



Addiction... between stereotypes... Illusions of media... and truth...

Addiction... between whips of the societies and religions... injustice of the laws... and true justice...

Addiction... beyond mere misbehavior, or seeking for fun and non-innocent pleasure...

Addiction... as an actual disease... as a multi-pillar crisis... not as committing evil or moral sin...

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Abstract

There is no clear concept of the addictive personality, but there are some characteristics that are common in the potential addicts, and those characteristics are:

- A tendency towards reckless behaviors.
- The person with an addictive personality finds it very difficult to delay his satisfaction. He wants what he wants in the moment and cannot wait to get it.
- The person with an addictive personality is often of a non-conforming character and expresses his dissatisfaction with the typical goals of society.
- An addictive personality often has a strong feeling of alienation from the society, and even from the family.
- An addictive personality often feels that he is living under constant high pressure, even when others living in the same circumstances do not show that pressure or distress exists. In other words, the addictive personality tends to overreact in interaction with stressors.

The factors that may predispose the transition to an addictive personality include: physical or sexual violence, abuse or persecution in childhood, low self-esteem, and chaotic family or household life. The thread that combines the above mentioned factors is the feeling of helplessness. Almost all cases of addiction are preceded by a sense of hopelessness or helplessness, which automatically leads to a sense of anger, and this anger leads to the subsequent addictive behavior. Here the shift to smoking, drugs, alcohol or compulsive behaviors of all kinds becomes a dynamic psychological mechanism to achieve some form of control over the situation.

Keywords: Addiction; Stereotypes; Abuse

Introduction

The first use of the word "addiction" dates back to the seventeenth century. At that time, addiction was defined as an act of doing some bad habits in a compulsive manner. Drug addicts were called

"opiate eaters or morphine eaters", while alcoholics were given the title that is still common until today, "drunks". However, the first use of "addiction" in written medical literature dates back to the 1880s. At that time, while working at the Vienna General Hospital, Sigmund Freud was researching about his patients who use

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cocaine; the addictive effect of cocaine was not yet known, and since he knew very closely about the sedative properties of cocaine, he himself began to use it to relief his migraine headache, from which he was frequently suffering, and so Freud himself turned unintentionally into a laboratory rat.

Another doctor has joined later in Freud's research; the famous surgeon William Halsted, and their contribution was a great asset in this important field that was, prior to that day, of the unknowns. Halsted was the first to describe the use of cocaine as a local anesthetic prior to surgical intervention. This is in addition to his major contributions to general surgery techniques as well as sterilization methods, and I have no doubt that most doctors today know him very well, at least through his famous surgical atlas that is still republished to this day.

Of course, Dr. Freud goes without definition.

Freud and Halsted noted that the dose of cocaine needed to relieve the same pain increases steadily with repeated use, and the duration of cocaine pain relief is steadily decreasing with repeated use, thus reaching the sad conclusion: cocaine is no different from opiate and morphine, it also causes addiction.

Until then, the results of Freud and Halstead' researches had not reached the other side of the Atlantic Ocean, specifically the new world; America (although Halsted was American but he was still studying and working in Europe at that time), or perhaps these results were not intended to arrive due to some malicious reason.

All the news came at the time was that a miraculous pain reliever had just been discovered, named Cocaine.

An American doctor named Bentley was enthusiastic to prescribe cocaine to get rid of the addictive effects of morphine, opium and alcohol, as well as for patients suffering from severe or chronic pain that does not respond to the conventional simple analgesics. He even published an article about the great effects of this miraculous drug. That is to say, all he did was replacing one addiction with another more serious addiction. Collectively, before the end of the 19th century, cocaine was transformed into a global epidemic, and it was no longer just used in pain relief, but also in the entertainment industry.

After being turned into uncontrolled epidemic, scientists and doctors became interested in studying the causes of this phenomenon, which spread faster than the speed of fire in the wild, but their researches were the way ostrich burying her head in the sand, they came to study the personality of the most famous cocaine addict, I mean Dr. Freud, and concluded the result of their analysis to the formulation of the term "addictive personality", which is characterized by three specifications derived from the specifications of Freud according to that analysis: boldness and recklessness, emotional scars and psychologic instability. Here I see that they were caught in an obscene mistake by this naive reduction and then generalization, but I have only provided here the requirement of the scientific honesty.

