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**THE LIVED EXPERIENCE OF COLLEGE STUDENTS WHO HAVE BEEN
MEDICATED WITH ANTIDEPRESSANTS**

A Dissertation Presented

by

PAMELA ASELTON

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

May 2010

NURSING

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Approved as to style and content by:

Christine King, Chair

Karen Plotkin, Member

Tameka Gillum, Member

Jean Swinney, Dean
School of Nursing

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ABSTRACT

THE LIVED EXPERIENCE OF COLLEGE STUDENTS WHO HAVE BEEN
MEDICATED WITH ANTIDEPRESSANTS

MAY 2010

PAMELA ASELTON B.S.N. SOUTHERN CONNECTICUT COLLEGE

M.S.N. UNIVERSITY OF MASSACHUSETTS AMHERST

M.P.H. UNIVERSITY OF MASSACHUSETTS

PH.D. UNIVERSITY OF MASSACHUSETTS

Directed by Professor Christine King

Increasingly in the last two decades college students have been diagnosed with depression, with estimates of major depression higher than the general population (American Psychiatric Association {APA}, 2005). According to the literature, the stresses of college life along with increased rates of substance abuse, and binge drinking have contributed to the rise in depression in this population. In a large survey of American college students, over half reported some depression since entering college (National Center on Addiction and Substance Abuse {NCASA}, 2003). Correspondingly, the percentage of young people treated with antidepressants has grown over the past decade, and there is concern that for younger individuals the newer antidepressants may increase suicidal ideation (Simon, 2006). Suicide is the second leading cause of death among college students, and although people between the ages of 20 and 24 who are not in college are more likely to commit suicide, one study found that 10% of college students interviewed had considered suicide within the past year (NCASA, 2003).

Although numerous studies have been completed (Wagner, Ambrosini, Rynn, Wohlberg, Yang, Greenberg et al., 2003; Keller, Ryna, Strober, Klein, Kutcher & Birmaher et al., 2001) to determine the appropriate use of antidepressants in depression, there have been few qualitative studies available that actually explore the experiences of young people being medicated with antidepressants (Fornos, Mika, Bayles, Serrano, Jimenez & Villarreal, 2005; Simon, 2006; Dundon, 2006). The purpose of this descriptive exploratory study was to explore how college students perceive the experience of having been medicated with antidepressants.

A review of the literature related to depression and college students, the causes of stress in students' lives, non-medical treatment of depression, plus information on the SSRI antidepressants is presented. The study describes the lived experience of college students prescribed antidepressants utilizing phenomenology as its philosophical basis. The internet was used to obtain informed consent, and conduct qualitative interviews to gather information on students' lived experience. These interviews explored the students' experiences with being medicated for depression with antidepressants, and their experiences with stress, anxiety and depression in college. In presenting the findings, whenever possible the students own words were used to describe their experiences with antidepressants.

The main findings of the this qualitative study included a feeling of numbness in students who were on antidepressants, a general dislike for the medication, even if they felt it was initially useful. It also presents a picture of the academic, familial and financial stresses college students are under as well as alternate ways they deal with depression and stress. Exercise, music and marijuana were seen as great stress relievers,

and talking to good friends very helpful for overcoming depression. The students advised others to carefully do their research before they decide to start on an antidepressant medication. Implications for nursing and the role of Nurse practitioners in making decisions about medicating depressed college students are discussed.

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CHAPTER 1

INTRODUCTION

Depression is common on college campuses in the United States with one survey indicating that nearly half of all college students reported feeling so depressed they could not function (APA, 2005). Many students affected by the increased stresses of college life are overextended by extracurricular activities, are exhausted by inadequate sleep, and frequently have problems with roommates and faculty which add to their stress (Dussellier, Dunn, Wang, Shelley & Whalen, 2005). They face worries about financial, social, and academic issues, and are engaging in binge drinking which can increase their risk for depression (Wechsler, Lee, Kuo, Nelson, Lee, 2002). For college students in northern climates the effect of light deprivation can be a major factor in winter depression (Low & Feissner, 1998).

Antidepressants are the most commonly prescribed treatment for depression; however cognitive- behavioral therapy has proven to be a highly effective treatment alternative which teaches students problem solving and coping skills (Hamrin & Pachler, 2005). Depressed college students report feeling empty and inadequate, are often ill, and receive lower grades than students who are not depressed (NCASA, 2003). They also experience other sources of stress related to being away from home for the first time such as lack of sleep, increased alcohol use, relationship difficulties, and health issues (Dussellier et al., 2005). These factors can all contribute to depression in college students. Depression is a major issue on college campuses, and although many studies on types of

treatment have been conducted on this issue few studies are available that present the student's perspective (Dundon, 2006).

The 1990's have been referred to as the "decade of the brain" because of advances in science which led to the development of new categories of medication for depression (Burman, McCabe & Pepper, 2005). The introduction of the Selective Serotonin Reuptake Inhibitors (SSRIs) was a milestone in the treatment of depression (Kramer, 1993). These drugs were considered safer than the older class of antidepressants (tricyclics), because it is was thought to be much more difficult to overdose on them. Many benefits were attributed to the medication such as personality improvement, increased self-esteem, a better quality of life and overcoming shyness (Kramer, 1993). The antidepressants were also found to be useful for the anxious or irritable depression so often found in teenagers and young adults (Parker & Roy, 2001).

These developments, along with an increase in pharmaceutical advertising, led to an increase in the prescription of antidepressants as well as other psychiatric medications, with the use of psychotropic medications in the United States increasing by more than 40% in the 1990's (Dworkin, 2001). Medicating young people has increased significantly over the last few decades as well, with one study finding a three to five fold increase in antidepressant treatment for those less than twenty years of age (Frankenberger, Frankenberger, Peden, Hunt, Raschick, Steller et al, 2004). On college campuses the numbers of prescriptions for antidepressants have increased, with estimates as high as twenty-five to fifty percent of U.S. college students seen in counseling centers at student health facilities being medicated with antidepressants (Kadison, 2005).

Depression has become a primary health care problem, not just psychiatry's concern. Increasingly, primary care providers have been called upon to treat depression in outpatient settings. Between the years of 1994 and 2002, the number of visits in outpatient primary care clinics for antidepressant therapy increased from 1.1 million to 3.1 million (National Library of Medicine {NLM}, 2004). Among the general population, this trend of increasing antidepressant treatment raises concerns that some individuals may be seeking relief from symptoms related to the stress of daily life, rather than actual depression (Frankenberger et al., 2004). The frequency of television and print advertising for antidepressants have contributed to increased consumer demand for antidepressants, and some clinicians have questioned whether all the individuals requesting medication actually meet the criteria for depression (Kadison, 2005). Some writers have also pointed to the use of checklists to diagnose depression as increasing the likelihood of people being labeled as depressed (Greenberg, 2007).

In the college environment clinicians may be more likely to prescribe these medications for social anxiety, to improve student's class participation, or because of pressure from students or from their parents seeking some type of increased efficiency in their son or daughter's school performance (Kadison, 2005). The question of whether antidepressant therapy with SSRIs increases the risk of suicidal thoughts has yet to be fully resolved, however many clinicians now see this as a significant risk for younger patients (Simon, 2006).

The Food and Drug Administration (FDA) convened a panel of experts in 2004 after receiving numerous case reports of suicidal behavior in children and adolescents on SSRIs. Close monitoring is now thought to be necessary to evaluate for suicidal behavior

and agitation when younger individuals are prescribed antidepressants (Hamrin & Pachler, 2005). A public health advisory was issued in 2005, and this led the government to put a “black box” warning on these medications for children and adolescents warning that antidepressants may increase the risk of suicidal thoughts or behavior (Jureidini, Doecke, Mansfield, Haby, Menkes & Tonkin, 2004). A black box warning is printed on the label in bold print to warn consumers and prescribers of serious side effects of medications and contraindications for prescribing the medication to certain populations.

It has been estimated that up to 10% of college students have considered suicide, and in a given year approximately 1,100 will actually kill themselves (NCASA, 2003). Major depression is a risk factor for suicide, along with chronic hopelessness, and having been assaulted (Stephenson, Pena-Shaff & Quirk, 2006). Untreated depression can leave a student at high risk for suicide (American College Health Association {ACHA}, 2005). This new knowledge on the potential side effects of antidepressants often puts clinicians in a bind when deciding whether to prescribe young people antidepressants or not. Although the risk of suicidal ideation with SSRI’s only a small percentage of those treated (Hall & Lucke, 2006), it is a substantial risk to take if other effective non-medical treatments are available. Within the last decade suicide has replaced homicide as the second cause of death nationally among 18-24 year olds, despite the availability of antidepressant medication. The most common factors related to suicides in this age group are depression and alcohol abuse, factors often seen on college campuses (Empfield & Bakalar, 2001).

Problem Statement

Depression is common in college students due to the increased stress and alcohol use they may be exposed to. Increasingly they are being treated with antidepressants, although there is concern they may increase the risk of suicidal ideation. Although many studies have looked at what types of medication to use for depression and why college students get depressed, there are no available qualitative studies which describe what being medicated with antidepressants in college is like from the student's perspective.

Purpose Statement

The purpose of this study was to describe college students' lived experience after being medicated with antidepressants, and to determine what other non-medical methods they have used to deal with the symptoms of depression and stress. Examining students' experiences with depression, stress, coping and their reactions to antidepressant medication hopefully contributes to providing a clearer picture of the usefulness of antidepressants in this age group. The present study utilizes a descriptive exploratory design to explore college student's experience with antidepressants and their experience with stress and depression in college.

Significance to Nursing

Since many of the students that nurses care for in college health settings are depressed and being medicated with antidepressant medications, it is a common topic for discussion in medication reviews. Nurses play a key role in managing these students' health care and developing health promotion and prevention programs for depression in the college age population (Von Ah, Ebert, Ngamvitroj, Park & Kang, 2004). Nurses who work in college health settings need to be cognizant of the signs of depression and

suicidal ideation which can be major problems on college campuses. Additionally, nurse practitioners are often asked to prescribe or refill antidepressant medication in college health and primary care settings when psychiatrists are not available. Nursing incorporates a holistic approach to health and understanding the experiences of college students who have been medicated with antidepressant medication and/or who used other methods to cope with stress and depressive symptomology will help nurses to provide high quality care to students are responding to the unique stresses of college life.

Definition of Terms

Antidepressants- For this study the term will refer to the newer classes of antidepressants which include the Selective Serotonin Reuptake Inhibitors (SSRI's) such as Prozac, Zoloft, Lexapro, Celexa and Paxil; as well as those that work on other neurotransmitters such as Wellbutrin, Cymbalta, Effexor and Buspar. The SSRIs are thought to act by blocking the presynaptic uptake of serotonin, causing serotonin levels to increase (APA, 2007).

Depression – A persistent low mood and a loss of interest and enjoyment in life and reduced energy (British Medical Journal [BMJ], 2008). Major depressive disorder is characterized in the DSM-IV criteria by fatigue, restlessness, depressed mood or sadness most days, change in appetite and weight, sleeping problems, feelings of guilt and worthlessness and possibly thought of suicide or death (APA, 2000). Depression and anxiety frequently co-exist.

Stress- Stress can result from any situation or thought that produces frustration, anger, nervousness, or anxiety, which is referred to as a stressor (APA, 2007). Stress is

defined as a mechanism of any external or internal demand made upon the body (Dusselier et al., 2005).

Coping – Individuals use different coping strategies such as reading, exercise or talking to a friend to deal with stress. If one is able to cope successfully with stress, then a healthy adaptation occurs. Unhealthy methods of coping include drinking, smoking, substance abuse and eating disorders (Lazarus, 1999).

Lived Experience- Lived experience is how humans make sense of an experience and transform that experience into consciousness (Patton, 2002). In depth interviews with people who have directly experienced the phenomenon of interest are utilized to determine the lived experience.

Phenomenology - Phenomenology is the study of the lived experience as perceived by the individual (Laverty, 2003).

Phenomenology in Qualitative Research

Nursing research has utilized phenomenology as both a philosophical basis for qualitative research, and as a method utilizing the in-depth interview to examine the reality as participants have experienced it (Lopez & Willis, 2004). Past empirical philosophies viewed reality as somehow separate from the individual, but phenomenology views the human experience as its own reality. Phenomenology attempts to explore how humans make sense of experience and transform their experience into consciousness (Patton, 2002). Phenomenology is a reflective inquiry into human meaning and explores the practical consequences of life by means of utilizing in-depth interviews with people who have directly experienced certain phenomena (Denzin & Lincoln, 2005). Historically phenomenology has been conceptualized by Heiderger

whose work has resulted in a more hermeneutical approach to phenomenology, and Husserl whose approach is seen as more of a descriptive type of phenomenology focusing on the individual's perception of reality, or their lived experience. This dissertation will utilize the more descriptive approach of Husserl (Lavery, 2003).

Research Questions

1. What is the lived experience of college students taking antidepressants?
2. What were their feelings about being medicated with antidepressant medication?
 - a. Did they find it helpful in coping with depressive symptoms?
3. What are some of the coping strategies that college students employ for dealing with stress and depression?

Summary

Many college students experience depression at some point in their college years, and are prescribed antidepressants (Kadison, 2005; Bhave & Nagpal, 2005). They frequently experience many sources of stress which may lead to depression such as lack of sleep, increased alcohol use, separation anxiety and relationship difficulties. Suicide is always a risk when dealing with depressed students, and there is a need to identify students at risk for suicide in the college environment (Stephenson et al, 2006). Immediate intervention is needed if nurses identify suicidal feelings in a student. College health and primary care practices are common settings for college age students to present with depression (Draucker, 2005). Nurses are called upon to counsel students regarding their depressive symptoms, and the use of antidepressant medication. Given the controversy over possible deleterious side effects of antidepressants (Simon, 2006),

becoming more aware of the experience college students have had with these medications will help nurses make better decisions about how to counsel students.

Since so many students may present for care on antidepressant medications, it is important for nurses to understand their benefits and risks, and monitor students for any signs of suicidal ideation. Antidepressants have been used by a large segment of the general population at some point in their lives. It is felt that they may be helpful in severe depression, but they are also frequently used for anxiety which frequently accompanies depression. Nurse Practitioners have been prescribing antidepressants as well, and work under a variety of guidelines for their use. Better understanding of the student's perspective by the nurse will help nurses who are advising depressed or anxious college students (Louch, 2005). A qualitative approach to researching this issue will provide a more complete picture from the student's point of view that may have been lacking in previous studies which focused on dosing and choice of medication. It may also help to inform prescribers on the various stressors that college students are under and what other advice they may offer to help them deal with that stress other than medication.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

This chapter reviews the literature related to depression and its risk factors in the college population including stress, alcohol abuse and physical illnesses. It will present an overview of antidepressant therapy, and the coping mechanisms that students use in dealing with depressive symptoms. This review will explore what is known about the subject of antidepressant use in college students, and will identify gaps in knowledge that this study will address. The controversy over the use of antidepressants in young people, and the risk for suicidal ideation will be discussed. The philosophical approach to the study will be presented along with a brief review of the philosophical underpinnings of phenomenology as well as the benefits and limitations of using the internet for qualitative research.

Depression

Major depressive disorder is characterized by sleep disorders, fatigue, loss of energy, feelings of hopelessness, poor concentration, and loss of self esteem (APA, 2005). About half of people who experience a major depressive episode experience symptoms for the next 10 years (BMJ, 2008). Depressed individuals may often present with physical symptoms rather than emotional concerns, and are three times more likely to be non-compliant with treatment recommendations leading to lower health related quality of life (DiMatteo, Lepper & Croghan, 2000).

The DSM-IV defines a major depression as depressed mood most of the day, diminished pleasure in almost all activities, significant weight gain or loss, insomnia or

sleeping too much, fatigue or loss of energy, agitation and feeling restless, excessive or inappropriate feelings of guilt, diminished ability to concentrate, a suicide attempt or recurrent thoughts of death (Empfield & Bakalar, 2001). Depression is a chronic, recurrent, and often familial illness that frequently first occurs in childhood or adolescence (APA, 2005). Many adolescents are often sad, but depression is characterized by a persistent irritable, sad, or bored mood, and difficulty with familial relationships, school, and work.

Adolescent Depression

The symptoms adolescents display are often different than the symptoms of depression in adults. Teenagers who are depressed may present with sadness, hopelessness or irritability and anger (Empfield, & Bakalar, 2001). They tend to withdraw from friends and family and lose interest in their usual activities. Depression robs adolescents of the supports of friends, family and school (Hetherington & Stoppard, 2002). The concern of being a burden on others when one is depressed was a common theme in a study of adolescents with depression, as well as a fear of appearing weak (Williams & Healy, 2001). In adolescents, depression is not always characterized by sadness, but instead by irritability, boredom, or an inability to experience pleasure (APA, 2000).

