) were used in the majority of studies conducted pertaining the panic disorder and quality of life (Spitzer et al., 1995; Massion et al., 1993; Hollifield et al., 1997; Schonfeld et al., 1997; Ettigi, Meyerhoff, Chirban, Jacobs & Wilson, 1997). The wide use of this instrument in these prevalent studies lends credence to its use in this study.

Closed and open-ended questions asked on the accompanying researcher-designed questionnaire allowed for descriptive analysis regarding possible contributing factors in panic disorder and QOL issues. Content analysis is one way of transforming qualitative material into quantitative data (Rubin & Babbie, 1997).

Both instruments were pretested with an individual meeting the study population criteria. This was done to allow the researcher to evaluate the questions on the researcher-designed questionnaire. Pretesting helps assure a more reliable and valid instrument (Rubin & Babbie, 1997).

Data Analysis

Qualitative data analysis is a process that requires careful study and creative insight. The researcher used descriptive analysis to transform qualitative data into quantitative data. Quantitative data obtained from the SF-36 was analyzed using the guidelines designed by the authors of the instrument. These results were then compared to the RAND Medical Outcomes Study findings. Results are discussed in the Findings Chapter that follows.

Protection of Human Subjects

Application was submitted to Augsburg College Internal Review Board for approval to use human subjects in this research project.

Written materials, and consent forms were locked away when not in use by the researcher. Others actions will be taken to assure confidentiality of participants:

1. Participants were told that by returning the completed survey, they were implying consent to take part in this research project.
2. Participants were told they could choose to stop the interview at any time.
3. Participants were assured all records relevant to the research project would be destroyed in a timely manner.
4. Confidentiality was assured in that participants would not be named or identified in the thesis, but written about in general terms in order to develop concepts.
5. Participants were provided the name and phone number of a licensed counselor in case adverse emotional or psychological reactions occurred because of participation in the study.

Chapter V

Findings

This findings chapter will present findings from the Quality of Life and Panic Disorder Questionnaire and the Rand 36-Item Health Survey. Twelve surveys were emailed to prospective participants. Of those, ten were returned for a response rate of 83%. These ten surveys and questionnaires were used to compile the following data.

A. Sample Demographics

Respondents in this study were Caucasian adults between 34 and 52 years of age, living in various parts of the United States. Seven women and three men participated.

Data from the Quality of Life and Panic Disorder Questionnaire showed the majority of respondents to be female (n = 7) as opposed to male (n = 3). Most were married (n = 8) and two were separated or divorced. Participants ranged in age from 35 to 52 years of age, with a mean of 42. All respondents were of European American/Non Hispanic heritage. Table one illustrates these demographic features.

Table 1

Demographic Features of Study Participants

(N = 10)

	Number	%
Gender		
Female	7	70
Male	3	30
Total	**10**	**100%**
Marital Status		
Married	8	80
Widowed	0	0
Separated/divorced	2	20
Living with partner	0	0
Single	0	0
Total	**10**	**100%**
Age		
30 – 39 years	2	20
40 – 49 years	6	60
50 – 59 years	2	20
Total	**10**	**100%**
Race		
European American/Non Hispanic	10	10
African American	0	0
Hispanic/Latino/Mexican American	0	0
Asian American/Pacific Islander	0	0
American Indian	0	0
Other	0	0
Total	**10**	**100%**

B. Comparing the number of years since the onset of Panic Disorder.

Most participants have had panic attacks for a number of years, with a range of a few months since the onset of panic attacks to 32 years. The average number of years was 14.7. Onset of panic attacks ranged in age from 17 to 38 with a mean of 27.4 years of age. Initial diagnosis of panic disorder ranged from an immediate diagnosis, to 25 years before a diagnosis was made. The mean was 5.6 years. Tables 2, 3 and 4 show a breakdown of information.

Table 2
Comparing Number of Years since onset of Panic Disorder
(N = 10)

	Number	**%**
Number of years since onset of panic attacks		
0 – 5	2	20
6 – 10	1	10
11 – 15	2	20
16 – 20	3	30
21 – 25	1	10
26 – 30	0	0
31 – 35	1	10
Total	**10**	**100%**

Table 3
Comparing Ages since onset of Panic Disorder
(N = 10)

	Number	**%**
Age when first panic attacks began		
15 – 19 years	2	20
20 – 24 years	2	20
25 – 29 years	2	20
30 – 34 years	1	10
35 – 39 years	3	30
Total	**10**	**100%**

