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Many may think health only relates to the physical being, but mental and emotional health is of equal consequence. Due to the significance of mental health, this Journal of the Health Resource Center focuses on commonly diagnosed mental disorders amongst our student population. The goal is to present the truths about mental illness. Regrettably, some diagnosed with mental disorders indicate experiencing stigma. Even though not grounded in truth, stigmas, nevertheless, cause severe repercussions. Examples of this negative damage can be a person believing they could have prevented their illness from occurring or choosing to keep their diagnosis a secret for fear of being singled out and treated differently by others.

The truth is most people will experience, on lesser degrees, various symptoms of mental illness. For instance, feelings of depression, euphoria and fear are considered quite normal on an emotional scale. However, if a student experiences depression lasting for weeks and even months, this could indicate clinical depression. Another debilitating mental disease is bipolar disorder. Students compare this illness to living life on an emotional roller coaster, one moment soaring into euphoric oblivion, the next plunging into bottomless pits of depression. Panic disorder can cause physical complications such as chest pains, heart palpitations, dizziness, abdominal distress and shortness of breath. Clearly, it is understandable how living with anyone of these mental disorders can be problematic for students.

Other significant mental disorders are addictions and learning disabilities. During the first and subsequent years on campus, students experience varying levels of stress. Some may choose substances such as: alcohol, drugs, marijuana, the Internet and gambling as a means to temporarily escape from the stress. However for some students, this use may jumpstart an addictive mental disorder. As the substance use increases, schoolwork, relationships, job commitments and health issues suffer. Learning disabilities are often not diagnosed because students attempt to camouflage the disorder. Frequently, learning-disabled students are described as being lazy or having a poor attitude. While in fact, they are tormented with feelings of inadequacy and confusion because they cannot complete specific assignments such as: reading a book, writing an essay or completing a mathematical equation.

In regard to all mental disorders, the emphasis is placed on treatment. First, always have a trained professional provide the diagnosis, whether it is a medical doctor, psychiatrist, psychologist and/or learning specialist. Second, develop a sound treatment plan; and third on a continuing basis, follow all suggested treatment steps. Students who are concerned about learning disabilities and any mental health issue can meet with specialists on their college campus. Living with a mental disorder/illness can be a challenging battle. Learning to live with these obstacles and overcoming the challenges provide definition, depth and meaning to life.
Focus Upon the Ability in Disability
Kimberlee Morrison

Learning disabilities are still somewhat of a mystery to society at large – and oddly enough, to people that are in the institution of learning. Learning disabilities and people’s reaction to them are as diverse as the people that have them. Three common LDs are: dyscalculia, dyslexia, and dysgraphia which can range from illegible writing, inverse wording to hindered quantitative reasoning skills. Defined as a neurological disorder affecting one’s ability to receive, retain, understand, organize and use information, the methods of diagnosis are still debated. What is less in question is how beneficial a supportive academic environment can be for students with LDs.

There are many misconceptions regarding adulthood, particularly with reference to learning disabilities (LD). We live in a society that views adulthood as the completion of developmental growth. For most people though, much of early adulthood is a quest for fulfillment and “personal, social, and occupational competence.” Authors Patton and Palloway argue that instead of viewing adulthood as the long road to death, we should understand that development is a lifelong process. The perception that growth ends when one achieves adulthood has possibly led to a lack of research regarding college students with LD. In spite of mounting research, there continues to be many students with LD who go undiagnosed for a myriad of reasons — and who do not know about resources available, nor do they receive the necessary support for their academic success.

Defining LD

A learning disability is defined as a neurological disorder affecting one’s ability to receive, retain, understand, organize and use information. The Learning Disability Association of America identified the three most common LDs as dyslexia, dyscalculia, and dysgraphia. The problem is that there is always the possibility for one person to be affected by more than one of these conditions; therefore, compounding the problems even further. However, each disability has its own indicators and symptoms.

Those suffering with dyslexia, the most common learning disability, would likely experience severe difficulty reading, recalling known words, writing and comprehension. Many dyslexics have patterned difficulties. Specific letters are seen in reverse or out of order, or phonetic sounds cannot be processed regularly. Take the simple word teapot for example; if you were dyslexic you might reverse, replace, inverse, or even see a mirror image of what certain letters should be. A dyslexic could actually see any of the letter combinations in the following graphic.

Dyslexics are considered pictorial thinkers. In the following diagramed sentence, a dyslexic would only comprehend words with pictorial meaning.

Students with dysgraphia may only understand three quarters of the meaning. Both students and teachers often notice that 75% of their printing or handwriting is illegible due to a mixture of writing forms because of strange wrist/body/paper position, and having difficulty writing and thinking at the same time. Some students have indicated they hurt their hand when writing because they hold their pen or pencil so tightly. Considering that by the third grade you are expected to perfect your penmanship, a student with dysgraphia could spend much of his or her educational career defending their poor handwriting to instructors who are unaware they are suffering from a developmental learning disorder.

Dyscalculia (sometimes referred to as math dyslexia) is a term encompassing many disabilities. Various aspects of one’s quantitative reasoning can be affected by this disability. Aptitude for understanding the concepts of place value, quantity, number lines, positive and negative values, understanding and doing word problems, and other basic math functions may be affected negatively. Dyscalculia could even affect one’s ability to grasp visual-spatial relationships, making it difficult to organize thoughts on paper or even process something that is written on a board or in a textbook. If not mastered prior to adulthood, adults with dyscalculia could find themselves struggling with higher-level computations encountered in college.

According to Peter Perbix, Coordinator of Support Services and Academic Advising for Disabled Student Services (DSS), a student support program that assists disabled students at California State University Long Beach, there are no math disabilities, only disabilities relating to quantitative reasoning. By this logic, dyscalculia is not simply a disability in math, but a condition affecting one’s quantitative abilities as a whole.
Perbix also pointed out that everyone’s disability affects them differently. Two people could have the same disability, but be affected in completely separate ways. He also suspects that the numbers of LD students at CSULB may be much higher than the current one percent who are registered with and utilizing DSS (Perbix, personal communication, May 9, 2006).

In a report by the National Center for Education Statistics, 6% of all graduating high school students have a disability, 29% of which are learning disabilities. Despite only being “minimally to somewhat” affected by their learning disability, of those 29% only 51% enrolled in either a 4-year or 2-year college or university. In many cases, considering the lack of funds for testing at the K-12 level, many people probably would not receive a diagnosis for LD until after struggling through years of school, including post-secondary education.

The following article introduces three CSULB students who had very different encounters leading to the discovery that they had LD. This personal account approach is used to convey the individual experiences of the students, either prior to discovering they had a LD or how they cope after being diagnosed. The first student was diagnosed with LD in college, but never suspected she had a LD because she excelled academically; that is until she realized that she was neither academically nor psychologically prepared for the rigors of collegiate life. The second was diagnosed with dyslexia; however, the struggles she faced prior to this discovery would forever affect her emotional and social development and perception of self. The third student began having troubles as early as elementary school. Sadly, she was not tested until college, after having been placed on a waiting list for over a year.

Imagine spending most of one’s life wondering why it was difficult to understand concepts that your peers seem to effortlessly comprehend. Imagine finally discovering in college that your lack of understanding was a result of a mental disability. Imagine how many in such a situation might have thought they were intellectually inferior. Students with learning disabilities report the damage to their self-esteem can be very costly to both intellectual capabilities and emotional balance. Those diagnosed with LDs are the fortunate few. It is feared there are far more who never have the opportunity to be diagnosed and as a result, never are afforded the opportunity to develop to their full potential.

Three CSULB Students’ Learning Odysseys

Graduating senior at CSULB, alias, Anya Santos, had always been at the head of her class — usually in accelerated programs, and never suspected that she had a LD. It wasn’t until she was awarded a full academic scholarship to Brandeis University and moved to Boston that she first realized she needed more time for tests. In almost every instance, Santos was the last person in her class to finish an exam, if she finished at all (Alias, personal communication, May 4, 2006).

She recalled, “You feel very self conscious when the room empties and you’re left sitting there.” Luckily though, a few instructors who noticed Santos’ frustration began offering her extended time. One professor even suggested she be tested for LD, but since Santos had always excelled academically, she disregarded the advice, concluding she just needed to try harder. This was the beginning of the end for Santos at Brandeis where she crashed and burned, returning home to Long Beach after a year of severe academic and emotional struggles. (Alias, personal communication, May 4, 2006).

In hindsight, Santos now understands the time issue had been a clear sign she might have a LD, but since she had always done well in school, she was not tested at that time. Not until Santos received a comprehensive scholarship to CSULB requiring all recipients to be tested for LDs did she learn of her reading and quantitative disabilities. After two days and 16 hours of testing, her results, based upon criteria from the Diagnostic and Statistical Manual (DSM-IV) for mental disorders, indicated she was entitled to extra time, a private room and a computer for all essay exams. This extra time afforded her the ability to utilize the Disabled Student Services (DSS). Santos began to excel academically. In May 2006, she graduated from CSULB with a near perfect G.P.A (Alias, personal communication, May 4, 2006).

Melissa Attia’s learning disabilities surfaced at the tender age of seven. She had been struggling with even the simplest of concepts relating to language and math as long as she could remember. One day her second grade teacher, tired of Attia’s inability to understand the lesson yelled, “Are you stupid?” As the class disintegrated into laughter, the humiliated Attia retreated into a shell of academic mediocrity and low self-esteem. Attia was subsequently diagnosed with dyslexia but never received any assistance. Her academic struggles, compounded by the emotional impact of being called stupid in front of her peers, became overwhelming and she eventually dropped out of school. This became a defining moment in Attia’s social development, effecting her academic confidence and social interactions to date (M. Attia, personal communication, May 3, 2006).

Although she knew it would not be easy, Attia decided to go to college for several reasons, the foremost of which was to serve as an inspiration to others who have gone through similar issues related to LDs. She is currently a junior at CSULB majoring in social work and while she was diagnosed with LD as a child, she was required to take a second assessment before she would be allowed to use DSS. But the waiting list was nearly two years long...in the meanwhile, Attia would suffer through essay exams (which were the most difficult) certain she would never measure up. Fortune turned out to be a double-edged sword as Attia had a psychological disorder requiring that she be fast-tracked for DSS assessment (M. Attia, personal communication, May 3, 2006).
•Ability in Disability•

With the law on her side, Attia remains reluctant to utilize the full spectrum of services available to her. There are times when she has doubt about her ability to be successful in her course of study and often replays that moment from second grade. She justifies her stubbornness saying, “It’s that fear of an entire classroom of people laughing at me again.” She adds “I also know that I could hinder my own progress by not using the services. I just want to prove I can do it by myself and I don’t want to be singled out again” (M. Attia, personal communication, May 3, 2006).

Ariane Stamps, a senior business/human resource management major at CSULB, shared a similar sentiment. Like Attia, Stamps remembered having difficulty reading, understanding instructions, math, grammar, and science “to the point of raised emotions.” She recalled repeatedly crying over homework as early as second grade. Try as she might, she was unable to grasp the concepts of multiplication and division, and could never even contemplate beginning algebra or geometry. Feeling frustrated with Stamps’ progress, her second grade teacher threatened to send her back to kindergarten. I remember wondering, “How come everyone else gets this stuff but me?” Stamps said. In contrast to the relatively quick interventions for Santosas and Attia, Stamps spent two and a half of her four years at CSULB drowning in the rigors of academia (A. Stamps, personal communication, May 6, 2006).

After a year on the waiting list for DSS assessment, Stamps learned that she had a LD and was entitled to take tests in an isolated location with extra time, use a computer for essay exams, and have an in-class note-taker. In the College of Business, being entitled to assistance created another set of problems. The stiff competitive attitude of the students and skeptical nature of the professors in the department created an environment in which asking for help was taboo. There were instructors who either scoffed at the idea of Stamps taking the exam in an isolated location or assumed it would mean more work to accommodate Stamps’ disability. “One of my professors even asked me what difference it made if I had extra time,” Stamps recalled. “It was all very intimidating and humiliating” (A. Stamps, personal communication, May 6, 2006).

Although these three students experienced their learning disabilities in very different ways, there are commonalities in their perceptions of themselves. Initially, all believed they should have been able to do the work required, and did not understand why they could not. Regrettably, competition and fear of not measuring up continue to haunt Stamps and Attia. However, they understand their intelligence is no longer in question. Overcoming this hurdle has enabled them to continue with their education, and experience academic success.

LD Controversy

There has always been controversy surrounding the methods used to identify learning disabilities. In fact, there has been considerable debate as to the efficacy of the Individuals with Disabilities Education Act (IDEA) since its inception. This legislation was intended to establish standards for identifying learning disabled students as well as what accommodations those students should receive once diagnosed. While the IDEA legislation is ever evolving and was updated as recently as 2004, the critics focused mostly on the use of formulas in identifying LD and disregarded other important determining factors outlined in the IDEA legislation.

The criteria for determining whether or not someone has a learning disability is very complicated and involved. A major determinant of LD is considered a severe discrepancy between intelligence and achievement (“discrepancy model”). However, the evaluation is not meant to stop there. Once a discrepancy is identified, a team of educators and psychologists (or otherwise qualified professionals) must eliminate mental retardation, emotional disturbance, sensory/motor impairment, and cultural, economic or educational disadvantage as the cause of the discrepancy. Finally, the team must determine if the student is in need of special education. This last requirement could eliminate many people who are legitimately learning disabled considering that special education is typically reserved for the mentally retarded or emotionally disturbed. However, since there is no special education for adults, both the second and third requirements are then waived when it comes to adults who are LD. Another issue arising from the diagnosis of adults with LD is that some professors might not be willing to accommodate students; although the law dictates that they are required to comply.

According to a study by Bourke, Strehorn and Silver, an instructor’s likelihood to accommodate an LD student is closely related to their knowledge and connection with learning disabled services (LDS) at the institution. An instructor who is unaware of the process of accommodating LD students, could be wary of approving services for fear of additional work or that the student will be receiving an unfair advantage. This is precisely the experience Stamps encountered within the College of Business at CSULB. Eventually, she was forced to have the DSS staff meet with her professors to explain the program. Even with the DSS intervening, Stamps said that her professors remained hesitant to sign off for her entitled services by law (A. Stamps, personal communication, May 6, 2006).