Depression can become a serious and pervasive problem in an adolescent's life. A study conducted on 121 adolescents in New Zealand found that irritability was the most common symptom in depressed adolescents along with problems in thought processing and with interpersonal relationships (Crowe, Ward, Dumnachie & Roberts, 2006). Depressed teens have described themselves as being in a fog, abnormal,

stigmatized, powerless, and having unrelenting anger (Dundon, 2006). Dundon's metasynthesis of qualitative studies of depressed adolescents concluded that the voice of the adolescent has been lacking in the development of theory, and that clinicians need to differentiate adult depression from depression in adolescents (Wisdom & Green, 2004).

Depression in College Students

Depression is an increasingly common problem in the college age population, with rates of students being diagnosed increasing from 10% to 16% in the years between 2000 and 2005 according to the American College Health Association (2005).

Loneliness and a lack of social skills as well as feelings of inadequacy and disinterest in school have been associated with depression in college students. Stephenson et al. (2006) identified depression and hopelessness as predictors for suicidal ideation in a study at a large Northeastern university. Suicide rates for college students are reported to be about 7.5 per 100,000, with males and older students being at greater risk, and substance abuse has also been correlated with increased suicidality (Stephenson et al., 2006). Although counseling is available for many college students, lingering misconceptions about treatment with a therapist may prevent young people from using their services (Williams & Healy, 2001). Researchers in an Australian survey of 577 young adults concluded that young men tended to believe in dealing with depression alone, and attributed depression to some personal weakness (Jorm et al., 2006).

Students in the college age group have increasingly been prescribed antidepressants over the past decade. A survey of health care professionals in college settings revealed that 90% reported seeing an increase in the number of students who were prescribed some type of psychotropic medication (APA, 2005). This increase in

the number of students with serious mental health problems has been affecting their academic performance, as well as their general well being (Frankenberger et al., 2004). Frankenberger et al. found that at least 90% of college students reported being depressed at least once since arriving on campus. The causes of depression are numerous, but include factors such as stress, substance abuse and physical illness, which are often major factors in the American college environment (Kish, Leino & Silverman, 2005). According to recent medical guidelines, the treatment of anxiety and depression in college students should ideally involve several modalities including medication, psychotherapy and psychosocial interventions (Bhave & Nagpal, 2005).

Stress

The American College Health Association has found that stress is the primary cause of impaired academic performance (ACHA, 2005). It is a major problem among American college students outranking physical illnesses, sleep difficulties, relationship difficulties and concern for troubled friends and family members. All of these factors can contribute to depression. Surveys of college students internationally also demonstrate prevalence rates of moderate to severe stress ranging from 21% to 41% (Wong, Cheung, Chan & Ma, 2006).

Physical symptoms of stress include fatigue, headache, upset stomach, muscle tension, teeth grinding, a change in appetite or sex drive, and dizziness. Psychological symptoms of stress include experiencing irritability or anger, insomnia, tearfulness, and feeling nervous (APA, 2007). However, not everyone responds to stress in a negative way; it often takes a particularly vulnerable person and negative stressful events for a stress reaction to cause harm (Lazarus, 1999). Mild stress may have a positive impact on

some individuals; while for others high levels of stress adversely affect health (APA, 2007). A person's vulnerability to stress may depend on genetic factors, environmental factors, or how one perceives particular situations (Lazarus, 1999).

The college age population is at a developmental stage between adolescence and adulthood, and the pressures of college life may lead to anxiety and depression (Voelker, 2003). Psychological stress may initiate physiological changes which trigger physiological responses that can be deleterious in vulnerable individuals, and this leads to depression (Lazarus, 1999). The American College Health Association reports that many of the emotional and physical symptoms common to college students such as fatigue, headaches and depression can actually be attributed to stress (Dusselier et al., 2005). Significant predictors of stress included conflict with family or college faculty, chronic illnesses and concerns over friends or family members. Higher levels of stress have been associated with depression, anxiety and alcohol use (Dusselier et al, 2005). A recent study has indicated that separation anxiety is very common in first year college students who are living away from home for the first time, and that this appears to be major stressor for this population (Seligman & Wuyek, 2007).

The American Psychological Association (APA) reports that stress is escalating in America and can negatively affect personal relationships, sleeping patterns, eating habits, and overall health (APA, 2007). Factors affecting stress either positively or negatively include social support, self-efficacy and negative self description. For instance Von Ah et al. (2004) found that social support in developing or maintaining positive health behaviors, and building a social network have a favorable impact on a college student's

level of stress. College students are often removed from family and friends for the first time in their lives and many have a difficult time adjusting to this lack of support.

However, not everyone may respond to stress in a negative way. Some individuals are more vulnerable and may be more prone to have a stress reaction from a negative event (Lazarus, 1999). Students who scored higher in self-efficacy ratings and general safety behavior are less likely to suffer the effects of stress (Von Ah et al, 2004). Negative thinking has also been found to negatively affect the self-esteem of college age women (Peden, Hall, Rayens & Beebe, 2000). Negative thoughts may dominate the attention of depressed students and maintain their depression.

The concept of resilience has been defined as the capacity to rebound from stress and maintain good functioning despite adverse conditions. In a study of 132 college students Arehart – Treichel (2005) found that those who scored high on the scales for extraversion, openness, agreeableness and conscientiousness coped more successfully with stressful situations, while those who scored high on the neuroticism scale fared poorly. Psychological hardiness appeared to be linked with a task oriented coping style, and the trait of conscientiousness (Arehart -Treichel, 2005). This study also found that those individuals who experienced childhood neglect actually scored higher on the resiliency scale than those from more nurturing environments, concluding that “psychological toughening” may occur in the more non-nurturing situations.

Negative self- description may also be a factor in how stressed individual college students feel. Saint Arnault, Sakamoto & Moriwaki (2005) found that American women tended to score higher on negative self descriptions than those from other cultures, raising the question of whether increased work pressures and expectations in our society have

created an impossible ideal for women to obtain. Eating disorders have also been correlated with depression (Hawkins, Mc Dermott, Seeley & Hawkins, 1992).

Coping

Teaching individuals how to deal with stress and depression are increasingly seen as primary health care concerns. Clinicians in primary care settings are usually the health care practitioners who care for the vast majority of depressed and stressed individuals (Burman, McCabe & Pepper, 2005). Health care providers are aware that stress may be dealt with in unhealthy ways such as overeating or skipping meals, drinking alcohol, smoking cigarettes, watching television and playing video games or through healthy methods such as reading, exercising and listening to music (APA, 2007). Individuals from lower socio economic groups may not be able to access healthier foods such as fruits and vegetables or have safe opportunities to exercise, and therefore may suffer more from depression and obesity (Goodman, Slap & Huang, 2003).

There are different ways people cope with stress (Lazarus, 1999). One is problem-focused coping, which focuses on taking direct action to deal with the stressors in one's environment such as seeking information or medical treatment. Emotion-focused coping focuses on the individual's ability to control their emotional reactions. For example, using a positive reinterpretation to accept the reality of the situation, seeking social support, and becoming involved in activities that help distract a person from a stressful situation are examples of emotion focused coping. Cognitive behavioral self help programs aimed at managing depression and anxiety offered at primary care sites have proven to be effective at combating depression in primary care patients (McEvoy, 2004).

Cognitive therapy and interpersonal psychotherapy have been found to be beneficial in treating mild to moderate depression (BMJ, 2008). Other proven strategies to deal with depression include exercise and exposure to the sun or full spectrum light (Jorm et al., 2006). College students report a variety of coping methods including drinking, illicit drug use, and other methods which may make the situation worse. Students with a previous history of mental illness are more likely to experience negative effects from heavy drinking (Weitzman, 2004).

Substance Abuse

Substance abuse is a major cause of depression in college students (Dusselier et al., 2005). Substance abuse and depression are often co-morbid conditions, and in large community studies depression and substance abuse of both alcohol and drugs have been related (Flynn, 2000; Cornelius, Maisto, Martin, Bukstein, Salloum & Daley et al., 2004; Stephenson, Pena-Shaff & Quirk, 2006). Studies of college students who abused alcohol and drugs revealed that participants often reported feeling depressed within the past year (Weitzman, 2004). College students who are not involved with their community may experience a lack of connection with others, resulting in loneliness, and depression. Von Ah et al. (2004) in a survey of 161 college students found perceived social support in college students was positively associated with healthy behaviors such as exercise, healthy diet, general safety and avoiding alcohol use and smoking.

Binge Drinking

White and Jackson (2006) refer to the period between high school and young adulthood as a time when identity is being formed and see the increased use of alcohol during this time period as a risk for alcohol abuse later in life. Binge drinking is often

expected behavior at colleges in North America (Murphy, McDevitt- Murphy & Barnett, 2005). The social controls students are accustomed to at home lessen, and it is a time when young adults tend to experiment and seek out altered states of consciousness. Alcohol and drug use may be important determining factors in the choice of new college friends (Leibson, 1994). Although alcohol use may have some positive effects such as facilitating friendships at this age, heavy use may lead to hangovers, poor academic outcomes, assaults and vandalism (Jackson, 2005). Individuals who have alcohol addiction tend to have higher levels of stress, anxiety and depression and are not as able as those without alcohol problems to regulate their moods (Thornberg & Lyvers, 2005).

Using Substances to Cope with Stress

College students may use alcohol and drugs to cope with stress (Maag & Irvin, 2005) or psychiatric symptoms such as depression (Miller, Miller, Verhegge, Linville & Pumariega, 2002). The use of alcohol and illicit drugs peaks between the ages of 18 and 25 while many young people are at college, with up to 31% of college students meeting the criteria for a diagnosis of alcohol abuse or dependency (Knight, Wechsler, Kuo, Seibring, Weitzman & Schuckit, 2002). In making the transition from high school to college, researchers concluded that men who joined fraternities were more likely to develop alcohol problems than those who did not due to the perceived norms of the groups (Read, Wood, Davidoff, McLacken & Campbell, 2002). Those who used alcohol to cope drank twice as much, and students who have considered suicide were much more likely to binge drink and use marijuana than those who have not considered suicide (NCASA, 2003).

The association between the rate of alcohol consumption and depression exists within college students from a variety of ethnic backgrounds in Western countries (O'Donnell, Wardle, Dantzer & Steptoe, 2006). In a survey of over 15,000 college students in 20 countries, the students with the highest alcohol intake scored the highest on the Beck Depression Inventory Scale. In the United States attending four year colleges was associated with increased risk of heavy drinking in white college students, but with decreased risk of heavy drinking in African- American and Asian students in a survey of 13, 000 young adults (Paschal, Bersamin & Flewelling, 2005).

International Comparisons

In the United States alcohol use is highest from the late teens to early twenties (Chen, Dufour & Hsiao-Yi, 2003). Internationally, alcohol use varies greatly by culture and country (Ahlstrom & Osterberg, 2005). The average alcohol consumption is generally highest in Europe and the Americas, while lower in Asia and Africa. A multinational study of 35 European countries found that young adults tended to be affected by external factors such as social norms, availability and price of alcohol, and internal factors such as gender, personality and genetic predisposition. In almost every society studied, younger males drank more often than young adult females. Several studies have concluded that the risk of alcohol abuse in young people remains high regardless of college attendance (Jackson et al., 2005; White et al. 2005).

Physical Illness

Depressed individuals often present for care with physical symptoms (Burman, McCabe & Pepper, 2005). Certain illnesses such as asthma have also been associated with depression and anxiety (Volicer, Quattrocchi, Candelieri, Nicolosi & Ladebauche, 2006). Symptoms of asthma have been thought to be exacerbated by stress, and depression is thought to affect how well asthma symptoms are managed. A study of asthmatic college students found that they were more likely to binge drink and have symptoms of depression. Volicer et al. postulated that perhaps asthmatics used the alcohol to try and treat their asthma symptoms (2006). However, being at parties where people drink often involves exposure to second hand smoke, and excessive alcohol may lead to vomiting, making it difficult for asthmatic to retain oral medications.

Antidepressants

Prescribing antidepressants became more frequent in the 1990's which has been referred to as the "decade of the brain" when advances in science produced new categories of medication. The most significant of these were the Selective Serotonin Reuptake Inhibitors (SSRI's), which were widely considered a milestone in the treatment of depression (Kadison, 2005). SSRI antidepressants are thought to improve mood, social functioning, energy, sleep and concentration with reported side effects of nausea, headaches, odd dreams and sleep disturbances. These medications were initially thought to be less likely to result in overdose, and were credited with personality improvements, increased self esteem, overcoming shyness and a generally increased quality of life (Kramer, 1993).

Side Effects of Antidepressants

Despite the benefits of SSRI therapy, increasingly this category of medication is recognized as problematic particularly in those with other health problems such as hepatic or renal insufficiency (Mackenzie, 2008). In 2004 the toxic exposure survey system reported 48,204 toxic exposures to SSRIs. Serotonin syndrome may be induced by an overdose either intentionally or unintentionally. Mild symptoms of toxicity include restlessness, diaphoresis, diarrhea or hypertension. Symptoms may progress to severe toxicity which may present as confusion, agitated delirium, seizures, coma, hypertension, tachycardia, hypertonia, clonus (alternating muscular contractions and relaxation in rapid succession), disseminated intravascular coagulopathy, renal failure and death (Mackenzie, 2008).

More common side effects include gastrointestinal upset, insomnia, sexual dysfunction, somnolence, anorexia, weight loss, agitation, tremor, dry mouth, sweating, hyponatremia, hyperkinesias and aggressiveness (Nurse Practitioners' Prescribing Reference, 2009).

Several categories of serotonergic drugs are available for treating depression. Common trade names of SSRI's include Celexa, Lexapro, Prozac, Luvox, Paxil and Zoloft (Mackenzie, 2008). Nonspecific serotonin reuptake inhibitors include Wellbutrin, Anafрил, Cymbalta, Desyrel and Effexor. No one class of individual antidepressants has been shown to be more beneficial than others for short term use, however the side effects may vary according to the most recent evidence-based studies (BMJ, 2008). SSRI's and related drug classes appear to be more beneficial than other older antidepressant drugs such as the tricyclics in that it is more difficult to overdose on them, but they also may

induce or worsen suicidal ideation in younger person. While there are many reported benefits to SSRI therapy (Bhave & Nagpal, 2005; Burman et al, 2005; Harman & Pachler, 2005), as many as 70% of patients on SSRI therapy experience the side effect of sexual dysfunction, and for this reason many students may discontinue their medication (Frankenberger, 2004).

The Effect of Advertising

Since it has been legal for pharmaceutical companies to advertise prescription drugs on television there have been numerous spots on popular news programs urging people to request antidepressants if they are feeling low for as little as 2 weeks (Kadison, 2005). Advertising appears to affect how students label themselves. Self-report of depression prompts people to ask for medication. Among college students this seems to be occurring, with up to 53% of college students reporting symptoms of depression in national surveys (NCASA, 2003). Students tend to think of antidepressants as safe medications, similar to “taking steroids for their brain” according to Kadison (2005) who noted that the number of prescriptions for antidepressant has increased dramatically over the last decade.

The Risk of Suicide

Following the increase in antidepressant use in young adults, many questions have arisen about the safety of antidepressants after numerous reports of suicidal behavior in adolescents on SSRI antidepressants (Jureidini et al., 2004). Consequently, an advisory panel to the Food and Drug Administration (FDA) in 2005 reviewed the reports of all suicidal behavior in pediatric trials of SSRI's. The panel found that the risk of suicidal ideation, behavior and suicidal attempts were twice as high among young

people receiving the newer antidepressant drugs than for those taking placebos. The panel then issued an advisory that antidepressants may worsen depression and suicidal thoughts or behavior in children and adolescents (Simon, 2006).

Studies confirming the safety and efficacy of this medication have been mainly quantitative in nature, and are often conducted by researchers who have funding from pharmaceutical companies (Juriendi et al, 2004; Kadison, 2005). Increasingly clinicians are questioning the results of clinical studies funded by the pharmaceutical industry. The concern is that adverse effects have been minimized, and the efficacy of the medication exaggerated. This possibly skewed interpretation of data from drug trials sponsored by the pharmaceutical industry may have led to a false impression of safety and efficacy with these medications in young people (Jureidini et al., 2004).

Gaps in the Literature

Currently, there are no qualitative studies conducted with college age students reflecting on their experiences with antidepressant medications available. Several studies investigate sources of stress and depression for college students on campus (Dusselier et al 2005; Von Ah et al., 2004; St. Arnault et al., 2005), and there are multiple studies on alcohol and depression (Ahlstrom & Osterberg, 2005; Wechsler et al., 2002; White & Jackson, 2006), as well as numerous studies on the various ways to treat depression (Embling 2002; Empfield & Bakalar, 2001; Hamrin & Pachler, 2005). More recently the emotional side effects of selective serotonin reuptake inhibitors have been examined in a qualitative study by researchers in Oxford, England (Price, Cole, & Goodwin, 2009). However, there are no qualitative studies available on the specific experiences that college students have had after being medicated with antidepressants.

