

Addictions, Brain and Behavior: The impact of Addictions in the Brain and in the Human Behavior

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Addiction is characterized by the exaggerated or continued use of a chemical substance, such as alcohol and drugs, or through activities or behaviors practiced in an excessive and constantly way, as shopping or gambling, causing problems and damages for the person's life and for the relationship with the family.

The addiction word refers to the condition of physical dependence or chemical reaction manifested by the brain due to the intake of certain drugs in the body. On the other hand, compulsive behaviors related to gambling, shopping, video games or eating for example, may not necessarily be tied to a physical dependence, but to a state of tension or emotional stress, generally linked to anxiety.

Among the brain areas most affected by addictions are the memory and the motivation, specifically the neural mechanisms related to immediate reward. Besides that, the use and abuse of drugs can cause significant changes in the neural circuits responsible for learning, attention, motor ability and self-control. This occurs because the drugs disrupt the communication and the flow of information between neurons, thereby impeding the ability of a person to plan, calculate, locate, and communicate with other people.

A very common addictive behavior today is the activity of sending and receiving text messages in the virtual environment. This type of activity can interfere quite significantly in the brain mechanisms of impulse control, causing dependence due to the numerous times in which people necessitate the immediate feedback when sending an image or comment on social networks. Treatment for this type of addiction requires an understanding of how it works psychologically.

According to some researchers, there are more people predisposed to develop chemical dependency than others are. People with chemical dependency would present a deficiency in the neurotransmitters serotonin and dopamine, neural structures responsible for regulating the mood in the human brain. Consequently, the use of chemical substances as well as the development of compulsive behaviors, may increase in quantity and frequency in an attempt to satisfy more and more the individual that aims to overcome feelings of pain, emptiness, sadness and anguish, through the relief and immediate well-being that the addictions offers.

Environmental factors may also influence the development of addictions. A child or a young woman who lives with parents or a family member that makes use of alcohol or illicit drugs have great chances to adhere the use.

It was also observed by scientists that some individuals who made use of alcohol and drugs, when cease to using them, eventually transferring the addiction of chemical order, for the development of addictive behaviors such as gambling, eating, shopping, among others. This occurs because as well as cocaine, heroin and alcohol, the addictive behaviors activate the brain's pleasure centers releasing neurochemical substances that generate euphoria and well-being. From this point of view, although addictions and addictive behaviors presents differences in actions, they are similar in feelings, because the biological process are the same in both situations.

The addiction to drugs has been associated with people who suffer from some form of mental disorder. This does not mean that every person diagnosed with schizophrenia or bipolar disorder for example, will become addicted to any drugs, but that due to states of eupho-

ria, anxiety or deep sadness caused by the disorder, a person with mental illness may use drugs as an escape to relieve intense distress or a state of extreme anxiety. The opposite can also happen: a person without mental illness can come to manifest over time psychosis, anxiety, depression or mood instability due to the abuse of drugs.

Moreover, what about when addictive behavior and addiction are part of the same personal conduct? This occurs when a person develops a compulsion for drugs or alcohol, for example. In a practical way, instead of this person has an addictive behavior in shopping or gambling, a compulsive behavior by the use of any drugs or the excessive consumption of alcoholic beverages is developed.

When a person develops a compulsion for gambling or shopping, may be easier for this individual in recognizing that he/she needs help or treatment, by the fact that these addictive behaviors are bringing some disruption to personal life, such as in financial healthy (in the cases of gambling and shopping).

On the other hand, in relation of compulsion for drugs or alcohol, the addict takes a more durable time to realize that help is needed, because this behavior does not interfere much in financial life, as in the case of buying compulsively (shopping) or practice gambling with frequency, which in most cases leads the individual towards a financial failure.

In practical cases, the person addicted to drugs often can sustain your addiction selling own belongings, developing thefts in shops, or in the case of people at a young age, usurping the money of your own parents.

Faced with these dramatic situations, one question remains.

Why a person does starts using drugs, alcohol or develop addictive behaviors?

The trigger of drug life or addictive behavior can be characterized by curiosity, peer pressure (in the case of drugs or alcohol among young people), family environment (parents who are drug users, or family members who are alcoholics). Pain or distress about a problem, conflict or situation in which the person cannot see a solution or alternative.