Modern science has introduced a real revolution in understanding addiction. Until the end of the last century, myths about addiction were dealing with addiction as a moral sin not as a disease, leading societies to punish addicts instead of seeking treatment and prevention. Science had to strive hard to change those misconceptions and lay the foundations for an effective response to that enormous problem. After this long introduction, I turn to talk about addiction in the light of modern psychology and neuroscience.

What is addiction?

According to psychology today, addiction is defined as a situation in which the person finds himself involved in the use of some substance or behavior, so that the pleasure or relief (psychological, physical or both) provided by that use constitutes a compulsive incentive for reuse repeatedly without paying attention to the harmful consequences.

The key word in this definition is the word "compulsive". The addict finds himself compelled to use the same substance or behavior despite knowing the harmful and even destructive consequences of such abuse. This compulsive behavior occurs only after long-term abuse, and only then the abuser becomes officially addicted.

Addiction may involve the use of substances such as alcohol, inhalers, opiates, cocaine, nicotine, caffeine, etc., or behaviors such as gambling, shopping and over-spending, theft, sex etc.

It should be noted that the abuse of substances known to be potentially addictive does not make the user addicted automatically, the way we have seen in too many movies and series, which chose to present the problem of addiction in a rugged and shallow frame, far from scientific accuracy. The best proof of this is alcohol. Millions or tens of millions of people regularly drink alcohol, and more than those who drink it socially only, but few are the ones who become addicted. What applies to alcohol applies to other addictive substances, with only a slight difference in the duration it takes to switch to addiction, as well as the mechanism and intensity of impact on brain cells and functions.

The American Society of Addiction Medicine identifies it as a primary, chronic and progressive disease in the cerebral pathways of reward, as well as memory, learning and related circuits. It is characterized by an inability to control behavior and creates an abnormal emotional and functional response.

This definition represents a qualitative shift in ways of dealing with addicts.

Addicts have generally been viewed in an inferior way, with many charges at the ethical and moral levels. Now, with the classification of addiction as a disease according to this definition, the outlook has changed.

In a nutshell, addiction is a disease of choice, in other words a disorder in the brain regions responsible for making the right



decisions. It is obvious today that the genetic factor has a major role in this disease; almost reaches the limits of half.

Addiction Biology

Addiction is influenced by biological, psychological, social and environmental factors contributing to its occurrence and continuity. There are scientific evidences that addictive substances and behaviors share a major characteristic; all of them strongly stimulate brain pathways that lead to a sense of pleasure or rest (in other words, gain sensory reward). Many of these pathways involve the neurotransmitter known as Dopamine, as well as Endorphins, which are also important neurotransmitters.

There are also ample evidences that most cases of addiction to drugs, alcohol or harmful behaviors such as gambling are accompanied by psychological disorders such as depression, anxiety or the like, but I leave this point to the chapter on addiction psychology.

Neurotransmitters are the medium that transmits brain commands to different organs, and they also transmit sensory signals in the opposite direction as well.

I have already talked about neurotransmitters, especially Endorphins and Dopamine, in a previous article entitled "Life, death, and what is between them... a sneaky look at the other bank", and I do not feel like having to re-talk about them here. However, this group of neurotransmitters has mainly sedative properties and it also mitigates the effects of stress, and these are added to its other secondary properties; like improving the mood and creating some kind of ecstasy and joy. The mechanism of the addictive substances and behaviors depends on stimulating the brain to release more and more of these neurotransmitters.

Other than their effect on different brain functions, the addictive substances also affect brain centers that inhibit behavior, in the sense that they open the brain gates towards further abuse and destroy the remaining brain resistance to repeat the same behavior. This is the so called a vicious cycle. The brain regions most susceptible to the effects of addiction are the frontal cortex and the limbic system. It is useful here to point out that the terms "dependence" and "addiction" are one term, and I do not agree at all with schools that try in vain to seek differences that do not exist between them, except for the difference in the nature of the substance, meaning that the term "dependence" is mostly used with the legal substances such as caffeine, nicotine, alcohol and the like, while the term "addiction" is used with illegal substances, such as drugs. In other words, it is merely a linguistic trick, meaning that it touches the surface without touching the content.

Addiction Psychology

Scientists and psychiatrists consider behaviors that promote individual well-being and quality of life to be adaptive behaviors.

By the same token, behaviors that limit an individual's functioning and impair his quality of life are called behavioral maladaptation. Since the two criteria mentioned above apply to addiction, it is then behavioral maladaptation, psychological analysis is therefore very useful in understanding the causes of this unhealthy behavior, and thus to try to counteract or avoid those causes.

