Bipolar Disorder: Its Effects on Your Appearance and Your Life

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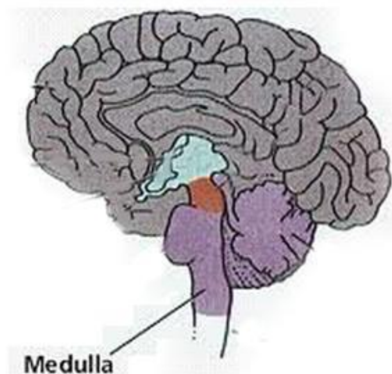
Abstract

How can Bipolar Disorder affect your appearance, your life, and those who love you? Bipolar disorder, also known as manic depression causes severe mood swings from feeling energized and/or irritable to feelings of sadness and hopelessness. These episodes of dramatic highs and lows are very common and are often accompanied by normal moods in between. Fortunately, bipolar disorder is treatable and manageable with medications and psychotherapy. Although treatable, the long lasting affects Bipolar Disorder leaves on the individual and those who care about him/her is occasionally permanent. Having any type of illness in the family can be detrimental to the family structure, relationships, financial situations, etc. The most important thing to do if you are someone caring for a person with Bipolar Disorder is to remind yourself it is not their fault, and they are unfortunately not in control of their actions and moods. Moreover, providing them with the correct professional help they need is crucial in order to see improvement in the patient. It is vital to understand what changes will occur when someone close to you is diagnosed with Bipolar Disorder. To exemplify the aforementioned statement, daily activities such as getting dressed, brushing teeth, and eating breakfast will become challenges for the individual especially when they are experiencing their mood swings. Episodes of severe depression can last weeks, causing the individual to remain in bed and become extremely unmotivated. Ultimately, the person needs support and they need to know that they are not alone in this treacherous battle.

"This is my simple religion. There is no need for temples; no need for complicated philosophy. Our own brain, our own heart is our temple; the philosophy is kindness."
— Dalai Lama XIV, The Dalai Lama: A Policy of Kindness: An Anthology of Writings By and About the Dalai Lama

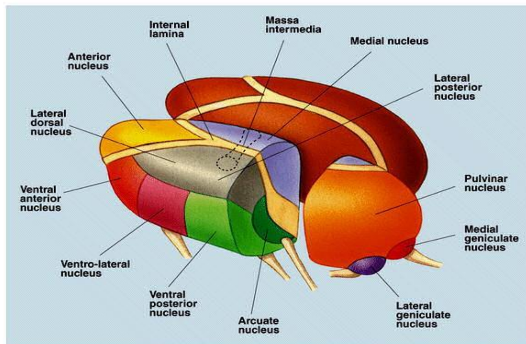
Bipolar disorder is a manic-depressive disorder. It is a difficult hereditary illness where the core feature is pathological interruption in mood that runs from extreme to severe cases of mania to depression. The central core is located in all vertebrates. It has five important regions that help adjust basic life progress: arousal, breathing, balance, sleep, and pulse. The human brain includes the medulla, the pons, reticular formation, thalamus and cerebellum. Bipolar disorder interrupts these functions, altering thinking and behavioral actions.[16]

The medulla is found in the brain stem and has a cone-shape. This part of the brain sends messages to the thalamus and spinal cord. The medulla is also known as medulla oblongata and assists the regulation of digestion, swallowing, sneezing, breathing, heart and blood vessels function. It also contains myelinated and unmyelinated nerve fibers.[8]

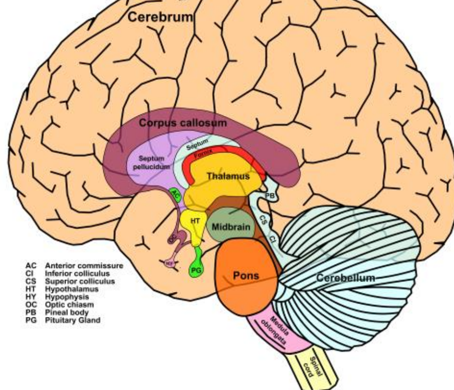


The Thalamus has two symmetrical halves located between the cerebral cortex and the

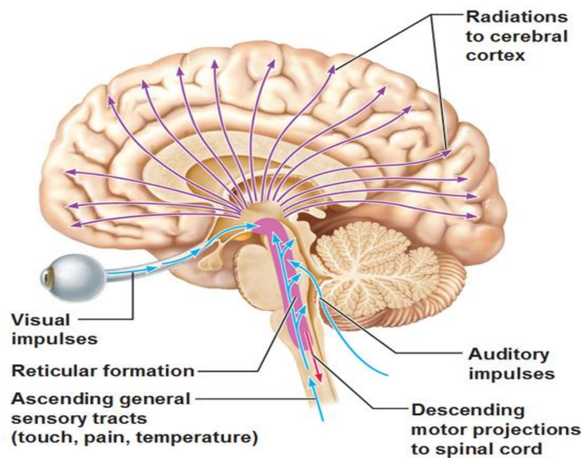
midbrain. The functions are sensory and motor signals to the cerebral cortex. It helps regulate consciousness, sleep and alertness. It also derives blood supply to many arteries, like paramedian thalamic- subthalamic arteries, inferolateral arteriesand posterior choroidal arteries.[9,10,11]



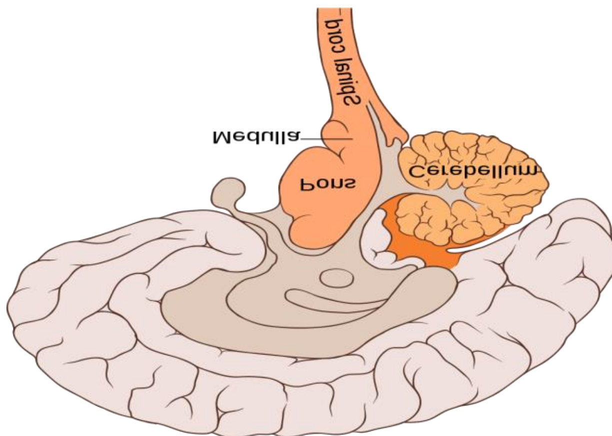
The brainstem also known as brain stem, is located on the posterior part of the brain. The brainstem consists of medulla, pons and midbrain. It provides sensory and motor innervation to the face and neck through the cranial nerves. It is the regulation of cardiac and respiratory system as well the central nervous system. It receives blood supply from the basilar arteries and the vertebral arteries.[12]



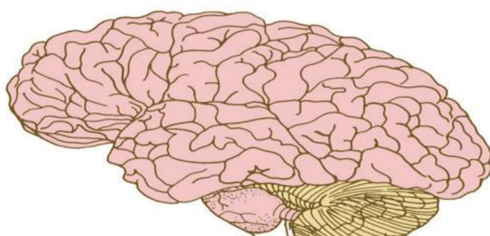
The Reticular formation is located throughout the brainstem, and includes neurons located in different parts of the brain. It regulates and maintains behavioral arousal and consciousness.



