Sumerianz Journal of Medical and Healthcare, 2025, Vol. 8, No. 2, pp. 1-15
ISSN(e): 2663-421X, ISSN(p): 2706-8404
Website: https://www.sumerianz.com
DOI: https://doi.org/10.47752/sjmh.8.2.1.15

Original Article Open Access

Prescription and Nonprescription Drug Abuse Rates in the United States and the Way Forward

Ngozi Caleb Kamalu*

Professor of Political Science Fayetteville State University 1200 Murchison Road Fayetteville, North Carolina 28301
Email: nkamalu@uncfsu.edu

Hannah Oluchi Kamalu

Health Sciences Major College of Nursing and Allied Health Sciences Howard University 2400 "6th" Street, N.W., Washington, DC 20059
Email: Oluchikamalu@gmail.com

Article History

Received: 9 August 2024

Revised: 03 January 2025

Accepted: 29 April 2025

Published: 03 May 2025

How to Cite

Ngozi Caleb Kamalu; Hannah Oluchi Kamalu (2025) Prescription and Nonprescription Drug Abuse Rates in the United States and the Way Forward." *Sumerianz Journal of Medical and Healthcare,* 8.2.1.15

Abstract

Prescription and nonprescription drug abuse has become a big health issue in the United State, and commonly fall under three categories that include pain killers (opioids), stimulants and depressants. Drug overdose was the leading cause of injuries leading to death in the U.S. in 2012. Gallup Survey [1], showed 50% of Americans are currently taking prescription medication; and nearly 90% of seniors admit taking prescription medication.

Many risks factor or predictors that increase a person's chances, especially youths to engage in drug overdose and abuse include availability, social access, low enforcement, peer pressure, history of tobacco, alcohol and other drug use, and reduced public perception that prescription drugs are safe to use regardless or irrespective of their dosage and or frequency.

Among the objectives of this study is to define the term, nature and scope of the problem of prescription drug abuse in the United States; review academic literature on the topic as well as analyze related theories of drug abuse that include Labeling, Social disorganization, social control, Biological, Psychological, Sociological, Choice and Rational-choice theories.

The mitigation strategies designed to reduce the incidents of drug overdose and abuse include:

- Education of patients, parents and community on the drug abuse issues.
- -Implementation of prescription drugs to identify signs of inappropriate use of controlled substances like prescription drugs.
- Institution of prescription drug disposal (take-back) program to reduce the supply of unused prescription drugs Programs-
- -Reliance on law enforcement to stop pill mills, through arrest, prosecution and sentencing/ imprisonment.
- - Providing drug/ substance abuse program to hold healthcare providers accountable when they violate safe, ethical and effective administration and prescription of painkiller medications.

The effective implementation of the above recommended actions and policies will eventually reduce the high rates of drug abuse and drastically improve public health standards and safety in the United States.

Keywords: Painkillers;, Symbolic interactionism; Sedatives; Stimulants; Labeling theory; Tranquilizers; Social norm; Drug overdose; Choice theory; Risk factor; Rational choice theory; Stigma; Shaming; Sociological theory; Stereotype; Deviant behavior; Psychological theory; Gender gap; Social disorganization theory; Self-fulfilling prophecy; Biological theory; Intrinsic motivation; epigenetics.

*Corresponding Author

1. Introduction

Prescription and nonprescriptive drug abuse or overdose has become a big health issue in the United States, primarily because of its dangers to health. The National Institute on Drug Abuse (NIH) says that it occurs when a medicine is taken in a way that is different from what the doctor prescribes; and is thus manifested in various ways, such as:

- Taking medicine that is prescribed for another person.
- Taking a larger dose than prescribed.
- Taking the medicine in a different way than supposed, such as crushing tablet when it is supposed to be taken whole.
- Using the medicine either for another purpose or to achieve a different outcome – such as getting high.
- The abuse of prescription medicine can lead to addiction and sometimes death.

According to research, signs of prescription drug abuse include stealing, forging or selling prescriptions; taking higher doses than prescribed, seeking prescription from more than one doctor, excessive mood swing, hostility, increase or decrease in sleep, poor decision making, continually losing prescription to have more written; and appearing to be high; unusually energetic / tired and sedated.

Commonly abused prescription drugs are known to fall into 3 main categories, namely

(a) Opioids (painkillers) – codeine, OxyContin and Vicodin. Their signs and symptoms include depression, low blood pressure, decreased breathing rate, confusion, sweating, and poor coordination

(b) Stimulants (used to treat ailments such as attention deficit hyperactivity disorder (ADHD), such as Adderall and Ritalin. These are forms of stimulants whose symptoms and signs include weight loss, agitation, irritability, insomnia, high blood pressure, irregular heartbeat, restlessness and impulsive behavior.

(c) Depressants –Used to treat anxiety or sleeplessness, such as Valium or Xanax. These sedatives or anti-anxiety medications have signs and symptoms that include drowsiness, confusion, poor judgment, involuntary and rapid eyeball movements and dizziness.

Further concern is that prescription is not only limited to adults but has become rampant among the youth and teenagers. Research has shown that after marijuana and alcohol use, prescription drugs have become the most abused substance among teens aged 14 and above. Teens also abuse prescription drugs for several reasons different from adults, such as to get high or to enhance their academic work and performance. Further, most teens get prescription drugs in dubious ways like stealing from friends and relates without their knowledge. There appears to be a gender gap element to prescription drug abuse, as boys and girls tend to abuse prescription drugs for different reason. For example, most boys abuse it to get high, while girls abuse them to stay alert or to lose weight.

2. Research Objectives

The purposes of this paper are to:

- Define the term, nature and scope of the problem of prescription drug abuse in the United States
- Review academic literature on the topic
- Identify best practices (evidence-based) of identifying and preventing the diversion of controlled substances such as prescription drugs
- Help reduce the mortality and morbidity associated with prescription drug abuse
- Assist medical practitioners/ professionals, clinicians and other stakeholders in identifying and referring victims for treatment
- Reducing the cost for law-enforcement by providing information for effective detection and investigation of cases involving the diversion and misuse of prescription drugs and its derivatives
- Inform the public and healthcare professionals about new trends and developments in the prescription drug business, industry and market.
- Provide profiles and identify risk-factors related to prescription drug abuse.

3. Scope, Prevalence and Cost of Prescription Drug Abuse Problem

According to the Center for Disease Control and Prevention (CDC – "Prescription Drug Overdose in the United States: Fact Sheet. http://www.cdc.gov/homeandrecreationalsafety/rxbrief/), the following shocking developments or trends have been observed:

- drug overdose was the leading cause injury-related death in the United States in 2012
- Among people aged 25 -64 years old, drug overdose claimed more lives than motor accidents.
- There has been an increase of 117%. Of overdose death rate between 1999 and 2012
- 79% (33,175) drug overdose deaths in 2012 have been accidental; 13.2% (5,465) Suicidal; 0.2% (80) homicide, and 6.7% (2,782) undetermined intent.
- 2.5 million emergency department visits in 2011 for drug overdose and abuse
- 71,000 children aged 18 years or younger reported in Emergency departments between 2004 and 2005.
- Among children under the age of 6 years, pharmaceuticals account for about 40% of all exposures reported to poison centers.