Perry A. Zirkle, Iacocca Professor of Education at Lehigh University, clearly defined a significant problem for identifying students with LDs. Students whose parent could afford private testing had a higher rate of being diagnosed than those waiting to be examined through a state-funded program. Data collected in 1998 indicated Lehigh University freshmen listed as LD were often wealthy and white. Zirkle substantiated his findings by citing an article in the LA Times which uncovered a trend of wealthy and affluent high school students taking the SATs and requesting accommodations; usually extra time. This trend may be related to the fact that some deserving, however less affluent students, may be unaware of their rights or attending a school whose procedures do not require them to test students suspected to have disabilities.
This presents an interesting conundrum considering that according to a survey of health statistics, children from impoverished families are more than two times more likely to have LD and that “risk factors are usually connected with poverty, not wealth.” Zirkel’s concern is that it is all too easy to become an “upper-income game player” and benefit unduly from the current discrepancy model used to identify learning disabilities. In fact, there has been considerable debate about the efficacy and implementation of the IDEA resulting in students falsely being identified as LD.

Zirkel is concerned that more pressure from affluent parents with money for lawyers and other advocates on school administrators is an “inappropriate attempt to beat the system” that needs to be curbed. The LA Times reported an audit conducted of institutions awarding SAT accommodations to affluent students, who had otherwise excelled in school, revealed many of these approved accommodations were secured through “threats of litigation” from parents. Also noted, were a number of court cases that enabled institutes of learning to deny accommodations to certain LD students pointing to the inclusion of mental disorders such as ADD and post-traumatic stress disorders.

**Coping with LD**

Amid all of this controversy, there are students who still have to figure out how to deal with the reality of having learning disabilities as they pursue their academic and career goals. While individual self-determination and resilience — the ability to bounce back from adversity — have been identified as the most important elements of positively coping with learning disabilities, there are other factors such as social support and the amount of stress one endures daily.

For Anya Santos, coping started as working hard to convince her instructors that she was intelligent and ensuring that she was never a disciplinary problem. In this way, she felt they might ignore her poor performance on tests. Once diagnosed however, Santos, similar to Stamps and Attia, discovered the accommodations of being able to utilize a computer, having extended time and taking exams in an isolated location, improved her performance significantly. Santos no longer had to work so hard to become the teacher’s pet.

According to Peter Perbx, coping strategies must be individualized because everyone is affected by their disability in different ways. Some common educational aids offered at most CSUs, include books on tape, in-class note takers, and extended time for exams. CSULB students are fortunate because the DSS is the oldest and possibly largest program offered in the entire CSU system. With their size and experience, CSULB’s DSS program is able to offer a very extensive support system that other institutions cannot. Santos has experienced first hand this difference between other college campuses. “I was taking several G.E.s at Long Beach City College,” said Santos, “and was surprised when I realized I would not have access to an isolated location for my exams. It was at that moment I understood how good I had it at CSULB.”

Since self-determination is a key to success in post-secondary education in general, it should come as no surprise that this is also the key to success for those with learning disabilities. According to Field, Sarver, and Shaw, “individuals who are self determined are more successful in achievement of their stated goals.” While critics of DSS accommodations at the collegiate level believe that the assistance undermines the concept of self-determination, Field, et al, argue that such support services help students learn to be self-determined. They also implied that since there is so little research regarding self-determination in post-secondary education, the criticism is premature.

**Conclusion**

Although their struggles were different, Attia, Stamps, and Santos all found ways to survive and even excel once they discovered the source of their difficulties. The fact is that these three phenomenal women were able to succeed despite serious adversities that were definitely not limited to, but compounded by their learning disabilities. Their stories should not only offer hope to those just discovering their disability, but serve to open the eyes of others who are yet undiagnosed, who might be considering their educational challenges could be attributed to a LD.

While the common LDs all have different names, there are commonalities in the stories of those who have had to deal with them in their lifetime. All three participants experienced bouts of self-doubt and expressed deep-rooted fear in their ability to succeed in the work force. These are just a few of the reasons that it is so critically important for students to take time to be tested if they even suspect they may have a LD.

There is more and more research about adult LD being done; however, there is still a severe lack of knowledge and understanding among instructors. Similar to diversity training, teachers should be educated with reference to:

- Knowledge about learning disabilities
- Responsibilities as professional educators towards those students with LDs
- Sensitivity to the specific needs and feelings of LD students

There is also limited funding for learning disabled programs, which is disheartening considering that much of the limited resources is a result of this lack of funding. The hope lies in the fact that institutions of higher learning are working diligently to supply students with services to support and even bolster their academic goals and success. It is time to shift the focus away from a student’s limitations towards emphasizing their expectations and achievements.
References


11. Wiess K. California and the West; audit confirms disparities in SAT testing education: White, affluent students are granted disproportionate share of time extensions based on learning disabilities, state report finds. *Los Angeles Times*, 2000;A: 3.


Clinical Depression: Is it All in Your Head?
Tanya Payne

Depression is a word used frequently in Western society. Even with all the research and drugs available to treat this mental disease, the disorder is often still not fully understood. Over the centuries, cultural perception of clinical depression has remained very diverse as to the different treatment options. There is not one primary symptom that dictates who will or will not suffer from depression, but there are certain personality traits that can influence the onset of its development. Some of these traits are stress, anxiety, shyness and substance abuse. Other specific factors such as a person’s gender and cultural background can play a major role in how depression is perceived and whether one seeks professional help.

The word carries a negative connotation and it conjures images we do not want to see. The word is depression, and the picture is not pretty. Western society values self-sufficiency and many equate depression with weakness. Our society distorts the idea of mental health to reflect our fear of being labeled crazy. Even worse, sometimes society can project a sense of shame onto those who seek treatment for mental health disorders.

To better understand how depression came to be so maligned, let us begin with a definition of the disorder and a brief history. Although many people are familiar with the symptoms of depression, few know what characterizes major/clinical depression from a medical standpoint or why it differs from other mood disorders.

Feelings of sadness, feeling overwhelmed, and feeling anxious are all signs of depression. Having a case of “the Mondays” does not constitute depression, nor does the state of “self-loathing” that sometimes occur after failing a critical test. These forms of emotional downs are not sufficient for a clinician to make a diagnosis. According to the Depression and Bipolar Support Alliance (DBSA), there are three main differences between the two:

1) **How intense the mood is:** With depression, the feelings are much more intense.

2) **How long it lasts:** A bad mood is usually gone in a few days, but clinical depression lasts two weeks or longer.

3) **How much it interferes with your life:** A bad mood does not keep you from going to work or school or doing the things you like to do.

The symptoms of clinical depression must last most of the day, every day, for a minimum of two weeks. A person who is sad may feel a significant drop in their energy level but be able to work through it until the mood passes. This is not the case with someone who is experiencing clinical depression. For simplicity, from this point forward the term depression will mean major/clinical depression.

**Depression: A History**

According to the National Institute of Mental Health (NIMH), approximately 20.9 million American adults, or 9.5% of the U.S. population will experience clinical depression, or a related illness, at least once in their lives. Depression is not a new illness, but is one of the most prevalent mood disorders diagnosed today. The Ebers Papyrus, an Egyptian document written in 1600 B.C., is one of the earliest written records containing medical knowledge of depression. The Egyptians associated depressed states with the anger or vengeance of the gods. This document promoted the use of herbals, mysticism, and magic as solutions to several mental and physical disorders, and described depression in poetic language. “He huddled up his clothes and lay, not knowing where he was. His wife inserted her hand under his clothing, she said, ‘my brother, no fever in your chest and limbs, but sadness of the heart.”

Historically, the Egyptians were not the only society to associate mental illness with the gods. Ancient Greek and Roman cultures thought mental illness was due to the direct involvement of the gods. Paranoia, insanity, and dysthymia (a milder form of depression that persists over at least two years) were viewed as punishment from the gods for moral failure. Treatment of the mentally ill during this period was humane and very little stigma was associated with sickness. A common treatment was purification through baths, herbs, tonics and certain foods.

During the Middle Ages, the Catholic Church dominated the Western world. Again, mental illnesses were inextricably linked to religion. The prevailing view was that sin led God to punish the guilty party by allowing demonic possession to take place. According to Merkel, melancholia was seen as a trial of faith. Mental illness was seen as either the result of sin or as a test of faith. Since sin was central to the illness, the church began to take an active interest in attempting to find a cure. Monasteries became treatment centers.
Common prescriptions included confession, penance, bloodletting and trepanation (a medical procedure involving drilling holes into the skull).6

From the classical period through the Middle Ages, even though the treatments may have seemed odd, the mentally ill were neither social outcasts nor pariahs. There was little or no stigma attached to mental disorders and family members often cared for the ill. However, this sentiment began to change in the 1600s. With the advent of the Anglican Church and the Protestant faith, the mentally ill were isolated from the rest of society because of their supposed sins. It becomes a common practice to chain the sick in dungeons and beat them. These and other inhumane treatments would continue into the 20th century.

Although the care of the mentally ill improved drastically, the stigma remains attached to this day.6 As the field of psychiatry grew more sophisticated, the standards and classification of mental disorders began to change. Up until this time, the term melancholia had been used to label various forms of mental illness. Now, melancholia was replaced by more specific categorizations of disorders, including depression, psychosis and mania.

Over time, the symptoms of clinical depression have become widely accepted. In fact, physicians today diagnose the disorder in deceased historical individuals. According to Jonathan Davidson, professor of psychiatry at Duke University Medical Center, nearly half of U.S. presidents between 1776 and 1974 would meet the criteria for a major depression diagnosis.9 And those 18 presidents are not alone. It is now recognized that authors Charles Dickens, Sylvia Plath and Ernest Hemingway suffered from depression, as did Abraham Lincoln. Lincoln’s bouts with depression were incapacitating and some episodes progressed to the point where he began contemplating suicide. Plath and Hemingway are two well-known examples of the devastating consequences of untreated depression, with the former gassing herself to death at the age of 30 and the latter killing himself with a shotgun blast to the head after previous suicide attempts.10

Causes of Depression

Determining what causes depression is nearly impossible. There is no particular lifestyle or gene that can be pinpointed, but there are as many causes for depression as there are differences in people. The Australian Depression and Bipolar Institute, Black Dog, noted, “the causes of depression are some mixture of ‘pressure’ (mild to severe) combined with a [genetic] vulnerability to depression.”11 There are definite signposts along the path to clinical depression. We know that certain personality traits can influence ones likelihood of developing depression. People who worry excessively or have high levels of anxiety are at a higher risk of developing depression. According to the National Mental Health Association (NMHA),

Two out of three people with depression also have symptoms of anxiety […] about 80 percent of depressed individuals suffer psychological anxiety symptoms […] some

60 percent of people with depression have anxiety-related physical symptoms.12

Perfectionists are also at risk. Studies have indicated that this trait can prolong a depressive episode. A perfectionist sets unattainable goals, and this constant inability to live up to their own standards keeps them in a depressive mode. Shy people are at risk for depression. Interpersonal interaction is a necessity to human existence, and therefore, we are hard-wired for intimacy and close relationships. Shy individuals are at greater risk for depression because they are unable to or have a difficult time forging healthy relationships.

Besides personality traits, our lifestyle and choices greatly affect our mental health. Alcohol and drug abuse are the most obvious risk factors. The medical community cannot conclude if alcohol and drug use causes depression or if depression causes a person to seek solace in drugs and alcohol. What is known, however, is continued substance abuse could augment or prolong the episode. Results of a study reported in 2006 about suicide ideation in college students showed that chronic recent alcohol consumption was an important predictor in female students.13 NMHA noted “sometimes what appears to be major depression clears up after abstinence from alcohol or drugs.”12

One should not underestimate the impact of an unhealthful lifestyle on depressive symptoms. In February 2000, a study published in the American Journal of Public Health (AJPH) found obesity among women was associated with a 37 % increase in the probability of being diagnosed with major depression.14 Sleep is another important factor in preventing a major depressive disorder. Although the exact relationship is unknown, poor sleep habits have a strong correlation to depressive symptoms. Researcher, Kelly Cukrowicz of Florida State University, along with others, conducted a study on the impact of insomnia and sleep disturbances on depression and suicidality among college students. The researchers found insomnia and nightmares were significant predictors of symptoms of depression. Nightmares were also predictors of suicidal tendencies.15

Gender Specific Depressive Symptoms

Many of us are familiar with the forlorn image of a depressed individual. It would be a mistake however, to limit our thinking to this image. Depression, as well as other related mood disorders, displays a wide a range of symptoms, there is no “typical” trait of this illness. In the Western world, men are socialized to be strong, assertive, and independent.16 Due to culture, men are allowed a much smaller range of acceptable emotions as compared to women. The Depression and Bipolar Support Alliance (DBSA) notes that while a college-age female may express depression in terms of feeling helpless or hopeless, a man is much more likely to express depression in terms of frustration, anger and irritability.15

Although women are at much greater risk for developing depression – twice that of men – DBSA estimates an average of 4 million American men will experience clinical depression in any given year.
Men are half as likely as women to seek treatment for depressive symptoms also, possibly because the symptoms may not be recognized as indicative of depression or because of male socialization. Some males indicate that they would not be inclined to seek professional help for “feeling down.” Instead they may choose to “ride the feeling out” or drink alcohol in an attempt to mask the depression.

The health consequences of male gender role conflict have been studied at great length. Research suggests, men who emphasized success, power, and competition as a measure of their personal worth or value, tended at great length. Research suggests, men who emphasized success, power, and competition as a measure of their personal worth or value, and men who restricted their emotional expression tended to be more anxious and depressed regardless of age. And if they were powerful, they would tend to overlook the symptoms of depression because they were seemingly achieving their goals. Even more telling, men who suppress their emotions, as a part of male gender role conflict, are at increased risk of developing “interpersonal insensitivity, paranoia, psychoticism, and depression.”