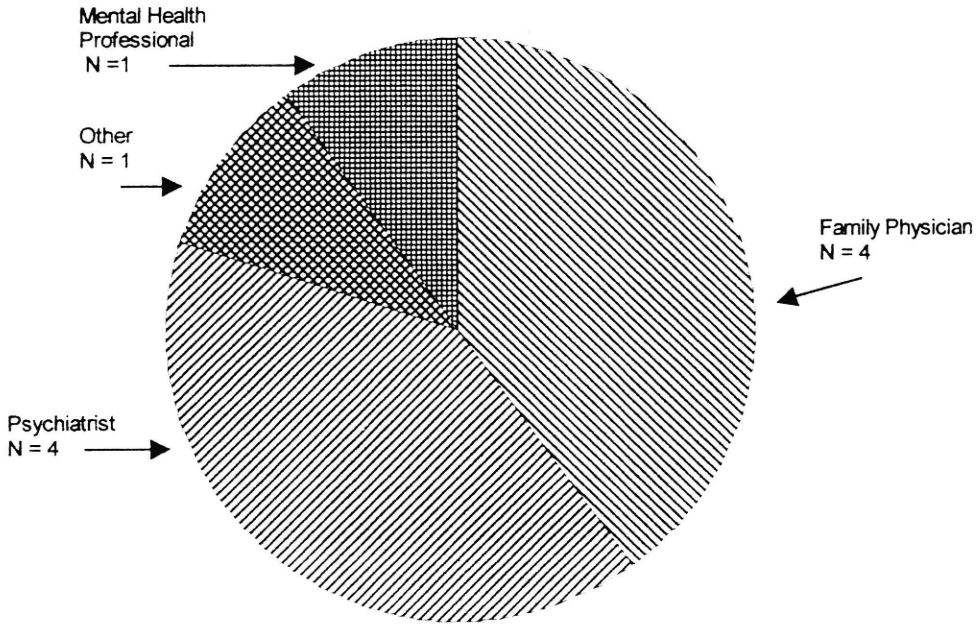
Table 4
Length of Time Before Panic Disorder Diagnosis
(N = 10)

	Number	**%**
Length of time before panic disorder diagnosis		
0 -12 months	5	50
1 – 5 years	1	10
6 – 10 years	1	10
11 – 15 years	1	10
16 – 20 years	0	0
21 – 25 years	2	20
Total	**10**	**100%**

C. Comparison of who made the initial diagnosis.

Family doctors and psychiatrists made the majority of the diagnosis: family doctors n = 4; psychiatrist n = 4. One respondent indicated "other" and one respondent indicated "mental health professional" as the individual who made the diagnosis. Table 5 shows this comparison.

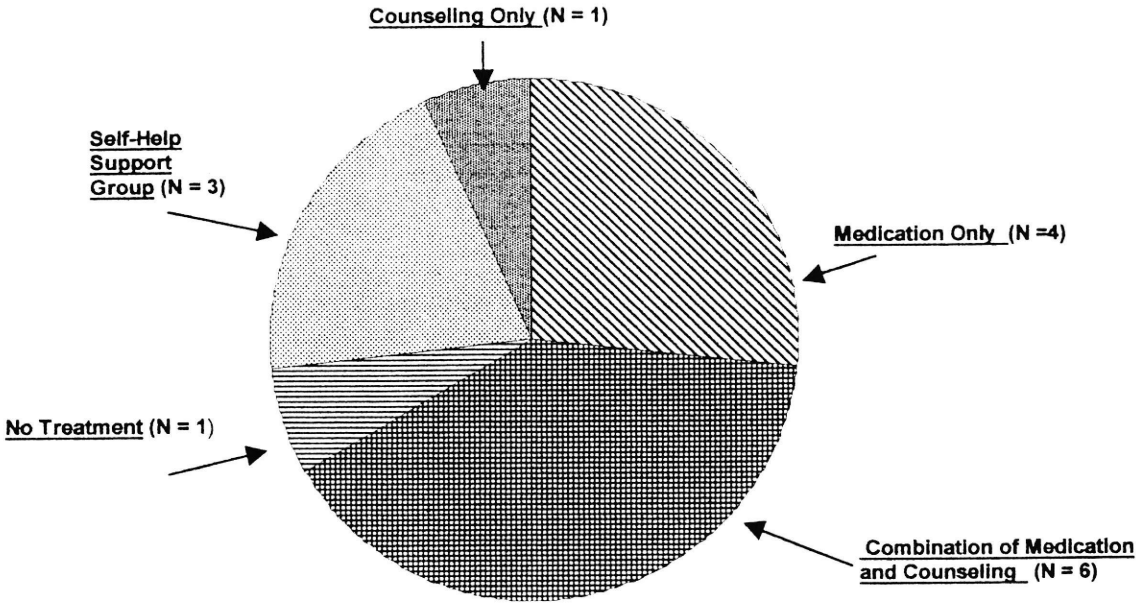
Table 5
Comparison of Who Made Initial Diagnosis



D. Types of treatment used after initial diagnosis.

Treatment types ranged in methods such as medication alone (n = 4), combination of medication and counseling (n = 6), counseling alone (n = 1), self-help support groups (n = 2) and no treatment (n = 1). Length of treatment ranged from 10 years to no treatment with a mean of 3.8 years. Participants could reply to more than one answer to this question, which explains totals equaling a higher number than number of respondents. Table 6 shows these results.