Most overdose incidents come from drugs that are originally prescribed. But once they are prescribed and dispensed, they are often diverted to people abusing them. Some come from pharmacy thefts but in a small quantity.

However, more than 75% of prescription drug abusers use prescription drugs, mostly painkillers prescribed for others.

According to the CDC study, victims of pain killer prescription drugs get them from several sources: 7.1% from unknown sources; 4.4% from drug dealers or strangers; 4.8% taken or stolen from friends or relatives without their consent; 11.4% bought from friends or relatives; 17% prescribed by one doctor; and 55% obtained from friends or relatives for free.

The level of persistence of prescription drug abuse in the mind of Americans was reflected in Pew Research Center National Survey Report [2] which showed that in addition to mental illness, Americans see U.S. losing ground against prescription drug abuse. The report noted that America has made more progress on treating or finding solutions for a host of societal illnesses except prescription drug abuse which received the least positive response. In the data, the respondents were asked whether the nation is making any progress on prescription drugs in relation to other kinds of ailments. The response rates were as follows: Cancer (54%), AIDS (48%), Cigarette smoking (45%), Obesity (28%), Mental illness (19%), Alcohol abuse (17%) and Prescription drug abuse (16%).

Gallup Survey [1], report showed that 50% of Americans are currently taking prescription medication; and nearly 90% of seniors admit taking prescription medication. Other findings of the research showed that Americans are much more likely to take medication for a long time as opposed to short time for their medical conditions; as well as take them for physical as opposed to emotional or psychological conditions. With respect to cost, the study found that on the average, Americans spend about forty-six dollars per month for their medications

More specifically, 52% of respondents say they are currently taking medication as opposed to 48% who said they are not; a result that showed a slight spike in reported prescription drug use from a previous Gallup survey of 2003. In terms of general prescription drug utilization, senior citizens appear to be more prone than other groups to take prescription drugs. Only about 25% of adults aged 18-29 years (27%) currently take prescription medication. This percentage also increases to 4 out of 10 people among persons in the age bracket range of 30 to 49; 61% among 50 -64-year-olds and a staggering 88% among adults aged 65 and above.

With respect to prescription drug use according to age, the Gallup research showed that by about 60% margin, women are more likely than men to admit that they are currently placed on medication; and even becomes more pronounced among younger women. Roughly half (46%) of women aged 18 -49 reported on current prescription medication regiment compared with about a quarter (26%) of men in the age bracket. Also, at least 70% of men and women aged 50 and older reported taking prescription medication.

As regards the conditions for which Americans take prescription medicine, one in three (33.33%), admit taking prescription medication to treat a long-term medical condition, as contrast to 7% who said they use them for a short-term condition; and 9% who reported using them for both long and short-term conditions. Among those taking prescription medication at the time of the survey, 66% of the respondents say they used it for a long-term condition as opposed to 13% for short-term and 18% for both short-term and long-term medical conditions.

When asked whether prescription medication was for a long-term or short-term condition, a few of the respondents reported taking prescription medication for psychological or emotional condition. The survey showed that 41% are taking prescription medication for physical condition only; 3% for only emotional condition and 6% for both. However, among those on prescription drugs at the time of the study, 78% admitted using the medication for physical condition; 5% for emotional condition, and 13% for both physical and emotional conditions.

There is an economic cost associated with prescription drug abuse. The Gallup study showed that on the average, Americans agree that they spend an average of 46 dollars a month on prescription drugs. (This average takes into consideration the 50% who are not currently on prescription medication or do not pay for their medication). Among those who currently take prescription drugs, their average monthly expenditure on prescription medication comes down to 89 dollars per month. The breakdown of expenditure for prescription drugs of Americans are as follows: 1 in 2 are not placed on prescription drugs or get them at no cost; about 1 in 10 (12%) spend between 1 dollar and 25 dollars in a month; 14% spend between 26 dollars and 50 dollars every 3o days; 1 in 10 spend between 51 dollars and 100 dollars every month; and 12% have expenditures exceeding 100 dollars per month.

The expenditure profile for seniors on prescription medication appears different. Seniors spend more on prescription drugs than teens or younger people. The Gallup study revealed that Americans aged 18 to 29 only spend an average of 13 dollars a month on prescription medication. The cost inches higher among those between 30 and 49 years old who spend an average of about 1 dollar a day (31 dollars a month). There is even a corresponding increase in cost to increase or advancement in age. For example, adults aged 50 – 64 spend an average of 58 dollars a month while those aged 65 and higher spend 93 dollars in one month.

According to Lyons [3], illicit drug use among the general U.S. population is roughly what it was in 1979 because of a drop off among teens, yet 42% of respondents say they worry a great deal as opposed to 23% that said they worry a "fair amount", while 24% said they were worried only a little; and 11% said they were not worried at all. Another finding of the survey was that the extent of worry had gender and age gaps to it. For example, 48% of women said they worry a great deal about drugs versus 35% of men. In the same vein, women were more likely to express worry about drug use just as older Americans. Furthermore, the study observed that less-educated and lower-income Americans worry more about drugs than the more educated and high-earning. For example, 51% of respondents with high school education or less were highly concerned about drug use as compared with 29% of college graduates. Also, the study found that 59% of respondents from household earning less than 30,000 dollars per year said they were concerned about drug use compared with 26% of those making 75,000 dollars per annum or above.

In a related youth survey study, McMurray [4], found that 20% of teenagers admitted using marijuana as opposed to 79% that denied experimenting with marijuana; and 27% who admitted using alcohol compared with

72% that denied using alcohol). The author found similarity with the trends observed in a 2003 Gallup Youth Survey that discovered that 20% of teens reported using marijuana while 30% admitted using alcohol.

Another critical finding of the study by McMurray [4], was that while a small number of teens admitted using marijuana or alcohol, a majority expressed concern about drug abuse among their friends. Further, 72% of teens described abuse of illegal drugs, such as marijuana and cocaine as "very serious (52%); somewhat serious (20%) health issues among their teenage friends; 42% regarded alcohol abuse as very serious; and 32% (somewhat serious problem. Also, 52% described abuse of legal, over the counter and prescription remedies such as cold medicine as a growing trend or fad among teens; 28% as very serious and 25% as somewhat serious health issue among their peers.

Next, McMurray [4], concluded that gender and age affect alcohol and drug abuse. For example, teenage boys were known to be much more likely than teenage girls to report that they have experimented with marijuana (28% vs. 12%) and older teenagers (aged 16 -17 years old) are nearly 3 times as likely as younger teens aged 13 -15 years old) to have tried marijuana (32% : 20%).

According to National institute on Drug Abuse (NIH)/March 2011, to gauge or measure the extent or how rampant drug abuse in the United States, one needs to look at admissions to substance abuse programs. For example, data by drugs of admissions to publicly funded substance abuse treatment centers in 2008 show that 23.% were admitted for alcohol only; 18.3% for alcohol and another drug; 17% for marijuana; 14.1% for heroin; 8.1% for crack /smoked-cocaine; 6.5% for stimulants; 5.9% for opiates; 3.2% for powder cocaine/ non-smoked; 0.6% for tranquilizers; 0.2% for PCP; 0.2% for sedatives; 0.1% for hallucinogens; 0.1% for inhalants; 0.4% for other drugs and 2.2% none reported.