Qualitative Research and Phenomenology

Qualitative research is an inquiry based process that explores problems humans face in a holistic manner by looking at the lived experience of individuals and groups in natural settings (Denzin & Lincoln, 2005). Given the holistic approach of nursing, it is a popular method for many of the topics nurses choose to research on the human experience. The use of quotes in qualitative research is a common feature and helps to illustrate ideas and experiences (Sandelowski, 1994). Quotes can provoke emotion and response in the reader. Referring to quotes allows the researcher to represent the accuracy of the data and support analytic findings (Sandelowski & Barroso, 2002). It is important in qualitative research to develop themes and patterns based on the participant's own words. Quantitative research seeks to reduce a phenomenon to a measureable unit, while qualitative research seeks to expand on the complexity and depth of an experience (Hamilton & Bowers, 2006).

Phenomenology has been utilized by nurse researchers to understand unique experiences of individuals and their interactions with others in culturally relevant environments (Lopez & Willis, 2004). It is a useful tool to study health problems and their lived realities for the various populations nurses care for. Qualitative studies can provide insight into many of the experiential aspects of health care, and can be very useful in understanding the patient's perception of his or her health care experience. This approach lends itself to the use of the internet for collecting data as more people are communicating via internet and chat groups, particularly in the college age group.

Qualitative Interviews Utilizing the Internet

Methods of qualitative data collection have traditionally included face to face interviewing, focus groups, semi-structured interviews, observations, and other archived materials (Patton, 2002). However, increasingly nursing researchers are utilizing the internet to conduct qualitative interviews with some definite benefits to both the researcher and participant. The widespread use of the internet provides a wealth of resources for individuals seeking support and information on their medical conditions as well as an excellent sampling option for research recruitment (Hamilton & Bowers, 2006).

Considerations with internet recruitment include sensitivity to the demographic utilizing the internet and trying to locate participants who best address the research question (Hamilton & Bowers, 2006). Since college age students are very comfortable with the use of the internet to communicate, it is an appropriate method for this population (Mann & Stewart, 2000). Purposive sampling in qualitative research allows for the researcher to select individuals from a variety of ethnicities and genders from a pool in order to obtain a complete description of a phenomenon. It is important to develop an adequate sample in qualitative research which will yield detailed and rich descriptions of the phenomena being studied.

Interviews for qualitative research are generally described as unstructured or semi-structured (Hamilton & Bowers, 2006). Interviews may begin as very open, and then revert to a semi-structured style as the specific area of interest is identified. Conducting interviews online using a set of open ended questions with contact over time is a qualitative approach that may be used instead of a series of face to face interviews for

in-depth interviewing (Mann & Stewart, 2000). This approach to qualitative research may offer more anonymity, perception of control, and ease of use for participants (Ahearn, 2005).

Benefits of Internet Research

There are many benefits to this approach, including the availability of printed transcripts without the need for transcription. Recruitment is easily negotiated through email and interview times can be set up in a more leisurely manner without worries about travel time or cost (Clarke, 2000). The interview may be structured so that participants may enter data at any time of day, allowing people to accommodate work and personal commitments. This asynchronous type of communication also allows for the researcher and participant to take time in forming their responses. Other benefits for both the researcher and participant include increased pool of study participants, better access for dealing with sensitive issues, accessing cultural groups and hidden populations, increased accuracy of data entry and analysis, ability to conduct follow-up studies

The strength of qualitative research often comes from using the participant's own words to capture the reality of the experience for them. The internet is increasingly being used to both recruit and interview subjects in qualitative research. The nature of qualitative research in nursing lends itself to the use of the internet for data acquisition for several reasons. The information is received in digital form making it easy to copy and insert into qualitative software to assist in the analysis. Information available online today can help clarify concerns of targeted populations regarding medications and treatments, and using this method of collecting data online may make it easier to disclose information than in a face to face interview. The younger generations are accustomed to

communicating by email or through social networking sites making the internet a common method for communication in this age group (Mann & Stewart, 2000).

Another benefit to using the Internet for data collection is that it eliminates the barrier of distance, resulting in an increased pool of study participants (Ahearn, 2005). Interviews may be conducted online with a set list of guiding questions, and follow-up, in-depth interviews can be accomplished with email. Positive effects from well-run qualitative research on the Internet have been shown in Beck's study on birth trauma, and she has noted that qualitative researchers can have a powerful effect on their participants (Beck, 2005). Women reported feeling empowered by being able to tell their story and feel like someone was listening. There are also some benefits to the researcher in being able to sample hidden populations such as recreational drug users (Duffy, 2002; Beck, 2005).

Limitations of Internet Research

There are however, many ethical issues involved in using the Internet for qualitative research. The question of how informed consent can be obtained, and whether a researcher can analyze an existing blog without identifying or notifying members is yet to be resolved. Privacy and confidentiality must be protected, especially for vulnerable population such as teenagers. The potential harm that may be done allowing subjects to reveal highly personal and sensitive information needs to be considered. Who we get to share the data with, as well as intellectual property rights are concerns that also are important with using online data.

For nurses there is the issue of whether conversing with participants in other states is practicing nursing across state lines. It is important for the nurse researcher to

stay in the researcher role, and not be perceived as providing care to the participant during the study as role confusion may interfere with patient care and the research, especially if a nurse researcher uses his or her own clinical setting to obtain data (Morse, 2007). This can become a problem if participants are not informed of this fact, or if quotes are taken from existing web pages. The legal issues include protecting private information, malpractice and the nature of the relationship between the researcher and the participant. Issues such as data sharing, along with the potential harm that may be done by allowing subjects to reveal highly personal and sensitive information are also concerns (Seidman, 2006).

Privacy and Online Presentation of Self

The Internet is a unique space in that it offers anonymity, and some users may create an identity which is very different from their actual identity. How the participant is defined is often dependent on the researcher's prior assumptions regarding age and gender. For example, male language is often seen as more aggressive in its stance, while female language tends to be more accommodating, and when phonetic spelling is used, one assumes that the writer is younger (Clarke, 2000). Online personas may be different from the real person depending on his or her emotional response to the subjects being discussed, and gathering demographic data on participants may help correct for these assumptions. Visual cues are important in perception of a subject, and are often seen as a type of communication (Denzin & Lincoln, 2005). Detecting whether someone is telling the truth can be difficult whether interviewing someone in person or online. However, in follow-up studies of online research it has been found that, in general, respondents are true to themselves in internet responses as evidenced by the following statement. "Indeed

checks made in qualitative market research, where the truthfulness of participants is carefully monitored, also suggests that deliberate deception online is unusual” (Mann & Stewart, 2000, p. 212).

There may also be a problem of selection bias due to the “volunteer” effect, or the non-representative nature of respondents when researchers use the internet to recruit participants in qualitative research, which may affect the integrity of the research (Eysenbach & Watt, 2002). It could be that the individuals who respond to a request made online tend to respond only if they have been deeply affected by the issue. Although some very rich and interesting data may be collected this way, it may not be representative of the experience for the general population. This may be corrected by interviewing until the data reaches a saturation point and similar stories are being heard over and over again.

Philosophical Underpinnings of Phenomenology

Edmund Husserl is referred to as the “father of phenomenology” (Lavery, 2003). His work was based on finding a universal foundation of philosophy and science, and he criticized psychology as attempting to apply methods of natural science to human issues. He believed that people are not simply reacting to external stimuli, but rather responding to their own perception of what the stimuli mean (Husserl, E., 1970). In that way he felt that psychology creates an artificial situation when it ignores the context of an individual’s response to a stimulus. His philosophical foundations were based on the experimental underpinnings of knowledge. “The relation between perception and its objects is not passive. Rather human consciousness actively constitutes objects of experience” (Denzin & Lincoln (2005) p. 484)

The need to bracket the outside world as well as the researcher's individual biases is known as phenomenological reduction (Klein & Westcott, 1994). Bracketing is described as a threefold process which includes exemplary intuition, imaginative variation and synthesis. The researcher first must choose a phenomenon, and imagine similar experiences, then integrate these variations into a synthesis of the essences of the experience (Klein & Westcott, 1994). Our perception of the world is found in how people are constructed by their own background and experiences. Thus in analyzing phenomenological data, a definitive interpretation is never possible; understanding and interpretation are bound together and the process is constantly evolving (Annels, 1996).

Qualitative Nursing Studies Utilizing the Internet

Phenomenology shares with nursing its approach to human problems that focuses on both the feelings people have about the experience, and its meaning for the individual in their interaction with others (Lopez & Willis, 2004). This makes qualitative approaches a good fit for nurses, since nurses have always focused on a holistic assessment of the patient. Beck has conducted multiple qualitative studies utilizing the Internet to examine various groups and their experience with birth trauma and post-traumatic stress disorder related to childbirth (2004), as well as women with depression (2005). Although the advantages of being able to observe the participant in face to face interviews have been generally accepted, new methods of contacting subjects online has certain benefits as well. The benefits of participating in online research for women with depression include offering a place to tell their stories and the benefit to the researcher is being able to sample populations that may not ordinarily volunteer for a face to face

interview as it allows for more privacy so that participants may fully express their feelings (Duffy, 2002 ; Beck, 2005).

Beck's (2005) study of birth trauma using online discussion with women around the world was an empowering experience for the participants and an example of the possible benefits of Internet dialogue for participants. In this study there were several themes identified as helpful aspects of the internet dialogue with the researcher including the experience of being listened to and acknowledged, a sense of belonging, providing a voice, and a sense of purpose. The participants felt they could finally make sense of the birth trauma process by letting go of the details once they relayed the story of the birth trauma. These themes were similar to the feelings expressed by another group of women in a face-to-face qualitative study including providing a voice, empowerment, healing, and sense of purpose and acknowledgement of their experiences (Beck, 2005).

Eo and various colleagues published three Internet-based qualitative studies in 2008. One was on the gender and ethnic differences in cancer patients needing help, in which a month-long online forum found a theme of marginalization for ethnic minority patients with cancer (EO, Chee, Lim, & Liu, 2008). An additional study published the same year accessed Internet communities for the recruitment of subjects for an online forum to explore attitudes toward physical activity amongst midlife women (Eo, Chee, Lim H. & Kim, 2008). The same researcher published a study on menopausal women (Eo, Lim, Dormire & Chee, 2008). Eo's productivity suggests that it is easier to conduct multiple studies in shorter amounts of time using online technologies. The Internet may also be a vehicle for the dissemination of qualitative research findings and it is important

for nurses to communicate their findings which may lead to improvements in the quality of nursing care (Byrne, 2001).

The use of the Internet in qualitative research allows the researcher to create a more level playing field where the participant feels that his or her expertise is valued (Hamilton & Bowers, 2006). There are benefits as well to eliminating visual cues of appearance; ethnicity and gender in that communication may be less inhibited.

Asynchronous communication, in which the responses to Internet prompts are entered at the participants schedule allows, gives the researcher time to read and reflect on the information they are obtaining and consider how to phrase follow-up prompts. There are however, ethical and legal concerns with utilizing the Internet for research.

Summary

Due to the increased stress of being at college, and the frequency of substance abuse in that environment, depression in college age students is very common. Stress, physical illness and substance abuse are major contributing factors to depression in the college age population. It is a difficult time of transition for many, and alcohol which is a known depressant, is widely used. Other coping strategies may be either emotion focused or problem focused coping, and either healthy or unhealthy in their response. In the past few decades, antidepressants and other psychotropic medications have been increasingly utilized in this population. Antidepressant serotonergic drugs are the most prescribed medication in the United States (Mackenzie, 2008). Other non-medical approaches such as cognitive behavioral therapy have been found to be useful in treating depression as well as light therapy and exercise (Embling, 2002 & Jorm et al., 2006).

Most of the studies supporting the use of antidepressants have been quantitative in nature, and since safety concerns have been raised regarding the use of antidepressants in young people, more clinicians, families and students are questioning their use in this age group (Juriendi, et al., 2004). Utilizing the qualitative research framework of phenomenology allows for the meaning of the lived experience to be revealed in the research. It is both a philosophy and method which have evolved over the years to study the perceptions humans have of the experiences of living through a certain phenomena. By the processing of human experience into consciousness a better understanding of the experience is gained. There are usually not definitive conclusions from these types of inquiries, but rather a better understanding of the totality of the experience. Quotes are often used by the researcher to frame the experiences of the participants.

Nurses conducting qualitative studies have begun to utilize the Internet to both recruit subjects and gather data. There are many benefits to this approach including ease of data collection and more efficient analysis of results. There are also benefits to the participants including emotional support and acknowledging their expertise in the area being studied. This method has been used successfully by several nurse researchers, and is increasingly recognized as having many benefits in populations where the Internet is a daily part of their lives and a regular means of communication. Legal downsides for nurses involved with online qualitative research may include the issue of practicing across state lines and privacy concerns.

CHAPTER 3

METHODOLOGY

This chapter presents a description of the exploratory research design used in this study. A phenomenological approach with in depth email interviews was used to explore the lived experience of college students who have been medicated with antidepressants. A thematic analysis approach utilizing a second reader was used for the analysis of the data (Denzin & Lincoln, 2005). Having had time to reflect on their experiences with antidepressants, college students sharing their experience with depression, and their opinions of the medications they have used should add to our knowledge of their lived experiences and how well these medications work over time. This approach is congruent with nursing's holistic approach to health incorporating knowledge of non-medical approaches to problems as well.

Since college students today are stressed for time, an internet based approach to the research was chosen to reduce their time burden for participation. By utilizing email to express their experiences, a comfortable environment may be created for them. Mann and Stewart (2000) have suggested that one of the benefits of utilizing email interviews is that participants are treated like equal members in the research process. College students spend a considerable amount of time online and are accustomed to using this means of communication. Collecting qualitative data online eliminates the embarrassment some subjects may face in disclosing information in a face-to-face interview, and subjects may be more likely to share intimate details and reflect on answers more carefully (Beck, 2005). The accessibility of the Internet allowed for students to enter information at any

time of day, and allowed time for the researcher to process that information in order to guide the discussion to the phenomena under study (Hamilton & Bowers, 2006). It was overall a very useful method to use to interview college students.

Qualitative Research

Qualitative research incorporates the many views present in today's society (Eysenbach & Till, 2001). This process of participant reflection on his or her life experience, and researcher assistance in that understanding forms the basis of phenomenological research. Phenomenology has evolved as a philosophy for nursing research, and as a research method utilizing the qualitative in-depth interview (Lopez & Willis, 2004). The data from this interview becomes the account of the lived experience of the participant which the researcher analyses to generate findings. Lopez and Willis (2004) feel that either a descriptive or an interpretive approach may be used to generate findings from the study.

Edmund Husserl's work criticized psychology as attempting to apply methods of natural science to human issues. His believe that people are not simply reacting to external stimuli, but rather responding to their own perception of what the stimuli mean is important in understanding descriptive phenomenology (Lavery, 2003). Researching the individuals' interpretation of their experience helps to counter the theory that psychology ignores the context of an individual's response to a stimulus. In doing these types of qualitative studies researchers can add to the knowledge base on treatments for mental health disorders that reflects the totality of the lived experience. In order for the findings to be applicable to the practice of health care, the researcher must interpret it to create culturally sensitive knowledge.

Trustworthiness in Qualitative Research

For interpretive qualitative studies the researcher must be aware of the factors to be considered in establishing the trustworthiness of findings from qualitative research: credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985). Credibility is described by Beck as being faithful to the participant's description of the lived experience (1993). Using the participants own words whenever possible helps to establish credibility. It also refers to the confidence one can have in the truth of the findings which can be established by various methods such as triangulation, where data from multiple sources are used such as interviews, non-participant observation, and document reviews (Denzin & Lincoln, 2005).

Trustworthiness was enhanced in this study by member checking(Denzin & Lincoln, 2005). This involved communicating with respondents to verify the accuracy of statements, and took place as data collection evolved into data analysis. On average there were at least 6-8 exchanges of long emails between the participant and the researcher. Prompts were used to generate the discussion and since both the researcher and participant had time to think about their responses new questions were able to be added or clarifications sought on anything that was unclear. Since the internet interviews were done over a period of several days to two to three months, this checking in on meaning helped respondents to clarify their thoughts and consider the meaning of their experiences. Crosschecking helped to maintain reflexivity by encouraging self-awareness and self-correction (Lincoln & Guba, 1985).

Trustworthiness was also addressed by validation among readers, the construction of texts that can be understood by all, and developing research conclusions that reflect the

complexity of the situation (Laverty, 2003). In this study there were several meetings between the researchers to determine the organization of themes and subthemes in the data. The open coding process was performed independently to start by both the first and second reader. Several hour long meetings were then spent discussing what the data were actually saying and organizing the information into themes and subthemes.

Transferability of findings, which means that other researchers can apply the findings of the study to their own research, was enhanced by including “thick” descriptions of the phenomena under study so that researchers may reference the original data and see how interpretations were formed. A thick description is a detailed narrative of settings, emotions and experiences. Whenever possible the respondent’s own words were used to illustrate themes in the study. These themes were then validated in discussions with the second reader and developed into conclusions based on the researcher’s interpretation of the data.