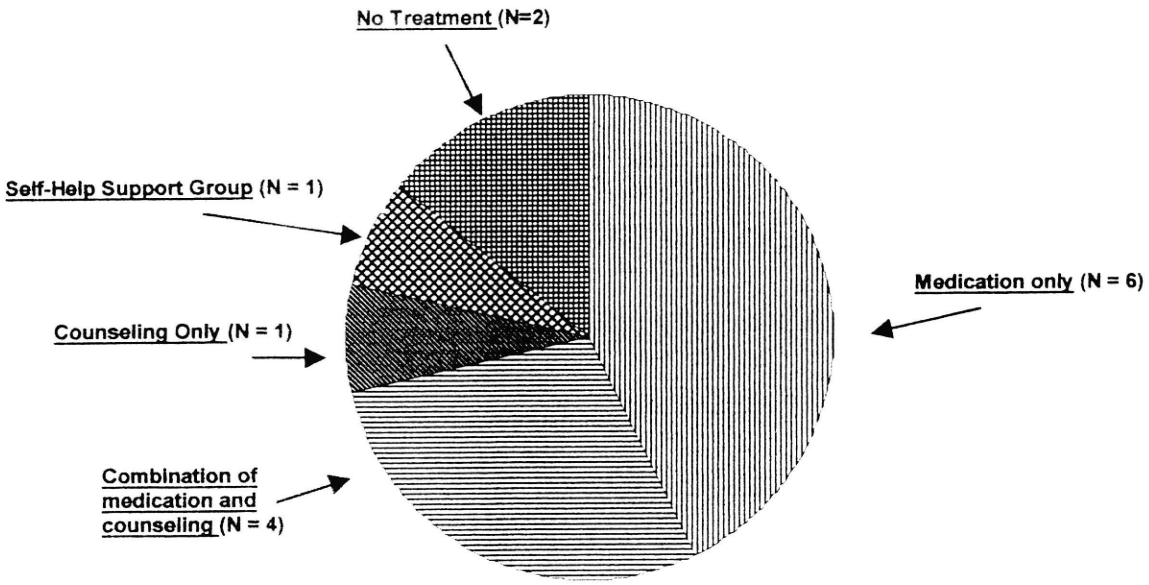
Table 6
Types of Treatment Received After Initial Diagnosis



E. Types of treatment still being used.

Many are still receiving treatment with indications of medication (n = 6), combination of medication and counseling (n = 4), counseling (n = 1) and self help support groups (n = 1). Two individuals are receiving no treatment. Table 7 on the following page illustrates these findings. Again, participants could reply to more than one answer to this question, which explains totals equaling a higher number than number of respondents.

Table 7
Type of Treatment Currently Receiving



F. Quality of life comments made by participants.

One component of the Quality of Life and Panic Disorder Questionnaire included the question: "If you feel the quality of your life has improved in the past year, what has changed to improve it?" Similarly, this question was also asked: "If you feel the quality of your life has gotten worse in the past year, what has changed to make it worse?". These responses were examined for common themes and the composite of replies will be found in the following paragraphs.

One half (N = 5) of study participants felt the quality of their lives had improved in some way. Proper diagnosis and medication, good relationships, and better coping skills were equally cited as reasons for the improvement. Respondent #3 related: "I FINALLY was diagnosed properly and have been on the proper medication for about 2 years". Respondent #4 agreed that medication made the difference: "I'm on a different

medication now that makes me less sleepy and apathetic". Medication and counseling in combination was attributed by Respondent #5: "I have noticed an improved quality of life when on medication and when in counseling – which is what I attribute my better quality of life to."

"The death of my father, although sad, reinforced bonds with my family, and strengthened our love of each other" were comments from Respondent #4 concerning good relationships. Respondent #3 gave credit to her husband for the improvement in her life: "My husband is a tremendous help. I think he understands what I have been through and always lends a loving and helping hand. Without him, my medications and my doctor, who knows where I would be."

Coping skills also played a role in improved QOL: "I feel I've become better a accepting things that I can't change" came from Respondent #4. Another respondent (#1) noted that the passage of time since his divorce made a difference in his QOL. Finally, a better management of panic episodes was cited by Respondent #2 as the reason for better QOL. "Panic attacks no longer rule my life. When they occur, I know what they are and am able to manage them...I am outgoing and creative now and do not live with the fears that used to rule me."

It should be noted that self-help support has also improved QOL for one participant: "I feel supported by the ADAA (Anxiety Disorders Association of America) chat room" was relayed by Respondent #4.

The other one half (N = 5) of participants indicated the quality of their lives had gotten worse. Health problems, recurrence of panic attacks, and depression were

prevalent themes, cited an equal number of times. One participant gave difficulty with medication as a reason for diminished QOL.

Medical difficulties included: "Not a great year – thyroid surgery for me..." was listed by Respondent #6. "Severe health problems..." were reported by Respondent #10.