A breakdown of drug admissions by race/ ethnicity in 2008 also shows that 59% of drug abusers admitted to publicly funded substance abuse treatment programs were 59.8% (white); 20.9% (African American); 13.7% (Hispanic origin); 2.3% (American Indian or Alaska Native); 1.0% Asian/ Pacific Islander); and 2.3% Other.

Further, when broken down according to age group, admissions to publicly funded substance abuse treatment program data in 2008 showed that 14.8% of those admitted fall within the age range of 25-29; 14.4% (20-24 yrs.); 12.6% (40-44); 11.7% (35-39); 11.5% (45-49); 11.3% (30-34); 10.4% (50-59); 7.5% (12-17); 4.1% (18-19); 1.2% (60-64); and 0.6% (65 or older)

4. Theories of Drug Abuse and Addiction

There are many theories or well-substantiated explanations regarding drug use and abuse, and abuse. They are as follows:

4.1. Labeling Theory

This theory posits that self-identity, and the behavior of persons may be influenced or determined by the terms that are used to classify or describe them. It is associated with the concepts of stereotyping, self-fulfilling prophecy, and shaming. Put succinctly the labeling theory argues that assigning people labels based on their deviant behavior such as drug use, and abuse may even cause them to behave like the label given to them. Thus, the labeling theorists believe that stigmas associated with drug users eventually lead to more drug use, abuse and addiction because such people internalize such that characterize drug abuse pursuant to the fact that such victims of drug use and addiction see themselves as drug users, abusers and addicts, and are thus inclined to accepting such behaviors and role, thereby accepting their roles and identities as drug users, abusers and addicts. In other words, such drug-victims seek to place blame on the individuals who are victims of drug use, abuse and addiction, as well as see themselves as failed members of the community.

In a nutshell, the Labeling Theory is an approach that explains that people become deviant or engage in deviant behaviors like drug abuse because society puts that label on them. In response, they, the accused "adapt" to such labels put on them and try to behave in exactly the way their accusers expect them to behave. This perspective is because of social stigma and label tagged on them by the community that is being targeted.

This theory was first introduced by theorist Tannenbaum who was widely regarded as the first labelling theorist. His main concept was the 'dramatization of evil and that if a person is described as a criminal, then he/ she is bound to or very likely to become one. But Becker [5] overshadowed his work because he is held to be the architect of the modern labelling theory responsible for coining the term 'moral entrepreneur', a term mainly used to describe law making officials who prescribe certain 'criminal behaviors such as drug abuse as illegal. This theory stemming from a sociological perspective known as "symbolic interactionism," According to this concept, what makes some acts and some people deviant or criminal in behavior like engagement in drug abuse is the effects of individuals in power responding to behavior in society in a negative way; responses known as "labeling theorists" or "social reaction theorists".

This labeling theory suggested that powerful individuals or political elites and the state create crime by tagging or labeling some behaviors as inappropriate. Even though, according to the theory, such action is in reactions of members in society to fight crime and deviant activities and behaviors. This theory shaped on the ground that even though some criminological efforts to reduce criminal and deviant behaviors such as drug use and abuse are meant to help the offender through rehabilitation effort, they may indeed move offenders closer to behaviors of crime because of the label they assign the individuals engaging in the behavior. Hence, and in reaction, as members in society begin to treat these individuals because of their labels, the individuals begin to accept and internalize the labels themselves. In other words, when an individual engages in a behavior that is deemed by others as inappropriate, others label that person to be deviant, and eventually the individual internalizes and accepts this label. Thus, this notion of social reaction or response by the targets persons to such deviant behavior is central to labeling theory. One of the

takeaways of this theory is the understanding that the negative reaction of others to a particular deviant behavior is what causes that behavior to be labeled as "criminal" or "deviant." Furthermore, it is the negative reaction of others to an individual engaged in a particular labeled behavior that causes that individual to be labeled as "criminal, deviant or "abnormal." According to the literature, several reactions to deviance have been identified, including collective rule making, organizational processing, and interpersonal reaction.

In the words of theorist Becker deviance is a social creation by "social grouping" which they propagate deviance by making the rules whose infraction constitutes deviance and by applying those rules to a particular group people and labeling them as "outsiders' Also, according to sociologists like Emile Durkheim, deviance behavior is functional to society and keeps stability by defining boundaries, an illustration that later expanded labeling theory to include the functions of deviance behaviors, societal reactions to such deviance and the stigmatization of the offenders and including their separation from the rest of society. The result of such a stigmatization was dubbed a "self-fulfilling prophecy", a condition in which the offenders come to view themselves in the same way and manner society perceives them.

4.2. Social Disorganization Theory

The social disorganization theory is a theory developed by the Chicago School that links crime rates to neighborhood ecological characteristics. That is, the study of the relationship between people and their environment. A core principle or cornerstone of social disorganization theory is that state's location matters. Put succinctly, a person's residential location is a substantial factor shaping the likelihood that that person will become involved in illegal activities or deviant behaviors such as drug abuse. The perspective suggests that, among several determinants of a person's later illegal activity, residential location is as important as or even more significant than the person's individual or personal characteristics like age, race or gender. For example, the theory suggests that teenagers and youths from disadvantaged, marginalized and poor neighborhoods are more likely to participate in engage delinquency and deviant behaviors given the fact that such communities rationalize, approve and tolerate such behaviors that are at variance with those of the larger culture and community. The embrace of such type of belief results or culminates in the youths' embracing criminality and participation in deviant conducts and behaviors such as drug use and abuse in their social and cultural settings and environment.

This is a theory that asserts that the actions of people are more strongly influenced by the quality of their social relationships and their physical environment instead of their rational and informed thoughts. By Environment, we mean that a person's environment includes many different influences, including those from family and friends, economic status, and general quality of life. Other Factors including peer pressure, early exposures to drugs, stress, and parental guidance can greatly affect a person's likelihood of drug use, abuse, and addiction. This shows that the location people find themselves matters when it comes to predicting illegal actions and activities such as drug use and abuse. This theory also explains such deviant behavior such as drug use and abuse are caused by physical environment people live in and that different areas of a city may record different rates of drug use and abuse incidents because macro level factors that affect them, such as demographics, political, ecological, economic, socio-cultural, and technological factors influence their behaviors, including drug use and abuse. In other words, factors such as poverty, neighborhood decay constitute environmental factors and forces that drive or create the setting for drug use and abuse.

4.3. Social Control Theory

The Social Control Theory which was developed by Travis Hirschi in the 1960s states that an individual's behavior is bonded by society, and the extent to which an individual feels the bond or commitment to society determines their deviance from conventional societal norms. That means that under the social control theory, the strengths and durability of a person's commitments and engagements to conventional society inhibits or undermines social deviance behaviors., and that this is so because the need for belonging and attachment to others and groups is fundamental in terms of influencing many behavioral, emotional and cognitive processes. In other words, this theory is based on the perspective that people need to be socially controlled in order not to be engaged in deviant behaviors such as drug use and abuse. This theory tries to explain the reasons behind the involvement of people in deviant behaviors and activities such as drug abuse. It is a theory that argues that the actions of people are directly influenced to society and communities and that a person is likely to behave in a positive manner if he/ she respect the beliefs, societal norms, and family values. In contrast, persons who do not believe or are attached to societal rules, norms and regulations are more likely to indulge or engage in criminal or deviant behaviors, activities, and conducts. That means that people develop social control rights from childhood, and that they internalize the facts that if they are rewarded by their parents or teachers for certain behaviors, they then believe that such behaviors are acceptable and positive while on the other hand, if punished for any behavior it is assumed that such constitute unacceptable, deviant and criminal behaviors. Finally, the theory argues that societal values and norms constitute learned behaviors from childhood to adulthood form the framework that motivates people and as such is also known as social bond theory. Put succinctly, this theory posits the reasons behind people's conformity with certain behaviors such as drug use and abuse as a product of socialization which occurs and transits from childhood to adulthood, and that the agents of such socialization include family, schools and peers in which attachment, involvement, engagements and commitment and beliefs are internalized by people, and that deviant behaviors and conducts such as drug use and abuse take place or occur when there is lack of any these elements in shaping the behaviors of people.