Dependability refers to the stability of the findings over time, and confirmability to the internal coherence of the data in relation to the findings, interpretations, and recommendations (Denzin & Lincoln, 2005). The dependability of the study was reinforced by going back to the literature and seeing if the feelings expressed and side effects described correlated with other published studies. Many of the side effects students described did match up with what had been known already about the medications. Other data also seemed to match up with some of the statistics that have been gathered in quantitative studies on this topic.

Creswell (1998) also specified outlining a decision trail which documents rationales and outcomes as another way to increase trustworthiness and credibility in

qualitative studies. An audit trail can be used to accomplish both dependability and confirmability. In this study copies of the email interviews were pasted into one long word document for each participant and shared with the second reader. Notes were kept on research decisions along the way and each participant's information was kept in a separate file folder. Electronic copies of the data were also shared with the second reader for use in her own Atlas-ti program. Copies of the summaries of the initial open coding using Atlas-ti were printed and kept with other study documents. As the thematic coding scheme evolved in discussions with the second reader, previous copies were indexed and edited. Using the Internet to gather data helped to facilitate forming an audit trail by having an electronic back up of the data gathered and a record of when it came in. Subjects were originally given subject numbers in the order in which they replied to the advertising, and these were later converted to participant numbers on the completed interviews.

The Use of the Internet in Qualitative Research

The nature of qualitative research lends itself to the use of the Internet for a variety of reasons. Sampling for qualitative research need not be representative; avoiding the problem of selection bias that one might experience doing quantitative research online. The Internet can be used for both the acquisition of data and the publication of results. The use of the Internet for qualitative research can provide immediate feedback from subjects, either through online interviewing, or open ended questionnaires. Interviews may be conducted online with a set list of guiding questions, and follow up to in-depth interviews done face to face can be accomplished with email communication. If

information is received in digital form, there is no need for laborious transcription that qualitative research often involves.

Research Design

The research design consisted of qualitative in-depth interviews via email with semi-structured questions utilizing concepts from Seidman's (2006) guide to in depth interviewing. Seidman's (2006) work in developing the three part interview focuses on breaking the interview into the history or background of the phenomenon under study, the experience of what it was like living it, and finally a reflection back on the experience to search for meaning. The first set of open ended questions focuses on the participant's life history and how they came to college including family, friends and school experiences. The second set focuses on the experience of being depressed, and the major stressors in the student's life. The third set focuses on the student's perception of their treatment for depression, specifically antidepressant medication, and any other methods they used to cope with their symptoms.

Sample

A sample size of 10-12 students was initially aimed for. These students were recruited through a variety of venues including posters and ads in the student paper. Participants in this study are undergraduate college students between the ages of 19 and 24 in the Northeast United States who have taken antidepressants at some point in their adolescent or college years. Exclusion criteria included those who have only recently started taking antidepressants (within the past 4 weeks), since they may not have been able to reflect back on their experience as well as those who have been on them for a longer time, and may be in a somewhat more unstable state. Also, since most

antidepressants are said to take several weeks to be truly effective, it would not have been an accurate assessment of their effectiveness. Those who were severely depressed as evidenced by their written material or engaging in suicidal ideation were also not to have been included in the study. These students were immediately referred to their college mental health services, or to private therapists in the area who had agreed to see them. If any students appeared in their written responses to be at risk for harming themselves or others, the appropriate college staff would have been notified or 911 will be called. To ensure safety for participants, arrangements were made to refer students to their college counseling services.

Procedures

Notices were placed in various areas such as student centers and academic departments in the local colleges. Classified ads were placed in both print and online student newspaper, and shops that students frequent. The university email address of the researcher was given as the contact. After a subject contacted the researcher, a short questionnaire was sent to the subject to determine his or her eligibility for the study. This brief reply questionnaire (Appendix A) included basic demographic data such as age, gender and ethnicity, and asked whether the student has taken antidepressants while in college and whether they have only recently begun taking medication in the last 4 weeks. Although a sample size of 10 -12 participants was anticipated, interviews were conducted to the point of data saturation. In this case it was felt that saturation had been reached once subject 13 had completed the on-line interview.

Data collection was conducted online using in-depth interviewing via email with semi-structured questions. The researcher used semi-structured, open ended questions to

solicit responses. As the interviews progressed further questions were added to probe more deeply into content areas mentioned by the subject. In addition after four interviews were completed the researcher started to ask participants if they had any advice for other college students who might be depressed in order to solicit more data. This question yielded a lot of useful data. Emails were exchanged between the subjects and the researchers at least 6-8 times to complete each interview. As the email session came to a close, copies of the text in the emails were pasted into a Word documents file with the subject's number as an identifier. All references to email addresses, names, persons and places were blacked out. This information was stored in a locked cabinet within the school of nursing and the second reader's office and only research team members had access to the material. All identifying information was blocked and identifiers as in Subject 1, 2, 3 etc. were used to identify data. All data files were kept locked in the researchers office in Skinner Hall, and not shared with anyone not associated with the study. Subjects were informed that the results from the study were to be used in Pamela Aselton's dissertation for the UMASS School of Nursing, and that some of their own words were to be used in subsequent publications in nursing and health journals.

Interviews were conducted using Seidman's (2006) three part in-depth interview method; the following guiding questions were used as prompts:

1. *Part One* – Life History

- a. Tell me something about your family and where you grew up?
- b. What was your early schooling like?

- c. How did you end up at college?
- d. Do you remember feeling depressed before college?

2. *Part Two*- The experience of being depressed while at college, sources of stress, and taking antidepressant medication.

- a. What was your first experience with experience with antidepressants like?
- b. Describe your past treatment for depression if any?
- c. How did you feel about being medicated with antidepressants?
- d. What are some of your current sources of stress?

3. *Part Three*- Student perception of depression treatment and how they cope with stress and depressive symptoms.

- a. Looking back, do you feel that antidepressants have helped you deal with stress?
- b. Do you feel like antidepressants helped you're dealing with depression?
- b. If you have ever stopped an antidepressant, why did you do so?
- c. How do you deal with feelings of depression now?
- d. How do you cope with your stress and depression in your life currently?

Human Subjects Assurance

Informed consent requires that participants be aware that they are being studied, and are able to withdraw at any time. The ethical issue of informed consent is important when using data from internet sources. The researcher must provide clear information

about the study for consent to be truly informed, and the data must be safeguarded (Seidman, 2006; Mann & Stewart, 2000). The Health Information Protection and Accountability Act (HIPAA), which became effective in April 2003, specifies guidelines for accessing and sharing protected health information from participants (Ellett et al, 2004). These guidelines must be followed by nurses conducting research over the internet.

For this study informed consent included identifying the purpose of the research, time required for participation, potential benefits and risks, providing explanation of how the data would be stored and who would have access to it, assurance on confidentiality, and affirmation that participation is voluntary and the subject may withdraw at any time (See Appendix B for sample consent form). One potential benefit to the student was the opportunity to discuss his or her feelings about antidepressant medication. Another potential benefit was the offer of \$25.00 gift cards on completion of the internet interviews. The potential risk to the student was that by discussing the issues surrounding their use of antidepressants they may become upset. Appropriate referrals were made if this occurred. Consent forms were emailed with the demographic questionnaire to be completed to determine if the student was eligible for the study. The informed consent form was sent as an attached document with a space for them to sign and date and return to indicate consent. The students who completed the interviews returned their consent form and questionnaire within 2-3 days.

Phenomenological Approach to Data Analysis

As the written data was emailed to the researcher numbers were assigned to participants and transcripts were read for meaning. As the interviews progressed open coding was begun utilizing both a qualitative software package and by hand-coding of hard copies of interview transcripts. This was followed by a clustering into themes and subthemes. Thematic analysis was then utilized to analyze the data (Denzin & Lincoln, 2005). Data analysis in phenomenological research may proceed in a variety of ways; including spelling out of meanings of significant statements and clustering them into themes, using intuition to obtain a sense of the whole, and synthesizing all meanings into some type of consistent statement in order to reach an understanding of the experience (Lavery, 2003). Reading and writing are at the core of phenomenology where the researcher and participant work together through a process of co-creation of the data (Koch, 1995). If the meaning of any of the participants' statements were unclear further clarification was sought by the researcher. All of these processes contribute to understanding the meaning of the students' experiences with antidepressants.

The Phenomenological data analysis/software package Atlas-ti v. 6.1.8 was used as a tool to help organize and code the interview data. Atlas-ti is a qualitative software package which assists in managing large volumes of qualitative data. Qualitative research can produce vast amounts of data (Pope, Zieband & Mays, 2000). Data analysis often takes place while collecting data, allowing for the researcher to refine questions and develop new lines of inquiry. Software packages such as Atlas-ti v. 6.1.8 assist with the analysis, but it is really the researcher who analyses the data. Multiple themes are usually

apparent in the data and a software program can assist in organizing the data into open codes and then allow the researcher to be able to cross reference them as themes develop.

Open coding on the data was performed by the primary researcher on all interviews with the help of the Atlas-ti v. 6.1.8 qualitative software. The second researcher then independently coded a sub-set of the interviews. After this was done, both researchers met several times to develop a concise coding scheme. Later frequently occurring codes were grouped into families and narrowed down into meaningful categories by hand. These codes were further refined after rereading and hand-coding the transcripts. After several discussions with the second reader both in person and on-line, themes and subthemes were organized around the research questions posed for the study. As both readers familiarized themselves with the data and compared open coding, several categories of themes and sub themes emerged (Appendix D). The data was re-coded by hand to check for these themes and subthemes which were abstracted and synthesized around the mutually agreed upon comprehensive coding scheme.

Thematic analysis helped to organize the text by clustering the text into themes by the researcher and second reader who read all data separately and then met together to decide on coding, themes and subthemes. The process of rereading the transcripts by hand after the initial coding helped to bring previously overlooked statements to the foreground and made some of the initial findings fall away if only one or two students had mentioned it. A count was made of the specific themes after a coding scheme had been agreed on to visually separate out frequently occurring statements from non-frequent themes.

The phenomenological process of reduction for the essence of the experience was incorporated into selecting themes in the data. Reduction involves rigorous reflection and is a process of recovering original awareness (Denzin & Lincoln, 2005). Bracketing is a way to achieve reduction by setting aside previous attitudes and experiencing the world in a new way. As a Nurse Practitioner, the primary researcher had certain views on medication that needed to be set aside in order to let the full experience of the students being interviewed to be revealed. By setting aside preconceived notions, qualitative research can elucidate realities that may lead to a better understanding of a phenomenon and needed change (Patton, 2002).

A framework for analyzing qualitative data has been developed in Britain which outlines the steps in the process of inductive qualitative data analysis which assist researchers in outlining their analytic process (Ritchie & Spencer, 1993). Its steps are as follows:

1. Familiarization – immersion in the raw data.
2. Identifying a thematic framework – key issues, concepts and themes.
3. Indexing – applying thematic framework to the data by annotating transcripts.
4. Charting – abstraction and synthesis used to rearrange data.
5. Mapping and interpretation – using charts to define concepts and themes that have emerged from the data.

These steps were useful in looking at the data from many different angles during the process and structuring the steps of the qualitative analysis to make it both intuitive and complete.

Summary

The Internet is more commonly used for qualitative research studies due to recent advances in technology and a better understanding of how appropriate this method may be for groups who use email frequently to communicate. In qualitative studies utilizing the Internet one may be concerned about selection bias as a factor, if only subjects who feel very strongly about an issue respond to the study a complete picture of the lived experience may not be presented. However, the same may be said of sampling for face to face qualitative studies in that those who feel more strongly about an issue might be more likely to respond. It is therefore important to use methods to enhance the trustworthiness of findings such as comparing findings with existing literature, utilizing a second reader and checking back with the participants for clarification on previous communication and considering credibility, transferability, dependability and confirmability (Lincoln & Guba, 1985). In this study the second reader was Professor Tameka Gillum who is part of the Doctoral Student's Research Committee and experienced in Qualitative research. She and the primary researching participated in several hour long meetings and email communications to code and recode data according to a thematic framework which was agreed upon during these meetings.

The Internet presents interesting and useful possibilities for the qualitative researcher in nursing studies, however utilizing the Internet for qualitative research has both benefits and limitations. The Internet provides ready access to subjects, flexible times for data collection, a variety of opinions and experiences, and eliminates transcription costs by having subjects type in their own words. The benefits of online recruitment and data collection also include better access for dealing with sensitive

issues, access to more diverse cultural groups and hidden populations, increased accuracy of data entry and analysis, the ability to conduct follow-up studies, and more anonymity for participants and the perception of control (Clarke, 2000). College students are often pressed for time and frequently use the internet to communicate with friends. The Internet is a common means of communication in college age students, and provides a more private setting for students to describe their feelings making it an appropriate method to study a sensitive topic such as depression and antidepressant medication.

Limitations to using on-line interviews include not being able to see the subjects in order to read their body language as they participate in their interviews. Using the Internet for qualitative research also presents certain ethical and legal limitations which must be considered before designing a study that is conducted online. Privacy and copyright concerns when using a person's own words in a qualitative study are the main problem with use of the internet in health research. It must be clear in the consent that the participant's identity will be shielded, but their own words may be used in the publication of findings. This was clearly laid out in the consent form for this study. Limitations also include legal issues for nurses such as practicing across state lines, and copyright concerns if participants are not informed their own words may be used.

This qualitative study of college students who have been medicated with antidepressants recruited college students from five college campuses in New England in order to conduct on-line interviews regarding their experiences with antidepressants. Open coding was initially used in the analysis utilizing the qualitative software program Atlas-ti v. 6.1.8, and later a clustering of themes and subthemes allowed for further analysis of the findings. The thematic analysis of the experiences of the participants was

conducted utilizing several methods to increase the trustworthiness of the data. The steps in the process of data analysis included familiarization, identification of themes, indexing, charting and interpretation. Utilizing a second reader was very helpful in the process in terms of organizing themes and subthemes and staying true to the data. Methods to increase trustworthiness also included creating an audit trail, bracketing of the researchers prior experiences and being faithful to the participants' descriptions of their lived experiences. This qualitative on-line interview study of college students endeavored to describe the lived experience of college students utilizing their own words.

CHAPTER 4

RESULTS

Data Collection and Description of Respondents

Data was gathered over a three month period in the fall semester. The response to posters in September was less vigorous than the response to an ad placed in the local college paper in October. When the incentive of a \$25.00 gift card was added later in October there were many more volunteers. A total of 13 interviews were completed, after having 26 subjects contact the researcher to participate in the study. Of the remaining 13 students who did not complete the study; two were eliminated for having never been on antidepressants, one was eliminated for having only started antidepressants within the last week, and the other 10 were either lost to follow-up or never returned their screening or informed consent forms.

Of those who did complete the survey, five were male and eight were female. Their ages ranged from 19-22. Although the majority of the respondents identified as white or Caucasian under ethnic background on the screening form, one student identified as African – American, one as half Russian and half Polish, and one as Asian American. The data was collected until it was felt that saturation had occurred. The interviews continued with the participants until all the semis structured open ended interview prompts had been used, and any further questions either the interviewer or subject had were answered.

Themes

The major themes extrapolated from the data were grouped under the following major themes: childhood and adolescent experiences, the college experience, feelings

about being medicated and coping strategies for stress and depression. Within each of these major themes the data was arranged into several subthemes as illustrated in Appendix D – Coding Scheme – *Themes and Subthemes according to Research Questions*. These subthemes included descriptions of childhoods in which subjects often had a feeling they may have been depressed or anxious; a reported family history of depression, anxiety, alcoholism or suicide; trouble in school either in early schooling or during college; feeling numb or various side effects from the medication; the importance of good friends to talk to and positive relations with therapists, and an overriding concern for their parents and family members and their relationships with them.

They also included the reported measures they took to reduce stress which included exercise, writing or journaling, reading, eating, smoking marijuana, watching movies and listening to music. A few mentioned alcohol, but it was not a very common response to the question of how do you deal with stress. In response to what factors were causing them the most stress currently, finances and worry about future career plans took center stage. Some mentioned roommate issues, and a few had relationship issues, but the main stress they all seemed to report was financial. Several said they worried about their families and were concerned about how much money their education was costing them.

The three part interview was helpful in giving a little background to their college journey, recounting the experience and then reflecting back on their experience with antidepressants. The themes in their personal history were looked at both as their perceptions of their younger selves and their experience of their college years for research question one which addressed their lived experience with depression. The

second research question addressed their feelings about being on antidepressants, and the third aimed to describe the ways they have found to cope with stress and depression and whether they felt the antidepressants were helpful in the long run.

In the following sections the research questions are addressed separately and the participant's own words are used to illustrate the themes and sub-themes that became apparent in the thematic analysis.