Gender differences in the appearance of depressive symptoms also extend to suicide ideation. In 2006, Hugh Stephenson, a psychology professor at Ithaca College, reported results of a study that found different predictors for suicide ideation in the sexes. Stephenson et al. found that feelings of helplessness, hopelessness and depression, common problems frequently cited by college-aged men and women were the strongest predictors of suicide ideation. Women had a higher likelihood of attempting suicide if they experienced a sexual assault or consumed alcohol in large quantities. For men, the occurrence of recent physical assaults (aka fights) had a direct relationship to suicide ideation. Also, statistics indicate higher success rate for suicide in men.

Depressive Symptoms in the Asian Community

The symptomology for major depression also changes among studies in the Asian community. Since the days of Plato, Western medicine has traditionally viewed the mind and body as clearly differentiated. This is not the case in Eastern medical traditions, where the mind and body are inseparable, one cannot be ill mentally without being ill physically.

Repeated studies have shown that most American students associate depression with internal referent words such as sadness, despair, and loneliness. However, East Asians associated depression with external referent words such as rainy, cloudy, and dark. Sung-Kyung Yoo, an assistant professor at the Korea Youth Counseling Institute in Seoul, Korea, and Thomas M. Skovholt, a professor in the College of Education and Human Development at the University of Minnesota, found that Asian college students were less likely to seek professional help and were less likely to admit personal or emotional concerns, even though they reported higher levels of emotional distress than did White American students. They do not view their symptoms as something that needs to be changed. Thus, they do not seek help.

In China today, physicians prefer to diagnose a patient as having neurasthenia, or weak nerves, rather than diagnosing major depression disorder. Neurasthenia implies physical symptoms will accompany psychological distress. This phenomenon, known as somatization (conversion of anxiety into physical symptoms) is most prevalent in first and second generation Asian-Americans as well as Asian international students studying in the U.S. Once acculturated to U.S. society, most Asians will display depressive symptoms more in keeping with the White American model than with the somatic tendencies present in the Far East. Still, Chinese Americans are more likely to seek the help of a medical professional instead of a mental health worker. For example, they describe depression in terms of unexplainable physical illness, lethargy, or constant headaches and interpersonal difficulties. It is important that mental health providers acknowledge the differences inherent to each of us, cultural or otherwise, and tailor treatment for each individual.

Diagnosis

There are several types of measurements used to evaluate levels of depression. One of the most commonly used is the Center for Epidemiologic Studies of Depression Scale (CES-D). It was designed to measure the current level of depressive symptomatology. There are 20 items chosen from five previously used depression scales that measure various types of depression. By creating a composite scale from previously used scales, it is hoped the CES-D gives a valid self-evaluation of a person’s depressive state. The components chosen include: depressed mood, feelings of guilt and worthlessness, feelings of helplessness and hopelessness, loss of appetite, sleep disturbance, and psychomotor retardation. Each item is rated on 4-point scales indicating the degree of their occurrence during the last week. The scales range from “rarely or none of the time” to “most all of the time.”

Center for Epidemiologic Studies Depression Scale (CES-D)

After each item please mark with the number that best indicates the degree of occurrence during the past week:

1 = rarely or none of the time
2 = some or a little of the time
3 = a moderate amount of the time,
4 = most of the time

1. You were bothered by things that usually don’t bother you. ___
2. You did not feel like eating; your appetite was poor. ___
3. You felt that you could not shake off the blues even with the help of your friends and family. ___
4. You felt that you were just as good as other people. ___
5. You had trouble keeping your mind on what you were doing. ___
6. You felt depressed.
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7. You felt that everything you did was an effort. —
8. You felt hopeful about the future. —
9. You thought your life had been a failure. —
10. You felt fearful. —
11. Your sleep was restless. —
12. You were happy. —
13. You talked less than usual. —
14. You felt lonely. —
15. People were unfriendly. —
16. You enjoyed life. —
17. You had crying spells. —
18. You felt sad. —
19. You felt that people disliked you. —
20. You could not get “going.” —

Possible range of scores is zero to 60, with the higher scores indicating the presence of more symptomatology. CES-D scores 16 to 26 are considered indicative of mild depression and scores of 27 are more indicative of major depression.

Treatment
Even though this is a complex mental disease, the good news is that depression is not permanent. As a matter of fact, it’s a readily treatable illness. Do not limit yourself to thinking treatment means therapy or drugs. Although psychotherapy and anti-depressant medications are the most common and effective treatments available, there are many other treatments out there. Aside from living a healthful lifestyle, which will help avoid depression altogether, there are other preventative steps you can take. The National Mental Health Association (NMHA) website offers several helpful tips to college students that may prevent depression.

Tips on Dealing with Depression in College

• Carefully plan your day. Make time every day to prioritize your work. Prioritizing can give you a sense of control over what you must do and a sense that you can do it.

• Plan your work and sleep schedules. Too many students defer doing important class work until nighttime, work through much of the night, and start every day feeling exhausted. Constant fatigue can be a critical trigger for depression. Seven or eight hours of sleep a night is important to your well-being.

• Participate in an extracurricular activity. Sports, theater, fraternities and sororities, the student newspaper - whatever interests you - can bring opportunities to meet people interested in the same things you are, and these activities provide welcome change from class work.

• Seek support from other people. This may be a roommate or a friend from class. Friendships can help make a strange place feel more friendly and comfortable. Sharing your emotions reduces isolation and helps you realize that you are not alone.

• Try relaxation methods. These include meditation, deep breathing, warm baths, long walks, exercise - whatever you enjoy that lessens your feelings of stress and discomfort.

• Take time for yourself every day. Make special time for yourself - even if it’s only for 15 minutes a day. Focusing on yourself can be energizing and gives you a feeling of purpose and control over your life.

• Work towards recovery. The most important step in combating depression and reclaiming your college experience is to seek treatment. Your physician should communicate to you that remission of symptoms should be your goal and work with you to determine whether psychological counseling, medication or a combination of both treatments is needed.

Medications
Conventional medicine often treats depression with Selective Serotonin Reuptake Inhibitors, or SSRIs, as the most commonly prescribed group of medications. There are other groups of drugs, both tricyclic antidepressants (TCAs), and monoamine oxidase inhibitors (MAOIs) available for treatment of depression. Although effective, TCAs and MAOIs have serious health risks and require restrictive diet and dosage scheduling. Currently, the medical community supports the theory that decreased levels of serotonin greatly affect mood. This group of drugs works by blocking brain cells from reabsorbing the chemical, thus keeping it available for use in the rest of the brain. Some common SSRIs include Prozac, Zoloft, Lexapro, and Celexa.

As with any drug, there are side effects. However, the benefits of the drug outweigh the often temporary, negative consequences. The most common side effects are gastrointestinal problems (e.g., gas, diarrhea, nausea), although other common side effects include agitation, cold or flu-like symptoms, sexual problems, insomnia, weight gain and exhaustion. Most of these usually disappear within a few weeks of treatment.

If one worries that they may become dependent on anti-depressant medications, here are the facts. Like most psychiatric drugs, SSRIs are not physically addictive. With certain SSRIs one may experience withdrawal symptoms when treatment ends; however, this is normal and under the care of a professional, easily managed. Also to be taken into consideration, for many, the positive effects of reducing depressive symptoms far outweigh the minimal withdrawal process.


\section*{Clinical Depression}

\subsection*{Psychotherapy}

Another traditional treatment is psychotherapy, also known as “talk therapy.” Depression responds best to combinations of several treatments because there are multiple causes of depression. Medications address our biochemical functioning, but without behavior modification, depressive symptoms can return once medication is stopped. There are several types of talk therapy, so finding a style that fits your personality is easy. There is interpersonal therapy, which involves the client and a therapist talking about life and stressors, cognitive-behavioral therapy, focusing on identifying and stopping negative thought patterns (which in turn influences behavior), and finally there is group therapy.\textsuperscript{11}

\subsection*{Alternative Treatments}

There are also natural and herbal supplements that can be used to treat depression. The most common are Omega-3 and St. John’s Wort. The issue, however, is that manufacturers of herbal supplements are not bound by law to maintain consistency in their product; therefore, each package has the potential to differ in ingredients and dosage. Keep in mind too, natural does not necessarily mean safe. St. John’s Wort has been shown to interfere with other medications, limiting their effectiveness.\textsuperscript{11}

For people with severe depression that does not respond to other, more conventional treatments, electroconvulsive therapy (ECT) may be beneficial. ECT has earned a bad reputation from films such as \textit{One Flew Over the Cuckoo’s Nest} and \textit{Requiem for a Dream}. In both movie portrayals, the ECT treatment was used as a means of taming difficult patients, and immediately afterward the person becomes a “vegetable” or catatonic. In reality, this is simply not the case. It works by using mild electrical impulses to stimulate the brain into an artificial seizure. Following the seizure, the brain normalizes and the depression is relieved. Unlike medication, which can take up to one month to see improvement, ECT relieves symptoms almost immediately. The most effective of all depression treatments, ECT is a painless procedure. As with other treatments, there are side effects. Some people report short-term memory loss, disorientation and headache following treatment; however, no study has shown any permanent effects on the memory. For anti-ECT advocates who say the treatment is dehumanizing and causes more harm than good, 81\% of patients who have undergone the therapy would voluntarily do it again. The large approval rating alone from ECT patients should settle any doubts as to its reliability.\textsuperscript{24}

\subsection*{Conclusion}

Clinical depression is a serious disorder. It can destroy the quality of one’s life and even result in tragedy. However, as described in this article there are many opportunities for those diagnosed with depression to find positive solutions. One can utilize effective medications, professional therapy, and healthy lifestyle changes. Also, there is help available on campus at CSULB. Counseling and Psychological Services (CAPS), located in Brotman Hall, offers trained clinical psychologists to assist students with depressive symptoms and provide better coping skills to deal with life stressors. Students can contact the CSULB Student Health Center or the University Police for further references or help. For any student who has been diagnosed with clinical depression, the most important fact to remember is to reach out for help. College is a tumultuous time and no one is expected to do it alone. \textsuperscript{11}

\section*{References}


• Clinical Depression •


Addictions: The Compulsive Mind Disease

Dannie Allen

Unfortunately, addiction can be the end result of behavior choices that in the beginning were harmless. Some of these “safe” actions could be drinking alcohol to take the edge off, smoking to relax with friends, surfing the Internet for social connections, and gambling to try your luck. Due to age, environment, and stressors, some college students are susceptible for certain behaviors becoming compulsive and/or addictive. Dependence and addiction to any substance or substance related behavior could compromise one’s physical and emotional health. Addiction is regarded as a mental disease. And similar to other illnesses, it is critically important to be aware of the symptoms and the treatment.

Addiction is an interesting concept, yet a perplexing disease. It is characterized as an intangible force within individuals that drives and dominates certain behaviors, much of the time making individuals feel powerless. In people, addiction can be manifested in different ways, and can function at different extremes. It is often linked to emotions, feelings, and habits.

The college population is particularly susceptible to addictive behavior, due in part to their age and environment. Often students feel they are invincible and overlook the consequences related to certain choices. In addition, the university environment encourages open-mindedness so college students might be more inclined to explore new behaviors based upon alcohol and drug use. Many students discover that they have more freedoms because they are not living at home and are apt to make decisions based on immediate gratification rather than long-term goals. However, they forget that along with college comes specific challenges and responsibilities such as: class attendance, papers to write, meeting and interacting with professors and students, and for many, balancing working at an off-campus job. Even though society often regards student life as being carefree and fun, it truly has its stressors. For some who might need relief from these daily challenges, alcohol, drugs and gambling could be viewed as a coping mechanism to escape the rigors of life. And there are those students whose use of alcohol, drugs and gambling could begin to interfere with productivity, eventually leading to the loss of what he/she values in life.

This journal article will examine addiction, a destructive mental illness. Topics covered are definitions and explanations for this condition, ways in which to immobilize this disease, its effects, and implications among the college population. Also highlighted are the types of behaviors college students experience and what they can do to avoid addiction in the future.

Addiction

A recent definition of addiction states it as an uncontrolled, compulsive use of an activity or a substance, despite the harm caused by the practice. If there is harm or damage done to oneself or others, it may be considered simply a compulsive behavior. Medically, addiction is regarded as a chronic disease. Research indicates that this illness is formed by a combination of genetic and biological factors. Sometimes addictions can be fatal, depending on the substance used. There has been much research done in reference to specific addictions such as alcohol and drugs, and more recently, gambling and eating disorders. Addiction is a compulsive behavior in which continuous choices are made despite the direct or indirect adverse consequences that result from engaging in this behavior. It is quite common for someone with an addiction to express a desire to stop, but cannot cease.

There are two factors considered in addiction: a physical dependence and a psychological addiction. The physical dependence is determined by the appearance of characteristic withdrawal symptoms when the substance is suddenly discontinued. And the primary attribute of an addictive substance or behavior taken is its ability to induce euphoria while causing harm.

Alcohol Addiction

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) defines alcoholism as a disease characterized by a strong dependence on alcohol. The symptoms of alcohol addiction are craving, loss of control, physical dependence and tolerance. Alcoholism is considered a progressive, often fatal disease having occasional genetic origin, influenced by social, psychological and environmental factors. Alcoholics relate that their addiction is as strong as the need for others to eat food or drink water. They develop a craving, or a strong urge, to drink despite awareness that drinking is creating problems in their lives.

It is true that some people can drink alcohol without facing problems and others develop addictions to it. Unfortunately, there is no way to predict from birth, those who might be predisposed to the disease of alcoholism. Alcoholics feel they must take their disease to extremes before they may even consider stopping. According to the NIAAA, scientists have found that having an alcoholic family member makes it more likely that one may develop alcoholism, if they choose to drink. Students affected by alcoholism in the family sometimes make a decision based upon this genetic link to never take the “first drink.”
Addictions

NIAAA explains however, that environment also plays a key role towards alcohol addiction. Even though there can exist a genetic component, environment can be a critical determinant. Our environment condones alcohol use. Advertisements, movies, television and literature promote drinking when one is happy, sad, mourning a loss, depressed, tired or anxious. It is touted as the elixir for all occasions and emotions. From a young age, we are conditioned to think that alcohol always can make any situation better.