The Pons also known as pons Varolli, which means "bridge of Varolius" rests between the midbrain and the medulla and in front of the cerebellum. It measures about .98" in length, and it has a nuclei that sends signals from the forebrain to the cerebellum that deals with sleep, swallowing, respiration, bladder control, hearing, equilibrium, eye movement, taste, posture, facial sensation and expressions. The pons center controls the changes in inhalation to exhalation. In addition, when humans sleep the pons assist in the generation of dreams.



Cerebellum means, "little brain" in Latin, it is necessary for the motor control, cognitive functions such as language and attention, it controls fear and pleasure responses. One important fact about cerebellum is that it doesn't start movement, however it contributes to accurate timing, precision, balance and coordination.



"I'm the girl who is lost in space, the girl who is disappearing always, forever fading away and receding farther and farther into the background. Just like the Cheshire cat, someday I will suddenly leave, but the artificial warmth of my smile, that phony, clownish curve, the kind you see on miserably sad people and villains in Disney movies, will remain behind as an ironic remnant. I am the girl you see in the photograph from some party someplace or some picnic in the park, the one who is in fact soon to be gone. When you look at the picture again, I want to assure you, I will no longer be there. I will be erased from history, like a traitor in the Soviet Union. Because with every day that goes by, I feel myself becoming more and more invisible..."
— Elizabeth Wurtzel, **Prozac Nation**

Patients who were diagnosed with bipolar disorder feel like the world is shrinking and alone they will be gone just like the rest of the world. It's a feeling of loss, sadness and loneliness all together in one single person.

The word "bipolar" means "two poles," the mania and depression. According to Dr. Sanjay Gupta from CNN (2014), "it is a mental illness that affects more than 6 million Americans". However, this diagnostic is vague and faulty due to the immense number of individuals who do not seek medical care. Women and men alike are equally prone to bipolar disorder, but, in 2005 a study in the "American Journal of Psychiatry," found that men are more likely to manifest manic episodes at a young age. There are four types of bipolar disorder: Bipolar I Disorder; Bipolar II Disorder; Bipolar Disorder Not Otherwise Specified (BP-NOS) and Cyclothymic Disorder, or Cyclothymia. Bipolar is a hereditary disease, which means it

passes through DNA. Some research shows that people with specific genes are higher at risk to develop the disorder. Although bipolar disorder is hereditary, in most cases, not everyone in the same gene pool will develop it. Moreover, bipolar disorder cannot be cured; it can only be properly treated under medical supervision.

Bipolar disorder, also known as, Bipolar Depression or Manic Depression can be considered a brain disorder because it causes abnormal changes in someone's mood, daily activities, energy, and anything that is related to your nervous system. The manic part is the highest of the high, no breaks, and the depression part is when you feel the lowest of the low. The disorder affects the frontal lobe of the brain, which is the part of the brain that involves the motor function, memory, speech, and social and sexual behavior. The deep part of the frontal lobe is the amygdala; it is the integrative center for emotions, emotional behavior, and motivation. Bipolar disorder can also cause episodes of hallucinations or delusions.

Bipolar I disorder, also knowing as the "classic" bipolar disorder, is determined by manic or mixed episodes that could last seven days. If someone presents severe manic symptoms, immediate hospital care is needed. Manic episodes could bring bizarre mood swings. To exemplify, a person displaying symptoms like agitation, does not need much sleep, is very impulsive, could be easily distracted and has ambitious ideas. However, the depressive episodes are the complete opposite. Depressive episodes produce feelings of sadness, hopelessness, guilt, and worthlessness. Furthermore, patients could experience difficulty concentrating, a lack of interest in normal daily activities, and unusual eating and sleeping habits. Typically, a depressive episode is when one experiences a few to several of these symptoms during the day for more than two weeks.

With bipolar II disorder, depression is the leading characteristic. People who have bipolar II disorder can also experience manic episodes called, "the hypomania," a mild form of mania. Someone with Bipolar II disorder refuses to understand or doesn't want to realize that something is wrong with them, making the situation unbearable to deal with. Usually, in this case, close family and or friends identify the disease. Studies show women can be more prone to have Bipolar II than men. Bipolar II is often mistaken for depression because hypomania is such a mild form of manic that it is harder to be detected. As time passes, a person who doesn't seek treatment for Bipolar II, the "up" period, the hypomanic, can turn into a depressed state.[6]

The third type of Bipolar disorder is, Bipolar Disorder Not Otherwise Specified (BP_NOS), and this kind of disease doesn't match either criterion from Bipolar I or Bipolar II. To be considered Bipolar I, manic episodes have to last several weeks because if not then it is diagnosed as Bipolar Disorder Not Otherwise Specified.[5]

Another type of Bipolar Disorder is Cyclothymia or Cyclothymic Disorder. The symptoms detected by others surrounding an individual with this type of Bipolar Disorder is moodiness. Cyclothymic Disorder is also a very mild form of Bipolar Disorder. Cyclothymia and hypomania are slight depressions. A critical form of Cyclothymic Disorder known as Rapid-cycling Bipolar Disorder, and usually happens when a person has several episodes of extreme depression, hypomania, mixed states or manic attacks all in a period of one year. Studies show that individuals who were diagnosed with rapid cycling had their first episode of rapid cycling four years before the second episode. Also, rapid cycling is more common in people who have their first attack at a very young age.[6]

Using modern diagnostic, studies propose that the widespread of bipolar disorder is very similar amongst women and men, with onset around the age of twenty one, however the same study couldn’t prove the spread of the same rate as the first study among different populations. Thousands of people suffer from mental illnesses, but only few seek treatment. Unfortunately, when no help is received, the illness progressively worsens and many resort to taking detrimental actions in order to cope. For example, with bipolar disorder, come risks of suicide. To exemplify, about 15% of the patients take their own lives.[16]

Working with patients, I was exposed to so many illnesses and bipolar was one those that I was very interested in because my paternal grandfather and aunt were both diagnosed with the disease. Speaking to my first cousin who told me about the family disease, Leila was telling me that so far it seems like it skipped a generation, the cousins. I wasn’t aware of the genetics in the family for so long and one day speaking to Leila she told me about the disease that runs in our family. The reason why I wasn’t aware was because we moved so much and I was more close to my mom’s side of the family, so for years I just thought my grandpa was “moody” and he was just getting old and losing his mind. She was telling me that our grandfather who passed away at age of 90 years old had bipolar and schizophrenia mental illness. It was big revelation for me, at the age of 25. She went on telling me that before he passed away, he was very violent at times and sometimes he was so sweet and kind. He had his “highs” when he was so happy and wanted to do everything at once, but when his “lows” came, he was sad, tired and barely get up from bed.