1. What is the lived experience of college students' taking antidepressants?

Childhood and Adolescent Experiences

Perception of younger self

Several respondents described being very shy while they were younger, and having some difficulties in school socially. Others described their experience with early schooling as having been bright, but very bored or lazy. These statements may have indicated early learning problems or just basically shy personality types. A sample of one of their stories included the following two stories:

“I was very shy as a kid and dreaded school more often than not. I always did my work and did well in school. I would get into trouble a lot and get called out in the middle of class by teachers, which is one of the reasons why I believe I continue to be a very self conscious and quiet kid until high school.”

“My early schooling was very troublesome. I was always creating some sort of disturbance at school. In primary school I was bright, but hardly ever on task.

...For most of my formative years I was pretty much a misfit.”

Another student described being bullied in her school because she was bright and did well.

“I was a high achiever from as early as kindergarten, but I also had a unique personality besides; it was probably the combination of the two that led to my being bullied.”

Some students stated that they were popular in high school while other reported difficulties maintaining friendships. One male student reported feeling isolated and not having friends until high school because he was so busy with sports. Another female student attributed her problems with friends to her perfectionist tendencies.

“I never had the greatest friends in high school. I guess it was a combination of me pulling away to see if they would come get me, and them not having an interest to be friends, my OCD kicked in....complete withdrawal from social life and ultimately depression.”

With hindsight she was able to see how her anxieties and compulsive behaviors may have prevented her from maintain friendships in her earlier years. This in turn led to her depression.

Personal History of Depression and Anxiety

Several students admitted to a history of depression or anxiety in their younger years, some starting in grade school, and others not until high school.

“I can recall feeling anxious for a long time, particularly in social settings, possibly as early as 5th grade. I began to feel depressed in high school. In retrospect, I can separate the “depressed feelings” I had then from my current bout of depression. In high school I was filled with angst and a general distaste for

what was considered the norm. When I look back on how I considered myself “depressed “in high school it seems juvenile compared to how I feel now.”

This student was able to look back and actually identify feelings of depression in grade school. She states it feels different than her current depression and seems she has matured somewhat and is able to look back on some of her behavior as a rebellion against the norm.

Another student who started on Paxil in sixth grade remembered feeling very anxious as a kid. His parents were both nurses and he did have a grandfather who committed suicide. He has had recurrent problems with anxiety:

“I was very anxious as a kid. It started out as separation anxiety around first grade. It has taken various shapes over the past fifteen years or so, but illness, specifically vomiting has been the trigger for the majority of the time.”

He stayed on medication for all of high school and has continued on it in college:

“I started on Paxil while I was in 6th grade, in 2000 I believe. I took that for some time and then switched to Celexa for a short time and then Lexapro while in 8th grade. I had side effects with both drugs so I went to Prozac from 8th to 11th grade. I switched from Prozac to Effexor when I was struggling horribly with anxiety. I stayed on Effexor until this spring when I ran into another setback. I then switched to Lexapro, but due to cost and relative ineffectiveness I went to Celexa which I am now on with moderate relief of background anxiety and reduction of panic attacks.”

Several students said their depression started in adolescence. This is how they describe their experience:

“I first started feeling depressed at around 16 or 17. I remember just wanting to sleep all day, not wanting to go to school or hang out with friends, and just crying a lot. When I was 17 I finally went to a doctor and was diagnosed with depression. I started taking antidepressants then.”

She felt the antidepressants did help her by making her a little more social and less sad.

Another student remembers her depression starting in High School.

“I felt self-conscious a lot as a child, and was sensitive and very smart. I had abnormal thoughts since middle school, in my opinion; I remember starting to feel miserable in High School around sophomore year.”

She did not specify what she thought were abnormal thoughts, and still struggles in college after trying several antidepressants which she feels never really solved her problems.”

Romantic relationships can be very stressful during the High School years. One young

man describes how the end of a relationship triggered his first depression:

“Yes, the first feeling of depression was after my first relationship ended. This feeling passed though, and I continued through my senior year as a much more confident and outgoing person than I had been. There was always a feeling of some kind of sadness though. I wasn’t sure why and I’m still not sure why, but that feeling is still with me into my third year of school.”

So he still felt a general level of sadness, or what might be called dysthymia, during his high school years, but was able to function and become more outgoing in his senior year.

One student who had been treated for depression starting in High School mentioned the traumatic events of having her mother die of cancer as the precipitating event for her depression.

“My mother passed away from melanoma when I was 14 years old and my Dad remarried rather quickly. I was forced to move to another town and switch schools in my senior year of high school. I hated it. I had no friends so I moved out to live with my aunt and uncle to finish high school in my original school. Things turned ugly there before and during my first year of college and I realize I had to be back with my father and family. I had to get over everything and accept it.”

Her depression appeared more situational in reaction to losing her mother at such a young age, and having to adapt to a new family constellation. She now describes her relationship with her stepmother as very good and she cannot imagine her father remarrying a more perfect mate. She expressed many positive feelings about being in college and having a close circle of friends that she can rely on.

Close Family that Valued Education

Although many admitted to some family problems or problems in their early years, four of the students described fairly comfortable childhoods such as the one quoted here:

“I grew up in a small suburb outside Boston. I had a very stable and happy upbringing by two well educated parents.....We lead a comfortable and financially stable lifestyle. I grew up very connected to both sides of my extended family.”

Another student who described herself being under great pressure to go to an elite school chose the state university for financial reasons. She describes her early schooling as very comfortable;

“My early schooling was through my town’s public school system. I excelled early on in language and reading but struggled with mathematics. I grew up in an affluent, white collared suburb with a good school system. There was no racial diversity. I had many great, nurturing teachers.”

The majority of the students said there was always an expectation in their family that they would go to college and mentioned how their families valued education. Even if they did not feel that their families had pressured them to go to college, they grew up with an expectation that they would.

“Going to college always seemed like what I was supposed to do, so I guess I always intended on going.”

“College has never NOT been an option for me- I was brought up knowing that after high school, that’s what you do.”

A few of the students were the first in their families to attend college, but were also brought up with the expectation that they should go to college to succeed.

Family History of Mood Disorders, Alcoholism or Abuse

Several students mentioned either a family history of depression, anxiety or substance abuse. The level of dysfunction varied from those who recognized their depression and got help, to those whose extended families never seemed to have addressed their problems such as the young woman quoted here:

“The people I call family are my mother and my sister. Everyone outside that circle that is related to me is severely dysfunctional. My grandfather on my mom’s side was very abusive to my mother and her sisters-he was an alcoholic.”

This student felt very responsible for her mother and her moods and aware of the family history of mood disorders and alcoholism.

In several cases students recounted which relatives had been diagnosed with depression or anxiety disorders, and which family members had a history of alcoholism or died by suicide. One student who was well aware of her family history mentioned her sisters’ struggles with anxiety disorders.

“Both of my sisters became diagnosed with anxiety disorders and placed on antidepressants...”

Her depression and anxiety issues became a source of shame for her, and she frequently mentioned a competition between the sisters. When she finally went on medication she felt there was a stigma attached to it, as she was always feeling like she had been doing better than her sisters by not being on medication.

Another student was aware of the struggle his grandfathers had with sobriety as well as the anxiety his mother and uncle suffered. His knowledge of the family’s mental health history indicated that the family had discussed these problems and were open to addressing them if they came up in later generations.

“My paternal grandfather died by in 1985 by suicide...My maternal grandfather had some problems while in his 20’s with substance abuse and depression. He was also a problem drinker and has been sober for close to 10 years. My mother

has suffered with anxiety since she was a teen as well as my uncle on her side of the family.”

A student who felt very responsible for her mother’s mental health and happiness reported:

“There is a long history of depression in my family...my mom tried to commit suicide several times when I was young.”

She felt stressed often by worrying about her mother’s mental health and felt that having that experience growing up made her more in tune with the needs of others who were suffering from depression. She mentioned she frequently gave her friends advice on how to deal with perceived anxiety and depression.

Parents in the medical field

Several students reported having parents who were medical doctors, nurses or some type of allied health professional. One student mentioned her psychiatrist father giving her advice on her medications. Another student with a family history of depression felt her mother was very open to her being treated because of her own history.

“I’ve always had a very supportive and emotionally aware family, growing up I lived in a family where emotions and feelings were openly talked about... My mother was on antidepressants for a very long time now after having grown up in a house where her mother was constantly depressed and not nurturing which had a toll on my mother’s emotional stability causing an anxiety disorder along with bouts of depression while I was growing up.”

This student has remained on antidepressants since her sophomore year in high school and credits them with helping her with her panic attacks, depression, anxiety and

Obsessive Compulsive Disorder (OCD). Her level of awareness of her mother's family history and her acknowledgement of the open discussions they had had about these family issues indicates a level of maturity not commonly seen at her age.

The College Experience

Roommate issues

College students are prone to stress due to the changing nature of the college environment which can affect their health as well as their academic performance. It is difficult for many students to adjust to a new living situation after leaving home. Several mentioned problems with roommates as being a major stress in college.

“Another thing causing me stress is my living situation. The whole roommate thing, just at (previous college) and here, has not worked out for me. I always have the drunk girl, the girl whose boyfriend sleeps over every night, or the girl who doesn't leave her room. Although the roommate I have now is better than the THREE I had before, I am still finding myself annoyed at her for wanting to stay up late and watch movies while I sleep, or sleeping until noon while I am up at 7:30 and out starting my day at 8 am.

Losing sleep can certainly decrease the student's ability to handle stress and she definitely sees this as an unhealthy aspect of living away at college.

Pressure from Family

Some students continue to feel too much pressure from their parents to achieve when they are in contact with their parents. One student worried about the cost of her college education and the burden it was placing on her family since her father was out of

work. She also felt she was harassed by her father, perhaps because of financial concerns.

“It’s just continued pressure from home that bothers me, but only when I’m visiting home and in their presence... Continued sources of stress include school (performance pressure from my parents), love life, and fear of being verbally harassed by my father...My father has been unemployed for about a year so I sometimes worry if I’m being a financial burden on my parents.”

For students who worry about family members at home there are also major sources of stress stemming from the family of origin. For one student whose mother had suffered from depression for most of the student’s life the feeling of responsibility and needing to take care of her mother was overwhelming.

“I am the first of my family to go to college. I am also the oldest so there is pressure to succeed and be an example for my younger sister. Pressure to secure a job – my livelihood for the future.....I also worry about my Mom a lot. I feel responsible for keeping her mentally healthy, so I worry that she could deteriorate while I am away.”

The pressure this student was facing after being the first in her family to attend college as well as worrying about her mother’s mental health was enormous. The pull of having to be successful at school in order to get a good job while worrying about how her mother is doing while she is away is evident in her statement.

If a family is seen as unsupportive, the student perceives this as another source of stress.

‘Academics continue to be a point of stress; more so creating a structure and motivating myself to do work than actually understanding my material...Continuing friction with my family creates an undercurrent of stress in my life, as there is little beyond interpersonal conflicts and very little in terms of emotional support or validation.’

This student was not feeling support from home and felt that most of the communications she did have with her family ended in conflict.

Academic Problems

Three of the respondents had some history of academic problems while at college. One describes a gradual pulling up of herself academically after nearly failing out. She attributes it to adjusting to college life.

“It might be of relevance to note that I was put on academic probation at the end of my first semester on campus since I ended up with less than a 1.00 GPA. I was able to pull it up to just under 2.0 with a semester G.P.A. of 3.5 in the spring, so things have at least improved and I expect to have a passing G.P.A. by the end of the semester. It may have been due to a combination of continued pressure from home as well as not being used to such a different environment with so many people.”

Another blames a traumatic experience during college which caused her to disengage from academics which resulted in her having to do an extra year at college.

“I was supposed to graduate last year, but I am taking a fifth year to finish my requirements. I can contribute my inability to graduate almost solely to a traumatic series of events that led me to psychiatric therapy. I felt awful, I was

depressed. This in turn was coupled with a steady downfall of my ability to commit to academics; I essentially flunked out my fourth year and returned for a fifth. Currently I am tired of the routine at school. I have a passionate curiosity to learn, but don't really like going to class. I constantly ask myself if I am making the best of my time here.”

When questioned further on the nature of the traumatic event she suffered she said she preferred not to share it. Her privacy was respected and no further questions were asked regarding that issue.

Financial and Career Concerns

Academics and financial issues appeared to be a major source of stress for these students. They worried a great deal about their future career plans, and the fact that college was costing their parents a great deal of money. Several expressed the desire to do well academically in appreciation of their parent's investment in their education.

“I worry about my future, what I am going to do, or what my career should be.” One, who said she felt pressured academically by her father, felt she wanted to get a good job to please her parents. She also felt a lot of stress from the amount of schoolwork she was given.

“My major and my future is a major source of stress for me at the moment. I am still undeclared and waiting to see if I get accepted into the major I want. Not knowing what will happen stresses me out a lot since if I don't get accepted I will be very behind and most likely will have to do a fifth year. Other than that it's

mostly from when I get loaded up with school work, which seems to be a normal source of stress in college.”

This student was anxious to get into a particular major and was waiting to hear the school’s decision.

Another student who was doing well in school and had been on antidepressants for many years for anxiety expressed his concerns this way:

“My current sources of stress have to do with academics (schedule planning, requirements, keeping a high GPA), finances, and women, worrying about my parents and trying to figure out what I’m going to do with my life and how I am going to get there.”

Pressure about their careers and how well they were doing academically was experienced as a source of stress. One student whose father was a physician described financial pressures, as well as a feeling like medical school was her only option. She describes not being able to organize her academics well.

‘I am trying to graduate. I want to do the best I can, I don’t want to settle for anything less than A’s. I am a poor planner and it takes me a long time to finish work. I often put things off, or become so stressed and overwhelmed that I freeze and don’t do my work. I am constantly in stress about financials. I am always in debt. I have a demanding job with a lot of responsibility. These responsibilities are often swept under the table, only to contribute more to my stress and anxiety. I have set a very high goal for myself in terms of my profession. I wish to pursue a career in medicine but my undergraduate degree is worthless for that. My less than perfect GPA means nothing to admissions for medical schools, but it is the

only thing I want to do. The future- employment after I graduate, where I will live, how I will pay rent, how I will fund my graduate education. I am constantly thinking about this and how it all seems insurmountable.”

Although she did not mention specific pressure from her father to go to medical school, she had set that standard for herself and it was obviously causing her a lot of stress. The financial strain of working at a demanding job, while attending college is a major source of stress for this student.

Someone to talk to

A prominent theme in these interviews was the importance of friends to college students. Many of the college students cited talking to good friends about feelings as being very therapeutic:

“I have a lot of good friends. There are only a few I will talk to like this though. I’m not normally one to express emotions, but when I need to there are a few good long term friends that I can comfortably say anything to.”

One student described how much happier she is with the new school she transferred to after freshman year, as well as having a steady boyfriend and good friend’s to talk to.

“I love having my boyfriend and people to hang out with. The people at my other school were a different kind of crowd. I had very few friends.”

If students were away from their friends they missed the closeness they had established with their good friends as the following young man describes below:

“Most of my best friends are either in my hometown or at college somewhere else. I have some friends who are here that I knew from High School so I see them sometimes. I haven’t made any friends with people here. Sometimes I feel

like everyone who goes here are idiots who only care about sex and beer. I think there aren't many people worth befriending here. As far as the people from High School that are here, I'm not really close to any of them, except for one. There is only one I can really talk to."

Another major source of support for several students was their mother. Four students actually cited talking to their mother as a major source of support. An example of one of their statements in response to being asked how they deal with stress is listed below:

"I cry. I talk to my Mom. I talk to friends and hang out with them."

Both male and female students mentioned talking to their mothers as either a source of comfort or a way to deal with stress. Some mentioned having better relationships with their mothers than their fathers at this point in their lives.

Summary Question One

Students started on antidepressants for a variety of reasons from anxiety, obsessive compulsive disorder and depression. Although some reported happy childhoods, many mentioned feelings such as being shy, moody or anxious as a child. Several mentioned being "bullied" at school and feeling isolated. Some did well at school in the early years and others had had trouble with their earlier schooling. Most of them mentioned that their families valued education and they were always expected to go to college. These expectations from home were not necessarily seen as a negative source of stress by all the participants, but it was clear that they wanted to perform well at college to make their families proud.

Several students remembered feeling depressed or anxious as children, and others had situations come up that caused a depression for them, such as losing a mother in high school, or the end of a romantic relationship. Several had been on antidepressants since junior or senior high school. Some mentioned family issues that made them feel unsupported such as being responsible for a parent with mental health issues. Others related that having a parent who had had treatment for anxiety or depression made their family much more supportive in finding treatment for them, and making sure those problems were talked about openly. Those with parents in the medical field also appeared to be able to talk openly with their parents about their concerns.

A major source of stress for these college students was the concern that they do well in college in order to have a successful career, and not be a burden on their parents financially. They were quite aware of the financial strain put on their parent's resources and hoped to do well enough to make it a worthwhile investment. Others mentioned school as a source of stress in itself, and described how relieved they were when their semester was over. Roommate issues were cited as a source of stress if the roommate stayed up later or had friends sleeping over which prevented the student from getting their rest. Adjusting to college life in general was stressful for these students. Some had set very high goals for themselves and had trouble settling for anything less than perfect grades. Others felt pressured by their families to get good grades and be accepted into the right major.