In the case of students, attending college may represent a special risk to emerging adults, as increases in alcohol availability and acceptance of drinking on college campuses may lead to a rise in heavy drinking among students. Emerging adulthood is defined as the period from the end of secondary school through the attainment of adult status, covering approximately ages 18 to 25. Frequent changes and exploration mark these years. Many students may view mass alcohol intake as a rite of passage to adulthood. For those students who might be genetically predisposed to alcoholism, if they attempt to drink like others, they are off to a disastrous start. Therefore, when alcohol begins to work against those who have the disease, it is difficult for them to let go of the idea they cannot imbibe like others. Even more challenging, at their age it is hard to accept the fact that one drink they can never guarantee where alcohol might take them. For many, they will continue to drink in spite of the failed relationships, drop in their GPA, financial problems, driving under the influence and poor health as a result of their alcohol intake. They simply cannot imagine life without alcohol.

Stages of Alcoholism

Alcoholism can be categorized into three broad stages. In the early stage, a person becomes dependent on the mood-altering qualities of alcohol. A gradual increase in tolerance develops so that it takes larger amounts of alcohol to produce the same mood-altering effects. A student might actually begin gulping 3 to 5 drinks before attending a party, justifying this action by explaining to others he or she is just getting an early start. Friends might not recognize that this person is in the early stages of a progressive illness because they appear to be just ensuring that they have an extra good time!

In the middle stage of alcoholism, the compulsion to drink becomes more intense. A person may start to drink earlier in the day. Tolerance continues to increase. Loss of control while drinking may not occur regularly, but is gradually noticed by others. Drinkers in this stage begin to realize they do not drink like others. Secretly, they may worry or be concerned about their drinking patterns and may actually make attempts to drink like others. One classic symptom of alcoholism that begins to repeatedly occur is blackouts. These can happen in both non-alcoholics and alcoholics who have consumed large quantities. A blackout is defined as a state of temporary amnesia due to alcohol consumption. During the blackout state, a person functions more or less adequately, conversing, driving, and performing other well-learned activities. One student recalls that he had been sitting in his truck with friends on one side of the river sitting in a car with a complete change of clothes. To this day, he still does not know the details of what he had been doing during this blackout. Blackouts are an inability to transfer short-term memories to long-term storage sites. The person is able to continue to perform because immediate memory is retained up to a minute. However, it is the permanent long-term memory storage sites that are destroyed.

During the late stage of alcoholism, symptoms of the disease become quite evident. The person becomes obsessed with alcohol to the exclusion of almost everything else. They drink despite the pleading of their family and friends. During the late alcoholism stages, the mental and physical health of the person becomes damaged. Alcohol in large amounts interferes with the digestion process and the passage of nutrients from the intestines into the bloodstream. Nutritional deficiencies cause a host of related problems to become worse. Students can experience a loss of mental alertness and appetite, fatigue, confusion, and emotional instability.

One of the most serious consequences is for the liver. In response to long-term alcohol exposure, it starts producing more alcohol dehydrogenase, the enzyme that it uses to breakdown the ethanol in alcohol. As the drinker begins to need more alcohol for the desired effect, the liver becomes over-active, cells die, and the tissue hardens. The result is cirrhosis of the liver. Unfortunately, for most, even at this stage, they will continue to blame their poor health and all other problems caused by alcohol on everything except the substance. This is the classic symptom of denial. “The idea that somehow, someday he/she will control and enjoy his/her drinking is the great obsession of every abnormal drinker. The persistence of this illusion is astonishing. Many pursue it into the gates of insanity or death.”

The Cycle of Addiction

It is in this final stage that one can become caught in the cycle of addiction. After a particularly disastrous bout with alcohol, the drinker will swear they will never do that again. Usually a resolution will be made that they will control their drinking or just simply stop drinking. However, as time goes by, the last drinking episode will diminish in recollection. Therefore, it becomes plausible to pick up another drink and begin the cycle once again.

The Cycle of Addiction adapted from J. Griffin (2006)
Even college students in the 18-24-age range, may be experiencing this cycle. Also, someone might have a friend who has become unpredictable in behavior and actions once alcohol has entered their body. It is important to remember not to put oneself at risk around someone whose drinking may be problematic. For instance, do not get in a car when they are driving under the influence. If alcohol causes them to become confrontational, beware of possible physical assaults from them or others they may infuriate. Female students could experience unwanted or aggressive sexual attention that could lead to assault. If one suspects they could be placed in jeopardy, always have back-up plans for ways to get home. Bring phone numbers of friends who know where you are and could come to your aid.

Self Test for Alcoholism

If a student thought they might have a problem, John Hopkins University Hospital created 20 questions to be used to determine alcoholic behavior. This is a self-administered test and one can evaluate their own drinking behavior.

1. Do I lose time from work due to my drinking?
2. Is drinking making my home life unhappy?
3. Do I drink because I am shy with other people?
4. Is drinking affecting my reputation?
5. Do I ever feel remorse after drinking?
6. Have I gotten into financial difficulties as a result of my drinking?
7. Do I turn to lower companions and an inferior environment with drinking?
8. Does my drinking make me careless about my family’s welfare?
9. Has my ambition decreased since drinking?
10. Do I crave a drink at a definite time daily?
11. Do I want a drink in the morning?
12. Does drinking cause me to have difficulty sleeping?
13. Has my efficiency decreased since drinking?
14. Is drinking jeopardizing my job or business?
15. Do I drink to escape from worries or troubles?
16. Do I drink alone?
17. Have I ever had a complete loss of memory as a result of drinking?
18. Has your physician ever treated you for drinking?
19. Do you drink to build up your self-confidence?
20. Have you ever been to a hospital or institution on account of drinking?

Test Results:

• If you answered yes to any one of the questions above, this is a definite warning that you could become an alcoholic.
• If you answered yes to any two of the questions above, the chances are that you are in the process of becoming an alcoholic and should seek help.
• If you answered yes to three or more of the questions above, you are an alcoholic and need to seek help immediately.

Drug Addiction: The Brain Disease

The addicted human brain has served as a fascinating subject of study by many physicians and psychologists alike. According to an article titled, The Addicted Human Brain: Insights from Imaging Studies, the research of images of the addicted human brain have brought insights about functional and neurochemical changes that occur in the brains of subjects addicted to drugs. “Neurochemical studies have shown that large and fast increases in dopamine are associated with the reinforcing effects of drugs of abuse, but also that after chronic drug abuse and during withdrawal, brain dopamine function is markedly decreased and these decreases are associated with dysfunction of prefrontal regions.” In other words, addiction is a result of a chemical reaction in the brain of those that it affects. When drugs are ingested, inhaled or injected, the brain releases an extra amount of the neurotransmitter, dopamine. This particular neurotransmitter is our body’s way of providing each of us with a ‘natural reward’ system. When this release occurs, an individual has a sense of well being and euphoria.

Our brains are naturally built to release dopamine during certain physical activities such as eating, sex, and exercise. Dopamine receptors in the brain that are sensitive to dopamine are excited when they come into contact with dopamine neurotransmitters, giving the individual a “natural high,” which motivates them to repeat the pleasurable activity in the future, in order to enjoy the feeling once more. However, through chronic or abusive use of illegal drugs (typically cocaine and amphetamines), the sensitivity of dopamine receptors in the brain is damaged and becomes dull, requiring higher and stronger amounts of dopamine to be released in order to produce the desired euphoric effects. As an individual gradually increases their drug use, they will begin to experience withdrawal symptoms. With increased use, cells become damaged and cause one to experience uncomfortable physical symptoms. This painful withdrawal leads to further drug use in hopes of regaining physical comfort. Unfortunately, this destructive cycle leads to addiction.
The study also determined addiction as a true disorder that is more complex than most would think. Addiction is a disorder that involves both the interactions of environmental and biological variables. The circuits in the brain that are responsible for control, inhibiting actions, and making decisions, are abnormal in drug-addicted subjects, and any disruption of these particular circuits in the brain, “…could lead to inadequate decisions that favor immediate rewards over delayed but more favorable responses. It could also account for the impaired control over the intake of the drug even when the addicted subject expresses the desire to refrain from taking the drug.”

What this means for an addicted person is that individuals who have an addiction to drugs in particular, end up damaging parts of the brain that inhibit hasty decisions and are in charge of control. This makes the addiction in the individual even stronger, since the person begins to literally lose their brain’s natural sense of self-control and regulation.

In examining vulnerability to addiction, and drug addiction specifically, which was examined closely in this particular study, researchers are posed with the challenging problem of trying to uncover and understand why certain individuals become addicted to drugs while others do not. It is a question to which there is still no clear-cut, black and white answers or explanations. According to Volkow, Fowler & Wang (2003), “Recently, imaging studies showed that offspring of alcoholic families who were considered to be at a high risk for alcoholism showed smaller amygdala [which is considered to be a phenotypic marker for vulnerability to alcoholism] volumes in comparison with control subjects.” This means that the addiction of alcohol in a person can put their offspring at risk for smaller volumes of amygdala in the brain. The amygdala is a dense set of neurons deep in the brain. The disease of alcoholism can affect the individual’s offspring by decreasing the size and volume of the amygdala, which in turn increases the genetic predisposition of the offspring to the addictive disease, such as alcoholism. This is only one proposed reason for individual susceptibility to drug addiction, and researchers are still trying to find answers.

An article entitled, Overlapping Addictions and Self-Esteem Among College Men and Women, reported the results of a study with traditional-aged college students, who were neither dysfunctional nor alienated from their social environments. Since traditional research on addiction and college students tends to focus on addicted individuals who require treatment or who are dysfunctional in their social situations, this makes the information gathered more difficult to relate to larger masses who do not suffer from dysfunction in social situations.

The goal of the research study was to, “…explore a variety of substances and activities with addictive potential among young adults (college students) and to determine whether a tendency to become addicted overlaps several different substances and activities.” The possible overlapping addictions were common substances such as alcohol, caffeine, chocolate, cigarettes, and also activities such as exercise, gambling, Internet use, television and video games. These items were studied in 129 college men and women. The results of the study showed moderate to large correlations both within and between substances and activities. This confirmed information that addictions can and do have the potential to overlap. It is hoped that future studies will lead to new theories of addiction and aid in the study of normally functioning young adults in college.

Since many college students experience addiction in one form or another during their college career, it is very possible that some or many addictions can overlap, meaning that the person has multiple addictions. This implies that college students clearly show a tendency to become addicted to more than one common substance or activity, which can lead to potentially serious problems if not self-regulated. However, some might consider activities such as exercise as a positive addiction. It must be remembered that whenever any repeated activity begins to interfere in other areas of one’s life, the addiction has moved from positive to negative. Of course addictive activities such as drug use, alcohol use, gambling, and chronic overuse of the Internet, would never be regarded as a positive. Addiction to these activities can lead to physical and emotional harm, as well as damaging the college experience, causing G.P.A. to drop, relationships to suffer, and ultimately, lead to a student withdrawing into isolation.

**Gambling: An Addiction Relevant to College Students**

Gambling is an addiction that is gaining popularity in the college scene. One such explanation is that college students have particularly unlimited access to the Internet and are not as monitored as individuals who, for example, are still living at home with the presence of their parents regulating certain Internet activities and durations of time. Gambling, being more accessible to many via the Internet, poses an easily accessible addiction for students. Gambling difficulties are likely to emerge during late adolescence and the college years. According to an article titled, Gambling: The New Addiction Crisis in Higher Education, “A national survey conducted by the Harvard School of Public Health in 2001 found that 2.6 percent...
of students attending four-year colleges and universities gambled weekly or more frequently. Conducting annual telephone polls, the University of Pennsylvania’s Annenberg Public Policy Center, has reported that 8.3 percent of post-secondary students across the United States gambled each week in 2002, while 15.5 percent did so in 2005, an 87 percent increase.”

These alarming statistics bring attention to this particular form of addiction. One of the explanations for this documented rise is that gambling has been mainstreamed which makes the opportunities available for most. State lottery commissions promote scratch tickets and lotteries. Casino gambling is now legal in 11 states, and on tribal lands in 28 states, not just in Las Vegas! Sports betting networks operated by students can be found on many campuses.

De Jong et al. proposed specific prevention and education strategies about gambling. A powerful defense against gambling is knowledge. The author claims that the best prevention strategy would be to change the environment in which students make decisions about gambling. It specifically suggests orientation programs and campus media campaigns that can prevent gambling addiction, and emphasis to be given to the personal risks associated with gambling, such as financial problems and time taken away from a college education.

Another option that the De Jong article suggests for battling gambling would be for campus officials to consider their positions on state level policies.

- Should online betting be banned?
- Should it be regulated and taxed?
- Should the minimum legal age be increased to 21?

Internet Addiction

At our fingertips, the Internet offers an endless supply of information, and also serves as a social interaction network by which students can communicate with a multitude of others, both known or unknown. Also, students use the Internet to access pornographic websites, as well as online gambling sites. Most use the Internet safely, but for some it can become addictive.

According to an article in the Journal of Mental Health Counseling titled, Internet Behavior Dependence, a form of Internet addiction, is a new disorder requiring informed response from addiction clinicians such as mental health counselors. As with other substances at our disposal, it is possible for students to binge on Internet use. Some students have serious addiction problems to the Internet, and this addiction is earning the loose title of “disorder.” In a journal article by S. Hansen titled, Excessive Internet Usage or ‘Internet Addiction’? The implications of diagnostic categories for student users, the clinical definition of excessive Internet usage is described as:

The new psychological ‘disorder’ of Internet Addiction (IA) is fast accruing both popular and - in some circles—professional recognition. This pathology claims to make sense of “excessive Internet use,” which is considered a “behavioral addiction” akin to pathological gambling.