However, critics argue based on self-report data that there may be various motives for disclosing information, and that questions may be interpreted differently by individual participants. Moreover, the critics argue that although

many of the conclusions drawn regarding the social control theory are intuitively convincing, individuals will not or are less likely to engage in crime like drug abuse if they are convinced or think that that indulgence in such deviant conduct will sacrifice the affection or respect of significant others, or cause them to lose employment or their autonomy if they face imprisonment for their actions. Other major criticisms of the Social Control Theory are that it only considers external bonds, such as bonds with social institutions or family. It fails to consider other factors like autonomy, impulsiveness, or personal choices that drive or influence delinquent behaviors.

4.4. Biological Theory of Drug Abuse and Addiction

Early biological theory of crime drew influence from Darwin's theory of evolution and natural selection. Later it extended into "degeneration theory" which posited that people who used or addicted to certain poisons — such as alcohol and drugs such as opium acquired morally degenerate human traits, and inborn or innate characteristics could be passed on biologically and socially to their offspring. Historically, biological theory of crime based on work of Lombroso and B.A Morel has migrated or degenerated into serving as the underpinning of the rationale used as justification for eugenic programs like those carried out by the Third Reich which stressed family, race and volk/ nationalism as the highest representation of values.

Under the Biological theory**,** there is an assumption that the genes that people are born with account for a significant percentage or chances of a person's risk for drug addiction, including other demographic variables such as gender, ethnicity, and the presence of mental disorders may also influence risk for drug use and addiction. Research evidence has shown that genetics plays a significant role in addiction. Even though the idea that drug addiction runs in the family has been proven to be correct even though does not totally mean that if a close relative of a victim of drug abuse struggles with addiction, one will be an addict. But rather means that when a person has an addicted blood relative, they have an increased chance of developing drug addiction when engaged in drug use.

Another supporting biological factor to this theory is the developmental stage. Evidence-based research has also shown that the sooner a person gets exposed to drugs, the more they are at risk of developing addiction in their later life. Another perspective to understanding the biology of addiction is sensitivity to drugs. While some people have higher tolerance rates to drugs than others, mental conditions such as depression, and anxiety also put drug abusers at risk of drug addiction. This is so because mentally ill people use drugs to make themselves feel good. Gender is also a biological factor that affects drug addiction given the fact that males drug abusers and females react differently to drugs. For example, women are more prone or likely to abuse sleep drugs, while men are more likely to abuse alcohol. Ethnicity is also a critical biological factor that determines disparities in drug addiction because different ethnic subjects may have different genetic makeup compared to others. Also, some members of certain ethnic groups tend to digest drugs differently than others. There is no doubt indeed that ethnicity is also closely related to environmental factors in the context of drug abuse and addiction. One of the takeaways or conclusions to be drawn from this biological theory of crime is that whether people commit crimes depends on their biological nature. First is the fact that some individuals are predisposed to criminal conducts and behaviors because of their human qualities and characteristics such as genetic, hormonal, or neurological factors that may be inherited from birth or acquired through accident, illness, or evolution. Secondly, No one can be a 'born criminal' because crime rather, crime is a learned behavior that can flow out of labeling and emulation. Nevertheless, there is a connection or link can be made between deviant behavior like drug abuse and aggression risk-taking and impulsive behaviors. Moreover, the formulation of neuroscience in the late 20th century gave impetus and life to genetic studies of crime. Not only did this shed light to genetics it also investigated how certain neurotransmitters, or chemicals in the brain, interact with several environmental behaviors to produce criminal behaviors.

4.5. Psychological Theory of Drug Abuse and Addiction

Psychological perspective or theory attempts to emphasize trying to understand human behavior. However, there are several psychological explanations of drug use and addiction. One of those theories is that people develop drug addiction due to inherent psychopathology manifested as mental illness. Another explanation is the possibility of people learning unhealthy behavior in response to their surroundings or environment. The next explanation is that people's thoughts and beliefs create feelings that shape their behaviors irrespective of the fact that these thoughts may be unrealistic and dysfunctional, translating to the same kind of behavior. Nevertheless, the psychopathological model suggests that mental disorders are the source of drug addiction with some of these disorders manifesting in the forms of cognitive problems, mood swings, and other mental issues.

Another psychological model of addiction is classical conditioning, which explains why environmental stimuli or internal sensations often cause or put in motion or activate an individual's craving for substances such as drugs. Under such condition, some parts of the brain get triggered by seeing apparatus for administering drugs. Another model is operant conditioning. Also referred to as instrumental conditioning, which is a method of learning that relies on rewards and punishment as instruments to modify one's behavior. In such case, through operant conditioning, any behavior that is rewarded is likely to be repeated while behaviors that are punished will rarely occur. Hence, in this model, it is believed that whenever a person uses a drug for the first time and happens to enjoy it, it is enough incentive for them to repeat this act. Nevertheless, under self-medication theory in which a person uses drugs to satisfy an emotional void in their lives such a person abuses drugs as a buffer against the reality that may be too painful.

It should be noted that all aspects of a person's life may revolve around the concepts derived in psychological theory. A psychological theory is an empirical or evidence-based concept on a person's thoughts, emotions, and

behaviors necessary to predict the future actions and behaviors of individuals. There are many types of psychological theory that include:

(a) **Behavioral Theory**: The primary focus is on the belief that a person's behavior comes from conditioning and that such behavior, like drug abuse, can be influenced by certain factors that trigger the condition.

(b) **Cognitive Development Theory**: This theory argues that thoughts influence a person's behavior or emotions. The primary focus of the cognitive development theory is on problem-solving, decision making, motivation, and thinking. Often, the intersection of cognitive development and behavioral theory helps to explain the causes of depression or anxiety and is crucial in addressing the issues of biases, phobias, and other false results associated with a cognitive development theory.

(c) **Sociocultural Theory**: This theory is based on the notion that a person's social environment including families, caregivers, peers, and culture, can influence a person's life and that through the agents of socialization like school, family, and workplace can develop several behaviors, traits, and perceptions in a person's daily upbringing and maturation as well as contribute enormously in shaping a person's behavior and contribute significantly to various interactions that help them to adapt to their respective cultures.