There is no clear concept of the addictive personality, but there are some characteristics that are common in the potential addicts, and those characteristics are:

- A tendency towards reckless behaviors.
- The person with an addictive personality finds it very difficult to delay his satisfaction. He wants what he wants in the moment and cannot wait to get it.
- The person with an addictive personality is often of a non-conforming character and expresses his dissatisfaction with the typical goals of society.
- An addictive personality often has a strong feeling of alienation from the society, and even from the family.
- An addictive personality often feels that he is living under constant high pressure, even when others living in the same circumstances do not show that pressure or distress exists. In other words, the addictive personality tends to overreact in interaction with stressors.

The factors that may predispose the transition to an addictive personality include: physical or sexual violence, abuse or persecution in childhood, low self-esteem, and chaotic family or household life. The thread that combines the above mentioned factors is the feeling of helplessness. Almost all cases of addiction are preceded by a sense of hopelessness or helplessness, which automatically leads to a sense of anger, and this anger leads to the subsequent addictive behavior. Here the shift to smoking, drugs, alcohol or compulsive behaviors of all kinds becomes a dynamic psychological mechanism to achieve some form of control over the situation.

Addictive Substances and Behaviors

Of course, the concept of addiction is often associated in people's mind with drugs, alcohol, tobacco smoking, cannabis and marijuana in particular, or perhaps exclusive. However, there are other addictive substances that are no less dangerous than the above. I will review some of the most important ones in the following, while I will ignore the above common materials and behaviors, given that they are known by the majority or even all people...

Steroids

Most people know the term "steroids" via the alternative word cortisone. Steroids, or cortisone, are synthetic pharmaceutical materials similar in their synthesis to vital hormones that are secreted by the adrenal cortex within the body. Despite the dread



and bad reputation that comes to mind once the word cortisone is heard, it may be one of the most important discoveries of the 20th century, if not the most important one, and its importance equalizes to some level with the importance of penicillin (the discovery of penicillin is attributed to Alexander Fleming; the discovery of steroids to Edward Kendall, both awarded the Nobel Prize in Medicine in 1945 and 1950, respectively).

The bad reputation associated with cortisone is due to its side effects, which vary in risk and severity, but most of these side effects are due to randomized and uncontrolled use, while if used wisely and cautiously do not show most of those side effects.

Steroids might cause dependence when used for a long time, even if they are used only by the topical way at the eye, nose or skin. This fact is known to the general public not only in the medical field, and this dependence what necessitates a comprehensive treatment plan when there is an intention to stop it after prolonged use; that plan would have to be phased out until it is completely ceased.

The most dangerous types of steroids are anabolic steroids that are classified as stimulants banned by international sports bodies and associations. This type of steroids, in terms of structure, is similar to the hormone Testosterone, which stimulates the growth of skeletal muscles, hence the prohibition of its use because it harms the principle of honest competition in sports competitions. The prohibition is not only for the sake of maintaining equality of opportunity and honest competition, but because of the serious side effects of its use, which vary in severity from common acne and hirsutism to liver damage, heart failure, infertility and even death. Of course, the use of anabolic steroids is also associated with addiction. When used, cessation is difficult and requires a long-term treatment plan and support.

Hence, the precautionary side must adhere to the use of drugs prescribed by the so-called "physical trainers" or "coaches" in sports clubs because of muscle amplification and the like. Some of these drugs contain steroids in their composition for sure.

Exercise

Is it really a regular exercise or is it turned into obsessive compulsive or addictive?. Regular physical activity, without a doubt, plays a crucial role in health maintenance and disease prevention. However, excessive exercise may be the cause of adverse effects on physical and mental health. How can we recognize the symptoms of exercise addiction? And once we do, what can we do about it?. Addiction to exercise is defined as a pattern of physical activity that goes beyond what most doctors and physiotherapists consider "normal" and causes tremendous suffering or psychological distress in addition to anxiety and depression, both during and after exercising or even during the waiting period before starting it. It also affects the personal, professional and social life of the addict, with the reference to the

difficulty to control or even to reduce the frequency, even in the case of illness or injury or extreme fatigue, and even if this led to the collapse of his career and the expansion of social isolation, which often happens in these cases. Usually joints and muscles are the first victims of exercise addiction. Joint sprain and muscle rupture occur at a much higher rate for addicts of this type of behavior. Bones are the next victims, where the risk of fractures or osteoporosis increases at the end of the exercise for those who refuse to have rest which will allow the body to recover and compensate for missing essential elements. In addition to this, nucleus pulposus herniation, tendonitis and fasciitis are more common in those than in the rest of the individuals.