"The so-called ‘psychotically depressed' person who tries to kill herself doesn't do so out of quote ‘hopelessness' or any abstract conviction that life's assets and debits do not square. And surely not because death seems suddenly appealing. The person in whom Its invisible agony reaches a certain unendurable level will kill herself the same way a trapped person will eventually jump from the window of a burning high-rise. Make no mistake about people who leap from burning windows. Their terror of falling from a great height is still just as great as it would be for you or me standing speculatively at the same window just checking out the view; i.e. the fear of falling remains a constant. The variable here is the other terror, the fire's flames: when the flames get close enough, falling to death becomes the slightly less terrible of two terrors. It's not desiring the fall; it's terror of the flames. And yet nobody down on the sidewalk, looking up and yelling ‘Don't!' and ‘Hang on!', can understand the jump. Not really. You'd have to have personally been trapped and felt flames to really understand a terror way beyond falling." ― David Foster Wallace

Only someone who has gone through depression can relate to this kind of feeling. It is easy to be an outsider and think this is just a phase, but in reality, these people are suffering in silence and begging for help. It is imperative for family or friends to get them help if the individuals choose not to do it for themself. These individuals feel trapped; they are unstable and incapable of asking for the help they so desperately need.

Bipolar Disorder research has come a long way, and the history of this disorder started around the 1st century. An ancient Greek physician named Aretaeus (not known) was the first to initiate the process of noticing symptoms of Bipolar Disorder in people. His notes about mania and depression were unnoticed for centuries. The words "mania" and "Melancholia" are ancient Greek words and the modern terms are, manic and depressive. Because the medical field wasn't as advanced as it is today, around the world people were being executed for having Bipolar Disorder, and other mental conditions. The church stated that demons possessed those individuals with Bipolar Disorder. Due to lack of knowledge, the medical field ordered the church to punish these sick people with death. (Krans,2012)

It was not until the 17th Century when the author of the book, The Anatomy of Melancholy, Robert Burton (1577-1640), wrote about how to treat patients with melancholy episodes through dance and music. The book pointed out effects of depression on society. Later in the 17th Century when Theophilus Bonet (1620-1689), wrote a book title Sepuchretum, on how he performed more than 3000 autopsies and how he was able to associate mania and melancholy together. This was a breakthrough since mania and depression were considered separate disorders (Krans, 2012).

Centuries went by with no new discoveries in Bipolar Disorder, until 1851 when a French psychiatrist named Jean-Pierre Falret (1794-1870), wrote an article on how patients would quickly switch from deep depression to manic episodes, and how this could be a genetic connection. This was known to be the first document discovered in Bipolar Disorder, and to this

day medical professionals do believe in the genetic relationship. However, Sigmund Freud (1856-1939), known as the father of psychoanalysis, believes that: "society and the suppression of desires played a significant role in mental illness." Bipolar Disorder was still a mystery and mistaken by the church as a demon possessed body or by the medical field as a mental condition with no treatment. (Krans,2012)

The history of Bipolar Disorder was about to change when a psychiatrist, from Germany named Emil Kraepelin (1856-1926) known as the father of modern psychiatry, broke away from Freudian theory. He was the first psychiatrist to study mental illness and the biological causes. In 1921 Kraepelin wrote a book *Manic-Depressive Insanity and Paranoia*, which in detail identifies schizophrenia, also known as praecox and manic depression. Moreover, Kraepelin was the first to initiate the use of drugs to treat mental disorders. It was only around 1950 when another German psychiatrist Karl Leonhard alongside many others had a more thorough understanding of the disease, thus, providing appropriated treatments. (Krans,2012)

Unfortunately, because bipolar disorder is a brain illness, it cannot be cured. On the other hand, it is treatable, consisting of a life of treatments, and special attention. Procedures vary depending on what kind of bipolar disorder the patient has. However, what works for one person doesn't necessarily mean it will work for someone else, but with effective treatment, bipolar symptoms can be managed. It's reasonable for a person to try several types of medication until they find the best, most suitable one.

The symptoms of bipolar disorder can change with different medicines. The most common types of drugs according to The National Institute of Mental Heath to treat bipolar disorder are mood stabilizers, atypical antipsychotics, and antidepressant. The first in the line of treatment is the mood stabilizers, which contain lithium and anticonvulsants. When taking certain medications such as, divalproex sodium or lamotrigine, regular blood work is required due to the side effects of those drugs. Side effects can include memory problems, dry mouth, increased urination, hair loss, weight gain, acne, and thyroid problems. According to "The National Alliance on Mental Illness (NAMI), "about 30 percent of individuals who try lithium as a treatment will not be able to tolerate it."(WebMD) This is a significant statistic and should be considered when deciding on means of treatment.

Atypical antipsychotics are used to treat manic, or mixed episodes and the drugs include olanzapine, aripiprazole and risperidone. Side effects can include weight gain, sedation, skin rash, and blurred vision. Antidepressants are also another medication to treat Bipolar Disorder, and usually are combined with a mood stabilizer, because antidepressants can cause manic episodes. Side effects can include sexual problems, dry mouth, nausea, and drowsiness. In addition to medication, it is recommended that patients try therapy. Therapy can significantly help the patient’s relationships with family members and friends and can help them maintain a normal social life. Therapies can include cognitive behavioral therapy, family therapy, interpersonal therapy, and psychoeducation.[5]

Many celebrities came out clean about their fight against this disorder, for example, Vivien Leigh is best known for her act in *Gone With the Wind*, Carrie Fisher from the original

Star Wars, Jean-Claude Van Damme, Linda Hamilton, Sinead O'Connor, Vincent Van Gogh, Catherine Zeta –Jones and much more.[3] "Whenever you read a cancer booklet or website or whatever, they always list depression among the side effects of cancer. But, in fact, depression is not a side effect of cancer. Depression is a side effect of dying."
― John Green, The Fault in Our Stars

"Mental illness is nothing to be ashamed of, but stigma and bias shame us all."- Bill Clinton.