- 2. What were their feelings about being medicated with antidepressants?**
a. Did they find medication helpful in coping with depressive symptoms?

Feelings About Being Medicated

Medications Didn't Help with Depression

Most of the college students felt that in general being on medication did not help them deal with depression any better than not being on medication. Some found the side effects troublesome, and others felt stressed out just by the fact they were on medication.

“No, I do not feel that the antidepressant has helped me deal with stress. If anything, the fact that I am on an antidepressant in the first place is a stress in and of itself.”

“Apart from making me too drowsy to remember my own name they (antidepressants) did nothing for me.”

Another female student who had been on antidepressants for awhile, and was really questioning the need for her to have been on them for so long summed up her feelings this way:

“I suppose for basic health of body and mind (eating, sleeping, bathing, and getting out of bed in the morning) it has helped. Other than that I feel that my personal bout of depression is not one that needs pharmaceutical intervention.”

One student who didn't like being on medication found she could do without it after she figured out what she wanted to do with her future.

“I stopped actually taking my medication about a week and a half after it was administered. I was feeling sad and helpless, but realized that the situation I was in was a result of my inability to know myself and defend that person. I started

reading about ways to change my perceptions on my own, and started investigating careers and future life choices that would make me happy, and pretty much ignored everyone around me at the time.”

Controlling their lives and making their own decisions seemed very important for some.

A student who never really wanted to be on medication, but felt forced by his friends and family to try them, stopped medication after a short trial because he did not feel the medications were helpful.

“After I made it clear that I really didn’t want anything to do with meds, my family understood and just told me to go talk to someone.”

He hadn’t at the time of the interview talked to a professional therapist, but was considering it.

Family Pressure to go on Medication

Some felt forced by concerned families and friends to seek treatment. Concerned family members who suggested medication and therapy for a depressed family member would sometimes encounter resistance. Those who felt forced to try antidepressants did not stay on the medication for long. One student stated:

“I had just finished a tough miserable semester at school. My grades weren’t that good and I was arguing with just about everyone. I had a lot of resentment towards my family and friends; none of them seemed capable of providing the emotional support that I needed. I had talked to a counselor under duress from my mom after a particularly bad blow out had her “concerned” for me, but mostly angry at how I treated her. That summer under closed quarters and with very little to do (no work or internship), I reached my breaking point. I had to go back to

the psychologist I'd seen earlier who recommended a psychiatrist who gave me a prescription.”

This student later went on to state that she only stayed on the medication for a week and a half because she felt they weren't doing anything for her but making her drowsy. She later found her salvation in coming to “know herself as a person and defend that person.” She credits reading about ways to “change her perceptions on her own” and research on career choices for getting her over her depressed period.

Feeling Numb

Several students reported feeling numb on antidepressants. They described this feeling in a variety of ways which are described in the following paragraphs. One student said she felt like the medication “muted people”:

“I absolutely hated taking antidepressants. I think they mute people. It makes you a blank human being who is unable to fully express emotions. I would rather have some crazy ups and downs than be static. This is why I stopped taking antidepressants. I've actually been fine and it's been about four months.”

This student missed having the full range of emotions and discontinued her medication on her own. She was very strong in her opinion that she needed to be able to express her emotions.

Another student who was currently still on antidepressants stated she felt chemically altered and longed to remember what it felt like to be naturally happy.

“I waver back and forth between thinking that the SSRI has helped me get out of the hole I was in, to absolutely hating the fact that I am on it. I no longer wish to be on the SSRI and wish to stop taking it. I hate the fact that my mind is being

chemically conditioned daily. I have a hard time remembering what kind of person I was prior to taking the SSRI. I feel as if I am a numbed version of myself. I long to be happy and to remember what it is like to feel “naturally” happy and content. I feel that for as long as I am on the SSRI, any feeling or reaction that I have to my environment is not genuine. I detest the fact that what is happening in my brain is due to chemical therapy.

This desire to experience true and genuine feelings which are not the result of a medication was expressed by several participants.

Masked Causes of Depression

Nine students stated that they really did not like taking the medication and some felt that it may have masked symptoms, rather than helping them to deal with the real causes of depression.

“I think the Zoloft made me have a lack of assertiveness, a little more easy going, but not being all there- if there was some debate going on that I would love to have jumped into and be involved in, I might have sat back and watched, feeling like what I had to say was not important enough to be said.”

This sense of detachment and feeling like she wasn't herself led one female student to discontinue her antidepressants. She expressed her feelings this way:

“Ever since I've been put on Zoloft, I haven't been “me”. I question all my thoughts, and find myself getting annoyed or frustrated wayyy more easily than I used to. This is why a few weeks ago, under the supervision of my doctor, I have started to wean down from 50mg a night to 25mg a night, and to eventually come off of Zoloft within the next two months.”

Students expressed concern that they were covering up their problems by being on medication and not getting to the root of their problems.

“Some (antidepressants) helped with stress and depression more than others, but there is no panacea or cure-all and I wish there was something that was. They don’t cure the source of the stress and depression and depression after all.”

This desire to get at the root of the problem was also expressed by several students.

Dehumanized

For those who felt forced into taking medication by concerned family, the feelings were somewhat stronger:

“I felt dehumanized. It felt as though the greatest concern was protecting the mentally sound people around me, and placating me was the only way to do it. It was a difficult process to be scrutinized in front of family members, and as the office was out of the way from my home, it was challenging to feel that everyone was straining to help with my problems.”

Ambivalent

It was not uncommon for students to expressed mixed emotions about being medicated. In the same interview, after saying medication may have helped them get through a rough patch, they would express ambivalence over whether they really did help.

“Antidepressants have done nothing for me. Who knows, the whole thing could have been a placebo effect...from my time on it, I’m not really sure that it ever had that great an effect on me.”

The placebo effect has been noted with many psychiatric medications in previous studies and this fact has been publicized in the popular press.

Embarrassed

One female student felt that the medication had a positive effect, but was embarrassed about taking them.

“My first experience with antidepressants was a positive one. At first I was really against going on antidepressants, worried that it would make me falsely happy-I heard everyone call them happy pills so I was worried that my happiness wouldn't be genuine. I was also really frightful of anyone finding out that I was on antidepressants, worried they would label me crazy and spread it around school.”

In general students were not happy about taking antidepressants, and many indicated some embarrassment about having to depend on them.

“I hated it and at points I feel as if it made me worse. It made me feel like a weaker person for having to depend on medication and not being able to solve my issues on my own. I tried to hide the fact that I was taking antidepressants as much as I could because...I felt embarrassed by them.”

This stigma that is attached to taking antidepressant medication was mentioned by more than one student.

Medications Helped Some

The student mentioned above had been on several different antidepressants since sixth grade for anxiety type symptoms and panic attacks. Interestingly both his parents are in the medical field and there is a strong family history of anxiety, substance abuse

and depression. He also noted that living away from home had helped lower his anxiety considerably. He felt that the medication “helped decrease mood swings and anxiety” and another student felt the medication helped her gain perspective.

Some of the students really felt that medication helped them with their anxiety and got them through a rough spot or made life more manageable. One female student felt that antidepressants had helped her deal with her depression which was mainly a result of her anxiety:

“I do feel that antidepressants helped me deal with anxiety. When left unchecked, my anxiety makes me lose perspective and that’s when I get a sense of overwhelming doom. Things as simple as preparing to catch a bus. Meticulously planning out my route and what time I should arrive could prevent me from going out in the first place for fear of missing the bus altogether. Medication has helped me calm down and keep perspective, even if I do miss the bus life goes on...As my depression is triggered by anxiety I would say that it has helped me deal with my depression....if I chose not to go out because I thought I wouldn’t be able to meet the bus on time I would see myself as a failure and that would cause me to seclude myself and lose confidence and miss out on opportunities.”

Her description of the anti-anxiety effect of antidepressants and how they help her to overcome obsessive thoughts and behaviors is impressive. Another student, who felt the medication helped him to deal with anxiety, put his feelings this way:

“They (medications) seem to make my life more manageable and enjoyable so the benefits definitely outweigh the risks.”

This student was also interested in exploring alternative therapies such as mindfulness and was willing to keep trying to deal with his anxiety by whatever means would work.

Side Effects of Medication

Student's feeling about being medicated were often complicated by the side effects they experienced being on medication. In this study students reported a variety of side effects from the medication. One stated that they felt unable to fully express their emotions and others mentioned a variety of side effects including dry mouth, diarrhea or stomach upset, sexual dysfunction and drowsiness. Others mentioned suicidal ideations, agitation, increased anxiety and worsened mood as well as difficulty withdrawing from the medication.

Suicidal Ideations

Two students mentioned having some suicidal ideations after starting antidepressants, but never acting on them. One student recalled:

“I had some very minor suicidal thoughts. They were never anything that I actually wanted to do, but I did think about it quite often when I was 16, 17, 18. My therapist called them “suicidal ideations.”

Although some side effects were minor such as dry mouth, others were more serious and prompted one student to discontinue taking antidepressant medication:

“I have stopped and switched antidepressants in the past due to bad side effects- the first one wasn't effective; the second one gave me a dry mouth; the third one ended actually worsening my anxiety and bringing on suicidal thoughts.”

Worsening Anxiety

Anxiety may be heightened when people are starting on medication and when they withdraw from antidepressant medication. This disturbing side effect was described by a student as an agitated and anxious state which occurred after starting antidepressants:

“Yes, the Zoloft made me feel angry, agitated, confused, anxious and frustrated that it wasn’t helping.”

She was given other medications to calm her down after this happened.

Problems Weaning off Antidepressants

Several students described what it was like weaning themselves off of antidepressants. Some did this on their own while others sought medical advice and came off of the medication slowly.

“The withdrawal from Zoloft so far has been causing some increased sudden anxiety, but as I re-adjust to each dosage increment, I find that that recedes, and I’m hoping that after the medication is completely out of my system, those minor attacks will go away.”

A female student took herself off antidepressants after trying several and feeling like they really weren’t working.

“I have been on every antidepressant that you could name at some point; they just kept changing them when they did not work. All of them had different side effects; different feelings to them, none of them ever really solved the problem. I was hopeful at first that they might work, but also disappointed that I wasn’t happy and needed help in any way. When I stopped taking them this summer I

was angry and I went through terrible withdrawal. I had been on antidepressants (with doctors constantly changing them) for 3.5 years; I was fed up and stopped completely.”

Her feelings of aggravation that she went through so many side effects without any real benefit led her to discontinue the medication and she reports she has been fine since then.

Summary of Question Two

Most students did not like having to take antidepressants, although a few saw them as necessary to get them through a stressful period such as college. The students who described themselves as suffering more from anxiety than depression, tended to stay on the medication longer than those who were simply diagnosed with depression. They did not like being labeled and most often kept the fact that they were taking medication private, only sharing it with close friends and family. They expressed fear that they might be labeled or seen as weak for taking medication. A major theme expressed by students was the idea that antidepressants left them feeling numb and not themselves. They may not become involved in life as much as they had previously and would tend to sit back and let events unfold without commenting on them.

Some students did find the medications helpful for relieving anxiety, particularly those who were troubled with obsessive thoughts and Obsessive Compulsive Disorder. Others thought it perhaps made them more social for awhile, and helped them cope with the stress of college life or a particularly difficult period in their lives. They frequently reported negative feelings about being on antidepressants such as feeling embarrassed or disempowered and disturbing side effects such as increased anxiety, suicidal ideations and lack of sexual desire. One student felt she was a burden on her family when they

became involved in getting her treatment, while others felt that the medications made them too tired or less likely to speak up. Students who were on medication in the earlier school years often had an acknowledged family history of depression or anxiety and or parents in the medical field that may be more aware of available treatments.

College students questioned the usefulness of being on antidepressants for long periods of time in general and sought alternatives to deal with depression and anxiety. Several mentioned feeling numb while on medication or chemically altered and several mentioned feeling embarrassed by having to take these medications. Their perception that they were not truly themselves on medication was reflected in their statements about not trusting that the feelings they had while on medication were actual feelings or medication induced. Many experienced well known side effects such as dry mouth, sexual dysfunction and fatigue. Two mentioned having suicidal ideations while on the medication, although neither acted on them. One student mentioned a suicide attempt in his early teen years that he never told his parents about. Clearly suicide is a risk in this age group in general and particularly worrisome when starting on antidepressants, particularly in the first two to three weeks.

3. What are some of the coping strategies that college students employ for dealing with stress and depression?

Coping Strategies

Self Talk and Deep Breathing

Self talk and deep breathing were cited by many students as quick ways to relax and calm themselves down. One female student who was going through a medically supervised withdrawal from Zoloft explains:

“To deal with stress right now, I ration with myself. I’ve been trying to talk myself through my anxious moments when I know that the thoughts going through my head are unnecessary and uncalled for, and have no real issue that they are stemming from. I have made patterns to find out what triggers my anxiety and when I’m most anxious- for example too much caffeine, PMS, physical ailments...nothing more than a bruise or a headache that I feel could be so much more, and I need to reassure myself that it’s just something minor...it’s all about keeping myself positive and putting the triggers and anxiety in the back of my mind so that, even if it’s there, it will go away with time, and it won’t alter my everyday life.”

Exercise and Physical activities

Exercise was cited frequently as a way to relieve stress by several participants. It seemed to lift their mood and take their minds off unpleasant issues.

“I run. Exercising is my savior, I get all my emotions and stress out by biking, running, even boxing. It helps me release the emotions that I don’t talk about.”

Several mentioned a specific sport such as basketball or hockey:

“For example, if I am all nerved up but I’ve been thinking about basketball all day long, I’ll go shoot some hoops.”

“I do play hockey from time to time. Exercise definitely helps because it gets my mind off of it and also when I become too lazy I feel worse, so exercise helps get me going.”

One student who was really questioning what he was doing at university mentioned that he was most relaxed when he was doing carpentry like his father.

“The carpentry work I do over the summer really helps, because it requires so much focus that I don’t have the time or energy to think about anything else. The satisfaction of looking at something I just fixed or built is such a great feeling that it overpowers any stress I am feeling.”

Realizing that he preferred outdoor work and working with his hands made this student question what he was doing at college. He stated that he did not seem to be enjoying it as much as the others around him and wondered if she have gone into the trades like his father had.

Writing or Journaling

Several students mentioned writing or journaling as a way to unwind and feel better. It was mainly the female students who mentioned the journaling.

“I talk to my boyfriend, write in my journal, eat something sugary or drink a soda, I try to change the anxiety to excitement...for example, this is weird but if I have a project to do that I’m really stressed about, it helps if I have some really nice paper and pen to use to help me create the project, because then I enjoy the process a little more, rather than worrying about producing and end result.”

Another student cited making lists as a way to help her relax:

“If I am stressed out about things I have to accomplish I like to make lists, it really helps me visualize what I have to get done, and really put it in perspective- usually I feel like I have so much to do, but in reality once it’s down on paper, it’s not so bad.”

Another student who did not stay on antidepressants for long stated:

“I try to find and recognize places and feelings of calm and comfort. I try to take more time for myself. Mostly though, I write my span of thoughts and feelings that trouble me down in a journal. This has been the most effective way for me to clear my head.”

Music

Many of the male students mentioned listening to music to calm them down.

“I either listen to relaxing music, give myself a pep talk and try to calm myself down rationally, or just wait for it to pass...I love music and movies. I also love reading. I play the drums, but I can't do that here unfortunately; there's no room for my drum-set in the dorm room. I think that's about it.”

Another male student mentioned music as a way to help remove whatever is bothering him.

“I found it very helpful to separate myself from whatever it is that makes me feel depressed and relax and listen to music. Listening to music has really helped calm me down and forget about my problems.”

Music was also seen as a great tool to exercise to by a female student who liked to exercise used her iPod to relax.

“I have the sounds of the ocean on my iPod so wherever I go; I have that instant comfort if I ever feel too over whelmed.”

Marijuana

Marijuana was cited by four students as one of their way to relieve stress.

“I smoke marijuana, this is a stress reliever.”

“If it’s a weekend I won’t mind a smoke or two (I don’t puff Sunday-Thursday for school related reasons).”

“I find that smoking marijuana helps to relieve the stress pretty effectively.”

“I swim, I go to the barn, I smoke pot on occasions.”

Whether they perceived the marijuana to calm the stimulating effect of the medication, or cope with stressful thoughts remained unclear. When questioned over the timing of his onset of depression and the age he starting using marijuana, one student saw no causative effect between his use of marijuana and becoming depressed in his teen years.

Positive Response to Talk Therapy

The majority of students who had been in therapy found it to be very helpful as illustrated in the following quotes:

“Yes, therapy has been very helpful. Unfortunately nothing that I have done has had significant lasting effects. It’s often good to just talk about things that are on my mind or triggers my anxiety. I think it is a characteristic of anxiety to have irrational fears that you need validated, but also told are unrealistic or improbable. Also, it is good to hear from someone else that the thing that you worry about isn’t the worst thing in the world, as catastrophic thinking is also fairly common with anxiety sufferers.”

