



# JOURNAL OF PHARMACEUTICAL SCIENCE AND BIOSCIENTIFIC RESEARCH (JPSBR)

(An International Peer Reviewed Pharmaceutical Journal that Encourages Innovation and Creativities)

## An Empirical Review on Behaviour Consequences of Drug Addict

Sharma Jyoti<sup>1,2</sup>, Pawar Dilip<sup>3</sup>

1. Research Scholar, Shree JYT University, Jhunjhunu, Rajasthan, India

2. Chief Nurse Educator, Eternal Hear Care Centre & Research Institute, Pvt. Ltd. 3A, Jagatpura Road, Near Jawahar Circle, Jaipur, India

3. Head- Medical Affairs & Clinical Development, Emcure Pharmaceuticals Ltd., Mumbai, India

### Article history:

Received 30 Jan 2016 Revised  
28 Feb 2016 Accepted 19 March  
2016 Available online 01 April  
2016

Citation: Sharma J., Pawar D. An  
Empirical Review on Behaviour  
Consequences of Drug Addict. J  
Pharm Sci Bioscientific Res. 2016.  
6(2):190-193

### \*For Correspondence:

Sharma Jyoti

Research Scholar, Shri  
Jagdishprasad Jhabarmal  
Tibrewala University, Jhunjhunu,  
Rajasthan, India

([www.jpsbr.org](http://www.jpsbr.org))

### ABSTRACT:

Drug addiction is a chronic condition characterized by obsessive, or uncontrollable, drug seeking and leading harmful consequences and changes in the brain, which can lead to crime, guilt or death. Drug addiction is also a relapsing disease and careful long term treatment required to stop using again after treatment. The path to drug addiction begins with the voluntary act of taking drugs. But after compromised with person's ability of what to choose and what not, gradually it affects parts of the brain involved in reward and motivation, learning and memory, and control over behavior. As addiction is a chronic disease, it is not easy to stop using drugs after developing abuse. Most patients need long-term or repeated care to stop using completely and recover their lives.

**KEYWORDS:** Addiction, Drug abuse, Impact of addiction, Treatment for drug addiction, Addiction cycle.

### INTRODUCTION:

Drug addiction will be outline as disorder of option to be results of natural processes that involves voluntary behaviour, specifically selection.

This approach stands in contrast to the present received view, a minimum of as published by the National Institute on Drug Abuse (NIDA) and the National Institute on Alcohol Abuse and Alcoholism (NIAAA), that drug abuse is a disease, specifically, "Addiction is a chronic, typically relapsing brain disease, similar to other chronic, relapsing diseases, such as diabetes, asthma, or heart disease"<sup>[1]</sup> Addiction is a disease that affects both the brain and behavior.

### Stages of Drug Addiction:

#### Stage 1: Experimentation

This stage is outlined as the voluntary use of medication while not experiencing any negative legal or social

consequences. For many, experimenting might occur once or many times as the simplest way to "have fun" or maybe to assist the individual deal with a drag. For many, experimentation occur with none need to continue drug use. For others, it will begin to become a drag once it moves into ensuing 2<sup>nd</sup> stage of addiction.

#### Stage 2: Regular Use

Some people will be able to enter the stage of regular use without developing a dependence or addiction. These people will be able to stop the drug use on their own. The problem with regular use is that the risk for substance abuse greatly increases during this stage. It also increases risky behaviors such as driving under the influence, unexplained violence, and symptoms of depression and anxiety.

Many individuals are able to enter this without developing addiction or dependence. These individuals can easily stop the drug use on their own. The matter with regular

use is that the chance for drug abuse will increase greatly throughout this stage. It additionally will increase unexplained violence, symptoms of anxiety and depression and risky behaviors like driving underneath the influence.

#### *Stage 3: Risky Use/Abuse*

There is hair line difference between 2<sup>nd</sup> and 3<sup>rd</sup> stage of abuse. The stage typically outlined as continued use of drugs in spite of severe social and legal consequences. Warning signs of addiction will begin to appear in this stage. The temporal escape can quickly lead to more serious problems, desire, obsession with the drug, and symptoms of depression, irritability and fatigue if the drug is not used.

#### *Stage 4: Drug Dependency*

Physical dependence for a drug is often tangled with addiction. Features of dependence comprise obsessive use of the drug despite severe negative consequences to human relationships and withdrawal symptoms, physical and mental health, job security, personal finances and criminal record.

Increase risk of developing dependence is principally seen in those people that starts intake of tobacco and alcohol in their early age. It's been found that drug abused kid usually come from challenging & problematic families and socially omitted groups; an unwanted association with school also appears to be linked with a high risk of drug intake among youngsters. The study also shows that older adults are less addicted to drugs than young adults and adolescents<sup>[2]</sup>. Youngsters have a less understanding to alcoholism, making it likely for them to consume more alcohol without having the feeling of being intoxicated<sup>[3]</sup>.