The article continues to explain that there have recently been multiple subtypes of IA that have been proposed and that they encompass “excessive (and nonproductive) use-in-general” to other different types of online activities. Specifically for students, IA can be coupled with addiction to viewing online pornography as well as cyber-sexual and cyber-relationship addiction. Cyber-sexual addiction involves individuals who are overly occupied with viewing, downloading, and trading online pornography or drawn into adult fantasy role-play chat rooms. Cyber-relational addiction is more of the interactive aspect of the Internet. This is where individuals may become over-involved in online relationships or may engage in virtual adultery. Some of the general symptoms that are typically found in accounts of people and students who have one form or another of IA include:

- Preoccupation
- Tolerance
- Relapse
- Withdrawal
- Loss of Control
- Concealment
- Escapism

These symptoms offer operational definitions that were detected from research of television addiction as well as definitions of television dependence drawn from diagnostic criteria for substance dependence, and reflect the same general symptoms found in accounts of IA.
Based on prior research, the study indicates there is a relationship existing between Internet usage, depression, habit strength, expected self-reactive outcomes, and deficient self-regulation. The study hypothesizes that depression and media habits combine to form an alleviation of depression in people.

However, depressed moods undermine a person’s ability to self-regulate and keep Internet usage in check, which leads to an increase in even more Internet usage. Thus it becomes a perpetuating self-defeating cycle of pathological Internet use. The study offers a model that explains that depression aids maladaptive cognitions, such as deficient Internet self-regulation, where a student or individual would be able to keep their Internet use in check, which in turn leads to excessive Internet use. The model below is borrowed from a 2003 Media Psychology article, and it summarizes the relationships among the many factors that contribute to excessive and abusive Internet usage:

One interesting study conducted by Morahan-Martin and Schumacher, surveyed 277 undergraduate students who were Internet users. The study was conducted in order to assess the incidence of pathological Internet use as well as classifying characteristics of those students who were associated with pathological Internet use. Results of the study indicated that 64.7% of students reported one to three symptoms of pathological Internet use, and 8.1% of students reported four or more symptoms of pathological Internet use. Symptoms included:

- Academic, work and interpersonal problems
- Feelings of distress and anxiety if not using the Internet
- Tolerance symptoms (longer and longer times spent on the Internet)
- Mood altering use of the Internet (e.g., joy, sexual excitement, adrenalin rush)

Partial confirmation of the study’s hypotheses were correct, indicating that the majority of pathological Internet users were males who were technologically savvy, who were partial to visually stimulating real-time interactive activities online, and who were likely to be lonely, but felt non-inhibited online.

There have been courses of action taken to limit and decrease the use of IA. Universities and colleges who provide student Internet accounts routinely form policies to regulate the Internet usage and online conduct of their students. The introduction of Internet codes of conduct, and charges for excessive Internet use are amongst the strategies that have been adopted to curtail time spent online. These codes of conduct are clauses created to define the types of activities that can be done while being online. As of yet, CSULB has not found it necessary to put into place any such policies. However, it is stated in the CSULB Academic Computer Services policies that computer games are not allowed in the lab facility and patrons who are playing will be asked to leave.

Treatment: Breaking the Chain of Addiction

As college students journey through life’s transitions, it is inevitable that habits will be formed. The difficult balance is retaining positive habits and letting go of those that can interfere with one’s life. If one is experiencing an addiction, be able to accept the facts about this mental disorder and begin to seek solutions to live with it. Many find an addiction is not a form of behavior that one can change or stop easily at will. Alcoholics and addicts indicate they often seek assistance from outside sources, whether for drugs, alcohol, and gambling or excessive Internet use.

There are several methods of dealing with addiction. It is important to speak with someone about your concerns. The CSULB Alcohol, Tobacco, and Other Drug Program (ATOD) at the Student Health Services offer an extensive list of resources for those who might be questioning certain behaviors. Another suggestion for CSULB students is to make an appointment with a psychologist at the Counseling and Psychological Services (CAPS) located in Brotman Hall. These are trained professionals who can discuss any concerns a student may have about patterns of abuse that seem to be interfering with their life. After having made contact with ATOD and/or CAPS, a student may be ready to change their behavior.

Cognitive-Behavioral Therapy

It is important to understand “change” usually does not happen overnight. Instead, studies suggest that there is a process of change. One accepted methodology of change is referred to as the Transtheoretical Model of Change, also known as the Stages of Change model.
In the ‘action stage,’ cognitive-behavioral therapy (CBT) is suggested as one method to assist students facilitate changes. This treatment is a type of psychotherapy used to recognize unhelpful patterns of thinking and action taking in regards to reacting to everyday life situations. Through CBT, a student can modify and replace these unhelpful patterns and replace them with more helpful ones. CBT is based on the idea that how we think (cognition), how we feel (emotion), and how we act (behavior) all interact together. Therapists choose to think of CBT as a highly individualized training program that helps a student unlearn old habits associated with abuse and learn or relearn healthier skills and habits. It is suggested that CBT be done over a period of 12 weeks, usually 12 to 16 sessions working with a therapist. There are five critical tasks that must be addressed during these sessions:

- **Foster the motivation for abstinence.** An important technique used to enhance the student’s motivation to stop the addictive use is to do a decisional analysis that clarifies what the individual stands to lose or gain by continued use.
- **Teach coping skills.** This is the core of CBT – to help patients recognize the high-risk situations in which they are most likely to use substances and to develop other, more effective means of coping with them.
- **Change reinforcement contingencies.** By the time treatment is sought, many patients spend most of their time acquiring, using, and recovering from the addictive use to the exclusion of other experiences and rewards. In CBT, the focus is on identifying and reducing habits associated with their addiction by substituting more enduring, positive activities and rewards.

**Foster management of painful affects.** Skills training also focuses on techniques to recognize and cope with urges to engage in addictive use; this is an excellent model for helping students learn to tolerate other strong affects such as depression and anger.

**Improve interpersonal functioning and enhance social supports.** CBT includes training in a number of important interpersonal skills and strategies to help students expand their social support networks and build enduring, addiction-free relationships.

### 12-Step Programs
Some students discover CBT is not effective and they need a stronger support system. For those students, a 12-step program may be a better fit. Alcoholics Anonymous created the original 12-step program. It is directed at an individual’s powerlessness to stop drinking alcohol. It is clearly stated that the only requirement for membership of an Alcoholics Anonymous (A.A.) group is the desire to stop drinking. Other 12-step programs are similarly fellowships that aim and successfully deliver recovery from the consequences of an obsession, addiction, a physical and mental compulsion, or another harmful influence in a student’s life. The success of these programs has led to the creation of 12-step programs for all types of addiction, including gambling, drugs, and the Internet.

All 12-step programs closely follow the original A.A. version. Members meet regularly to discuss their addictions, their problems and share their victories. Common among all programs is the view that members are dealing with an illness rather than a bad habit or a maladaptive behavior. In addition, they believe the illness is a combination of an allergy of the body that creates uncontrollable cravings coupled with an obsession of the mind that keeps finding rationalizations for returning to that which causes the cravings in spite of the damage that may be caused from the use.

A primary belief of 12-step groups is that their recovery requires them to give up their self-reliance and willpower, and to place their trust in God, or a “Higher Power.” However, it has been proven time and again that agnostics and even atheists can be helped by the program as a member’s “Higher Power” may be the 12-step group itself or any other entity, thing or object that helps a member to accept that they are powerless over their problem.

### Secular Organizations for Sobriety
For students that cannot tolerate turning their life and will over to a “Higher Power,” there is the Secular Organizations for Sobriety (SOS). The original SOS groups began as groups for alcoholics.
**Addictions**

These groups have been extremely flexible in accommodating family members and friends of alcoholics and addicts, and those addicted to any substance or behavior. SOS was founded to provide a neutral ground where the alcoholic/addict can safely explore an individual path to recovery. While many of the members are atheists, agnostics, and secular humanists, many others are theists of one form or another who simply want a secular recovery environment, separation of church and recovery. SOS members strongly believe that the original 12-step programs are built upon a type of religion. In their groups they wish to keep the focus on recovery not a spiritual entity. Each SOS meeting begins with the following:

Secular Organization for Sobriety is dedicated to providing a path to sobriety, an alternative to those paths depending upon supernatural or religious beliefs. We respect diversity, welcome healthy skepticism, and encourage rational thinking as well as the expression of feelings. We each take responsibility for our individual sobriety on a daily basis.  

**Conclusion**

The harsh facts about addiction are the ways in which it can destroy someone’s life. Grades can slide downward, friends are lost, families torn up and one is at more risk for having accidents, getting into fights, domestic violence, sexual abuse, as well as health problems directly related to the abuse. Recently, a CSULB female freshman was in despair over her current state of affairs. During the spring semester her tolerance to marijuana had increased to the point that all of her money had been spent on her substance need. She had nothing left to pay her rent, car payment or her monthly food bills. Not only was she financially destitute, but also her GPA had dropped to 1.8. And even in the face of these facts, she could not accept that her marijuana use was interfering with her life. Instead, she was angry towards her landlord for not being more understanding, her parents for being unreasonable. Never once did she accept any responsibility for her plight, but instead maintained that she was the victim of ‘bad luck.’ For any students reading this article who might be honest enough to admit there could be a problem with their substance use, please take heed. The disease of addiction does not go away on its own. It is not a bacterium that can be cured with an antibiotic, nor can one be protected from contracting an addiction through an inoculation. Addiction can be compared more to a virus. And as similar to a virus, addiction is a mental disease one will carry with them for the rest of their life. Any student questioning possible addictive behaviors is encouraged to visit the Alcohol, Tobacco, and Other Drugs (ATOD) program located in the Student Health Center. Staff members can answer questions and provide further resources. Through acceptance, one can learn new coping skills that will allow them to live a productive life and achieve any desired goals.

**References**

Panic Disorder: Living in Fear

Christina Goldpaint

Everyone has experienced a moment of anxiety from time to time, but for some, these periodic episodes reach far deeper proportions. These people suffer from panic disorder, also known as “panic attacks.” Panic attacks are a mental disorder that is fueled by repeated and unexpected moments of intense fear that can make the sufferer go through a series of physical symptoms that range from chest pain to abdominal distress. Usually developing in early adulthood, approximately six million Americans, 18 years or older, suffer from panic disorder. Women are twice as likely to develop this disorder. With the help of Cognitive Behavior Therapy and medication, there is hope for those that live with panic disorder.

Beginning college can be a difficult time for many individuals. Balancing school and work, while also increasing your social status in a new environment is a difficult feat. This transition is stressful in itself, without having an anxiety disorder. The addition of an anxiety disorder, such as panic disorder, can be more than overwhelming.

Panic disorder is a type of anxiety disorder that is characterized by unexpected and repeated episodes of intense fear. The condition is also accompanied by physical symptoms that may include: chest pain, heart palpitations, dizziness, abdominal distress, or shortness of breath. Because these symptoms are similar to traits of a heart attack or other life-threatening medical conditions, individuals may feel as if they are dying, or as though their life is in serious danger. As a result, the diagnosis of panic disorder is frequently not made until extensive and costly medical procedures fail to provide a correct diagnosis or relief.  

Diagnosis of Panic Disorder

Panic disorder was first diagnosed in the 1960s, when researchers and clinicians began to differentiate patients who had unexpected anxiety attacks from patients with other anxiety disorders. “The diagnostic category of panic disorder was first officially recognized with the publication of Diagnostic and Statistical Manual of Mental Disorders (3rd edition) of the American Psychiatric Association in 1980 (DSM-III). These criteria were modified slightly with the 1987 publication of the revised version of the Diagnostic Manual, DSM-III-R.” The DSM-IV Criteria for a Panic Attack is described as a discrete period of intense fear or discomfort, in which at least four of the following symptoms develop abruptly and peak within 10 minutes. These symptoms include: increased heart rate or pounding heart; sweating; trembling; shaking; shortness of breath; feeling of choking; chest pain; nausea; abdominal distress; dizziness; feeling lightheaded; being detached from oneself; fear of losing control or going crazy; fear of dying; numbness; tingling sensations; chills; and hot flushes.  

Panic disorder is diagnosed when an individual has recurring panic attacks and experiences at least one of the following characteristics:

1. Persistent concern about having another attack (anticipatory anxiety).
2. Worry about the implications of an attack or its consequence (i.e., suffering a catastrophic medical or mental consequence).
3. A significant change in behavior related to the attacks.  

Prevalence of Panic Disorder among College-Age Students

Approximately 6 million people in the United States, ages 18 and older, have panic disorder. This is roughly 2.7% of people in this age group. About one in three people with panic disorder develops agoraphobia, a condition in which individuals become afraid of being in any place or situation where they might not be able to escape easily. Panic disorder usually develops in early adulthood, between the ages of 18 and 30, and half of all people that have panic disorder develop the condition before age 24. Women are twice as likely as men to develop panic disorder.  

Panic Disorder with Agoraphobia

Agoraphobia is characterized by severe and persistent anxiety about being in situations that might be difficult to escape. As a result, individuals may completely avoid situations such as being alone outside of the home, being in a car, bus, or airplane, or being in a crowded area. Panic disorder with agoraphobia can be extremely debilitating to college students because they may be afraid to leave their homes and attend class regularly. Without regular attendance, it is difficult to succeed in college.
College students with agoraphobia may also miss out on social interactions among peers and faculty due to social anxiety. This is an integral part of the college experience, and is necessary to build new relationships, network, and gain valuable experiences.

Treatment

Treatment of panic disorder includes Cognitive Behavioral Therapy (CBT) and/or medications. CBT includes cognitive restructuring (changing the thought-process) and behavior therapy, including breathing techniques and other relaxation techniques. Medications used to treat panic disorder include: Selective Serotonin Reuptake Inhibitors (SSRIs), Benzodiazepines (BZDs), Tricyclic Antidepressants, and Monoamine Oxidase Inhibitors (MAOIs). The same treatments are available for individuals experiencing panic disorder with agoraphobia.

Cognitive Behavioral Therapy

CBT is a type of psychotherapy that focuses on changing negative thought processes and patterns of behavior. "Cognitive behavioral therapy is based on the scientific fact that our thoughts cause our feelings and behaviors, not external things like people, situations, and events." By using these concepts, individuals are able to restructure the way they perceive certain issues that trigger anxiety and panic. CBT includes applied relaxation, panic management, breathing training, and cognitive restructuring.