Another female student views her therapy visits as a way to maintain herself and help her deal with stress and depression.

“For the most part, to deal with current feelings of depression and stress I just try to move forward in my life and bring up concerns at my weekly therapist’s

visit....Talking and reasoning out both my feelings and possible solutions has always been what has worked best for me, anyway.”

Several males indicated that they really should go and talk to someone professionally, but they hadn't gotten around to it. One student, who reported mainly anxiety symptoms, was still on antidepressants and stated that he found Cognitive Behavioral Therapy (CBT) helpful.

“I think the CBT is a great approach to psychotherapy in anxiety patients. I was in my early teens when I tried it and found it too much to take. I think I will give it another shot at some point, though.”

This student also expressed interest in mindfulness training and was referred to a local group.

Talking with Friends

Friends were very important to the individuals who participated in this study. One student who transferred into her present University from a school where she could not relate to the people said:

“The biggest difference now is that I have a good “support system of family and friends to talk to when things aren't going the way I want them to, and that makes all the difference.....Now that I know I have people around me to support me and help me if things ever do get hard, I feel I can manage fine without knowing in my brain that I am taking a medication to help me out.”

Another male student who took antidepressants for about a year and a half without noticing much effect said that:

“... conversation with someone I know and trust will keep me level-headed and sedated.”

The male students did not mention having as many friends as they could talk to, but usually had a few people they could express their feelings to.

Alternative Therapies

In a search for alternatives to medication, students have tried a variety of alternative therapies:

“I tried herbal supplements like 5-HTP, did journal writing, breathing exercises, and a lot of personal analysis.”

Another student found acupuncture to be very helpful in dealing with the headaches that were brought on by her various medications. Others read a lot about alternative therapies and found the process of learning about them helpful:

“I have done a good deal of research on my own....I started researching a lot into alternative therapies for depression and other mental states. I learned a great deal about myself in the process...researching learning styles so that I could have a better understanding of myself, and I read about giftedness in adults and multiple intelligences. While there was not professional involved in this introspection I would say that it's done a great deal in terms of lasting help than a lot of what I was subjected to has. It's helped me regain some sense of self that I felt I had lost, and helped me to understand myself better.”

One student felt that alternative therapies just made her frustrated or “like I was doing something wrong for not getting better.” She had tried several medications and therapy

and was open to alternative treatment, but it ended making her feel like a failure if she didn't feel better.

Summary of Question 3

Reading and writing were definite themes as well as talking to friends and listening to music. The process of finding themselves at this stage of life and learning how to deal with their feelings was a commonly expressed theme for those who seemed to have been through the experience of being medicated with antidepressants. Self actualization often led to a realization that they did not need medication and needed to deal with their problems on their own. In their advice to others they frequently mention doing your own research and advocating for yourself with medical professionals until the right treatment is found. Another theme expressed was for students to really “know themselves” through reading, research or talking to others.

Exercise, which is known to reduce stress and symptoms of depression, was a frequently cited as a means to relieve stress and depression. This was not an unexpected finding as it is a well accepted fact that exercise can lift mood and is generally healthy to engage in (Jorm et al, 2006). Journaling was helpful to many, and really part of their learning about themselves which they talked about as being very helpful. Writing seemed to be more popular among the female college students.

They often mentioned seeking alternative treatments, and the majority found talk therapy to be helpful by the majority of the students interviewed as well as having a close circle of friends to talk to. The number of students who openly admitted to using marijuana as a stress reliever was perhaps not surprising given the relationship between substance abuse and depression. General socializing, gaming and watching television and

movies were also cited as means to reduce stress. Basic functions such getting enough sleep and eating were necessary and one male student mentioned sex, when it was “available” as one of his favorite ways to relax.

Advice to Others

As the interviews progressed several students were asked what advice they would give to other college students who felt depressed. These narratives were quite revealing and heart-felt:

“Know thyself. And realize that the goals that others and society impose on you aren’t necessarily what you were placed here to achieve. Understand your motivations for thinking the way you do, and stop to make sure that the relationships you’re in are really helping you grow. Realize that things can get better.”

“Talk to people you can trust”

“Be insistent that your needs are addressed”

A female student who really wanted to apply to medical school advised:

“I would advise him or her to isolate the source of sadness and how it can be alleviated or resolved. Unless his or her every day is disrupted (that is not getting out of bed, inability to participate in daily responsibilities, self neglect, etc.) I would not advise the use of anti-depressants. After other therapeutic outlets have been sought, I suppose psychiatric intervention could be useful to some. I think it is all very subjective, though.”

A male student who was on antidepressants for a short period during college advises students to research medications fully and take their time in making a decision to start medication.

“Figure out as much as you can before you take them. Ask friends who are on them. Find online forums. Get as many opinions from doctors as possible. Figure out the side effects and all that jazz. There is no reason you should jump in blindly. I did that and felt it was a terrible mistake, but that’s just me. I’m sure there are people out there who abide by it and what not. I feel I could’ve picked a better medication with further research; maybe my dosage wasn’t strong enough or whatever. I can’t put my finger on it, but do your research since it is your mental you are messing with.”

A female student who had been on several types of antidepressants over several years didn’t really trust the medical advice she was given. She finally felt better after switching doctors and having her hypothyroidism treated.

“I would advise them to be insistent if they believe that something specific needs addressed. It is hard because young people are immediately put in a box and labeled as being immature or flakey, and so medical professionals don’t take us seriously. We are fighting a battle against people considered stronger and more knowledgeable than us. They continue to dismiss us and wonder why tragic statistics are so high in our country.”

Her encouragement for others to stand up for themselves when seeking medical care was the result of dealing with a variety of health professionals over the years in treating her depression. She stated that her thyroid screenings were always borderline hypothyroid

and for several years her providers took and wait and see approach. It wasn't until she was treated for hypothyroidism that she really felt better. She felt because she was young the medical professionals she consulted did not take her concerns seriously enough and advises others to assert their rights when seeking care.

CHAPTER 5

DISCUSSION

The expectation that children will go to college is the norm for most middle class families in America. These college students are coping with a changing job market due to a serious economic recession, and being raised by parents who have certain expectations of their being successful at college and able to find meaningful employment afterwards. Interviewing college students at the stage in life, when they are finding themselves, and trying to sort out the meaning of their previous life experiences was enlightening. The variety of lived experiences offered in the online interviews provides a snapshot of the college experience for students who have lived through a period where depression and anxiety treatments are widely available, and heavily advertised on television and in magazines. The interviews gave the students a chance to reflect on the meaning of their experiences with antidepressants, and many concluded that they were not a “panacea” or cure all

Some of the major themes coming out of their lived experiences included that they disliked being medicated, often referring to feeling numb or not themselves on medication, and that their family and friends were important sources of support for them. The stresses they are under in college included academic, family and financial pressures as well as general problems associated with adjustment to college life. Students with parents in the medical field appeared to have been exposed to information on treatments and may have had families that were more open to getting them treatment when they reported depressive symptoms. Several students had a family history of

depression and anxiety which was not unexpected since depression and anxiety do tend to run in families.

Discussion of Major Themes

Disliked Being Medicated

The majority of students in this study did not like taking antidepressant medication, even if they were still taking the medications. They expressed feelings of embarrassment, shame they had to depend on a pill, and worries that the medication was somehow changing them into someone who wasn't quite their authentic self. Some, who had felt forced into taking medication by concerned family and friends, felt even more strongly about this and almost felt that the concerned individuals who had helped them initiate treatment may have been doing it for their own convenience and not for the ultimate good of the student. There certainly appeared to be a broken trust if families had urged the student to be medicated without their full consent and understanding. Students who had weaned themselves off the medication often expressed a wish that they had done more research before starting antidepressant medication.

Feeling Numb

Some of the findings from this study were not unexpected based on previous literature searches. In terms of side effects most of the symptoms students have described are listed in the literature for the drugs including suicidal ideation, dry mouth, sedation and sexual dysfunction (BMJ, 2008). However, the description of feeling numb or not themselves is more unique, and probably a result of using a qualitative approach for this topic. Several students commented on feeling removed or not quite themselves while they were on antidepressants. This was often cited as a reason for discontinuing

the medication. They expressed a desire to experience the full range of emotions again, and not have themselves be muted. A recent study by Price et al. (2009) describes an emotional side effect of antidepressants as feeling “blunted” which seems similar to feeling numb.

A recent study (Kirsh, Deacon, Huedo-Medona, Scobua, Moore & Johnson, 2008) which looked at 35 clinical trials of antidepressant drugs submitted to the U.S. Food and Drug Administration, concluded that “patients taking antidepressants fared no better than patients taking a placebo” in patients who were either mildly or moderately depressed. The drugs only seemed to benefit those who were severely depressed. If in fact many college students experience unpleasant side effects or personality changes on the medication, the decision to start a young person on antidepressants for mild to moderate depression should be made with greater caution by clinicians. The potential to cause possibly life threatening side effects should weigh heavily on this decision, especially if the medication is not seen to have a major impact over time. The increased stimulation and agitation has been a well known effect of SSRI antidepressant therapy, particularly when one is just starting medication and it is this agitation that may lead to the suicidal ideations or actual action (BMJ, 2008).

The fact that we have gone through a period where so many young people have been put on mood altering medications is an unusual, and perhaps a particularly American phenomenon. There is some concern that this practice is spreading to other countries that follow the United State’s lead on diagnosing increasing numbers of young people with psychiatric illnesses (Watters, 2009). Allowing pharmaceutical advertisements on television, and not having strict guidelines on prescribing medications “off-label” has led

to the medication of many children and adolescents in this country with psychotropic drugs for milder forms of depression or other mood disorders (Jureidini et al., 2004 & Watters, 2009). Adolescence is a difficult transition for many, and with mounting financial and academic pressures being placed on college students, many of the subjects in this study reported feeling stressed and anxious. Looking more carefully at the pressures college students are under today and what might be done to lessen these stressors may do more to enlighten the state of knowledge of depression and anxiety in this age group.

Family History of Depression or Anxiety

Many of the students interviewed in this study mentioned a family history of anxiety or depression. Bowen's Family Theory talks about the transmission of anxiety from parent to child as a major construct in his theory (Hanson, Kaakinen, & Gerald-Duff, 2005). Some of the students interviewed in this study actually felt that their anxiety had lessened somewhat since moving out of their family home. In this way the whole process of going away to college and living away from home may be therapeutic for those who come from fairly anxious home environments.

Antecedents of Adolescent Depression

Since several of the students mentioned either being bullied in high school or not quite fitting in such as those who felt bright, but bored or other typical descriptions of how children labeled with Attention Deficit Hyperactivity Disorder (ADHD) might describe themselves one is left to wonder how the earlier schooling experiences affect these individuals who develop depression type symptoms. With teachers being quicker to label children with mental health and learning problems after receiving training which

is often sometimes sponsored by the drug companies, one of the questions that really needs to be asked is whether this has been truly helpful for the children involved?

Importance of Family and Friends

Family appeared to still be very important to the students interviewed for this study. For those who had unresolved issues in their family of origin, such as worrying about a depressed mother or feeling pressured by an unemployed father, family issues continued to be a source of stress. If students are still caught up in emotional issues in their family of origin, this may be preventing their differentiation from the family which many family therapist see as key to the healthy development of an individual (Hanson et al., 2005).

Those students who reported good relations with their families expressed great satisfaction that they had a supportive relationship with their family. Mothers were often cited as someone they could talk to in order to relieve stress. Students were also very concerned that they not waste their parent's money by doing poorly at college. Given the current economic climate in the United States and the scarcity of good professional level entry positions, college students are under enormous pressure to stand out from the pack in order to get hired. Several students expressed the concern that they needed to get into the right major in order to get hired after graduation.

Good friends that students were able to share feelings with were highly valued in this study. In Erickson's stages of psychological development the period of young adulthood is centered on the task of developing meaningful relationships, or what has been termed the stage of "intimacy versus isolation" (Hanson et al., 2005). Several female students cited having a good boyfriend who they can share their feelings with as very important in their enjoyment of college, and their ability to handle stress. Talking with friends in

general was cited frequently as a way to cope with stress and depression. On the other hand, roommates who don't allow for enough sleep can be a terrible distraction for students, and the discourtesy of having romantic partners sleep over in a double room without their roommates consent is often an issue for college students in dorms. Many students also report the problem of having to take care of friends who drink too much alcohol as a source of stress. Developmentally this is the age of forming close relationships and those who have been successful at completing this task and have developed a close network of friends appear to benefit from it.

Therapy Helpful

The literature supports the assertions that talk therapy, and in particular Cognitive Behavioral Therapy, is effective in the treatment of depression and anxiety (Embling, 2002). It is thought that individuals need to express their sadness before they can recover from depression. Several of the students in their study said their experiences in therapy were helpful. Several mentioned therapist they had seen by name, and recounted how helpful they had been. Therapy was seen as a means to problem solve and deal with pent up anxieties. It was also expressed as a great reality check where they could talk and reason out their feelings with someone. One student expressed this as "...it's good to hear from someone else that the thing you worry about isn't the worst thing in the world." Others mentioned experiences with specific therapists and how it might have taken them awhile to find the right match for their personality.

Self Actualization through Reading, Writing or Talking to Friends

Many of the students mentioned either doing research on their own, or writing in journals about their feelings as being very helpful in overcoming their depression and

anxiety. Reading in general, or what has been termed “bibliotherapy,” has been listed as an effective alternative treatment for depression in the literature (Jorm et al, 2006).

Cognitive behavioral bibliotherapy was seen as effective in treating depression in adults according to Jorm’s (2006) meta-analysis of available data. Since many college courses involve a lot of reading, the process of being at college and opening oneself up to new ideas may in fact be therapeutic for depression.

Talking to friends and sharing feelings was also seen as very therapeutic by the college students interviewed for this study. Men were less likely to mention having close friends available to talk to, and less likely to have mentioned engaging in therapy than the women in this study. Men may suffer depressive symptoms as often as women, but are less likely to admit them and also less likely to get help

(<http://www.repsych.ac.uk.mentalhealthinformation>). It is thought that men don’t like to admit they need help because it makes them appear weak, and that they are less likely to talk about their feelings with their friends and families. It was a pleasant surprise to have as many male participants as replied. Perhaps the online environment for interviewing helped them to open up by providing a more private setting than face to face interviewing.

On a practical level, one of the male participants stated that he was motivated to participate in the study by the reward of a \$25.00 gift card. He did reassure the researcher that his need for cash would not affect his responses in the following post:

“I’m itching for that money, so expect promptness. I will still answer in detail.

Though don’t think the responses are sullied form the check-dollar signs don’t

blur the vision, just ignite the fuse. Trust me, you tell a college kid you're going to give him money for something, it'll be done before you finish your request.”

In general the students' responses seemed honest and believable. This finding supports the literature on internet interviewing and the authentic self (Mann, & Stewart, 2000). College students in this age group are so used to expressing themselves online; they are perhaps more honest in the written word than they would be in a face to face interview with a stranger.

Exercise, Music and Marijuana seen as Stress Relievers

Some evidence exists for alternative treatments for depression such as light therapy, Saint John's Wort, Vitamin C, Omega 3 Fatty Acids, massage therapy, bibliotherapy, exercise and relaxation therapy (Jorm et al., 2006). Students found exercise to be helpful at lifting their moods and helping them deal with stress. This finding was expected according to the literature review and the general medical opinion that is expressed in scientific literature (Jorm, 2006) Several students mentioned that they tried to go to the gym regularly, but found it difficult. For those who did fit in regular exercise, the benefits of being outdoors or focused on an activity were tremendous and were deemed a “life saver” by one participant.

Although the literature seemed to point to alcohol use as both a common means to deal with stress in this age group and a major cause of depression, only one of the students interviewed mentioned regular drinking. Marijuana however was cited by several students as a way to reduce stress and may have been one of the factors leading to depression in the first place. A recent survey found marijuana use to be fairly prevalent among college students (Bell, Wechsler, & Johnston, 2002). This survey of over 17, 000

American college students found that one in four admitted to using marijuana in the past year. It also found the highest use of marijuana among single white students at non-commuting four year colleges with pubs on campus. These numbers are similar to what was found in this small qualitative study of mostly white students at a four year college in which 4 out of 13 admitted to regular marijuana use.

Internet Interviews

Using email to communicate with the subjects of this study was a convenient medium for the students to express themselves in, as well as being an efficient method to gather data. Any concerns about students not revealing their opinions online were allayed after reading the first few interviews. Mann & Stewart's (2000) assumption that young people are generally honest in what they write about online appeared to hold true. Students were very forthright in sharing their feelings about medications and personal stories. Several students mentioned that they found writing about their feelings on this issue to be therapeutic for them. Although this may have been the case as well if the interviews were in person, these particular college students might not have volunteered without the privacy of responding to questions in their own room and at their own pace.