This is a powerful quote demonstrating that your mental illness does not define you and as a society we should work together to defy the stereotypes associated with mental illnesses. Working in the dental office for five years and then having this great experience at NYU working towards my dental hygiene degree, I encountered many different patients with mental illness. They are just like everyone else; their illness is just a part of their life, it is not their entire life. I consider myself lucky to have met them and to be able to make a difference in their lives.

I had a patient at my first office in Trumbull, Connecticut who I talked to last week and was not until then I realized how many people with bipolar disease struggle on a daily basis with simple things. Mundane activities like, showering, getting dressed, eating and among those brushing and flossing teeth become activities that certain people can not even get out of bed to perform. This demonstrates how severe Bipolar Disorder can get and how badly it can interfere with people's daily lives. It is important to understand that this doesn't just affect the person suffering; it affects all who care about them and together they must try to overcome the terrible ups and downs.

Beth Chobody is 29 years old. She graduated from McIntosh College Dover, New Hampshire as an English major. Beth is 5'3' and weighs 120 pounds; she is a brunette with hazel eyes. On the outside, Beth looks healthy, beautiful and content, but deep inside Beth has a mental illness she has been battling for years: bipolar. Beth is a regular patient at my old office; she is kind, sweet and always polite. She came to the office every six months for a cleaning and x-rays and was on time for any other procedure. She was quiet and tried to keep a smile on her face, but that smile used to fade away pretty quickly. That always intrigued me, and at times Beth would not come for a year. I called to remind her she missed her appointment, and I thought it was just

because she was busy like most of us. Naturally, I didn't think too much into it, because we all live hectic lives.

I was the main assistant for my DDS. He had a hygienist and his schedule was very busy and due to the hectic schedule, the hygienist had his own assistant and that day she was out sick. My boss asked me if I could assist the hygienist instead of him because his schedule was much lighter and of course I went. My third patient that day was Beth Chobody. She walked in as usual and took a seat on the dental chair, and as a protocol I had to go over her medical history as well take her vitals. I took her vitals, which were normal, and quickly I asked her if she had any changes in her medical history. It took her few seconds to answer me and then she said, YES. For a second I was surprised because this was a shy girl and she was so young and in 2 seconds, my head was spinning and trying to figure what could she probably say, and I returned to her and asked if was vitamins. To my surprise, she said no.

I turned to Beth and asked her what had changed, and then she told me she was diagnosed with bipolar disease. I was staring at her for few seconds, which felt like an eternity. I knew Beth for a couple years now, and having the outgoing personality that I do, I wanted to keep a smile on my face. After hearing the pain in her voice when she revealed the news of her diagnosis, my smile faded away. I gently took a seat next to her and gave her the medical history paper. She took the pen from me and made changes in her medical history. I took the papers from her and pretended everything was ok because it was ok; it was me who wasn't ok.

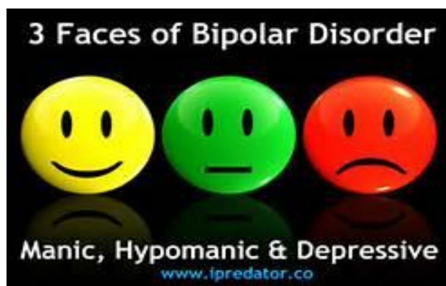
I walked away for few seconds, then I came back, pulled a chair back and asked her if I could ask her few questions. My head was spinning with millions of questions. Some were because the disease intrigued me, some because I wanted to know if she needed help, if I could help and how it all started. I asked Beth if we could talk for few minutes before the hygienist would initiate the cleaning and she said of course. Beth was 25 years old when we first had this conversation. We had many conversations after the first one. She told me she was very young when her parents started to notice differences in her, and they were very concerned because her aunt on her father's side was diagnosed with bipolar illness at the age of 17. To my surprise, Beth knew she had bipolar disease since she was 15 years old, but never told anyone due to embarrassment and fear of people looking at her differently.

It was a fascinating and educational conversation. Beth said she always felt different compared to the other kids, sad at the time and super agitated at other times. She had a hard time focusing on simple things and couldn't keep one friend, let alone a boyfriend. At the age of twelve, she was seeing a psychologist who just thought what she was experiencing was part of the "teenager" phase. She went to several specialists until she found Dr. April, who had kindness and saw a problem with her instead of a small phase she would eventually grow out of. Dr. April knew how detrimental Beth's symptoms could be and she was eager to help. Her parents were very supportive and knew something was wrong; they also knew bipolar disease ran in the family, but like any other family they hoped it would never happen to them. Beth has been on medication for years, and she takes Latuda, 40 mg. She's been on several medications before this one.

I asked Beth how she feels and how she deals with an everyday task, including work, social life, and her oral care. She was very honest and told me that her primary concern was herself and how she was going to wake up the next day. She went on telling me that keeping a job was a struggle and she only had one boyfriend, and barely any friends. She reads a lot and tries to educate herself about her disease. She said her oral care was the last thing on her mind and it was her parents who kept the tab on her appointments and made sure she would make it to her appointments on time. Beth's parents also monitored her medication, ensuring that she took it every day and on time.

After I had left the room and I asked her if we could talk more and she said yes. I asked her why only now she told us at the dental office about her illness and she said it's because she trusted me and I was always so kind to her. It made me wonder how many more patients I have with the bipolar disease that feels embarrassed to come out clean or ask for help. Moreover, it made me think of those patients who come but don't return for years. Is this because of an illness that I don't know about it? How can I help them?

"One person's craziness is another person's reality." – Tim Burton



I was very young when my grandfather died, and I wasn't aware of his illness until later on in life. Growing up with him wasn't anything but just sit there and watch TV. By the time I was able to sit and enjoy my grandfather's company, he was highly medicated and then I didn't know the difference. However, talking to my cousins, uncles and my father, I could only imagine what they went through in life until they discovered my grandfather's mental illness. I knew my grandma left him even before I was born, but to me that was normal. I didn't know the difference until one day my mother told me the reason why she left him (never got divorced) was because she was "afraid "of him. It was years later that my grandma also understood my grandpa's "mood swings" and "craziness." I guess not even my grandfather's parents knew what was going on. My grandma loved my grandpa very much, but she was afraid of him, causing her to walk away from her marriage. Although she left him, she still always tried her best to take care of him.