Recurrence of panic attacks, which has been reported in the current literature as a reason for lower QOL, was also reported: "Panic attacks resurfaced 2 months ago after being fairly dormant for the last year" came from Respondent #6.

Finally, depression was prevalent among these respondents. In the narrative replies, three individuals listed depression: "Unfortunately over the past year or so, my anxiety has progressed into depression" was reported by Respondent #9.

G. Comparison of study results and RAND 36-Item Health Survey 1.0

Overall Health Concepts

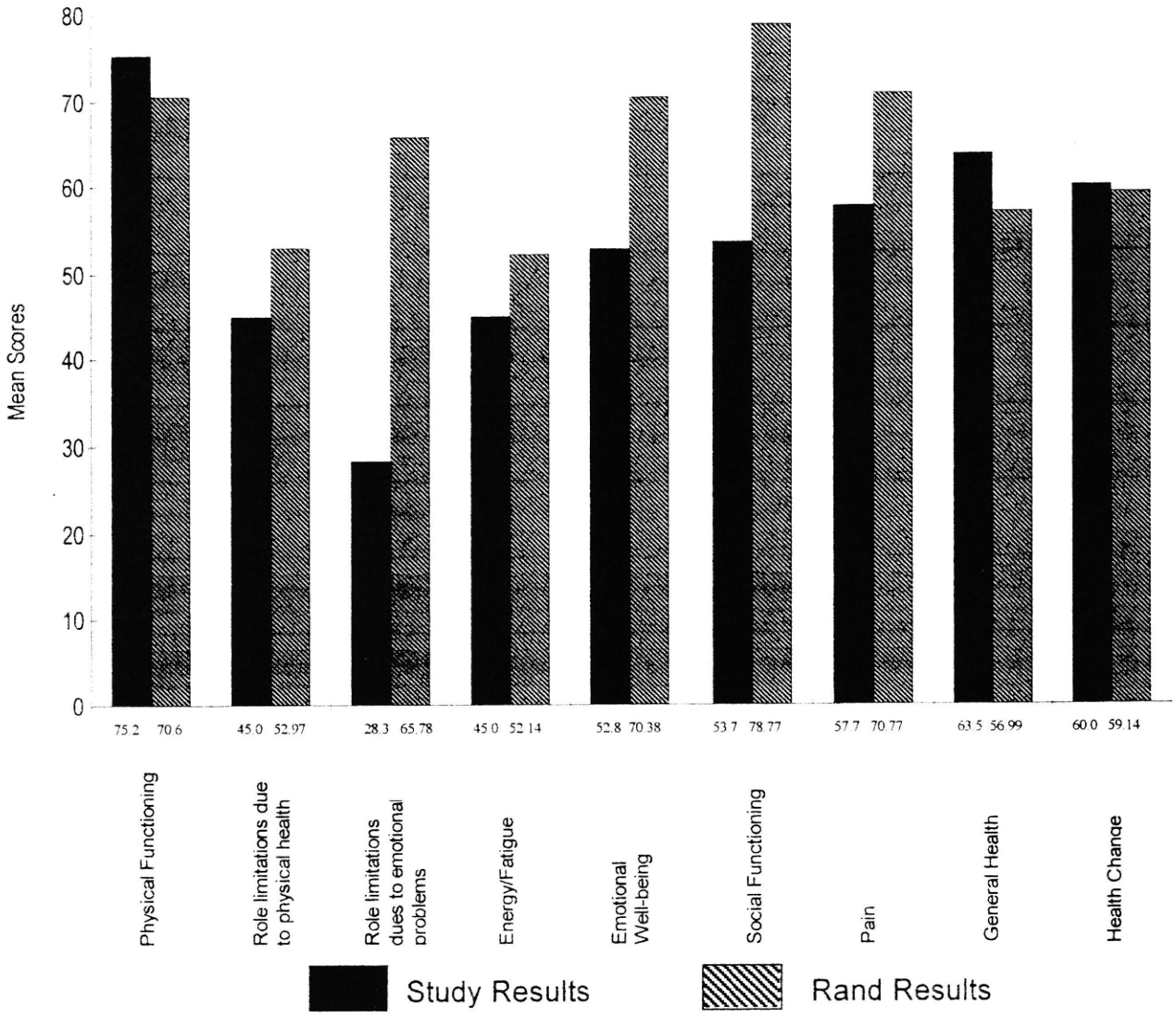
This study's results were consistent with the literature review in that panic disorder is associated with quality of life disruptions. The Rand 36-Item Health Survey 1.0 studies eight health concepts: physical functioning, bodily pain, role limitations due to physical health problems, role limitations due to personal or emotional problems, general mental health, social functioning, energy/fatigue, and general health perception (Hayes et al., 1993). This study's results showed participants scored lower in the areas of physical and role functioning, bodily pain, general health perception, social functioning and mental health. These findings are consistent with research findings (Candilis et al., 1999; Markowitz et al., 1989; Spitzer et al., 1995). These findings could

indicate that people with chronic panic disorder suffer the same limitations as those who have just been diagnosed with the disorder.