As the interviews progressed, additional questions were added as needed based on previous responses. Some of the set open-ended questions were not used, or altered if the student had already addressed the subject in a previous reply. It was easy to scroll back on previously collected information and review what might have been covered or what might need to be explored further. This medium for communicating with young adults was very practical for both participants and researcher, and should be utilized for other qualitative studies in this age group. The sensitive nature of some of the topics they

discussed such as family history of mental illness and the use of recreational marijuana might not have been as comfortable to discuss in a face to face interview. On the other hand conducting these interviews online did not allow for the actual visualization of the subjects and a reading of their body language. It also did not allow the subject to judge the interviewer based on age, gender and appearance. In that way the internet is somewhat of an equalizer.

Strengths and Limitations

One of the limitations of this qualitative study was the small sample size, which is standard for qualitative inquiry, but interviews were conducted to the point of data saturation. This study also relied on self report of diagnosis, medication usage and side effects and reactions which were not independently verified, however given the nature of their descriptions seemed to be in line with what others have reported as side effects in previous studies. When searching for other studies on line of young people's responses to antidepressants, narratives with very similar themes were discovered on a variety of self help blogs. The main limitation might have been in not having met the subjects and being able to read cues from their appearance and body language, but as stated previously many of their personalities were evident in their narratives. The up side to this is that the age of the researcher did not directly affect their responses. The reality of using the internet for research is that you can never really tell if someone is telling the truth, but the same could be said for interviews conducted face to face. A strength of this study was that the stories were rich and full of detail for the most part and not written in quick email type jargon.

The use of incentives was necessary in this study in order to complete enough interviews in the time the researcher had planned to collect data in. The twenty five dollar gift card was only sent after interviews were completed, and students really needed to put at least two hours total into their responses, so this seemed like fair compensation for their time. The downside of using incentives would be if they fabricated their data in order to receive the compensation. So many specific questions were asked regarding their experience

Summary of Findings

College students expressed a general dislike for taking antidepressant medication in this study. Several students, who were mainly dealing with anxiety issues, found them useful, but the majority of students did not feel that antidepressants helped them cope with their depression. Although alternative methods of dealing with depression such as exercise and talk therapy were seen as very useful, the process of forming close friendships and researching about their moods and careers in a process of self actualization seemed to be the most beneficial.

Students described feeling numb and unable to experience the full range of emotions while on long term antidepressant therapy. Many of the students came from families where there was a history of anxiety or depression, or they had parents in the medical field that may have been more open to treatments for depression. Family relationships were very important to these students, and many expressed concern that they needed to do well in college to please their parents and find a stable career path. A variety of means to deal with depression and stress were mentioned in this study including exercise, smoking marijuana, writing and reading, listening to music and talking to friends.

Directions for Further Research

What is the effect of television advertising on prescribing practices? Studies have indicated that the majority of the healthcare dollars spent on pharmaceuticals are being spent on the more expensive medications recently developed that are advertised on television, even if there is not enough evidence to indicate that they are actually more beneficial than older less expensive medication. One study has looked at college students' perception of antidepressant medication based on advertising (Frankenberger et al., 2004). Perhaps more research in this area would be of use to prevent classes of medications being widely adapted before they stand the test of time.

The accuracy of self report from industry sponsored research needs to be continually questioned. The fact that an analysis done after the fact, of all the clinical trials the FDA had received for the approval of antidepressants indicated no clear benefit for mild to moderate depression (Kirsh et al., 2008) suggests that the original data may have been stretched or skewed in a way to make the drugs look more effective than they were. Concerns about this problem have been expressed by Jureidini (2004) and others (Keyhani & Federman, 2009).

Another recent study found that very few of the people enlisted in the original studies on depression met the criteria for inclusion in phase III trials. According to the author of the study "This raises major concerns about whether traditional phase III studies can be generalized to most people with depression, who often suffer from anxiety, substance abuse and other medical and psychiatric problems" (Wisniewski, Rush, Nierenberg, Gaynes, Warden et al., 2009). If antidepressants are no better than placebo for most

people with mild to moderate depression we have just spent millions of dollars inappropriately treating people and putting them at risk for potentially deadly side effects.

Keyhani and Federman (2009) describe the need for more independent pharmaceutical policy research citing a current selective process which “bypasses peer review and ignores conflicting research to support ideological positions.” These authors go on to conclude that given the current regulatory climate “the line between research and marketing has been blurred to the point that industry sponsored studies should be considered by clinicians with a hefty grain of salt” (Keyhani & Federman, 2009, p. 693). Nurse Practitioners should resist a quick rush to medicate young people with antidepressants until it is clear that they are severely depressed and really need them.

Another topic that may need to be addressed further is how can colleges structure their curriculum to prevent unnecessary stress and anxiety? Given the competitive climate in the marketplace that today’s college graduates are facing, faculty are feeling the pressure to offer more rigorous courses in order to prepare students for employment. This can however, cause undue strain on students who struggle academically, leaving them at risk for depression and academic non-progression. With parents feeling the pressure to prepare their children to support themselves after college, a student’s academic issues quickly become a family concern. More education on how parents of college students can best support their children emotionally in the transition and experience of the college years is needed. Given that children have often gone through tumultuous times during their teen years before entering college, it is often difficult for parents to know how much to let go and how much to stay in touch.

A study looking at antecedent factors for depression that occur during primary school such as being bullied or being labeled as attention deficit disorder in younger grades might make for some interesting paths of inquiry. Since so many of the students in this study mentioned either being shy or not fitting in during their earlier schooling prior to becoming depressed, it would be interesting to see how these factors affect their status during their college years. It may help to influence how children are treated in primary school to promote better mental health in young adulthood.

The results of this small qualitative study indicate that students with a positive relationship with their parent expressed great satisfaction about the support they received. However, students who felt constantly pressured by their parents, or experienced too much anxiety at home felt that their families were not all that supportive. How can families learn to express emotions in a positive way and encourage self expression in their children? There is a need for more research and education for parents on how best to develop new relationships with adult children.

Further qualitative work on this age group in terms of what the side effect of “feeling numb” or muted meant to them may be an interesting path of inquiry. Some authors have referred to what has been termed “amotivational syndrome” a condition characterized by apathy, disinhibited behavior, demotivation and personality change as a side effect of SSRIs (Garland, & Baerg, 2001). This could be similar to the side effect students are referring to when they speak of feeling numb or unable to express their full range of emotions, but the numbness is a unique finding.

Female students seemed much more open to communicating openly about their feelings, and to use available counseling services. More research into how to get male

college students to open up about their feeling and to use available counseling services would also be helpful.

Teaching Opportunities for Nurses

Nurses are in an excellent position to teach students about alternative methods to deal with stress and depression such as exercise, journaling and talk therapy. They can also try and get the quieter students who come to see them to open up about their feelings about being at college, and if they are on medications to assess how the students feel they are working. Each short visit to the college health clinic can be utilized as a check on their emotional well being, as well as their physical health. Any encouragement that can be made to work out outstanding issues with family members will be therapeutic for students at this time of self discovery when they are learning how to be independent adults. Parents may also need support at this time in the family cycle, as their children establish an independent life on how to be supportive without discouraging their children's personal growth.

Educating Nurses on Depression in College Students

Nurses should be taught in school about the risk factors for depression in children and adolescents and what to look out for. In looking at antecedent factors for the development of depression in college students such as family history of depression and anxiety, poor family communication, adjustments to life on campus and the increased financial stress that both students and their families are under; a more national effort for a comprehensive approach to mental health services at colleges may be needed. How can college health services provide adequate and accessible counseling services to those who suffer from anxiety and depression? Many college health services are seeking to address

the mental health needs of their students by expanding counseling services and offering depression screening on campus. The next step is how to change the environment that college students are living in order to reduce stress. Nursing leaders at institutions of higher learning can advocate for positive changes on campus to benefit student mental health.

Implications for Nurse Practitioners

Nurse Practitioners need to assess their prescribing practices based on recent research. Some have guidelines set in place and ample Psychiatrists to refer to when treating depression and anxiety in primary care clinics or college health settings. Other Nurse Practitioners are often asked to make this decision on whether to start young people on antidepressants in primary care settings without the benefit of having a psychiatrist following the patient. Awareness of the long term efficacy profiles for antidepressants in mild to moderately depressed college age individuals may affect whether Nurse Practitioners start someone on an antidepressant. Initial advanced practice nursing studies focused on the availability and affordability of medications to treat depression (Burman et al., 2005). However, more recent studies have focused on issues such as identifying serotonin syndrome (Mackenzie, 2008) and other negative side effects of antidepressant therapy.

Given the potentially serious side effects with these medications, Nurse Practitioners may want to reevaluate their willingness to start young people on antidepressant medication and more carefully assess patients who are on them for potentially serious side effects. Being aware of the difficulties patients have in withdrawing from these medication also requires extra teaching and support when patients are ready to

discontinue medication. Further research on prescribing patterns for SSRI medication among Nurse Practitioners in primary care and psychiatric settings may be a way to assess whether practice has been affected by recent research about this class of medication.

Nurse Practitioners' educational programs need to emphasize the normal developmental processes of children and adolescents to ensure that their graduates are dealing with young patients in a holistic way rather than a straight medical model which focuses on disease and treatments. Most Nurse Practitioner programs do include a class in family theory and another on child and adolescent development, but more discussion could be added on the controversial issues of medicating children and adolescents with psychotropic medications. Nurses can also be great advocates for children who are not fitting in or are suffering in school systems that are not a good match for their personalities. By continuing to critically evaluate both quantitative and qualitative studies together, nurses can better inform their patients in their decisions on the treatment of depression.

APPENDIX A
SURVEY ON DEMOGRAPHICS

Thanks for your interest in this study. Please answer the following brief survey to determine your eligibility for the study of the use of antidepressants in college students. All information will be kept confidential.

Age _____

Gender _____

Ethnicity _____

Year at College _____

Have you been prescribed antidepressants for the first time within the past 4 weeks? _____

Have you taken antidepressants while you were in college _____

APPENDIX B
INFORMED CONSENT

Dear Participant,

Thank you for agreeing to participate in this online study of depression in college students. The purpose of this research is to explore the lived experience of college students who have taken antidepressants. You have been selected because you responded to an invitation to participate. The purpose of this notice is to inform you of your rights in this study.

This study will involve communicating by email for an interview about your experience with depression and your use of antidepressants while you have been in college. It is expected to take several hours of communication over the internet spread out over a period of 1-3 weeks. Your participation in this study is entirely voluntary, and if at any point during the study you feel uncomfortable you may withdraw.

The information you provide in the email interviews will be kept confidential and stored on discs that will be kept in a locked cabinet in the researcher's office at the *University of Massachusetts School of Nursing Skinner Hall*. While we cannot provide encryption of the data you transmit via your responses over the internet, all identifying information in the data will be blocked or coded so that your identity is protected. Only the researchers involved with the study will have access to this data, and your responses will in no way affect your standing at your University or College.

Due to the nature of qualitative research your quotes may be used in the write up of the study, however all identifying information will be deleted and your privacy will be protected.

Sometimes when people discuss their thoughts and feelings about past experiences, they would like to initiate additional conversations with a professional counselor. If you feel in a depressed mood or have anxiety, you should discuss these concerns with a professional counselor. We will be happy to refer you to either your institution's counseling center or private therapists in the area. We have listed below the phone numbers for the counseling centers at local colleges, but you may also have your own professional that you might want to contact.

At UMASS you could call:

Psychological Services Center - 545-0041
University Health Services, Mental Health Division - 545-2337
Everywoman's Center - 545-0800

For Smith College – 585-2840
For Mount Holyoke College – 538-2037

For Amherst College- 542-2354

For Hampshire College – 559-5458

If you are not able contact your college health service over the summer please contact Service Net at 586-2394 for services or First Call for Help at 582-4237 for referral to a provider in your area.

If by your written material there is a concern that you are at risk of harming yourself or others, we will be law need to notify the residential staff on your campus, or dial 911 in order to get you the services you need. We

maintain a strict and firm policy of confidentiality about your personal information and matters related to your treatment. No information about you or your family will be passed on to another person. The only exceptions include life-threatening emergencies, a court subpoena of records, or instances involving our ethical and legal duty to report abuse of children, elder adults, or disabled individuals. Your interview material is reviewed for research purposes only.

You will be given the opportunity to clarify your responses at the end of each interview and share any concerns via email or phone with the researcher. There are no anticipated risks to participating in this study. The only benefit to you may be the chance to discuss your feelings about depression and antidepressant medication. An unforeseen risk to you may be that by discussing this issue you may become upset.

The information obtained in this study will be used in the Dissertation of Pamela Aselton, Doctoral Candidate in the UMASS School of Nursing. Other nursing faculty may be reviewing the data including members of the dissertation committee, Professor Eileen Hayes and Professor Karen Plotkin of the School of Nursing, and Professor Tamika Gillum of the School of Public Health at UMASS. You will not be personally identified in the dissertation or any subsequent publications. Publication of study findings will only be reported in the aggregate, and may at a later date be published in national nursing, college health or public health journals.

You may use the following phone numbers to contact the researchers involved with this study at UMASS if you have any questions regarding your participation in the study.

Pamela Aselton 413 545-5096 – Doctoral Candidate

Dr. Eileen Hayes 413 545-5056 Chair of Doctoral Committee

Please type your name below to indicate your willingness to be in this study of college students with depression and return the document as an attachment to paselton@nursing.umass.edu

_____ *Yes, I agree to participate in the qualitative study of college students with depression conducted by Pamela Aselton Doctoral Candidate in the School of Nursing.*

_____ *Date*

APPENDIX C

OPEN CODING USING ATLAS-TI

Academics keep me focused

Alternative treatments

Anxiety and other meds

Being a financial burden on my parents

Continues academic troubles

Coping with depression

Coping with anxiety

Coping with stress- exercise

Coping with stress- self talk

Early schooling trouble

Family History of depression, anxiety and substance abuse

Family history of suicide

Family support and friends to talk to

Feeling depressed in high school

Feeling depressed and anxious as a child

Felt like reading helped

Financial worries

Happier after switching schools

I felt dehumanized

Living away from home helpful

Medication numbing

Meds got me through a rough patch

Not wanting to start medication

Parents in the medical field

Reducing anxiety and panic attacks

Side effects of medication

Situational depression

Stressful living situations

Talk therapy helpful

Trouble with primary school

Turning to food to cope with stress

Worrying about future career

Worrying about my parents

APPENDIX D

CODING SCHEME ACCORDING TO QUESTIONS

1. What is the lived experience of college students taking antidepressants?

Childhood and Adolescent Experiences

Perception of younger self

Personal History of Depression or Anxiety

Close family that valued education

Family History of Mood Disorder, Alcoholism or Abuse

Parents in the Medical Field

College Experience

Roommate issues

Pressure from Family

Academic Problems

Financial and Career Concerns

Someone to Talk To

2. What were there feelings about being medicated with antidepressants?

a, Did they find medication helpful in coping with depressive symptoms?

Feelings about Being Medicated

Medication Didn't Help with Depression

Family Pressure to go on Medication

Feeling Numb

Masked Causes of Depression

Dehumanized

Ambivalent over whether medications helped

Embarrassed

Underlying issues not addressed

Medication Helped Some

Side Effects of Medication

Suicidal Ideation

Worsening Anxiety

Problems Weaning off Antidepressants

3. What are some of the coping strategies that college students employ for dealing with stress and depression?

Self Talk and Deep Breathing

Exercise/physical activity

Writing or Journaling

Music

Marijuana

Positive Response to Talk Therapy

Alternative Therapies

APPENDIX E
CODING RESULTS

1 What is the lived experience of college students taking antidepressants?

Childhood experience

Perception of younger self

Depressed or anxious - 7

Shy or self conscious – 6

Smart did well - 3

Bright, but lazy - 3

Trouble in school – 4

Bullied - 3

History of depression, anxiety or bipolar disorder – 5

History of alcoholism or physical abuse – 4

Parents in the Medical Field – 3

Close Family - Always expected to go to college, parents valued education - 7

Depressed or anxious 9

College Experience

Academic pressures/career concerns – 7

Pressure from family – 4

Roommate problems – 4

Academic problems at college – 3

Someone to talk to

Talking with friends – 9

Talking with my Mom – 4

2. What were there feelings about being medicated with antidepressants?

Medication didn't help with depression– 11

Numb – 9

Masked Causes of Depression -4

Dehumanized 4

Ambivalent -6

Embarrassed 2

Positive – Helped with anxiety- 2

Medication Side Effects-

Problems weaning off medication – 3

Worsening anxiety – 3

Suicidal ideation – 2.

3. What are some of the coping strategies that college students employ for dealing with stress and depression?

Talk Therapy Positive – 8

Alternative Treatments

Self Talk – deep breathing – 8

Exercise/physical activity – 7

Music – 5

Marijuana 4

Talking with friends 4

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