At next stage, comes the role of organs and viscera. It may seem shocking to many, but recent studies and researches have shown beyond doubt that the incidence of cardiovascular diseases, especially the ones affecting the coronary arteries, is much higher in those comparing to it in others who exercise moderately, and indeed, this rate is almost equal to that of those who do not exercise at all.

What is also interesting is that physical coercion to exercise excessively stimulates the brain's hormonal control centers to send "shut or close" orders to the genitals, both male and female, in order to maintain the little remaining energy reserves, most of which have been depleted by exercise Exercises.

Add the above to the long-standing known fact that chronic stress is associated with a significant reduction in the immune system of the body. Now how do we know that someone has become addicted to exercise and is no longer just a diligent exerciser? The person concerned has the same general symptoms of addiction as tolerance, meaning that the person in question needs to increase the exercise time and / or to increase the intensity of the exercise in an upward manner in order to achieve the desired effect - better mood, for example – while the original duration of the exercise, as already determined, no longer achieves this effect. The symptoms of withdrawal syndrome appear also; if the person cannot perform his usual exercise for some reason, the negative mood such as anxiety and depression or even frustration infiltrates and controls him. In addition to that, he loses control of himself; even if he gets exhausted, or even if he develops swollen knee or twisted ankle, he overcomes his pain trying to finish the exercise, as well as when he does not want to do anything other than to go home and relax on the couch or have meal with his family or friends, he finds himself unable to do so. His will is completely lost.

It is worth mentioning that addiction to exercise, contrary to what some may think, does not start from the point of reducing weight or maintaining it, but starts in the majority of cases out of dissatisfaction with the physical shape of the body, so the person is trying his very best to build his muscles more attractively, as he thinks. Over time, it turns into addiction.



This condition is widely known today as Adonis's complex, derived from Greek mythology (Adonis was portrayed as a half-man and half-God, and was the most prominent example of masculine beauty in terms of handsomeness and well development of the body's muscles. This led Aphrodite- the God of beauty and fertility and the master of all Gods- to fall in love with him, always according to Greek mythology itself). It is obvious that this situation is often for males. I do not say that it has a monopoly on them, but its occurrence in males is multifold more than that of females.

Low calorie diet or widely known as healthy diet

It is obvious that a low-calorie diet is important and necessary for the majority of adults, and is more important in those who suffer from obesity, diabetes or high blood lipid-related diseases, etc. In such cases, doctors or dietitians recommend reducing calories derived from carbohydrates or fat or all of them in the food intake, depending on the case.

However, when it comes to a person who does not suffer from any of these conditions or diseases, and yet he refuse to eat anything but these types of foods, we are not here in front of a healthy pattern of life, but we are facing another kind of addiction. This condition was first described by Dr. Steven Bratman in USA in 1997 and was called orthorexia nervosa, but it is now prevalent in most countries with the influence of social media that contributed to the dissemination of theories of healthy life style and philosophies of macrobiotics, lacking in a large proportion of them to the lowest scientific credibility.

This obsession with strict dietary restrictions is certainly a type of addiction, and all the aforementioned addiction symptoms apply. Over time, it also leads to social isolation and mental disorders such as anxiety and depression, often leading to severe malnutrition with the accompanying symptoms of malnutrition. It may even lead to death.

Treatment of addiction

Addiction has several dimensions that have the potential to cause chaos in various aspects of the addict's life. Drug addiction programs do not have a single form or approach that fits all situations, but the methods or levels of care vary from case to case. Effective treatment programs include many valid components for each individual dimension.

Helping the addict to stop using addictive substances or addictive behavior is not enough; treatment should focus on maintaining a lifestyle free of those substances or behaviors, as well as on achieving effective productive performance in the family, work and society. As addiction changes the structure and the function of the brain, brain circuits may take months or even years to recover

after quitting addiction. This may explain why addicts are at risk of relapse even after long periods of take-off [1-6].

Addiction researches have shown that most addicted individuals need a minimum of three months of treatment before treatment can be stopped, but treatment for more than three months has a higher success rate.