CBT is very successful in treating individuals suffering from panic disorder. “In CBT trials, an average of 73% of treated patients were panic-free at three to four months, compared with 27% of control patients...46% of treated patients remained panic-free at two years.”

Pharmacological Therapy

Selective Serotonin Reuptake Inhibitors

Antidepressants work primarily by affecting chemicals in the brain called neurotransmitters. Selective Serotonin Reuptake Inhibitors (SSRIs) are a type of antidepressant that affect the neurotransmitter called serotonin. SSRIs work by slowing down the reuptake process of serotonin. In other words, SSRIs allow serotonin to remain in the brain longer, improving mood. The usual dosage of SSRIs is once daily.

Some side effects of SSRIs include: nausea, diarrhea, constipation, insomnia, drowsiness, decreased sexual desire, delayed or absent orgasm (anorgasmia), erectile difficulties in men, decreased vaginal lubrication in women, headaches, skin rashes, and weight gain or loss. Also, SSRIs may cause a stimulating effect in some people, causing them to feel nervous or restless.

All antidepressants, including SSRIs, may cause suicidal thoughts, hostility, and agitation in both children and adults. It is required by the Food and Drug Administration that all antidepressants disclose this information in package inserts.

If choosing to discontinue using SSRIs, abrupt stoppage can cause withdrawal symptoms. These symptoms may include dizziness, trouble with coordination, headache, nausea, lethargy, tingling, vivid dreams, flu-like symptoms, irritability, anxiety, and lowered mood.

Benzodiazepines

Benzodiazepines (BZDs) are central nervous system depressants. If taken for an extended period of time, BZDs may cause mental or physical dependence. Some signs of BZD dependence include: a strong desire to continue taking the medication; drug tolerance, including a need to increase the dosage to maintain effectiveness; and withdrawal effects.

Some side effects of BZDs include clumsiness, dizziness, drowsiness, slurred speech, abdominal cramps, blurred vision, changes in sexual desire or ability, constipation, diarrhea, dry mouth, increased thirst, headache, muscle spasms, nausea or vomiting, problems with urination, trembling or shaking, tiredness, and weakness.

If choosing to discontinue using BZDs, stopping abruptly can cause withdrawal symptoms, including seizures. Other withdrawals symptoms may include irritability, nervousness, trouble sleeping, abdominal cramps, confusion, fast or pounding heartbeat, increased sense of hearing, increased sensitivity to touch and/or pain, sweating, mental depression, muscle cramps, nausea or vomiting, sensitivity to light, tingling or burning sensations, trembling or shaking, convulsions, and hallucinations.

Tricyclic Antidepressants

Tricyclic antidepressants were the most commonly prescribed antidepressant before SSRIs. Antidepressants begin to alter brain chemistry after the first dose, but need to be taken for four to six weeks before physical symptoms begin to fade. Tricyclic antidepressants work as well as SSRIs in treating anxiety, with the exception of obsessive-compulsive disorder.

Some side effects of tricyclic antidepressants include:

- dry mouth
- blurred vision when reading
- constipation
- slower urine stream
- orthostatic hypotension
- sedation, restlessness or poor sleep
- sweating
- skin rash or other allergic reaction
- weight gain
• nausea
• vomiting
• poor appetite
• tremor
• confusion
• rapid heartbeat

Tricyclic antidepressants can cause irregular heart rhythms, and an overdose can be fatal. Because of this reason, tricyclic antidepressants are not used as frequently as other antidepressants, such as SSRIs.¹²

If choosing to discontinue using tricyclic antidepressants, abrupt stoppage can cause withdrawal symptoms. These symptoms may include loss of appetite, nausea, vomiting, diarrhea, runny nose, sweating, muscle aches, fever, tingling, restlessness, insomnia, increased dreaming, dizziness, anxiety, and agitation.¹²

Monoamine Oxidase Inhibitors

Monoamine oxidase is an enzyme that breaks down neurotransmitters, such as serotonin. Monoamine Oxidase Inhibitors (MAOIs) work by hindering the action of monoamine oxidase. By hindering monoamine oxidase, the concentration of neurotransmitters rise, elevating a person’s mood. MAOIs were one of the first types of antidepressants developed. Because of strict dietary and drug restrictions, MAOI prescriptions are rarely used. The usual dosage of MAOIs is two to three times daily, with or without food.¹³

 Serious side effects of MAOIs including severe headache, rapid heartbeat, chest pain, sweating, nausea, vomiting, and/or stiff neck could indicate dangerously high blood pressure, which is a medical emergency. Other side effects may include dizziness, lightheadedness, fainting, diarrhea, leg swelling, nervousness, restlessness, drowsiness, mild headaches, weight gain, sweating, and trouble sleeping.¹³

Besides breaking down neurotransmitters, monoamine oxidase also breaks down tyramine, a substance found in certain foods. High levels of tyramine in the body can cause a dramatic rise in blood pressure. Because MAOIs block monoamine oxidase, tyramine is not broken down in the body when using MAOIs. Foods containing high levels of tyramine should be avoided; these foods include: aged cheese; fava beans; broad bean pods; yeast; meat extracts; smoked or pickled meat, poultry, or fish; fermented meats, such as bologna, pepperoni, and salami; sauerkraut; miso soup; overripe fruit; alcoholic beverages, especially red wine, sherry, beer, and ale; caffeinated beverages, such as coffee, tea, and sodas; and chocolate.¹³

Certain drugs can react with MAOIs, and should be avoided. Be sure and inform your doctor of any drugs you are taking before starting MAOIs. Some drugs that may interact with MAOIs include:

- stimulants such as amphetamines
- Ritalin, certain cold medications
- diet pills
- blood-pressure drugs
- other antidepressants, including SSRIs
- asthma drugs
- pain relievers such as Demerol
- sedatives
- drugs taken for diabetes, including insulin
- tryptophan taken as a supplement or food aid¹³

If choosing to discontinue using MAOIs, abrupt stoppage can cause withdrawal symptoms. These symptoms may include depression, anxiousness, agitation, and sleeplessness. Abrupt stoppage of MAOIs may also cause psychosis, including hallucinations and/or delusions. To avoid these symptoms, do not stop taking MAOIs suddenly; instead, talk to your clinician about slowly decreasing the amount of medication.¹³

The following chart indicates some of the advantages and disadvantages of treatment options for panic disorder. It is important to clarify that MAOIs are not always offered as a first choice because of the number of negative side effects and dietary restrictions. SSRIs have often been very effective when used correctly. Usually, BZDs are prescribed for a short duration of time, due to the possibility of becoming physically dependent. For many diagnosed with Panic Disorder, CBT continues to be a successful treatment option.

<table>
<thead>
<tr>
<th>Drug Dosage Range</th>
<th>Dosage Range</th>
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<tbody>
<tr>
<td>Fluoxetine (Prozac)</td>
<td>20 to 80 mg per day</td>
</tr>
<tr>
<td>Paroxetine (Paxil)</td>
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</tr>
<tr>
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<td>Clomipramine (Anafranil)</td>
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<td>Nortriptyline (Pamelor)</td>
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<td>Desipramine (Norpramin)</td>
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<tr>
<td>Phenelzine (Nardil)</td>
<td>45 to 90 mg per day</td>
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<tr>
<td>Tranylcypromine (Parnate)</td>
<td>Tranylcypromine (Parnate)</td>
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Drugs Used For Treating Panic Disorder

Drugs: SSRIs, Benzodiazepines, Tricyclic Antidepressants, MAOIs

SSRIs
- Fluoxetine (Prozac)
- Paroxetine (Paxil)
- Sertraline (Zoloft)
- Fluvoxamine (Luvox)

Benzodiazepines
- Alprazolam (Xanax)
- Lorazepam (Ativan)
- Clonazepam (Klonopin)

Tricyclic Antidepressants
- Imipramine (Tofranil)
- Clomipramine (Anafranil)
- Nortriptyline (Pamelor)
- Desipramine (Norpramin)

MAOIs
- Phenelzine (Nardil)
- Tranylcypromine (Parnate)
Living in Fear

<table>
<thead>
<tr>
<th>Advantages</th>
<th>CBT</th>
<th>SSRI's</th>
<th>BZDs</th>
<th>TCAs</th>
<th>MAOIs</th>
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<tr>
<td>Antidepressant effect</td>
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<tr>
<td>Generic form available</td>
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<td>+</td>
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<tr>
<td>Established efficacy</td>
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<td>+/-</td>
<td>+</td>
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<tr>
<td>Favorable side-effect profile</td>
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<tr>
<td>Not habit forming</td>
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<td>+</td>
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<td>Maintenance of gains</td>
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<th>Disadvantages</th>
<th>CBT</th>
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<th>BZDs</th>
<th>TCAs</th>
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<td>Potential toxicity</td>
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<td>Weight gain</td>
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<tr>
<td>Sexual dysfunction</td>
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<td>+</td>
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<td>Anticholinergic effects</td>
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<td>Orthostatic hypotension</td>
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<td>Cardiovascular effects</td>
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<tr>
<td>Dependence/abuse</td>
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<tr>
<td>Withdrawal syndrome</td>
<td>+/-</td>
<td>+</td>
<td>+/-</td>
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<tr>
<td>Multiple dosing/sessions</td>
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<td>Delayed onset</td>
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<tr>
<td>Cost</td>
<td>+</td>
<td>+/-</td>
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<td>Limited availability</td>
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<tr>
<td>Dietary restrictions</td>
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</table>

CBT = cognitive-behavioral therapy
SSRIs = selective serotonin reuptake inhibitors
BZDs = benzodiazepines
TCAs = tricyclic antidepressants
MAOIs = monoamine oxidase inhibitors

Adapted from Saeed & Bruce, 1998
Treating Patients with Panic Disorder

Patient meets DSM-IV criteria for panic disorder.

Is current alcohol abuse present?

Is rapid action needed for the patient to function?

Offer treatment with anti-depressants or CBT (4 to 12 sessions)

Reassess at 2 to 10 weeks to discuss effectiveness and side effects.

Is the patient panic-free or functioning well?

Offer additional treatment with another therapy, combination therapy, increased medication dosage, or additional CBT.

Offer alcohol detoxification and maintenance program with follow-up to reassess panic disorder.

Consider short-term therapy with a benzodiazepine while long-term therapy is initiated.

Antidepressants:
Continue for 6 months and consider medication withdrawal with monthly follow-up for relapse.

CBT:
Follow patient monthly for relapse after sessions are discontinued.

Benzodiazepines:
Taper benzodiazepine. If unsuccessful, offer CBT during tapering period.

Adapted from Ham et al, 2005
Living with Panic Disorder

If individuals with panic disorder do not seek treatment, it is probable that there will be no improvement in their condition. According to the National Mental Health Association, panic disorder is often accompanied by depression and substance abuse. “About 30% of people with panic disorder use alcohol and 17% use drugs, such as cocaine and marijuana, in unsuccessful attempts to alleviate the anguish and distress caused by their condition.” Approximately 20% of people with panic disorder attempt suicide. Individuals that undergo treatment such as CBT or take medication are 70-90% successful at preventing panic attacks. Some patients show improvement after only a few therapy sessions. Although relapses may occur, they are usually treated the same way as the initial attack.

Conclusion

Panic disorder can be extremely debilitating if not treated. Treatment options include CBT and/or medication, and have been extremely successful in suppressing panic attacks and treating agoraphobia. College students need to be able to feel comfortable enough to attend class regularly and be able to communicate with peers and faculty without having to deal with social anxiety related to panic disorder and agoraphobia. By having a positive outlook and an effective treatment option, panic disorder can usually be successfully combated. You don’t have to live in fear. There is hope.

References

In the past, *folie circulaire*, depression and mania, and manic-depressive were all terms used to label a mental disorder that today is referred to as bipolar disorder (BPD). Over two million Americans suffer from BPD, a mental illness causing one to experience two sharp contrasting emotional states. The first is a period of energized euphoria, requiring little or no sleep, while the second is a dark depression in which the sufferer becomes immobilized, unable to complete daily activities. Only of recent has the United States government recognized bipolar disorder as a legitimate illness. Early recognition of symptoms plus a medically based diagnosis, allows a person with BPD to choose appropriate options for treating this illness such as: medications, psycho-education, and psychotherapy.

Research and treatment of mental illness has moved forward positively into this century. No longer are people constrained by their illness, but instead can have the opportunity to achieve their goals. Currently enrolled are students diagnosed with schizophrenia, clinical depression, bipolar disorder, and anxiety disorders, such as obsessive-compulsive disorder. The following article highlights bipolar disorder (BPD). Prior to being diagnosed with BPD, students have described a life in which they often felt they were riding a roller coaster, one moment skyrocketing upwards into exhilaration (manic episode), and the next spiraling downward into an emotional freefall (depressive episode). This article details the history, symptoms, causation, diagnostic tools, and positive ways to live with this mental illness through effective use of medication and treatment.

For most, attending a university is punctuated by the following academic responsibilities: registration, attending classes, completing assignments, taking exams, giving oral presentations, and interacting with students and professors. An observer walking across campus or sitting in on a particular lecture would be unable to detect interacting with students and professors. However, these students do confess they are inclined not to disclose their mental illness to fellow classmates or professors for fear they might be judged by their disorder rather than their capabilities. Many diagnosed with mental illness have experienced a stigma attached to their disease. For students, this stigma can result in being tagged and labeled by others, set apart from fellow students, connected to undesirable characteristics, and broadly discriminated against. This type of stigma can cause a student with mental illness to experience feelings of hurt, sadness and discouragement, thus negatively compounding a person’s ability to function in the university environment.