In a comparison of scores from this study and the scores provided in the Rand 36-Item Health Survey 1.0, it was shown that study findings were consistent with those of earlier published research. While study participants scored higher in most areas of physical health such as physical functioning, general health, and health change, they scored lower in areas of role limitations due to emotional problems, emotional well-being, and social functioning. Participants also scored low in role limitations due to physical health, energy/fatigue, and pain. Table 8 represents this comparison of findings.

Table 8

Comparison of Study Results and Rand



Chapter VI

Discussion

This Chapter discusses similarities and differences between study findings and what has been reported in the literature. In addition, strengths and limitations of this study were examined. Implications for practice, research and policy are discussed as well.

A. Similarities of findings and literature review

Gender Issues

Barlow (1988) reported that women are more likely to experience anxiety disorders. Even though this was a small sample (N = 10), there were more women who participated and 70% of the sample population was women. Researchers and practitioners may want to take gender issues into consideration during the course of treatment.

Pharmacological Treatment of Anxiety Disorders

Pharmacotherapy is often used to treat anxiety disorders (Walley et al., 1994; Wilson et al., 1997). Ninety percent of study participants reported using some sort of pharmacological treatment, either alone or in combination with counseling. Most had been receiving this type of treatment since the diagnosis of this disorder (N=9). While the literature suggests that pharmacological treatment alone may not be the best choice of treatment (Barlow et al., 1998; Walley et al., 1994), a large amount of participants (N = 4) reported the use of medication alone. Six reported the use of pharmacotherapy combined with some type of counseling. Research indicates cognitive and behavioral

treatment as the best type of counseling (Barlow et al., 1998); however, it is unknown what type of counseling these individuals are receiving.

In perusing the narrative replies, it is evident that problems with medication are a concern among participants, a concept supported in the literature (Starr, 1998). One study member stated "...this medication roller coaster kept me housebound, ill, and just not myself for four months."

Panic Disorder as a Chronic Illness

Panic disorder has been described as a chronic, recurring illness (Schonfeld et al., 1997; Yonkers et al., 1998, Starr, 1998). One study member reported this was true in her case: "Panic attacks resurfaced 2 months ago after being fairly dormant for the last year." A different participant reported a ten-year hiatus between her first panic attacks and the subsequent onset of panic disorder.

Onset of Disorder

Onset of panic disorder is typically in the early twenties (Barlow, 1988). Study participants reported ages of onset from 15 years of age to 39 years of age. The majority (60%) (N = 6) began experiencing panic attacks between the ages of 15 and 29. However, it should be noted that 30% (N = 3) were over the age of 35 when their symptoms first began.

Long Term Outcomes of Anxiety Treatment

Current research does not always include long-term outcomes for treatment of panic disorder. A majority of studies only report QOL immediately following treatment (Starr, 1998). In this study, whereby participants have had treatment for at least two years, they were asked to report whether or not they are still receiving treatment. A

huge majority (90%) still receives treatment, some of them many years after their initial diagnosis. This finding supports the literature that panic disorder is a chronic, recurring illness (Schonfeld et al., 1997; Yonkers et al., 1998, Starr, 1998).

Depression

Depression comorbidity is also prevalent with panic disorder (Barlow et al., 1998). Although comorbidity questions were not present on the questionnaire, some (N = 3) reported in their narrative responses that they also suffered from depression. One participant stated, "Unfortunately over the past year or so, my anxiety has progressed into depression." Another reported, "more crying".

B. Differences in findings and literature review

Misdiagnosis of Panic Disorder

The literature review reported that it is generally 12 years after the initial panic symptoms before individuals seek or are referred for treatment (Wichowski et al., 1996). The findings of this study showed that diagnosis for participants ranged from an immediate diagnosis to 25 years. One-half of participants had been diagnosed in less than one year after the onset of their panic symptoms. This is an important indication, because it may show that anxiety disorders are becoming more recognized in the medical and psychiatric community.

C. Strengths of the study

World Wide Web

The World Wide Web is a powerful new research resource for social workers and other social scientists (Rubin & Babbie, 1997). Participants for this study were recruited exclusively through the use of the World Wide Web; all but one received the

questionnaire and Rand Survey via email attachment. One-half (N = 5) took advantage of cyberspace and used email to return their completed information.

This type of recruitment offered a rich opportunity for geographic diversity, which was demonstrated by the locations replies were received from. Although specific geographic location was not a part of the demographic information requested, unsolicited indications were that the East and West Coasts, Southern and Midwestern United States were represented.