Relationships can be amazing, but difficult as well. Finding out your partner has mental illness can be a challenge, and the responsibility of the health partner can increase, especially if children are involved. The good news is, with time mental illness with the right treatment can get

better and be controlled. However, the road can be a rough one and to continue to love and understand your partner with a mental illness is crucial. The marriage can go through tough times, and the other partner can blame him/herself until they discover the ugly truth about their loved one. The health issues the person can suffer from depression and anxiety thinking it is their fault that the marriage is failing, but in reality it is no one's fault. (Harper,2012)

The ill spouse is not aware of their own symptoms and accepting that they have a mental illness and seeking help for it can take a long time. Even after help is delivered, recovery can take just as long or longer. It's imperative for the healthy partner not to blame him/herself and not try to change the ill spouse. Understanding is the key to making the relationship work and trying to change the other or telling them what to do will make the situation worse. (Harper,2012)

Being in a relationship with someone with bipolar disease, is like being on a rollercoaster, and medications may work one day and stop the next or the medication prescribed at first might never work. Learning about the disease is crucial, but being obsessed and making the "illness" your marriage is not healthy to either party. Being able to help and manage the disease is great as long as both involved in the relationship agree with it. Worrying only about the condition can make the healthy partner lose him/herself. Make sure not to stop doing what makes each happy, like shopping, exercise, hanging out with friends. (Harper,2012)

Living with someone with the bipolar disease is very challenging, and divorce is higher due to the condition. To demonstrate, the only reason my grandparents didn't legally get a divorce, was because divorce in a Japanese family is seen as a disgrace. However, not many people think that way; at times it can be rough due to mood swings. Some are rapid, and some are slow phases. Many times the manic episodes make the healthy partner angry, frustrated and make them wonder why they are still in a relationship like that. The healthy partner should remember the happy times and when the rough times come along, keep in mind it is the "illness" and not the happy person.[8]

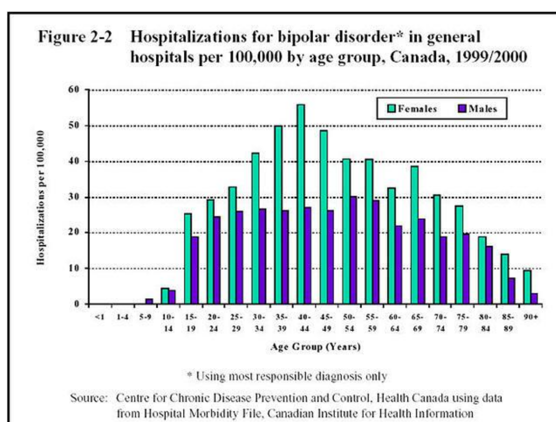
To care for someone with mental illness is not an easy task and no one asks for it, but taking care of the mentally ill partner can be like having a second job. Making sure the person is taking their medication is critical, but also challenging. Keeping an open conversation is imperative, talking to them and making sure their needs are met is important to be able to help and understand them. Always remember why you married that person and how important they are to you.[8]

Whether it is a relationship or a marriage, the people involved are always looking for happiness, peace, and stabilities. Mental illness is never a choice in a marriage; however, it does happen and can cause copious amounts of stress. Cases of euphoria, the partner with a bipolar disease can go and do insane things without thinking the risks he/she are putting towards the family. The person can spend more money that he/she has, putting their family in dangerous financial situations. Some people do not experience the mania or depression phases, but for those who do experience those episodes, thinking clear is impossible and impulse judgments do happen. These effects can put the relationship at risk.[5]

On the other side is the depression phase, is when the person involved in the disease can completely check out, making the other partner hopeless.[5] Having a case so close to me with mental illness, it makes me wonder how difficult it must be for a family member be able to cope with mental illness because you could marry someone with bipolar disease. However, you could also give birth to a child with a mental illness. Unaware of the situation, or lack of understanding of sickness, unconsciousness parents do blame themselves thinking they did something wrong and their loving child was born with the disease they caused. They grieve and they grieve more, and there is big chance of parents always blaming themselves due to the lack of power for not being able to do something to help their child. (Harper,2012)

Parents fear for what kind of future their beloved child might have, and their dreams and hopes all of the sudden become fear as the reality sinks in. However, to keep up with such stress on a daily basis, the family member needs to learn how to take care of themselves and make sure they won't spread the fear among their other children. Some siblings might not be able to understand the situation due to age or might act out due to personality. They might not be able to comprehend why so much pressure and expectation is on them and misunderstand might happen more often them parents would like too. It's imperative to keep communication open with both parties and make sure that ill or healthy child understand the changes and differences in the house. (Harper,2012)

Having a child with bipolar disease or marry someone with mental illness is not an easy task and can be tough. Supporting groups are critical for parents and spouses learn how to cope with such scary disease. Family structures change with the news of someone having a mental illness, however, its not impossible to live and learn how to cope with the illness. (Harper,2012)



"There are only two ways to live your life.
One is as though nothing is a miracle.
The other is as though
Everything is a miracle."
Albert Einstein

Bipolar disorder remains a disease that many people prefer to not talk about, yet it is a mental illness that if it is left untreated can lead to dangerous outcomes, including death. Family and close friends are a major support system for the discovery and treatment of bipolar disorder. However, friends and relatives are not sufficient enough to help a loved one that suffers from the mental illness; it requires a team of skilled professionals to help one person. A psychiatrist is the leading professional to diagnose a person who might suffer from the disease, which also includes the treatment of a psychiatric nurse, social worker, and psychologist. (Mayo Clinic)

Each person is different and receives the treatment according to the individual's needs. To start the initial treatment, patients will have to take medications to control and stabilize the symptoms of the illness. Once the symptoms are controlled, the doctor along side with the patient will work towards a long-term treatment. The patient's awareness of the need of a lifelong treatment is crucial for the treatment to work properly. However, many of them stop the treatment as soon as they feel better increasing the risk of relapse. These relapses include full-blown episodes of mania or depression. It is possible that a daily program might be necessary for the initial treatment, to provide acknowledgment and support at the beginning of the long-term treatment. (Mayo Clinic)

Another important factor is the use of a substance, like alcohol and drugs, because it will have a significant impact on the treatment of bipolar disorder. Patients will need to refrain immediately from using substances if they are seeking a successful treatment. If at the initial treatment the doctor feels the patient is at any risk of hurting him/herself, hospitalization could be an option to keep patients out of danger. That stage of the disease is considered the psychotic phase, where patients detached themselves from reality and often take their own life. It is imperative that in the initial discovery of the disease, patients have the appropriate team of professional to make the transition smoother for both patients and family members. (Mayo Clinic)