Teenagers are more vulnerable to use drugs, alcohol or develop some kind of addictive behavior (such as gambling, shopping, eating, electronic games, etc.) because they meet at a time of identification and affirmation of their identity, beliefs and values. There are still further examples, as in the cases shown below:

- The teenager can knows the drug or the alcohol at school, or start drinking in order to socialize and belonging to a social group.
- The girl can stop eating to resemble any model or artist of the magazine cover.
- The student starts to consume up more and more by shopping in order to, arouse attention and interest to other colleagues, craving admiration for what he / she has and not by your essence, friendship or companionship.
- The shy young teenager can relate to the electronic games in an attempt to be whatever he/she likes, in order to escape from reality or to relief some kind of stressful or distressing feeling.

These are just some examples of what may affects some young people.

Drugs and alcohol arise in trying to generate relief and pleasure to the person in distress. However, with the time of these uses the addiction ceases to make the pleasurable effect that had at the beginning of consumption. In the case of addictive behavior in shopping or gambling, one feels an exaggerated pleasure to be in control or in dominating position while exercises the addictive activity.

The habit of using drugs and practicing addictive behavior over time let it be only a habit to turn into an obsessive conduct. In this way, the individual can no longer imagine your routine without the drug or the act of buying or gambling compulsively. Thus, the act of using drugs, gambling or buy compulsively, becomes part of the individual character, so that the person only thinks in the act, ignoring the consequences of these addictive practices.

The addictive behavior, besides altering neurochemical structures of the brain, can also bring imbalances in economic, physiological and social areas of the person:

- Economic, to the fact that generate financial losses.
- Physiological because many times the adult or the youth leaves to eat and sleep in a healthy way, due the addictive effects of drugs, alcohol, gambling or compulsive shopping.
- Social because the addiction cause damage in the family relationships, and interpersonal relations in the workplace.
- The good news is that the addictions as well as the addictive behavior have treatment and through this, there is the possibility of the person backs to having a healthy routine with dignity and quality of life.
- The Cognitive Behavioral Therapy is a psychotherapeutic approach based on the principle that the set of beliefs and thoughts of the person has great influence on your behavior. Cognitive-behavioral therapists help the patients to restructure their dysfunctional way of thinking in order to develop more positive and assertive forms of behavior in people's lives. In some cases, it is necessary pharmacologically intervention, with the help of prescription medication made by a specialist doctor such as a psychiatrist. These medications can help in relieving symptoms related to anxiety, psychoses, mood swings, depressive episodes, obsessive behaviors, among others.

Family members can help in the treatment, either in cases of abuse of drugs or alcohol, whether in episodes of addictive behaviors. Regardless of the situation, parents can get help by:

- Reading blogs, websites and educational materials about the type of addiction / addictive behavior.
- Seeking information and knowledge through support groups (over the Internet or in-person) about the addictive situation, present in the family.
- Look for professional help by the assistance of psychologists or family therapists in order to gain a better understanding of how would the best way to help the familiar in distress.
- It is extremely important that the entire family be involved in the recovery and treatment of the familiar member. The development of a healthy family environment begins when each member shows interest and empathy for the others. The dialogue is a practice that unites the family ties, creating linkages to care and affection between each other.
- It is crucial that all the family can be present in the educational events and counseling sessions. With the involvement, commitment, dedication and discipline of everyone, especially of the member in addictive condition, it is possible to use techniques and strategies to treat the person's addiction and the addictive behavior. In this way the person in suffering, will be able to feel joy and motivation of having a life again.

Bibliography

1. <http://www.axisresidentialtreatment.com/obsessive-compulsive-disorder/how-family-members-can-help/>
2. <http://americanaddictioncenters.org/ocd-and-addiction/>
3. <http://www.axisresidentialtreatment.com/obsessive-compulsive-disorder/the-link/>
4. <http://www.parliament.uk/documents/post/pn356%20-addictive-behaviours-corrected.pdf>
5. http://www.drugrehab.co.uk/drug_information.htm
6. <https://www.drugabuse.gov/sites/default/files/rrcomorbidity.pdf>

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