History of Bipolar Disorder

As far back as the second century, there has been recorded evidence of people experiencing recognized symptoms of bipolar disorder. Written documentation describing emotional symptoms of mania (a state of unrealistic excitement accompanied by disorganized behavior and elevated mood) and depression (a state of sadness that can cause an inability to perform daily activities) both being experienced in a person with no extraneous factor. One of the best examples of an attempt to explain a mental disorder yet determined is found in a book entitled *The Anatomy of Melancholy*, written by Richard Burton in 1650. Burton based much of his writing on his own maladies, describing in great detail the characteristics of his manic and depressive states. For the first time, melancholy became a subject of discourse. In its time, the Anatomy was an enormously influential work, drawing on the medical theories of the ancients like Galen and Hippocrates and the book itself inspired the efforts of great literary figures as Byron and Keats.

His descriptions demonstrated the two sides of melancholy as understood by scholars of the 1600’s. He wrote,

“General as of Melancholy: Fear and sorrow without a just cause, suspicion, jealousy, discontent, solitaryness, irksomeness, continual cognitions, restless thoughts, vain imaginations or ambitious thinks himself a king, a lord; covetous runs on his money; lascivious on his mistress; religious hath revelations, visions, is a prophet.”

Burton proclaimed this mental disease was prevalent amongst his peers who suffered from fierce mood swings. *The Anatomy of Melancholy* has been republished into three text volumes as recently as 1989, 1990 and 1994. His findings are still used today by those in the mental health field and he is often referred to as the father of depression as a mental illness.

In 1854, Jules Falret described a condition called *folie circulaire*, in which patients experienced alternating moods of depression and mania. He recognized this to be different from simple depression, and finally in 1875 his recorded findings were termed Manic Depressive Psychosis, a psychiatric disorder. “He described in the same person severe depressive states, associated at varying times with excited states, for which he could find no life reality causation.”

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Emotional Freefall – Bipolar Disorder

Linda Peña
Also attributed to Falret’s research is the detection that the disease reoccurs in members of certain families, thus recognizing a genetic link. The end of the nineteenth century witnessed the German psychiatrist, Emil Kraepelin, first use the term manic-depressive with this mental disease. He conceptualized a continuum that included today’s Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) subtypes, mixed and rapid cycling states, the soft bipolar variations and also episodic depressions. A differentiation for this illness was detailed as a psychosis that does not lead to deterioration in the psychic process.

Unfortunately, for most who suffered from BPD in the past, there was no treatment. Even as recently as the 20th century in the U.S., those diagnosed had no opportunity to seek government assistance because of Congress refusing to recognize manic depression or bipolar disorder as a legitimate illness. Ultimately, laws were enacted and standards established to help those afflicted, and in 1979 the National Alliance on Mental Illness (NAMI) was founded. In 1980, the term bipolar disorder officially replaced manic-depressive disorder as a diagnostic term found in the DSM-III, thus finally recognizing BPD as a mental illness.

**Symptoms**

All people go through emotional ups and downs; however, those having BPD experience severe shifts in high and low moods, fluctuating energy levels, and the ability to function. More than two million American adults, or about 1 percent of the population age 18 and older in any given year, have bipolar disorder. Recent research suggests that mood swings often begin in adolescence and that the average age of onset is the early 20s. Most people experience their first episode of manic depression between the ages of 20 and 40.

Earlier age of onset is more common in individuals with a family history of this illness. Some people have their first bipolar disorder symptoms during childhood, and unfortunately those early manifestations are often not recognized as an illness, and someone could suffer for years before being properly diagnosed. An equal number of men and women develop this illness. However, men tend to begin with a manic episode, women with a depressive episode. Statistics indicate in most cases, episodes of depression and mania will occur, but in a small percentage of cases, 10 to 20 %, only manic episodes are experienced.

Bipolar Disorder exists in all ages, races, ethnic groups and social classes. Famous names from the past and present bear witness to the fact people have lived with or are still currently living with Bipolar Disorder. Those from the past are: Winston Churchill (British Prime Minister), Honore de Balzac (writer), George Fredrick Handel (composer), Abraham Lincoln (U.S. President), Theodore Roosevelt (U.S. President), Gustav Mahler (composer), Vincent Van Gogh (artist), Virginia Woolf (writer), and of recent: Jimmy Persall (baseball player), Daniel Boorstin (former presidential advisor), Patty Duke (actress), Margot Kidder (actress), Ted Turner (businessman) and Tracy Ullman (actress/comic). Some of these familiar personalities suffered greatly with their mental illness, and a few chose suicides as their only option to escape their overwhelming, hopeless episodes of depression. Fortunately, today because of the development of treatment programs and medications, people diagnosed with this illness can avoid entering those episodes of life threatening depression.

As other mental illnesses cannot yet be diagnosed physiologically, bipolar disorder cannot be identified through a blood test or a brain scan. Instead, a diagnosis is made based upon symptoms, course of illness, and family history. Often a diagnosis is difficult because bipolar disorder can be present with other psychiatric conditions such as panic disorder, social phobias, post-traumatic stress disorder (PTSD) obsessive-compulsive disorder (OCD), and impulse control disorders e.g. (pathologic gambling, kleptomania). The National Institute of Mental Health recently reported an especially high incidence of PTSD and OCD in people with bipolar disorder, with 43% of people with bipolar disorder exhibiting symptoms of PTSD. “One must go to a credible psychiatrist because this mental illness is particularly difficult to diagnose. There are instances when people are misdiagnosed because they exhibit only two or three of the symptoms. A qualified diagnosis is based upon a person’s detailed history of mood changes for a long period of time” (J. Prince, personal communication, March 9, 2006).

To understand the depth of bipolar disorder, it is important to begin with a basic and thorough description of this disease and all its symptoms. In very simple terms, bipolar disorder causes dramatic mood swings – from “high” (mania) and/or irritable to sad and hopeless (depression), and then back again, often with periods of normal moods in between. Severe changes in energy and behavior go along with these changes in mood.

- Emotional Freefall -


**Emotional Freefall**

<table>
<thead>
<tr>
<th>Mania Symptoms</th>
<th>Depression Symptoms</th>
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<tbody>
<tr>
<td>Increased energy, activity, and restlessness</td>
<td>Feelings of hopelessness or pessimism</td>
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<tr>
<td>Excessively “high” overly good, euphoric mood</td>
<td>Feelings of guilt, worthlessness, or helplessness</td>
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<tr>
<td>Extreme irritability</td>
<td>Loss of interest or pleasure in activities once enjoyed, including sex</td>
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<td>Racing thoughts, talking very fast, jumping from one idea to another</td>
<td>Decreased energy, a feeling of fatigue or of being “slowed down”</td>
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<td>Distractability, cannot even concentrate well</td>
<td>Difficulty concentrating, remembering, making decisions</td>
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<tr>
<td>Little sleep needed</td>
<td>Restlessness or irritability</td>
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<tr>
<td>Unrealistic beliefs in one’s abilities and powers</td>
<td>Sleeping too much, or can’t sleep</td>
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<tr>
<td>Poor judgment</td>
<td>Change in appetite and/or unintended weight loss or gain</td>
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<tr>
<td>Spending sprees</td>
<td>Chronic pain or other persistent bodily symptoms are not caused by physical illness or injury</td>
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<tr>
<td>A lasting period of behavior that is different from usual</td>
<td>Thoughts of death or suicide, or suicide attempts</td>
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<tr>
<td>Increased sexual drive</td>
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<tr>
<td>Abuse of drugs, particularly cocaine, alcohol, and sleeping medications</td>
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<tr>
<td>Provocative, intrusive, or aggressive behavior</td>
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<tr>
<td>Denial that anything is wrong</td>
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<tr>
<td>Lasting sad, anxious, or empty mood</td>
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These periods of highs and lows are called episodes of mania and depression. Bipolar Disorder is divided into categories according to the patterns, frequency and severity of symptoms, or episodes, of highs and lows. These classifications are: Bipolar I Disorder, Bipolar II Disorder, and Mixed States.

**Bipolar I Disorder**

Some have compared the two “poles” of “bipolar” similar to the North and South Poles (North Pole = Mania, South Pole = Depression), being in extreme opposite positions. However, this illness is far more complicated, in that between mania and depression, there lays a myriad of combinations of bipolar disorders. It is important to begin with the description of the first defined bipolar disorder illness. A person with bipolar I disorder experiences episodes of major depression and mania. There are two types of mania: euphoric in which the person is elated and full of optimism and dysphoric, in which the person is high, but also irritable, impatient, and agitated. Less common forms of bipolar I disorder exist, such as rapid cycling (a person experiences four or more episodes of mania or depression within 12 months), or mixed states (where a person experiences the symptoms of mania and depression simultaneously). Fortunately for most, time between episodes increases. After approximately five episodes, there is generally a six to nine month interval before symptoms re-emerge.

**Bipolar II Disorder**

People experience major depressions and less intense “highs” called hypomania. It is significant to mention that another state is cyclothymia, an unstable mood, with milder ups and downs than those of bipolar I or II. Hypomania and cyclothymia together are known as the bipolar spectrum disorders. Although these are less severe than bipolar I disorder, individuals with bipolar spectrum disorders still have to cope with significant difficulties in their daily lives. Hypomania tends to have more of the positive and few of the negative features of mania, but individuals with bipolar II disorder still experience severe and debilitating depressive episodes. Hypomania is of two types, euphoric and dysphoric or irritable. Students have related a “hypomanic” phase to be an extreme and very negative experience. The “racing thoughts” can have a negative focus, especially self-criticism. This high energy can be experienced as a severe agitation, to the point where people feel they must pace the floor for hours at a time. It is also of two durations, episodic and protracted or characterologic. Euphoric hypomania may feel good to the person who experiences it and may even be associated with good functioning and enhanced productivity. Thus, even when family and friends learn to recognize the mood swings as possible bipolar disorder, the person may deny that anything is wrong. Dysphoric hypomania produces irritability, emotional discomfort, impulsiveness, anger, and impaired judgment. In this mood, interpersonal relationships and work productivity suffers. A person endures a symptom referred to as ‘inner speeding’ combined with restless over-activity and racing thoughts, which can lead to a state of desperation. Hypomania frequently alternates with episodes of depression, and mood instability. Sometimes brief euphoric episodes are added to the mix. The triad of irritable episodes alternating with episodic rage and paranoid is characteristic of dysphoric hypomania.

Likewise, cyclothymia is a chronic bipolar disorder consisting of short periods of mild depression and short periods of hypomania. These symptoms may last a few days to a number of weeks. The onset is separated by short periods of normal mood. Individuals with cyclothymia are never totally free of symptoms of either depression or hypomania for more than a number of months at a time. Because the mood swings are relatively mild and the periods of mood elevation may be enjoyable, cyclothymia frequently fails to come to medical attention. The mood changes occur in an unpredictable way over many years, often disrupting the lives of individuals and their families.
Mixed States

Mixed states of bipolar disorder are more common in women and are often associated with thyroid abnormalities, lack of response to lithium (the standard treatment for bipolar I disorder), and antidepressant-induced worsening of symptoms. These mixed states are found in bipolar I, bipolar II, and bipolar spectrum disorders. A person experiences a simultaneous occurrence of both depressive symptoms and mania/hypomania with rapid cycling bipolar disorder. For doctors and clinicians, these forms of mixed states of bipolar disorders can produce diagnostic confusion. Misdiagnosis of these conditions is all too common, leading to delays in effective treatment and a higher risk for a client to experience a deep depressive episode.

Bipolar Disorder Causation

All too often a student diagnosed with BPD may feel shame. They think they could have taken certain actions to prevent this mental illness from occurring. A recently diagnosed 18 year old female, indicated that she felt she was crazy because her family had always made jokes about an elderly aunt, who for as long as she had known her, had extreme shifts in moods. Therefore, when she began to exhibit similar symptoms, it was only natural for her to assume her family would regard her as being “crazy” and possibly make jokes about her behavior. It is extremely important that both the person with bipolar disorder and all friends and family members educate themselves about BPD. It is crucial to remember no one diagnosed with BPD had the power to prevent this illness from occurring.

Currently, there is no definite research that indicates direct causes of bipolar disorder illness. However, there has been family, twin, and adoption studies completed that consistently indicate a strong genetic component, but the specific genes that contribute to the illness remain unclear. Research results have led to three possible genetic causes for this disease:

<table>
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<tr>
<th>GENETIC CAUSES</th>
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<tbody>
<tr>
<td>a. A single gene model - only one gene and nothing else plays a role</td>
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<tr>
<td>b. A polygenic model - there are a huge number of genes which individually have a vanishingly small effect but together completely explain the illness</td>
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<tr>
<td>c. A purely environmental model - genes have no role</td>
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Strategies for clarifying specific genetic bases for BPD include linkage and association methods. Linkage methods test the location of vulnerability genes by studying chromosomal fragments that are inherited together with an illness. Initially, the focus was on identifying large affected families, an approach known to be useful in disorders following simple, single-gene modes of inheritance. Currently, there has been a more recent trend to study smaller nuclear families. From these studies, a number of chromosome locations are emerging in which evidence for linkage is provided by multiple data sets. The following is a list of chromosomes discovered through linkage methods to have the clearest implications for further genetic research. They are chromosomes 1, 2, 4, 5, 13, 16, 17, 18, 20, 21, 22 and chromosome X.

Association methods examine whether a given gene variant is associated with the illness. These studies use unrelated bipolar cases and unrelated comparison individuals (controls) who are matched for potentially relevant variables such as gender, ethnicity, and age. Also utilized, are family-based association samples in which DNA is obtained from a proband (an individual or member of a family being studied in a genetic investigation) with bipolar disorder and both biological parents. These linkage and association studies using DNA markers are considered to be the cutting edge of modern approaches to unraveling the mysteries of complex genetic diseases. However, the pattern of result emerging from these studies supports the view that no single major gene exists that explains the majority of cases of BPD.

Several years ago, researchers excitedly reported to have found a brain abnormality in a group of people with BPD. Magnetic resonance imaging (MRI) has opened a window on what happens to the brains of young people who have this disorder. Researchers from Yale University are particularly interested in using these scanning techniques to look for possible differences in the shape or size of particular structures in the brain, especially those that process the emotions. Since those who have BPD have painful symptoms of emotional upheavals, researchers focused on a part of the brain that handles extreme emotions, the amygdala. It is the size and shape of an almond located deep within the very oldest part of our brains and is critical to the basic processing of our emotions. Psychiatrist Joseph Coyle, indicated in his research that the brains scanned of those with BPD showed the amygdalas of the bipolar group were reduced by over 15 %. The next step is to see if the amygdalas of those with bipolar disorder shrink as the disease progresses or whether people born with smaller amygdalas have a higher probability of developing BPD.