There are several medications available for the treatment of the mental illness, and each will be prescribed according to the symptoms the individual presents at the time of the evaluation. These may include history and past signs of the disorder. Medication might include: mood stabilizers, antipsychotics, antidepressants, antidepressant- antipsychotic and anti-anxiety drugs. (Mayo Clinic)

Mood stabilizers are used if the patient presents with Bipolar II or I. Usually, patients will need this type of medication to control the mood, going from mania to depression. Examples of drugs include lithium, valproic acid, divalporex sodium, carbamazepine, and lamotrigine. Antipsychotics can be prescribed when the mood stabilizer creates dangerous symptoms. When these symptoms progress, adding another medication is essential for the treatment. Some medications are including Zyprexa, Risperdal, Seroquel, Abilify , Latuda, Saphris. (Mayo Clinic)

Some doctors might find it necessary to add a prescription for an antidepressant in addition to the mood stabilizer or/and antipsychotics, in order to prevent the antidepressant that might cause the manic episode. The FDA (Food and Drug Administration) approved a medication called Symbax. This is a combination of both antidepressant and antipsychotic. Some doctors also might find it necessary to prescribe an anti-anxiety to help with the symptoms of anxiety and to promote relaxation and sleep. (Mayo Clinic)

One of the major concerns about patients who are on the right treatment plan is that the medication will often give them side effects, or it will work. If the medications give them side effects, patients might decrease the intake of the medication on their own or completely stop taking the drugs without consulting their doctor. That could cause major problems concerning their well being, leading to severe episodes of mania or depression. (Mayo Clinic)

Another fact that is a concern among medical professionals is that if the medication works as it is supposed to, patients will feel better and decrease the intake of the medication or stop taking it all at once without consulting their doctor. Also, it could cause recurrence of the episodes without patients not even noticing. (Mayo Clinic)

Finding the right drugs that will properly work according to the needs of each individual might take time and perseverance to continue with the treatment. Adjusting to the medication or receiving the effect by the same drugs will cause excitement (if it works) or disappointment (side effects). The significant goal is to help patients continue a lifelong treatment to avoid relapse. Moreover, doctors aim to encourage the patients who experience side effects not to give up, but to keep trying until they find the right drugs that will work according to their needs. However, it takes a group of skilled professionals to help one single person find the right path without getting too disappointed. How about those who can’t afford it or do not want to accept the fact they have a mental illness? How can society, family, friends, and community find the right way of helping those who can’t accept the reality??

“When one door of happiness
closes another opens but
often we look so long at
the closed door
that we do not
see the one that
has been opened
for us.”
Helen Keller

One of the best features at NYU, among many others, is the exposure to such a diverse community. I am in my 3rd semester as a Dental Hygiene student, and I have seen patients since my 2nd semester. I have treated patients with HIV, HPV, depression, smokers, alcoholics, anxiety, diabetics, and the list goes on. I had few patients that had bipolar disorder, and to my surprise, one of them was very open about it. On the other hand, others were more reserved to share their story.

At NYU, we have one clinic (1A) where first-time patients walk in with problems, like a severe toothaches, infections, broken teeth, and the list goes on. Vicky is one of our every day patients that comes to our clinic with severe pain. Before I saw her for a cleaning, she had walked in the clinic with an acute infection on her lower left molar and needed treatment immediately. She stated that she couldn't eat, drink or sleep. Vicky is our typical patient we get to see on a daily basis; she was treated with antibiotics, radiograph and painkillers. It was recommended before any dental procedure that Vicky would come back in seven days after the infection cleared up for a treatment plan. This treatment plan includes a cleaning, which she never had done before in her life.

The DDS that treated Vicky sent me a text and asked me if I could see a patient of his for a cleaning in a week. It was explained to me that it was a young woman that has never been to the dentist in her life. This woman also happened to be suffering from bipolar disorder. Immediately, I was fascinated in meeting my new patient.

Vicky is from Russia, and resides in the United States for ten years now. Her family immigrated to America for the same reason many immigrants, including myself, come to the land of opportunity; education, stability, and security. Her oral care is not her priority in life due to the lack of insurance and money. Moreover, because of her consuming disorder, medical attention was not her first priority. However, what intrigued me the most of Vicky's story was her age. She is only 21 years old and already knows she suffers from bipolar disorder. I knew about her mental illness from reading her medical history, but I had to ask her all of the questions all over again, and she was very comfortable answering all them. Naturally, I was immediately interested in her story since I am writing about a bipolar disorder. During her appointment, I asked her if she would be willing to talk to me about her story after her treatment. To my surprise, she said she was more than happy to stay and speak to me.

Two hours later, after the requirements were done, radiographs were taken and prophylaxis all set, I thought Vicky would like just to leave, but once again she surprised me and asked me where we could talk. I told her we could stay in the room if she didn't mind and my mind was racing with so many questions and curiosity to get to know this young woman facing such illness that would haunt her for the rest of her life.

Of course, I didn't jump in at once, and I started asking about her family. Vicky is the youngest of 4 children; she has three brothers, making her the only girl. She told me her mom's dream was to have a baby girl, and she wasn't going to stop until she was holding a little girl in her arms. Vicky went on saying that her mother's dream came true, but she felt like she has now ruined her mother's dream because of her disorder. The radiant smile she once had slowly began to fade away from her pink lips. I was apprehensive to say something and interrupt her thoughts, so I let her go on and she continued saying that growing up wasn't so easy as her parents thought it would be.

Vicky said she had a rough childhood back in hometown Russia, where money didn't come so quickly, and her father had to work day and night to be able to provide food on the table. Her mom being a stay home mother couldn't do much since she didn't have a college

degree and needed to stay home to raise her and her oldest three brothers. However, she said her mom did what she could, like baking a cake, cookies or bread to sell. She even began sewing clothes or washing neighbor's laundry for extra cash. Vicky explained that it was a party at her house when her mom made some money, so she knew she would be able to obtain a new pair of shoes or simply a chocolate bar. While she was telling me this, she kept staring at the floor like she was watching a movie about her life right in front of her.