### **Impact of drug abuse**

#### *Impact on Health:*

There are severe consequences of ingesting of alcohol and drugs on children and adolescents. There are many adverse effects of consumption of alcohol. In acute consumption, neurotransmitters in the human body are being depressed. The mood of the person swings and he also observes various bodily disorders like muscle cramp, headache nausea. Furthermore, self-discipline in the person is also eroded by the addiction of alcohol. Drug abuse many times termed as self-medication as an addict takes medication repetitively to make himself better and better. In cocaine abuse its appeal is because of its ability to relieve the distress associated with hypomania, depression, or hyperactivity. For alcohol addicts use of alcohol, permits the experience of aggression, affection,

and closeness in an individual who is otherwise cut off from their emotional state and relationships<sup>[4,5]</sup>.

A study for impact of alcohol on the human brain stated that use of Alcohol is linked with irregularities in the volume of the prefrontal cortex, in youngsters. Prefrontal cortex is the portion of the brain that regulates rational thinking and instinct<sup>[6]</sup>. A serious consequence of drug abuse is suicide. In United States, 3<sup>rd</sup> leading cause of death in adolescent is suicide due to consumption of alcohol.<sup>[7]</sup> Acute consumption of alcohol changes visualization, decision, synchronization and often leads to risk taking behavior.

Physical effects of substance abuse include:

- Organ Damage.
- Hormone Imbalance.
- Cancer.
- Pre-Natal and Fertility Issues.
- Gastrointestinal Disease.
- HIV / AIDS.

#### *Social Impact:*

On the other hand, with the increase in the consumption of drug, there has been seen a decline in the academic performance of the youths. Usage of drug is closely linked with being malingering and absenteeism from school. Children largely skip their classes and enjoy drugs<sup>[8]</sup>.

Intake of drug increases the possibility of being tangled in traffic mishaps which may cause death or injury. The relation of the drug addict with his friends and family are affected by this habit, causing discrepancies, harsh conversation fights and loss of relationship. Girls consuming drugs enter into irresponsible sexual behavior and are likely to get pregnant<sup>[9]</sup>.

### **Why drug abuse increase day by day?**

In developing countries, with rapid financial growth, development and amplified movements to metropolitan areas, new ways of living standards have been escorted in and new ethics and principles have substituted the old ones, thereby, generating circumstances and situations under which conduct can be variously demarcated.

Absence of parental nursing & care due to the working conditions of the parents and the breakup of joint family system inspire the youth to initiate first stage of addiction; there after physical mental and wealth conditions promotes to 2<sup>nd</sup> & third stage of addiction.

For many individuals it is very difficult to detach from drug addiction and change the habit of consumption of alcohol and drug once cultivated.

In specific, females are susceptible to the effects of alcohol. Excessive use among female youths may restrict the improvement of their prefrontal cortex. Low prefrontal cortex growth may result in insufficiencies in thinking and thoughtless behaviour. Liquor can trigger the pleasure-producing chemistry of the brain and discharge a pleasure-enhancing element called dopamine. This leads to emotional state of despair, annoyance, monotony, apprehension, and irritation<sup>[10]</sup>.

**Table 1 Risk and Protective Factors for Drug Abuse and Addiction**

Risk Factors	Protective Factors
Aggressive behavior in childhood	Good self-control
Lack of parental supervision	Parental monitoring and support
Poor social skills	Positive relationships
Drug experimentation	Academic Competence
Availability of drugs at school	School anti-drug policies
Community poverty	Neighborhood pride

Anyone can get stuck to the addiction cycle (figure1) which can lead to crime, death or the treatment. The treatment is only option for better life and restoration.

**Drug Addiction Treatment**

No matter which stage of drug use one is in, it's important to seek help right away, especially if one is reached the stage where he is unable to stop using drugs on his own. Addiction is a progressive illness that, if left untreated, only gets worse. Thankfully, addiction is also a treatable illness. There are many forms of drug addiction treatment, including inpatient treatment, outpatient treatment, 12-Step programs and holistic therapies.

One thing to consider when choosing a drug addiction program is if it offers dual diagnosis treatment. Oftentimes a person will develop a drug addiction after trying to self-medicate symptoms of a mental illness.



**Figure 1 Addiction Cycle and its Leads**

depression and anxiety, will develop due to chronic drug use. The result is a never-ending cycle that is difficult to break without treating both the drug addiction and the mental illness. Proper assessment of a dual diagnosis can help you in any stage of drug use and addiction.

Drug addiction is complex and chronic fight, and relapses occur even after long periods of sobriety. Very few people can get out of the cycle of addiction on their own, but those could not come out have to pay much better after seeking treatment of some kind. Every addiction treatment case is identical issue, and handling them need continuous care and therapy and thus addiction treatment approaches sought in different forms. Successful treatment needs to address a number of issues that have been disrupted in the patient's life.