Long-term Consequences of Panic Disorder

Research has been lacking in producing studies regarding long-term consequences of panic disorder. While we know that panic disorder is associated with poor quality of life (Candilis et al., 1999; Weismann, 1991, Markowitz et al., 1989, Hollifield et al., 1997), long-term consequences have remained unreported. This study involved persons who had received a panic disorder diagnosis at least two years ago. It is known that panic disorder is chronic and recurring; the information found in this study represents those individuals who have been suffering the consequences of panic disorder for a number of years.

Triangulation

Triangulation increased the study efficacy by using more than one method to gather information. The RAND Survey provided scores in different areas of life functioning for each participant. The researcher-designed questionnaire examined their perceptions and asked them to self-report the level of their quality of life.

D. Limitations of the study

Biases

Because the researcher has been diagnosed with panic disorder, a potential bias exists in that the researcher may have been unable to remain impartial when examining the findings.

World Wide Web

The use of the World Wide Web in recruiting participants could be considered a limitation of this study. Perhaps more women use the Internet and visit the Anxiety Disorders Association of America's bulletin board more often, explaining the high number of women participants. Because the use of an up-to-date computer system is necessary to access the World Wide Web, people that do not have modern computer equipment available to them were unable to participate in the study.

Sample Size

Weaknesses of this study include the small sample size (N = 10). The return rate was excellent (83%), but more participants would lend credence to the findings. Although the sample size was small, members provided descriptive data on their experiences. The limited sample prohibited generalizability, yet lent applicable information that is non-existent in current literature. In analyzing the data, a focus was placed on finding common themes from the participants' experiences. Furthermore, a discussion of these themes was included as it related to the long-term effects of panic disorder on quality of life.

Gender

Participants of this study were primarily women (N = 7). Existing literature states that more women report panic disorder (Barlow, 1988), but it is now known that a higher number of men than previously reported in the literature suffer from anxiety disorders as well (Starr, 1998). If men were better represented in such studies, perhaps more could be learned about how this disorder affects them.

Life Disruptions

Other useful information could have been obtained through the use of the researcher-designed questionnaire. For example, aspects of other life disruptions could have been examined as well. These include occupational deficiencies, depression comorbidity, drug and alcohol abuse, incidence of suicide attempts, number of visits to the emergency room and the increased use of medical services. Information pertaining to these types of disruptions would indicate even more areas that anxiety disorders affect quality of life, consistent with current literature.

Cognitive-Behavioral Therapy

Research has indicated that Cognitive-Behavioral Therapy, combined with pharmacological treatment, is most effective (Barlow et al., 1998). This study's participants were asked if they have or had received counseling for anxiety, but the specific type of therapy was not included in the questionnaire. The use of Cognitive-Behavioral therapy in the treatment of anxiety disorders could be further supported if the findings indicated this was the type of therapy received by participants.

Recurrence

Panic disorder is often recurring (Barlow et al., 1998; Beamish et al., 1996). It is not known whether or not participants have had periods of remission, although two offered information through their narrative responses that indicated they had had periods of remission. Recurrences of anxiety reported by study participants could have been compared to data from current literature.

E. Implications for practice

Quality of Life as an assessment

Quality of life assessment can be used as a screening device for mental illness, a measuring gauge for depth of recovery, and as a clinical tool for planning long-term interventions. Because panic disorder coincides with diminished quality of life and functional impairment, these aspects of measuring quality of life can impact many systems, including individual, family, and societal systems. With information obtained through this study, practitioners will have a tool to track efficacy of long-term treatment outcomes. Results could be useful for mental health practitioners who may benefit from knowing that their panic patients suffer significant impairment, and will bring greater attention to psychosocial, physical and occupational deficits in panic disorder sufferers.

F. Implications for research

Long-term consequences and Quality of Life

This study has shown that panic disorder affects the quality of life for individuals not just immediately, but also years after their initial diagnosis. Further research could support the findings of this study. If practitioners were more knowledgeable about the extent of quality of life disruptions and its long-term course, treatment plans could be

more attentive to these disruptions. As a result, clients who have experienced deficits in psychosocial, physical and occupational areas would benefit from more effective treatment. In addition, the high costs associated with anxiety suffers' excessive use of medical services, as demonstrated in current research (Klerman et al., 1991; Markowitz et al., 1989; Weissman et al., 1989) could decrease.

Gender

When differences in gender issues in research are prevalent, it is apparent that these issues need to be studied more intensely. As in the case of current research and this study, it is evident that more women report anxiety disorders. Perhaps this is because of biological and psychosocial precipitants. Further research could support or deny these previous findings. Furthermore, it could be learned whether or not men have anxiety disorders at the same rate as women, but fail to report the symptoms.

Studies have shown that men may drink to relieve anxiety (Yonkers et al., 1998). Stress management is one approach that has proven effective in the treatment of alcoholism (van Wormer, 1995). If this is the case, alcohol abuse treatment could address specific anxiety disorder-related issues as well.

Systems Theory

Further research is needed to elaborate on adapting Systems Theory principles and the quality of life disruptions associated with panic disorder. Systems Theory allows social workers to see how other systems are involved and affected by the poorer quality of life seen by panic disorder sufferers. This theory provides a way to understand the dynamics and impact of diminished quality of life.