At the age of eight years old, her parents couldn't bare the fact that they were unable to give their children the best lives. It was not until a friend of her family introduced them to someone who was living already in America for several years and was doing well. She said this friend was willing to help Vicky and her family move to America and create a new start. Vicky was almost eight years old when they relocated to America with her parents and brothers. Vicky said she always thought she was different, however, she thought this was because her family didn't have money and she was often left out among her friends or mocked for not having beautiful clothes or toys.

Vicky explained that her transition to America was difficult at first, however she was happy to see a variety of food she was never exposed to. Moreover, it pleased her to see her parents having less stress, even though their financial situation was still not the greatest. Necessities such as food, rent, and clothes became the top priority instead of oral care. Vicky said by the age twelve her bipolar symptoms were progressing. However, she still didn't know what was going on, and problems among her family commenced. She explained that when she started feeling what soon became depression, her mother thought this was Vicky's body preparing for her first menstrual cycle. Likewise, when she was experiencing small cases of manic episodes, her mother attributed this to being in love, or happy. Vicky went on saying she always felt different and most of the time she preferred to be alone. She only had one real girlfriend, Mariah.

At the age of fifteen, Vicky's life became out of control and fights would break out when Vicky didn't have the strength to get up to go school and her family thought she was just lazy. Similarly, when she was "hyper", they would think she was abusing drugs. Things got so out of control that her parents got physical with her a few times. I asked her if she resented her parents and she shook her head no because she knew her parents didn't know what was going on with her. Their confusion, frustration, and worry brought out the worst in them and it continued to until she was about eighteen years old.

Vicky took a few deep breaths, and I finally asked her how she discovered her disorder. She responded by telling me that Mariah's mother was the one who first brought up the subject. Vicky never heard about the illness, and her parents had not either. Her best friend, Mariah, was the only friend Vicky had since 5th grade and Mariah would occasionally mention to her mother how Vicky wouldn't go to school for days and then other times she was very hyper. Mariah's mom is a nurse and took an interest in her daughter's best friend. She was exposed to so many illnesses; therefore, she understood what was going on with Vicky. Certainly, without appropriate diagnosis, Mariah's mother could not prove anything.

Vicky said the worst part was trying to explain to her parents what was going on with their daughter. Their lack of education made it difficult for Vicky's parents to comprehend that their little girl needed help. Vicky was another story; she always knew deep inside she was different, but discovering she had a mental illness did not come at easy either. Initially, Vicky grew depressed but she did not think it was serious. Vicky, like many other bipolar patients, thought she could handle herself and control her motions. Nevertheless, she went through a

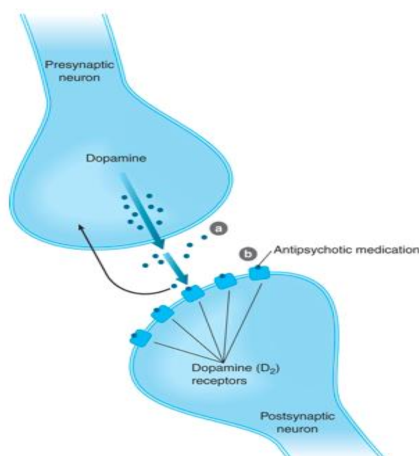
rough patch of denial, confusion and anger. Vicky only sought help when she was suffering a manic episode and almost killed herself driving. Mariah's mom came to her rescue and told the doctor her suspicions and immediately Vicky was sent to a psychiatrist to have an evaluation.

It took many months for Vicky and her family to understand her condition. Mariah's mother was a big help in the process of explaining; supporting and helping Vicky locate the right treatment. Vicky told me it took almost two years of ups and downs with medication to find the right one. She continued telling me the biggest problem about her illness is that when people feel good, they want to stop the drug, or when the medication doesn't work they stop taking the drugs without consulting their doctors.

We spoke for about 30 minutes after her appointment with me. Vicky expressed to me that keeping her appointments up to date with a psychiatric and maintaining the right medication is essential for her success in the long life treatment ahead of her. She also said she has relapsed many times and if wasn't for the support of her family, her best friend Mariah and Mariah's mother, she doesn't know how she would have made it. I finally finished my conversation with asking her what her dream was in life. She happily replied and told me she hoped to fall in love and have healthy, beautiful babies.

"Sensitive people usually love deeply and hate deeply. They don't know any other way to live than by extremes because their emotional thermostat is broken."
― Shannon L. Alder

The psychosis etiology is due to excessive dopamine in the brain, and the surplus production of dopamine can overexcite the dopamine receptors. Dopamine over activity can increase the positive symptoms, and the deficiency of dopamine can cause the opposite and have negative symptoms. Dopamine receptors are located in the brain. (Oral Pharmacology for Dental Hygienist, 2nd edition).



As soon as someone is diagnosed with any mental illness, the first step to take is to prescribe medication, either to help with the person's mood, or depression and anxiety. The more potent a drug is in blocking the dopamine receptors, the more powerful it is as an antipsychotic, when about 65% of the dopamine receptors are blocked, psychotic behavior is reduced. (Oral Pharmacology for Dental Hygienist, 2nd edition). However, it takes time and patience to be able to recognize the right drug that might help, after all only a person who is sick is capable of understanding their own body. Sometimes it takes months of trials to see a difference in the

medication taken. It is important to mention the support system, i.e., the doctors and families involved with a person with mental illness. How can they help?

It is tough for the individual who suffers from bipolar disorder to realize and accept the symptoms involved with the disease. Treating the depression phase is harder than the manic phase due to the difficulty of recognizing if the depression is related to bipolar disorder or just a depressive disorder. However, if depression is not treated life risk can occur. Likewise, when treated the manic phase can spike. (Oral Pharmacology for Dental Hygienist, 2nd edition). Some people prefer to live in denial rather than accept the reality of their condition. This is why a support system is imperative in the process of seeking help and to continue a life-long treatment without any serious harm.

Medications for bipolar disorder can have many side effects which discourage patients to continue with the treatment. One of the principal side effects is the time frame. To exemplify the aforementioned statement, bipolar disorder is treated on a long life term, which means patients cannot go off medications. If the patient feels the drugs are not working properly, seeing medical help is mandatory. Discontinuing the medication without proper medical consult can end up in life threating situations. Patients can have suicidal thoughts and behavior, which could lead to death if not monitored closely. Other side effects include weight gain, fatigue, increased thirst and much more. All of these effects can cause one to stop the medication, because women tend to fear gaining weight and men find themselves always tired. Although this occurs, stopping the medication could cause other serious symptoms.