4.6. Sociological Theory of Drug Addiction

According to Kenneth Allan, a distinguishes sociological theory the theory consists of abstract and testable propositions about society; relies heavily on the scientific method which aims for objectivity and to avoid passing value judgments. But, in the words of Sociologist Robert K. Merton, sociological theory deals with social mechanisms, which are essential in exemplifying the 'middle ground' between social law and description and strongly believed that these social mechanisms to be "social processes having designated consequences for designated parts of the social structure. From a sociological point of view, drug addiction is examined through several prisms or perspectives. Some of the terms used in sociology to refer to drug abuse are unflattering, unfavorable, uncomplimentary, and harsh including drug abuse and drug misuse, while addicted people are called drug deviants or addicts. Under this theory, drug use was more than a mere chemical reaction between the drug and human physiology.

However, one of the ways to understand or comprehend the subjective perception an addict has on drugs, their effects, as well as the broader social lives of the drug addiction victims is that users who obtain drugs from the streets are more likely to develop an addiction than those who are administered in a medical setting. In the context of sociological theory, it is believed that criminal behavior is acquired from the people who commit heinous crimes. The more this person takes interest in the crimes that are being committed, the more dangerous their intention to commit the crime becomes. That is, the more they gain interest in their deviant behaviors such as drug abuse, the more prone they are to even commit more heinous crimes. Sociological theory is dependent on a few deviant behavior theories that include:

(a). Social Strain Typology: This theory was popularized by Robert K. Merton and based on two assumptions that include a person's desire to achieve social and cultural goals; and their belief that they can achieve those goals. Merton said that there are different types of deviant behaviors that are based upon such criteria as conformity, innovation, ritualism, retreats, and rebellion. Under this approach, Merton suggests that people can turn to deviance in the pursuit of widely accepted social values and goals. For example, individuals involved in the sale of illegal drugs have rejected the culturally acceptable means of achieving their financial goals and interests even though they still share the widely accepted cultural value of making reaping economic benefits."

(b) Structural Functionalism: this is a perspective that explores how deviant behaviors play an important role in uniting different types of populations. It also helps to differentiate between the types of behaviors acceptable and those that are not. By so doing, the theory helps in affirming that certain societal norms of the society must be upheld and codified and as such requires that a line must be drawn between the right or acceptable behaviors and deviant conducts that are wrong.

(C) Conflict Theory: This is a sociological theory that explains that deviant behavior takes place because people face challenges of economic, social, and political inequalities. As a result, the marginalized groups of people protest in their own ways against their perceived. As a matter of fact, conflict theory is an approach which shares the idea that the basic feature of all societies is the struggle between different groups for access to limited resources. It also assumes that all societies have structural power divisions and resource inequalities and disparities that lead to groups having conflicting interests For example, and in the context of Marxism, Karl Marx_emphasized class struggle and conflict over economic resources, while Max Weber suggested that conflict and inequality are caused by power and status while status on the other hand was based on economic factors such as kinship, education and religion. He ended by drawing the conclusion that both class and status determine an individual's power and influence over ideas. In terms of the evolution of the conflict theory it is argued that Large-scale civil unrests and large demographic dislocations, extreme poverty, and a wide gap between the interests and wealth of workers and owners (reach vs. the poor) lead to the development of Marxist conflict theory, which emphasizes the omnipresence of the divides of social class, which is the state of conflict being widespread and constantly encountered or repeating itself.

4.7. Choice Theory

Choice theory posits that the behaviors people choose are central to our existence and that behavior choices people make are driven by selected genetically driven needs that include survival, love, power, freedom, and fun in a hierarchical order. The most basic human needs according to this concept are survival (physical component) and

love (mental component). Without physical (nurturing) and emotional (love), argued the theory a child will not survive therefore unlikely to attain power, freedom, and fun throughout his/ her stages of development.

According to this theory, making choices usually involve many types of motivation. For example, People do not usually don't make important decisions randomly but instead are influenced by different factors or forces. Choice theory suggests that people will always choose options based on their intrinsic or natural motivations. This means that such people are responsible for the decisions they make. Hence, if this is true then it has serious implications in terms of how such problems like drug addiction is viewed or perceived, and strongly suggests that the only person who can help the individual with respect to drug abuse is himself/ herself.

Motivation is the driving force behind actions. Even people who like to sit around watching TV all day will be doing so because of this force. It is wrong to say that they are lacking in motivation. Instead, it would be fairer to say that they were motivated to engage in what others would consider unhealthy behavior. It is usual to describe motivation as either intrinsic or extrinsic. With intrinsic motivation the individual will do things because they feel that it is good or right. Extrinsic motivation comes from societal expectations, peer groups and authority figures. Therefore, an individual might be motivated to do something because he/ she feels it is right or because they feel forced to such behavior by external conditions and expectations.

The Choice theory has been developed and popularized by U.S. theorist and psychiatrist William Glasser. One of the most controversial elements of this theory is the idea that all behavior is chosen or based on an individual's decision. Therefore, the motivation for such action is always going to be intrinsic or natural. According to theorist Glasser such psychology not only wrong but also potentially harmful in the context that humans are seen as developing scenarios that make them feel good and thus their choices will then be made to fit the situation. This environment and scenario as created is known to be shaped by the experiences that the individual has ever had and will lean toward choosing the best possible way to fulfill basic human needs. Humans are always confronted with challenges regarding what they want to be and the things they want to achieve or accomplish in life. The mere fact that people experience different challenges as they grow means that the way they see and perceive things will differ as well.

There are basic types of human needs identified by Choice Theory. They include the need to belong; to survival needs that include things like food, shelter, warmth, and security/ protection; need to have fun; need for freedom; and need for power. Although people may not fully comprehend their basic needs, they remain motivated by the choices they make.

With respect to drug addiction, another takeaway in choice theory is that addictions are caused by unhappiness, and that Alcohol and drug abuse occur pursuant to the choices people make and not necessarily caused by diseases. Hence, it becomes the challenge or burden of the victimized individual to take responsibility for his/ her actions to rectify the situation. It is Given the fact that drug addict can find a pathway designed to provide them with or reinstate their happiness they are more likely to reduce or mitigate their addiction even though reality therapy is advocated to help the individual regain their happiness. Under this Choice theory in relation to personal empowerment, people will often justify their actions based on some external event. In a global system where people make choices mostly due to external motivations, they are likely to lose some of their freedom. Thus, the Choice theory suggests a different community or environment where people have much more power to control their lives. Nevertheless, many criticisms have been levelled gains his theory. One claim is that if the cause of , say mental illness is always unhappiness then assisting patients or victims of such situation, like making people to reclaim their lost happiness would eventually mitigate such situations or health conditions like drug abuse and addiction, a strategy that ignores the biological factors and explanations of drug abuse which claim that genes, including the effects of environmental factors have on a person's gene expression known as epigenetics which account for a high percentage of a person's risk of addiction, as well as the fact that people with mental disorders are at greater risk of drug use and addiction than others.

4.8. Rational Choice Theory

This theory examines the problem of why people voluntarily engage in self-destructive behavior such as drug use and abuse. One of the central elements of drug dependence is the fact that the alleged persons have impaired control over their use of the drug substance. This type of deviant behavior and conduct may manifest itself in continued use despite a wish and failed attempts to reduce or stop the use of the said drug, to use greater amounts of the drug than intended, or to use the drug for longer periods than intended. These challenges and problems may be greater in certain situations such as when drug user and addicted skips his or her chances to continue engaging in drug abuse conducts, a form of deviant behavior some people may tag as "against the persons personal better judgement. As a matter of fact, drug-dependent persons or addicts have a choice of at least two options, both of which may be evaluated in terms of their future consequences. They realize that one option better serves their self-interest, but still choose the alternate in which they continued engaging in deviant drug abuse behaviors. However, one of the weaknesses of this perspective or approach is that it is hard to certify or prove that such a person chose the continuous drug abuse option despite knowing that such practice was detrimental to his or her self-interest and greatest benefit.