Summary

Social workers need to be aware that panic disorder is associated with poor quality of life. Published research thus far has not addressed long-term consequences of panic disorder and quality of life. Because it is a chronic and persistent disorder, the future of panic disorder sufferers rests on the ability of practitioners to address quality of life disruptions effectively.

A systems approach, skillfully applied, will help the practitioner perceive the total picture of the client's situation rather than only a small part of it. The social work profession should be at the forefront of treatment for panic disorder and quality of life disruptions because of the relevance of its systems approach to human behavior. Panic disorder treatment requires an approach that attends to the biological, physical, and psychosocial aspects of the disorder. The overall systems framework of social work lends itself well to understanding the complexities of panic disorder in a multidimensional light.

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Appendix A

TEXT FOR INTERNET RECRUITMENT

As a graduate student in the Master's of Social Work program at Augsburg College, Minneapolis, Minnesota, I am requesting your participation in a research study that I am conducting as part of my graduate program. I am interested in studying how panic disorder affects quality of life in adults who have had some sort of treatment for panic disorder at least two (2) years ago. I would like to compare my findings with those of other research studies I have read about whereby participants' quality of life has been examined only after recently receiving treatment for panic disorder. These findings will be presented in a thesis that I am writing.

If you have been diagnosed with panic disorder and have received treatment at least two (2) years ago and you are agreeable to participating, please contact me at QOLsurvey@hotmail.com I will then send the questionnaire and survey to you via email attachment. The questionnaire and survey will take about twenty minutes to complete.

Thank you for your consideration.

Becky Kinnander
QOLsurvey@hotmail.com

Appendix B

April 27, 2000

Dear Study Participant,

As a graduate student in the Master's of Social Work program at Augsburg College, Minneapolis, Minnesota, I am requesting your participation in a research study that I am conducting as part of my graduate program. I am interested in studying how panic disorder affects quality of life in adults who have had some sort of treatment for panic disorder at least two (2) years ago. I would like to compare my findings with those of other research studies I have read about whereby participants' quality of life has been examined only after recently receiving treatment for panic disorder. These findings will be presented in a thesis that I am writing.

If you are agreeable to participating, please complete the enclosed questionnaire and survey and return in the stamped self-addressed envelope by **May 15, 2000.** The questionnaire and survey will take about twenty minutes to complete.

You are under no obligation to participate in this study. There are no consequences for not participating. Your decision whether or not to participate will not affect your current or future relations with Augsburg College. If you decide to participate, you are free to withdraw at any time without affecting those relationships. If, at any time, your participation makes you feel uncomfortable and you would like to discuss it with someone, you may call the Peace Center for Anxiety and Stress, 515-221-1030.

The information you provide will be kept anonymous. No names or other identifying information will be used in the write-up of this study. All questionnaire and surveys will be destroyed by December 31, 2000. Only this researcher and my thesis advisor will have access to data. The data will be kept in a locked filing cabinet in the researcher's home. Only this researcher will have access to this cabinet.

There are no direct benefits for participating in this study. Indirect benefits of participating in this study include: you may feel it is beneficial to reflect on experiences pertaining to quality of life and panic disorder. In addition, it is hoped that this study will provide an improved understanding by the researcher and other social work practitioners about how panic disorder affects quality of life.

Your completing and returning the questionnaire and survey will imply your consent to participate in the study. Inquiries to the completed study can be made at the address below. If you should have any questions, please do not hesitate to contact my thesis advisor, Dr. Susan Bullerdick, at 612-330-1398. You may also contact me at the email address: qolsurvey@hotmail.com

Thank you in advance for considering this research project. Again, if you have any questions, please contact me at the above email address, or my thesis advisor at the numbers listed above.

Sincerely,

Becky Wyatt Kinnander

Becky Wyatt Kinnander
qolsurvey@hotmail.com
Augsburg College IRB # 2000-32-2

Appendix C

QUALITY OF LIFE AND PANIC DISORDER QUESTIONNAIRE

Gender *(circle correct answer)*

Male Female

Relationship Information *(circle correct answer)*

Married Widowed Separated/divorced Living with partner Single

Age (yr) _____

Race *(circle correct answer)*

European American/Non Hispanic African American Hispanic/Latino Mexican American

Asian American/Pacific Islander American Indian Other _____

Panic Disorder Information *(please fill in the blanks.)*

How many years ago did you begin having panic attacks? _____

How old were you when you began having panic attacks? _____(yrs)

How long after your first panic attack were you diagnosed with panic disorder? _____

Who made the diagnosis? (Please circle correct answer)

family doctor psychiatrist mental health professional other

What kind of treatment did you receive after your initial diagnosis of an anxiety disorder?