In sum, healing from addiction is a long-term process. The first step in the treatment of addiction, whatever the nature of the addictive substance, is detoxification, which helps the body to get rid of all toxic substances and their effects, while observing the symptoms of withdrawal syndrome; as these symptoms, which are always severe, can sometimes be fatal in the absence of medical supervision and managing those symptoms appropriately when necessary. In most cases, it is not possible to stop the addictive substance at once. Rather, it is done in a gradual manner by giving dilute doses that gradually decrease until completely stopped, and medicines that help overcome the effects of withdrawal syndrome are often needed.

The second step, which is no less important than the previous one, is the rehabilitation of the patient and riddance him of destructive behaviors that contributed to the incidence of addiction in the first place, and encouraging him to adopt positive patterns of personal, familial, social and professional behavior [7-11].

It is best to have the treatment in a specialized clinic or a sanitarium if possible, but it can be done in an outpatient clinic if the option of a sanitarium is not available. Here, in particular, the support provided from the family and close friends is vital. The articulated mechanism in the behavioral treatment of addicts is based on breaking the psychology of the addictive personality, by training the patient to confront bad situations instead of avoiding or circumventing them, as well as to replace positive behaviors rather than obsessive destructive behaviors. Of course, it is not as easy as it seems, and it needs constant follow-up and perseverance.

The role of drug therapy in addiction is often limited, almost exclusively to the management of symptoms of withdrawal syndrome, or to the replacement of painkillers (opioid analgesics) with relatively safe analgesics. However, there are currently three drugs approved by the FDA for the treatment of alcoholic addiction: The oldest drug among these three is Disulfiram and the other two drugs are relatively newer and benefit in the prevention of relapse (working on the brain reward centers); Naltrexone and Acamprosate.

Although it is not our theme here, it do not mind to talk a few lines about the immediate symptoms associated with excessive alcohol consumption, which appear when waking up the next day and is known as hangover, due to its high prevalence. These symptoms are the body's way of warning us when we drink too much. Excessive alcohol temporarily inhibits the pituitary gland in the brain, leading to a temporary stopping of its release of hormones. The most important hormone that its release is stopped in this



situation is the antidiuretic hormone, which calls on the kidney to send water directly to the bladder to be emptied. To compensate for the loss of water from tissue and organs, it is withdrawn from the brain cells themselves, which leads to dehydration, which is the cause of the terrible headache that occurs the next day.

The other thing that happens in this case, but in another organ, is treating of alcohol entered into the body, like any food intake, and this is done in the liver by converting it into sugar, which may raise blood sugar dramatically in diabetic people, and on the other hand, this process distresses the hepatic cells because it consumes a large portion of the liver glycogen to provide the necessary energy.

From here I have drawn to a very important point, often absent from the minds of many: Coffee, tea, or soft drinks are not helpful in treating the effects of alcohol. On the contrary, these beverages increase diuresis and thus increase the dehydration already present; also they increase the exhaustion of the liver which is already exhausted from the treatment of alcohol consumed. Water then water and then more water, this is recommended to get rid of the effects of alcohol. It is also recommended to compensate for the shortage of electrolytes, especially potassium and magnesium. Bananas are useful in this context. If you need to take an analgesic, it is advisable to avoid using paracetamol, codeine and similar analgesics that increase liver fatigue. Aspirin can be used instead, because its clearance takes place in the kidney, not in the liver. Eating some eggs is also useful in treating the effects of alcohol because it contains the amino acid "cysteine" and this acid eliminates some toxins that result from the treatment of alcohol.

Conclusion

Addiction is often a destroyer of social relations and efficiency in work and study. As addiction affects brain function, addicts often do not realize that their behavior causes problems for themselves and others in their surroundings. Over time, the pursuit of the pleasing effects of the addictive substance or behavior may dominate the activities of the addict. Although most types of addiction, especially alcoholism and drugs, have the potential to cause feelings of despair and failure, as well as a sense of shame and guilt, most research confirms that recovery from addiction is the rule rather than the exception. There are, of course, multiple ways of treatment and recovery, whether self-reliance or methods that depend on receiving medical, psychological and social support from the appropriate institutions or clinics. However, the path to recovery is rarely straight, but often there are periods of relapse or regression, but the light at the end of the tunnel certainly exists, which is certainly not a dim light.

Most addicts are victims of social, familial, environmental, biological or other conditions. Yes that's right. But making the decision to recover from addiction is their personal responsibility alone. They are not required more than to take this easy and clear decision; showing sincere desire for recovery. All that remains is

the responsibility of the community and the competent institutions. Or, so as not to be overly naive, let me say: this is what must be...

Acknowledgement

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