Many factors will determine just what type of addiction treatment is sought, including<sup>[11]</sup>:

1. The need for detox (medically assisted or otherwise).
2. The need for ongoing medical treatment, such as treatment of medical complications arising from drug overdose,
3. The need for skills training for reintegration into a healthier family, work or social environment that will promote sobriety.
4. The need for additional therapy to address any concurrent or dual diagnoses, such as major depressive disorder, anxiety, or bipolar disorder.
5. The need for a thorough plan of aftercare to reinforce the progress made throughout early treatment.

Any option can be chose for abuse therapy after successful diagnosis abuse problem. Diagnosing a drug addiction does not solely rest on determining the

physical appearances of the drug addict. Instead, medical experts use a series of both physical and behavioral diagnostic principles to determine whether one has an addiction and if yes which kind of. These criteria include:

1. Inability to cease using drugs.
2. Inability to meet obligations at work, in the family or to friends.
3. Withdrawal symptoms occur when drug use is stopped.
4. Physical tolerance to the effects of the drug.
5. Compulsive use of the drug, even when harmful consequences are recognized.

#### *Inpatient Drug Abuse Treatment:*

Inpatient drug abuse treatment allows an addict to fully focus on his or her recovery. This abuse treatment can be provided as mixture of individual and group therapy to help addicts learn ways to overcome their addictions. Along with that motivational and educational opportunity makes recovery easy. Many times medication also required to ease the symptoms of detoxification and withdrawal. Many common withdrawal syndrome are shown in figure 2.

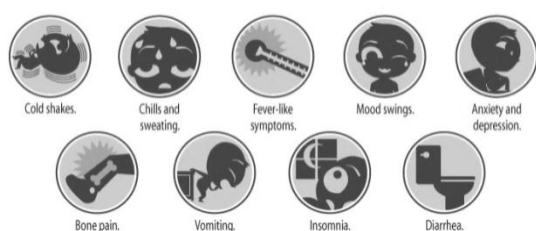


Figure 2 Typical Withdrawal Syndromes

Compare to outpatient treatment an inpatient treatment facility can greatly increase the chance of successfully completing a treatment program, particularly if an addict does not have a good support system at home or has a mental illness, such as depression, personality disorder or anxiety disorder.

#### *Outpatient Drug Abuse Treatment*

Outpatient drug abuse treatment can guide drug addicts through all stages of their recovery. However, outpatient treatment more successful during the later stages of recovery.

Some tools that help to progressively recover from addiction or abuse are motivation, physical work, exercise, meditation, educational programmes.

#### REFERENCES

1. NIDA InfoFacts: Understanding Drug Abuse and Addiction. 2008.

1. <http://www.drugabuse.gov/infofacts/understand.htm>
2. Brownsberger, W.N. & Heymann, P.B., 2009. Drug Addiction and Drug Policy: The Struggle to Control Dependence, London: Harvard University Press.
3. Winters, K.C., 2009. Adolescent Brain Development and Alcohol Abuse. The Journal of Global Drug Policy and Practice, 3(3),1-4.
4. Galanter, M., 2006. The Consequences of Alcoholism: Medical, Neuropsychiatric, Economic, Cross-Cultural, Berlin: Springer Science & Business Media.
5. Khantzian EJ (1990) Self-regulation and self-medication factors in alcoholism and the addictions. Similarities and differences. Recent Developments in Alcoholism, 8, 255-271.
6. Medina, K.L. et al., 2008. Prefrontal cortex volumes in adolescents with alcohol use disorders: unique gender effects. Alcoholism, clinical and experimental research, 32(3), pp.386-94.
7. Groves, S.A., Stanley, B.H. & Sher, L., 2007. Ethnicity and the relationship between adolescent alcohol use and suicidal behavior. International journal of adolescent medicine and health, 19(1), pp.19-25.
8. Brick, J., 2012. Handbook of the Medical Consequences of Alcohol and Drug Abuse 2nd ed., London: Routledge.
9. Cui, C., Grandison, L. & Noronha, A., 2012. Neural-Immune Interactions in Brain Function and Alcohol Related Disorders, Heidelberg: Springer Science & Business Media.
10. Shuldiner AR, O'Connell JR, Bliden KP, Gandhi A, Ryan K, Horenstein RB, Damcott CM, Pakyz R, Tantry US, Gibson Q, Pollin TI. Association of cytochrome P450 2C19 genotype with the antiplatelet effect and clinical efficacy of clopidogrel therapy. Jama. 2009 Aug 26;302(8):849-57.
11. Condon P. Residential Treatment Center <http://drugabuse.com/library/residential-treatment/> Accessed on 10 Feb 2016