Seniors with dementia should not take medications for bipolar disorder, especially Latuda (lurasidone HCL). This specific medication can increase mortality due to side effects of the pills. (Latuda,2016). Also, younger adults should avoid or be monitored closely due to an increase of dark thoughts, and attempts to harm themselves. (Latuda, 2016).

Many medications can cause severe side effects on the oral cavity as well, making it difficult for the patient and the clinician. For example, lithium, the “gold standard” is used as a mood stabilizer and has side effects such as tongue movements and xerostomia (dry mouth). Xerostomia will decrease the salivary flow and increase the risk of caries, periodontal disease and oral candidiasis (fungus). All of these doctors need to take into consideration drug interactions before prescribing the patient with any other medications. For example, Lithium has a drug interaction with nonsteroidal anti-inflammatory drugs and with metronidazole antibiotic. (Oral Pharmacology for Dental Hygienist, 2nd edition).

When having a patient with bipolar disorder it is crucial to take a detailed medical history and be aware of all the medications and the side effects before planning or treating a patient. Divalproex sodium (Depakote) taken with aspirin or any other nonsteroidal anti-inflammatory drug can increase the chance of bleeding when performing an SRP (Scaling and root planning) on a patient. This could end up being extremely dangerous for the individual receiving this treatment. Lithium also can cause orthostatic hypotension (decrease in systolic blood pressure of 20mm Hg and a decrease in diastolic blood pressure of 10 mm Hg). Monitoring vitals during the procedure is crucial to avoid any of the previously mentioned scenarios. In addition, patients should stay in the dental chair in an upright position for 3-5 minutes before getting up. (Oral Pharmacology for Dental Hygienist, 2nd edition).

Bipolar disorder is a complex disease that needs intensive care and having a support system is critical for the long-term treatment. Patients who suffer from this illness have other priorities to consider. To demonstrate, they are concerned with maintaining a job, having a social life or even on how they will wake up the next day and do the small task a healthy person does. Having a group of doctors, therapists, family members, dentists, hygienist, social workers to help and support patients, are critical in the process of guiding and ensuring that each one of them will be free from any harm. If we all do our small part to help others in needs, those less fortunate will have a better place to live.

“Be strong, be fearless, be
beautiful. And believe that
anything is possible when you
have the right people there to support you “
Misty Copeland

“A movement is a medicine for creating change in a Person’s physical, emotional and mental states” Carol Welch

Dealing with a mental disorder puts a lot of pressure and stress on someone’s body. Medications for bipolar disorder can have many side effects including, stomatitis and glossitis, dizziness, loss of taste acuity, xerostomia, muscle weakness and dysgeusia, a metallic taste in the mouth due to the medication. A person diagnosed with bipolar disorder understands that the treatment is a lifelong process with many ups and downs. It is crucial that these individuals maintain a well-balanced diet and exercise regularly.

Exercising has many good effects on the body. To exemplify, exercise can help someone lose weight or maintain his or her weight. It also supports the endocrine system, which is critical to the production of many hormones in the body. Hormones are essential to control cellular function as well as the physiological reaction, including building muscle and burning lipids. Also the most important role of hormones is to help the brain operate in a way to decrease symptoms associated with depression, anxiety, bipolar disease and many other mental disorders. The human body has three important hormones: steroid, peptide and amino acids, and each of them have an important role.

When a person exercises frequently, the hormones involved with the function of the body is insulin, glucagon, cortisol, epinephrine and norepinephrine, testosterone, human growth factor, and brain- derived neurotropic factor. Each hormone plays a significant role in the human system, for example, insulin is produced by the pancreas and regulates lipids and carbohydrates. Glucagon is another hormone produced by the pancreas and is released in low levels of blood sugar. Cortisol is made by the adrenal gland (cortex) and is vital for an active person; it releases the hormone to help recover from previous exercises.

Too much physical exercise can release too much cortisol and interrupt the repair of damaged tissues. Epinephrine and norepinephrine are also made by the adrenal gland, and helps to elevate cardiac output, but also increase blood sugar to give more energy while exercising. The testes in males and ovaries in females make testosterone. It is important for muscle proteins to repair any damage from a workout. Human Growth Hormone released by the anterior pituitary gland have many roles including muscle protein synthesis. Exercise can elevate the levels of the brain–derived neurotropic hormone that improves the cognitive function. (ACE)

Besides having so many positive factors, exercise can also improve someone's quality of life who is suffering from mental illness; it also helps to prevent many other diseases, including heart disease, stroke, and diabetes.

Patients who have mental illness are commonly stressed and depressed, and some of them develop more problems along the way due to lack of motivation and information on how important a simple 30 minutes a day can improve one's quality of life. Exercise can boost their self-esteem, making them more satisfied with themselves. It also improves memory and thinking, and helps with sleep as well. Patients take these medications to help with the symptoms of the illness that can cause many other side effects that destroy many parts of the human body. However, to keep the disease under control, those drugs are necessary for the treatment, but implementing other things in the treatment should be essential. Regular exercise will increase the release of endorphins, which make people have the "euphoric "feeling of happiness. When patients feel their best, they accomplish more tasks on a daily basis even the simple ones. This contrasts with the times when they are feeling down and depressed and can't even get up from bed. How can a dental professional implement exercise and nutrition in the patient's treatment plan?

Dental Hygienists plays a significant role in the patient's oral health, teaching and educating patients on how to have a healthy mouth to avoid the increase of chances of developing the unnecessary infection in the mouth. However, when it comes to dealing with patients with mental illness, making appointments and making sure those patients will keep a regular schedule is almost impossible due to many other things they might think is important.

Being a dental hygiene student made me realize how important the oral health is correlated to the body, however, overall health is more than just the oral cavity. It is the mind and body being healthy as well that is important. Unfortunately, teaching patients the importance of exercise is beyond the dental hygiene scope, which makes no sense since we take classes in nutrition, and why not implement in the curriculum a health class.

To be able to educate our patients properly, hygienists should be trained in nutrition and health to provide a better service. As a hygienist, we would be able to teach our patients the importance of exercise to help increase the hormones that are so essential to maintaining a healthy body and mind. An article was written about the "aerobic exercise and attention deficit hyperactivity disorder: brain research" by Choi JW, concluded that aerobic exercises stimulate hormones; therefore, drugs could be decreased. (PubMed,2015)

Being a dental hygienist is more than just cleaning teeth, and hopefully over time the laws will be changed and being a hygienist will be more than just ensuring patients have beautiful smiles. I would love to have more authority to advise patients on how to keep a healthy mind as well.

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