Thus, rational choice theory states that individuals, such as drug abusers and addicts use rational calculations to make rational choices and decisions to achieve their stated goals and outcomes in such a way to aligned with their own personal goals and objectives. These results are also expected to maximize the individual's self-interest. Put succinctly, under rational choice theory, a person is expected to make decisions that will result in or yield outcomes that will provide him or her, the greatest benefit and satisfaction in the context of the option available to them at a particular point in time. The conclusions or takeaways one can draw in this respect is that as regards Rational choice

theory, people rely on rational calculations to make rational choices that result in outcomes that aligned with or are consistent with their own best interests and is often associated with the concepts of rational actors and self-interest. Rational choice theory assumes that individuals, or rational actors, in any decisions they make will always try to maximize their advantage in any situation while at the same time consistently trying to minimize their losses. One of shortcomings or weaknesses of this concept is that people are not always able to obtain all the relevant information they would need to make the best possible informed decision and that knowledge of all alternatives, or all consequences that follow from each alternative, is realistically impossible regarding the decisions that people make.

Like all theories, one of the benefits of rational choice theory is that it can be helpful in explaining and analyzing individual and collective behaviors. In other words, rational choice theory can explain why people make certain choices, based on specific costs and rewards. One of the pros of Rational Choice Theory is that it is helpful in explaining individual and collective behaviors, while the con or weakness of the theory is that individuals do not necessarily and always make rational decisions. This means that people are often moved or driven by external factors that are not necessarily rational, such as emotions rather than financial. Some of the reasons is that people do not have perfect access to all the information they need to make the most rational decision all the time. In order for the rational choice theory to apply, it is assumed that it satisfies a number of basic premises that include the fact that the choice has to be rational, and be based on risk against reward, and that the decision will not be made if the risk outweighs the reward and the alleged person will use all available information and resources to make the informed decision.

Rational choice theory in simple terms means that people make choices based on the idea that the result will be beneficial to them, and it assumes that the person making the decision or taking such a action will do so based on rational choices that will result or culminate in an outcome that benefits them or is in their own best self-interest. That means that people make a choice where the reward is equal to or greater than the expected reward. With respect to drug abuse and Addiction, rational choice theory can be applied to people suffering from addiction because the reasons why someone's drug abuse and diction keeps getting worse and worse has to do with the issues of risk vs reward choice. That is the risk of becoming addicted as opposed to the choice to mitigation through alleviation of feelings and the euphoria that comes with substance abuse and addiction.

Many criticisms have been levelled against the rational choice theory. The first problem with the theory has to do with explaining collective action. First, it argues that individuals base their actions on calculations of personal profit or benefit while unable to explain the reasons behind their choosing to do something that will benefit others rather than themselves. Furthermore, the problem with rational choice theory, according to its critics, has to do with social norms given the fact that this theory does not explain why some people seem to accept and follow social norms of behavior that lead them to act in selfless ways or to feel a sense of obligation that overrides their self-interest. Moreover, the argument against the rational choice theory is that it is too individualistic in the context that the theory fails to explain and take proper account of the existence of larger social structures. That means that there must be social structures that are not liable, dependent and cannot be reduced to the actions of individuals and therefore have to be explained in different terms.

5. Literature Review

Pursuant to the fact that social disorganization theory experienced a significant decline in popularity in the study of crime during the 1960s and 1970s. Bursik [6], gave impetus or life to the theory by making a significant contribution to the theory. He highlighted the most salient problems facing social disorganization theory at the time and elevating and charting a clear pathway forward in terms of ways and mitigation strategies necessary for the study of neighborhoods and crime.

Kasarda, *et al.* [7], examine the utility of two competing theoretical models mainly relied on to analyze variations in community attachment. The first model considers population density and size to be the primary predictors of community attachment across place while the second emphasizes on length of residence even though in the end of their experiment they concluded that their empirical findings did indeed support the second perspective that focused on length of residence as a unit of analysis.

In another study Kubrin and Ronald [8], critically examined the nature of the relationships among neighborhood structure, social control, and crime as reflected in social disorganization theory. The researchers proposed critical and substantive refinement of this perspective by providing a detailed and comprehensive discussion of the methodological issues that undermine the study of neighborhoods and crime which is at the foundation, underpinning or root of the social disorganization theory.

Raudenbush, *et al.* [9], in the next experiment focused on psychometric analysis, which is the science of measuring mental capacities and processes. In other words, this psychometric approach relied on the field of psychology devoted to the testing, measurement, and assessment and related activities. It is worth noting that psychometrics is a field that focuses on the best ways to measure psychological concepts such as cognition, knowledge, and personality. In this investigation, Raudenbush, *et al.* [9], proposed many strategies necessary to improve the quantitative assessment of neighborhoods which they coin "Eco metrics." In it, the investigators clearly demonstrate the utility of survey and observational data and stressed the importance of "nested research designs", where subdivisions or levels of a given factor change for the various subdivisions of competing factors. Hence the research was recorded as a very useful and pertinent design for neighborhood research.

6. Risk Factors Associated with Drug Overdose and Abuse

There are many factors that Increase one's chances of Drug Overdose.

According to the "Prescription Drug Overdose in the United States: Fact Sheet", based on available data of persons who died from drug overdose in 2012, men were 59% more likely than women to die. Also, whites had the highest death rate, followed by American Indians/ Alaskan Natives and then blacks. Next, the highest death rate was among the 45 -49years age bracket, while the lowest death rates were among persons less than 15 years old. This is explained by the fact that due to parental and societal controls children in this age range do not have the access or the opportunity to abuse prescription drugs.

In 2011, among the population that abused or misused drugs and received treatment in emergency departments, 56% were males; and 82% were individuals who were not less than 21 years of age.

Outside whites, adults aged 45 -49 and males, there are other factors that increase a person's chance or propensity to abuse prescription drugs according to research. Among those vulnerable to prescription drug overdose are:

- People who obtain multiple prescriptions from multiple providers. (Doctor shoppers)
- Low-income people and those living in rural communities.
- Those who take daily dosages of prescription painkillers such as veterans of war.
- People On Medicaid (prescribed painkillers twice the rate of non-Medicaid patients and 6 times the risk of becoming painkiller overdose victim)
- People with mental illness
- Those with history of substance abuse

Research has also shown that factors such as availability, social access, low enforcement, Prior use of Alcohol, Tobacco, and other drugs (ATOD), low commitment to education, peer norms that encourage drug abuse and low perceived risk of harm also serve as enhancers or risk factors for prescription drug abuse. Risk factors are determinants or correlates in enhancing the chance or propensity that people will abuse prescription drugs even though it does not necessarily cause it. As determinants, risk factors are variables associated with either increased or decreased risk of abusing prescription drugs.