- medication yes ☐ no ☐
- combination of medication and counseling yes ☐ no ☐
- counseling yes ☐ no ☐
- self-help support group yes ☐ no ☐
- no treatment ☐

How long did you receive treatment? (Please list in years, months, weeks, or days) _____

If you are still receiving treatment, what kind of treatment is it?

- medication yes ☐ no ☐
- combination of medication and counseling yes ☐ no ☐
- counseling yes ☐ no ☐
- self-help support group yes ☐ no ☐
- no treatment ☐

If you feel the quality of your life has ***improved*** in the past year, what has changed to improve it?

If you feel the quality of life has ***gotten worse*** in the past year, what has changed to make it worse?

Please use the back of this page if more room is needed to answer the last two questions.

RAND 36-ITEM HEALTH SURVEY 1.0

QUESTIONNAIRE ITEMS

1. In general, would you say your health is:

(Circle One Number)

Excellent	1
Very good	2
Good	3
Fair	4
Poor	5

2. **Compared to one year ago**, how would you rate your health in general **now**?

(Circle One Number)

Much better now than one year ago	1
Somewhat better now than one year ago	2
About the same	3
Somewhat worse now than one year ago	4
Much worse now than one year ago	5

The following items are about activities you might do during a typical day. Does **your health now limit you** in these activities? If so, how much?

(Circle One Number on Each Line)

		Yes, Limited a Lot	Yes, Limited a Little	No, Not Limited at All
3.	**Vigorous activities,** such as running, lifting heavy objects, participating in strenuous sports	1	2	3
4.	**Moderate activities**, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf	1	2	3
5.	Lifting or carrying groceries	1	2	3
6.	Climbing **several** flights of stairs	1	2	3
7.	Climbing **one** flight of stairs	1	2	3
8.	Bending, kneeling, or stooping	1	2	3
9.	Walking **more than a mile**	1	2	3
10.	Walking **several blocks**	1	2	3
11.	Walking **one block**	1	2	3
12.	Bathing or dressing yourself	1	2	3

During the **past 4 weeks**, have you had any of the following problems with your work or other regular daily activities **as a result of your physical health**?

(Circle One Number on Each Line)

		Yes	No
13.	Cut down the **amount of time** you spent on work or other activities	1	2
14.	**Accomplished less** than you would like	1	2
15.	Were limited in the **kind** of work or other activities	1	2
16.	Had **difficulty** performing the work or other activities (for example, it took extra effort)	1	2

During the **past 4 weeks,** have you had any of the following problems with your work or other regular daily activities **as a result of any emotional problems** (such as feeling depressed or anxious)?

(Circle One Number on Each Line)

		Yes	No
17.	Cut down the **amount of time** you spent on work or other activities	1	2
18.	**Accomplished less** than you would like	1	2
19.	Didn't do work or other activities as **carefully** as usual	1	2

20. During the **past 4 weeks,** to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups?

(Circle One Number)

Not at all 1
Slightly 2
Moderately 3
Quite a bit 4
Extremely 5

21. How much **bodily** pain have you had during the **past 4 weeks**?

(Circle One Number)

None 1
Very mild 2
Mild 3
Moderate 4
Severe 5
Very severe 6

22. During the **past 4 weeks,** how much did **pain** interfere with your normal work (including both work outside the home and housework)?

(Circle One Number)

Not at all	1
A little bit	2
Moderately	3
Quite a bit	4
Extremely	5

These questions are about how you feel and how things have been with you **during the past 4 weeks.** For each question, please give the one answer that comes closest to the way you have been feeling.

How much of the time during the **past 4 weeks** . . .

(Circle One Number on Each Line)

		All of the Time	Most of the Time	A Good Bit of the Time	Some of the Time	A Little of the Time	None of the Time
23.	Did you feel full of pep?	1	2	3	4	5	6
24.	Have you been a very nervous person?	1	2	3	4	5	6
25.	Have you felt so down in the dumps that nothing could cheer you up?	1	2	3	4	5	6
26.	Have you felt calm and peaceful?	1	2	3	4	5	6
27.	Did you have a lot of energy?	1	2	3	4	5	6
28.	Have you felt downhearted and blue?	1	2	3	4	5	6
29.	Did you feel worn out?	1	2	3	4	5	6
30.	Have you been a happy person?	1	2	3	4	5	6
31.	Did you feel tired?	1	2	3	4	5	6

32. During the **past 4 weeks,** how much of the time has your **physical health or emotional problems** interfered with your social activities (like visiting with friends, relatives, etc.)?

(Circle One Number)

All of the time	1
Most of the time	2
Some of the time	3
A little of the time	4
None of the time	5

How TRUE or FALSE is each of the following statements for you?

(Circle One Number on Each Line)

		Definitely True	Mostly True	Don't Know	Mostly False	Definitely False
33.	I seem to get sick a little easier than other people	1	2	3	4	5
34.	I am as healthy as anybody I know	1	2	3	4	5
35.	I expect my health to get worse	1	2	3	4	5
36.	My health is excellent	1	2	3	4	5

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