Diagnostic Tools

For the most part, if diagnosed, this will be a lifetime illness that one must take care of on a daily basis. Physicians must be very cautious in their diagnosis. According to Judy Prince, Psy.D., Counseling and Psychological Services (CAPS) at CSULB, “Diagnosis depends a great deal upon a detailed history of mood changes for a long period of time.” It is important to acknowledge that clinicians appear to be inadequately trained or proficient in recognizing bipolar disorder. There is clinical research suggesting that bipolar disorder is much more under-diagnosed than over-diagnosed. Part of this under-diagnosis is related to a patient’s lack of insight, whereby they deny or fail to describe manic symptoms. Thus, putting forth the necessity of having the family report symptoms they have personally witnessed or experienced.
EMOTIONAL FREEFALL

For students concerned about behavioral patterns they are experiencing, there are two self-evaluation tests that can be administered by a professional therapist or medical doctor. The first is the Mood Disorder Questionnaire (MDQ) used to diagnose Bipolar I. Physicians stress this is not to be used in lieu of a full medical evaluation.

The Mood Disorder Questionnaire (MDQ)

Y = Yes   N = No

1. Has there ever been a period of time when you were not your usual self and you felt so good or so hyper that other people thought you were not yourself or so hyper that you got into trouble?  ____
   You were so irritable that you shouted at people or started fights or arguments?  ____
   You felt much more self-confident than usual?  ____
   You got much less sleep than usual and found that you didn’t really miss it?  ____
   You were more talkative or spoke much faster than usual?  ____
   Thoughts raced through your head or you couldn’t slow your mind down?  ____
   You were so easily distracted by things around you that you had trouble concentrating or staying on track?  ____
   You had much more energy than usual?  ____
   You were much more active or did many more things than usual?  ____
   You were much more interested in sex than usual?  ____
   You were more social or outgoing than usual, for example, you telephoned friends in the middle of the night?  ____
   You did things that were unusual for you or that other people might have thought were excessive, foolish or risky?  ____
   Spending money got you or your family in trouble?  ____

2. If you checked YES to more than one of the above, have several of these happened during the same period of time?  ____

3. How much of a problem did any of these cause you—like being able to work having family, money or legal troubles; getting into arguments or fights?
   __ No problem  __ Minor problem  __ Moderate problem  __ Serious Problem

4. Have any of your blood relatives (i.e. children, siblings, parents, grandparents, aunts, uncles) had manic-depressive illness or bipolar disorder?  ____

5. Has a health professional ever told you that you have manic-depressive or bipolar disorder?  ____

Evaluation of the results is as follows: answering “yes” to seven or more of the events in question #1, answering “Yes” to question #2, and answering “Moderate problem” or “Serious problem” to question #3 is considered a positive screen for bipolar disorder.1

Another test for subtle versions of bipolar disorder is the Bipolar Spectrum Diagnostic Scale. Anyone taking this test would be informed that it will not give a definite “yes or no” answer as to whether they have bipolar disorder. As always, it is stressed that if one thinks they could have any variation of BPD, they seek out a mental health professional, a skilled therapist, Ph.D., psychologist, or a psychiatrist. Read the following paragraph all the way through first, and then follow the instructions, which appear below it.

The Bipolar Spectrum Diagnostic Scale

Some individuals noticed that their mood and/or levels shift drastically from time to time. These individuals notice that, at times, they’re moody and/or energy level is very low, and at other times, and very high. During their “low” phases, these individuals often feel a lack of energy, a need to stay in bed or get extra sleep, and little or no motivation to do things they need to do. They often put on weight during these periods. During their low phases, these individuals often feel “blue,” sad all the time, or depressed. Sometimes, during the low phases, they feel helpless or even suicidal. Their ability to function at work or socially is impaired. Typically, the low phases last for a few weeks, but sometimes they last only a few days. Individuals with this type of pattern may experience a period of “normal” mood in between mood swings, during which their mood and energy levels feel “right” and their ability to function is not disturbed. They may then notice a marked shift or “switch” in the way they feel as if they had too much energy or feel “hyper.” Some individuals, during these high periods, may feel irritable, “on edge,” or aggressive. Some individuals, during the high periods, may feel like they have too much energy or feel “hyper.” During the high periods, some individuals may spend money in ways that cause them trouble. They may be more talkative, outgoing or sexual during these periods. Sometimes, their behavior during the high periods seems strange or annoying to others. Sometimes, these individuals get into difficulty with co-workers or police during these high periods. Sometimes, they increase their alcohol or nonprescription drug use during the high periods.

After having read this passage, please decide which of the following is most accurate:

- This story fits me very well, or almost perfectly
- This story fits me well
- This story fits me to some degree, but not in most respects
- This story doesn’t really describe me at all

Now go back and put a check after each sentence in the paragraph above that accurately describes you. When you are done, total the number of check marks. Here is how to interpret your score:
It is significant to make note of the fact that when interpreting the test the words “likely” and “probability” are used. Bipolar spectrum indicates that there is no clear-cut yes or no, black or white, but instead shades of gray. Thus, the reason for basing a total diagnosis on either the Bipolar Spectrum Diagnostic Scale or the Mood Disorder Questionnaire is impossible for several reasons. Bipolar spectrum disorders are quite unrelated with regard to their ease of diagnosis. Persons taking the tests may be unable to detect these illness subcategories because they are not certain of their own periods of excitement. In their recall, it may all seem very transitory, thus not valid for marking one of the categories. Also, students taking this test who are currently depressed or hypomanic would tend to minimize or deny their hypomanic episodes, and could be inclined to deny they have any type of mood disorder.

Treatment

Across the nation, universities are witnessing an increase of entering students who have mental health issues. According to Richard Kadison, M.D., chief of the Mental Health Service at Harvard’s Health Services, “Depression is probably the most common mental health problem students face these days.” Also he reports that more and more families are asking about our mental health resources to ensure that their children will receive good care. More focus has been placed on providing assistance for those students with schizophrenia and bipolar disorder. Due to good treatment plans and medications, these students are able to attend a university, and because bipolar students tend to be very creative and intelligent, they have been able to do very well in school.

Students diagnosed with Bipolar Disorder may experience embarrassment and/or even shame because they think they could have prevented having this illness. It must be remembered that one does not “catch” mental illness, but still, students often keep the diagnosis a secret from others. It is interesting to note that with other illnesses, support groups are created offering strength and support to those members. However, persons diagnosed with Bipolar Disorder do not tend to seek out others with a similar mental illness. They purposely choose not to associate with others of similar or same mental illness for fear of being labeled. (J. Prince, personal communication, March 9, 2006). The stigma attached can be overwhelming at times. Therefore, the importance of becoming knowledgeable about BPD is critical for part of a positive treatment plan.

Another important factor to consider is the comorbidity rate for students with BPD. Comorbidity means being diagnosed with two or more simultaneous existing medical conditions. “According to the findings of the National Comorbidity Survey, 95.5% of the study’s patients with bipolar I disorder met criteria for 3 or more additional psychiatric disorders, the most common of which were anxiety, conduct disorders and substance abuse.” Approximately 50% of all patients with bipolar disorder will experience significant alcohol and/or drug abuse at some point during the lifetime course of their bipolar illness. It is quite common that adolescents and adults who have not yet been diagnosed, attempt to self medicate their unpredictable and uncontrollable mood swings with whatever is readily available: alcohol, marijuana, amphetamines, cocaine and opiates. By the time they reach evaluation, these patients are manifesting two separate and related conditions that feed upon one another, vastly complicating the treatment. Generally, it is impossible to diagnose patients with substance abuse until they have undergone detoxification and have been able to remain substance-free for a minimum of thirty days.

Clearly for students who have BPD, it is important for them to now focus on treatment in order to accomplish their educational goals. In the past, research has indicated that despite comparable IQ levels, patients with bipolar disorder completed fewer years of education. One such study used two control groups, students with BPD and students without. Although 60% of both groups entered college, only 16% of bipolar patients received a college degree. At this juncture, studies have not clearly indicated what the causes are for this functional disability in BPD students. However, there is speculation that prior to onset or during early phases of illness, the student experienced educational setbacks and challenges due to the characteristics of BPD. Therefore, those students may not pursue further education due to the consequences of their cognitive and behavioral disturbances.

For those diagnosed with BPD stress, it is not always easy for them to be students. However, all concede if they follow certain treatment steps they can achieve their educational goals. There are three primary aims for effective treatment.

The Primary Aims of Treatment

- Reduce the acute symptoms and problems associated with depression and mania
- Restore an individual to their prior level of functioning
- Prevent any recurrence of mania and depression, or reduce the severity of episodes that do occur

Treatment nonadherence is a substantial problem among patients with bipolar disorder. Therefore experts advise, students with BPD should always include in their treatment plan the following: pharmacotherapy, psychiatric/psychological therapy, and psycho-education. Students with BPD are highly susceptible for going off treatment because of the nature of this specific disease. Although treatment noncompliance may happen with all illnesses, noncompliance, especially to medication is common among patients with mood BPD, due to the lack of rationality and insight that generally accompanies such illnesses. Therefore, it is critical to understand the importance and role of each treatment component.
Pharmacotherapy

The medications are pivotal to the success of any treatment plan for BPD because the emotional swings must be stabilized so a student can successfully follow the other components of the treatment plan. Lithium, Carbamazepine, Risperidone, Olanzapine, and Quetiapine, are some of the more commonly used mood stabilizers with BPD I. Thus far, lithium still remains a primary medication used for treating BPD I. Lithium is one of the best-studied drugs in acute and long-term treatment, and it remains useful for many patients. Research indicated about one-third of patients on lithium mono-therapy remained episode-free for about 2 years. It is important to take the exact amount prescribed. If too little is taken, lithium will not be effective and if too much is taken, a variety of side effects may occur. When taken correctly, this drug can even out mood swings in both directions – from mania to depression, and depression to mania and is used for ongoing maintenance. Physicians advise students using lithium that once they have begun, it might be weeks to several months before the condition is fully controlled. However, lithium will reduce severe manic symptoms in about 5 to 14 days.

Carbamazepine, Risperidone, Olanzapine and Quetiapine can be other effective mood stabilizers. It is crucial to remember a doctor must check the progress as a result of the medication being used. Only a doctor can evaluate if a student is receiving the right amount of medicine or if certain side effects may be occurring without the patient knowing it. Also, the amount of medication may have to be changed according to the correct maintenance level. Often it is suggested a student keep a journal and record their behaviors and emotions, reporting this to their physician, psychiatrist or psychiatric nurse. Students involved in psychotherapy need the right medication to not only even out mood swings, but to prevent the mind from concluding suicide as a final possibility. Hopelessness and depression can be symptoms of BPD disorder untreated or symptoms when the correct medication is not being taken. Numerous studies have established the effectiveness of lithium in lowering the suicide risk.

Psychotherapy

The goal for psycho-education is to increase the patients’ insight into their illness and educate them about the consequences of it being untreated. Because non-adherence is often caused by a failure to understand the nature of the disorder and the importance of complying with pharmacologic treatment, helping students to understand their disorders and convincing them that a regular medication regimen is vital to maintaining health may improve adherence. Psycho-education provides this insight and adherence motivation for patients with bipolar disorder and improves clinical outcomes by reducing treatment non-adherence.

Psychotherapy

Under the care of a good therapist, psychotherapy can be an important part of treatment. A therapist may be any one of the following licensed professionals: psychiatrist, psychologist, social worker, counselor or psychiatric nurse. Students involved in psychotherapy find ways to better cope with feelings and symptoms and by understanding the disease they are more apt to change behavior.
patterns that contribute to the illness. Psychotherapy is not just talking about problems, but also, finding solutions. Those involved in psychotherapy have found that this type of therapy has assisted them in the following ways:

- Understand your illness
- Define and reach wellness goals
- Overcome fears or insecurities
- Cope with stress
- Make sense of past traumatic experiences
- Separate your true personality from the mood swings caused by your illness
- Identify triggers that may worsen your symptoms
- Improve relationships with family and friends
- Plan for the future
- Understand your needs
- Establish a stable, dependable routine
- Develop a plan for coping with crises
- Understand why things bother you and what you can do about them
- Eliminate destructive habits such as drinking, using drugs, overspending, unhealthy sex, etc.
- Understand and maintain treatment

Psychotherapy focuses on current thoughts, feelings and life issues. At the beginning, a student would see the therapist more often, but as time passes and one learns to manage problems and avoid triggers, the maintenance appointments become less often. It is important to remember psychotherapy is a tool to assist one in becoming an active participant in life. Students indicate their relationship with a therapist is a partnership. Both student and therapist work together in finding and discovering a treatment program that is effective.

**Conclusion**

Students with BPD feel far more fortunate to those diagnosed in the past when not much was known about this mental illness. Currently, students diagnosed are relieved to know they could have done nothing to prevent or cause their mental disease. Once they have accepted the diagnosis they can then begin to take responsible steps towards treatment. For many, they begin to learn the balance between stabilizing mood swings and living their life. BPD students emphasize that they must stay in close contact with those who know of their mental illness. There must always be honesty about their disease because they can tend to isolate and attempt to pretend they either have been cured or never had BPD. Psycho-education is an important segment of the treatment plan. By dealing with and accepting the facts of their mental disorder, they seem to be able to more readily deal with taking their medication, seeing a therapist, and continuing to keep updated with the latest advances in living with BPD. Also, students have indicated there is a sense of healing for them to be open about their mental illness with others. In fact, for many who have disclosed to other classmates they have BPD, they have generally been met with understanding and acceptance. Today, students with BPD can have the promise, if they stay committed to their treatment plan, of having the opportunity to successfully complete an education and achieving their desired goals beyond CSULB.

**References**


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