Abstract

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Lemonick, M. D. (2009). When Your Brain Can’t Say No. *TIME*, 104–109.

**Purpose:**

 The purpose of this study is to correct the myths about drinking that it’s all dependent on willpower because it isn't. It is a medical condition of the brain that can be treated with medications and therapies.

**Summarization:**

 Humans will tend to do things that they like no matter the consequences. Such is the matter of addiction to drugs, humans understand how bad it is but they still do it. By the mid-50s, the American Medical Association (AMA) reported that alcoholism is a disease and not moral wrongdoing. Thus, methods for its treatment started to come in and most common was the counseling and vitamins. A support group Anonymous Alcoholics (AA) proved to be effective for a few individuals but others had no improvement at all. By the next decade, researchers proposed the same model as AA that continued meetings could have better results. Also, by the time advanced technologies like MRI and PET scans were introduced into practice. Latest studies helped scientists understand the physiology of the neurotransmitter chemicals and their mode of action.

 Based on the results of the research, new drugs were introduced. Scientists started working on establishing the nature of addiction and its effects on human’s behavior. When the human brain is exposed to drugs, the memory system, impulses, conditioning and decision-making skills are affected adversely. Addiction may be genetic but sometimes epigenetics may also play its role and it may occur in nonchemical attributes like behaviors, shopping, gambling, and sex. Some issues are behavior-specific. Addictions do not mere occur due to pleasure-seeking purpose but there are more analytical variables to find the root cause. Brain-imaging has shown that patients who relapsed within the first year of the program lacked cognitive and analytical skills for decision-making activities. This relapsing of patients was detectable due to decreased levels of prefrontal cortex activation and impulsive behavior is overridden by rational thoughts. By blocking dopamine receptor D3, the excessive effect of the drug can be minimized but the natural system for damping is defective in addicts and can be boosted by the usage of vigabatrin.

 Endocrinology also plays part in addiction or craving to certain drugs. For example, women crave nicotine during their menstrual cycle at the release of follicle following progesterone and estrogen release. Studies have suggested that the same amount of drink hit women intensely as compared to men because women have less amount of alcohol dehydrogenase and body water and combined with estrogen give a net concentrating reaction in the blood. The PET scans of methamphetamine abusers indicated that after more than a year of treatment, their brains started returning to their pre-drug state. The 90-days rehabilitation program has proven to very efficient as it is how long a brain takes to shake off the effects of the drug completely; sleeper effect. This research opened up more dimensions of studying cognitive responses to drugs. So, many brain systems are entangled with each other and thus trying to adjust one will influence the other. Though science has made marvelous discoveries and developed many medications and treatment therapies, the only best way to stop drinking is to stop drinking.

**Strong/Weak Points:**

 The strong points in this study are that the author has stated all the facts with sources by mentioning the name of the researcher or the universities in which the studies were conducted. The study pattern is based on the analysis of the past researches and is in the proper timeline to follow through the development stages of the rehabilitation process. The author has also given relevance from the history and evolving pattern over the years. Sound examples have been provided with an explanation of all points. The article is well written and coherent. The visual illustrations are the strongest point of the study. The weak points of the study are that it stated some incomplete information which was not enough to convey the complete idea. Another point is that it did not address the prospects of the study.

**Benefits:**

 The benefits of this study are that it gives useful ideas about several factors that influence alcoholism and its consequences. It removed any misconceptions about drug addiction that it is entirely abusers fault because so many mechanisms in the human body trigger such behavior. It stated many facts together at one point that helps make associations among different variables. It also mentioned different medications and programs suggested for the treatment of alcoholism. The studies also approved of the support group meeting program by AA and reported that it is quite efficient. Information about the basic anatomy of the human brain has also helped understand the process in a better way.

**Applicability:**

The applicability of this study is wide-scale as it opens the discussion for several possible research ideas. The studies can be applied to the analytic and observational studies plan for the better understanding and collecting evidence on our own. It can also be used as a baseline for medical practices and theoretical work. This study can be applied as an interesting activity within support groups and rehabilitation centers. It can also be compared with the real experiences of the addicts and analyze the behavioral patterns that led them to addiction. It can also be used to conduct qualitative studies on other kinds of addictions and their initiation causes and consequences. It is a diverse study and can be utilized in so many useful aspects.