6.1. Availability

By availability, we mean a set of circumstances that make it possible for a person to abuse prescription drugs. In other words, people find themselves in a position where they have an increased chance to abuse prescription drugs. The study by Birckmayer [10], found a corresponding relationship between price of goods and demand. The authors observed that when the prices of alcohol and drugs become inexpensive, convenient, and easy to get, people are more likely to get it.

According to Elliott [11], while the volume of major pain killers distributed in the United States has grown, the most increase so far seen has been in the sale of oxycodone whose astronomical increase has been up to 600% between 1997 and 2000. It has been found that adults who abuse prescription drugs do not usually get them legally. Rather unsafe combinations or volumes of medication are obtained from multiple sources such as physicians - a practice known as "doctor shopping" Prescription drug abuse or misuse has also been linked to inappropriate prescription or poor monitoring by healthcare professional such as doctors, nurses, and pharmacists.

6.2. Social Access

There is expanded reach and market for prescription drugs; and technology has enhanced this access. The internet has also become a medium of the masses to get information, make purchases and have their products delivered. According to Birckmayer [10] and Laxmaiah [12], the internet has been instrumental in opening new sources for acquiring drugs and thus partially responsible for its abuse. In fact, in the words of Compton and Volkow [13], the internet has made credit card purchases much easier, thus allowing potential prescription drug abuser the cover from detection, and with little or no control or supervision by healthcare professional or stakeholders. Hence, the authors make the case for parental education regarding the safeguards and necessary monitoring of internet use and purchases in the home.

Other sources through which youths and young adults acquire drugs identified by Herman-Stahl, *et al.* [14]; Barteis [15] and Culberson and Ziska [16] include stealing from parents and relatives and purchasing from classmates or peers who originally acquired them in as legitimated prescriptions. However, there are other relatively safe ways by which people who are inexperienced or those afraid of interacting with drug dealers for fear of leaving behind a purchase trail (record) and subsequently exposed to arrested and punishment, can acquire prescription drugs from close associates or extended family circle. A survey by Hernandez and Nelson [17] on safe means of obtaining prescription drugs found that 55.9% of those reporting nonmedical use of analgesics said they secured it most recently from a relative or friend; 18% reported getting the drug each time from one doctor; 0.4% admitted buying the drugs online, while 4.3% said they bought the drugs from licensed drug dealer or a stranger.

6.3. Low Enforcement

Regular and appropriate monitoring and sanctioning of rules (rule enforcement) is a necessary condition for successfully managing prescription drugs in ways that would prevent abuse. Enforcement is hard because of the complexity, scope and prevalence of prescription drug abuse. Further, law enforcement agencies are not well equipped to handle the complexity associated with drug abuse, because drug abuse touches almost all aspects of society. As observed by Hernandez and Nelson [18], the fight prescription drug abuse is a crisis that affects not only healthcare professionals, but also involves the cooperation of many agencies – law enforcement, legislature and funding, technology, family, and workplace. Further, the drug culture in which we live suggests that in order to

control prescription drug use and abuse, physicians and other healthcare professionals will be required to voluntarily self-control. This is important because physician abuse of prescription writing is hard to control because of the level of discretion they enjoy with regard to healthcare decisions they make; and by virtue of the fact that they are the "healthcare bosses" and specialists.

6.4. Prior Use of Alcohol, Tobacco and Other Drugs (PTOD)

High risk theory of drug abuse assumes that use and exposure to alcohol and drugs put people in greater risk of indulging in prescription drug abuse behaviors and thus are more likely to develop traumatic events or experiences that could cause physical, emotional and psychological harm or distress. Research has shown that nonmedical use of prescription analgesics is particularly high among young adults aged 18-25. Who are more likely to use them as a source of "getting high".

Alcohol and tobacco are the first psychoactive (gateway) drugs young people experiment with and use before they are introduced to marijuana and other hard drugs, according to Kandel [19].

Also, according to Sung, *et al.* [20]; McCabe, *et al.* [21] and Hall [22], illicit drug use and abuse of drugs such as opioid, sedatives and anxiolytics is found to be the strongest correlate or predictor of prescription drug misuse among adolescents; and is also associated with illicit drug use and other substance –related problems.

6.5. Peer Norms That Encourage Drug Use

Peer pressure and influence are major contributors to drug abuse among teens and young adults/ adolescents. Peer pressure is also at the center of adolescent experience; and is commonly associated with risk taking – delinquency, sexual harassment and assault, drug use and alcohol abuse. However, such behaviors can be mediated or moderated by parental monitoring, involvement, sanctions and discipline. Parental guidance has been known to correspond with disincentives for prescription drug abuse. Peer coercion during initial drug use or encounter could lead to vulnerabilities of opening the gateways to regular drug use from transitional experimentation. Peer pressure is also known to heighten risk in social settings.

Research has also shown that peer pressure to conform to peer-group norm is also known to be pronounced in group contexts with respect to appearance/ dressing, values, ideology/ belief, taste and style/ fad. Thus, having affiliation with social groups such as sororities/ fraternities, bands, and debating societies may also constitute risk a risk factor. To be popular or acceptable to a reference group, teens and adolescents may succumb to or fall victim to peer group behavior such as tobacco, alcohol and prescription drug use.

Several studies support this thesis. A study by Hernandez and Nelson [17] which surveyed students taking methylphenidate for attention-deficit/ hyperactivity disorder discovered that 16% of the respondents admitted being asked by other students (peers) to exchange, sell or give them their stimulant medication. Similarly, an internet of more than 3,000 undergraduate studies by Hernandez and Nelson [17], the respondents were asked about their nonmedical use of prescription drugs as well as their attitudes and perceptions regarding nonmedical use of drugs by their peers and found that majority of students overestimated his behavior and practice. Furthermore, majority of the respondents while perceiving that use of nonmedical prescription drug as controlled, safe and responsible, they provide avenues of avoiding the high-risk lifestyle and stigma associated with its use.

6.6. Family Norms that Encourage or Discourage Prescription Drug Misuse and Abuse

Parental control, mentoring and guidance including the absence of them can serve as predictors of drug use or nondrug use among youth. Children learn by modeling to conform to a normative standard of behavior. Sometimes, parents place negative sanctions to enforce normative behavior compliance among their children. Several studies support this paradigm or theory. In a study conducted by Sung, *et al.* [20], increased parental involvement emerged as a protective factor against past-year misuse of prescription drugs. Youth who had strong perception of parental disapproval of drug use, including marijuana; whose parents supervised their homework; or had been praised and complemented by their parents were significantly less likely to engage in prescription drug misuse in the 5 years preceding the survey.

Another study by Stewart [23] made similar discoveries – that parental guidance and close monitoring of youth proved to be protective factors for adolescent drug and substance use. Furthermore, Sung, *et al.* [20] found that low parental involvement and positive youth attitudes toward drugs are predictors of (opioid) prescription drug misuse. Next, Ford [24], in support of the research investigations of Stewart [23] and Sung, *et al.* [20] drew the following conclusions:

- Adolescents with strong bonding with their parents are more likely to have their behaviors closely monitored.
- Children under parental monitoring regiment are more likely to believe deviant behavior.

by them will be dictated and punished accordingly

- Close monitoring by parents limits free time spent with peers in social/ informal settings.
- Close parental monitoring reduces opportunity for children to indulge in deviance behavior.
- Students with strong bonding to school tend to establish they are vested and have stake and ownership in conformity.
- Students with strong bonds to their school and academics are less likely to use drugs.

6.7. Low Perceived Risk of Harm

The public perception that prescription drugs are always safer to use no matter the dosage and frequency than street drugs tend to fuel the surge in prescription drug use and eventually abuse. In the words of Friedman [25], the mass media has become an accomplice in this drug culture war. As he observed, it is almost impossible to open a newspaper, turn on television or search the internet without encountering an advertisement promoting a prescription medication designed to foster images of prescription drugs as safe and popular; and as integral routine of everyday American without any discussions or highlights of adverse effects associated with such drugs. Thus, it is not a surprise to see adverts reduce drug use stigma by promoting facelifts, weight loss drugs, facial alterations and younger looks obtained with evasive surgical techniques. Sometimes we see web doctors who give out prescriptions online.

Compton and Volkow [13], argued in the same vein by noting that the increases in the marketing of medications via the media not only increases marketing reach but rather changes attitudes toward abuse of psychotherapeutic drugs; and further reinforced by physicians who give its false sense of safety approval and legitimacy.

Survey research by Hernandez and Nelson [17] also shows that the media market strategy of marketing prescription drugs to youth appear to be working. In their study, the authors found that approximately one in two children (50%) of school children in grades 7-12 reported that there is no great harm in abusing prescription medicine, while roughly three in ten (30%) believed that prescription pain relievers are not addictive.

7. Drug Abuse: The Shift and Changing Attitudes toward Treatment and Punishment

There has been a change of attitude among Americans toward drug abuse victims, in terms of treatment and punishment. The Pew Research Center study (April 2012) captures the general sentiments of Americans which spans across all demographic groups. That is, cuts across party, ideology, gender, and age. Based on the analysis of the findings of this survey study, the following conclusions were drawn:

- Almost 7 out of 10 Americans (67%) said that the government should focus more on providing treatment for those who are addicted to drugs such as cocaine and heroin as opposed to 26% who think government should focus on prosecuting the victims.
- Republicans (conservatives) are less supportive of treatment options than democrats (liberals) or independents, among whom about 1 in 2 of Republicans (51%) say the government should focus more on treatment than prosecution in dealing with illegal drug users and victims.
- There is public consensus of government move away from mandatory sentencing for nonviolent drug crimes and offenses. By 63% to 32%, more Americans say it is a good thing than a bad thing that some states have moved away from mandatory sentences for nonviolent drug offenders – a change from 2001 survey that showed a 50-50 split.
- Support for the legalization of marijuana has steadily increased. Close to eight of 10 (75%) of the public, including opponents and proponents of marijuana legalization believe that the sale and use of marijuana would eventually be legalized throughout the United States
- By a wide margin, the public now view marijuana as less harmful than alcohol both to personal health and to society.
- Most of the public prefer a less punitive approach to the use of hard drugs such as heroin and cocaine and even larger majority (76% of the public), including 69% of Republicans and 79% of Democrats think people convicted of marijuana possession should not serve time in jail.

8. Conclusion and Recommendations

Most treatment admissions, according to the National Institute on Drug Abuse (NIH)/) [26], (41.4%) involve alcohol. Heroin and other opiates accounted for the largest percentage of drug-related admissions in 2008 (20%), followed by marijuana (17%). Further, about 6 out of 10 persons (60%) admitted were white, followed by about 2 in 10 (21%) for African Americans; 14% for Hispanic or Latina and distant 2.3% for American Indians or Alaska natives and 1% for Asian/Pacific Islanders. With respect to age range, the 2008 data by age group showed that among those admitted for substance abuse treatment, the highest proportion was the 25- 29 age group (14.8%), followed by 20-24 age group (14.4%), and then 40-44 age group (12.6%).

There is existential need for possible solutions to reduce or solve his problem drug overdose and abuse. Such mitigation strategies include the following steps:

- **Education: E**ducate parents, youth, and patients about the dangers of abusing prescription drugs, including prescribers to receive education on the appropriate and safe use, and proper storage and disposal of prescription drugs.
- **Monitoring.** Implement prescription drug monitoring programs (PDMPs) in communities to reduce "doctor shopping" and diversion and enhance PDMPs to make sure they can share data across states and are used by healthcare providers. Monitor prescription claims information and data, looking for signs of inappropriate use of controlled substances such as prescription drugs.
- **Proper Medication Disposal.** Develop environmentally responsible and sound prescription drug disposal programs to help decrease the supply of unused prescription drugs in the home. Examples are community "take back "programs.

- **Enforcement.** Provide law enforcement with the tools necessary to eliminate improper prescribing practices and stop pill mills through arrest and prosecution and sentencing.
- **Treatment**: Provide substance abuse treatment program designed to reduce overdose incidents among victims of drug and alcohol dependence.
- **Healthcare provider accountability** – make sure providers follow evidence-based guidelines for safe and effective administration and use of prescription painkillers.
- **Tighten the noose on doctor-shopping and the operation of rogue, online or pill mills** -to check illegal diversion and abuse of prescription medicines.

The effective implementation of the above recommended actions and policies will eventually reduce the high rates of drug abuse in the United States.

References

Anthony & Petronis (1995). Early-onset drug use and risk of later drug problems. Drug Alcohol Depend, 40: 9–15.

Becker, H. (1953). Becoming a Marihuana User. American Journal of Sociology. 59 (3), 235-242

Bogenschneider, K., Wu, M., Raffaelli, M., & Tsay, J. (1998). Parent Influences on Adolescent Peer Orientation and Substance Use: The Interference of Parenting Practices and Values. Child Development. Dec 69 (6): 1672.

- Bursik, Robert J. 1988. Social disorganization and theories of crime and delinquency: Problems and prospects. *Criminology* 26 (4), 519–551.
-

Barteis, et al. (2006). Evidence-based practices for preventing substance abuse and mental health problems in older adults. SAMHSA (Substance Abuse and Mental Health Administration), pp. 4-25.

Birckmayer, et al. (2004). A general causal model to guide alcohol, tobacco, and illicit drug prevention: Assessing the research evidence. Journal of Drug Education 34 (2), 121 -53

Barteis, et al. (2006) Evidence-based practices for preventing substance abuse and mental health problems in older adults. SAMHSA, pp. 4-25.

Compton & Volkow (2006). Abuse of prescription drugs and the risk of addiction. Drug & Alcohol Dependence 83 (1), 4 – 7

Culberson & Ziska, (2008). Prescription drug misuse/abuse in the elderly. Geriatrics, 63, (9): 22-31.

CDC – "Prescription Drug Overdose in the United States: Fact Sheet. http://www.cdc.gov/homeandrecreationalsafety/rxbrief/

CDC- "Policy Impact: Prescription Pain Killer Overdoses" http://www.cdc.gov/homeandrecreationalsafety/pdf/policyimpact-prescriptionpainkillerod.pdf

Compton, W. M., & Volkow, N. D. (2006). Abuse of prescription drugs and the risk of addiction. Drug & Alcohol Dependence, 83(1), S4-S7.

Dawson, D. A. & Grant, B. F. *(*1998*)* Family History of alcoholism and gender. Their combined effects on DSM-IV alcohol dependence and major depression. Journal of Studies on Alcohol, **59**, 97–106.

Dawkins, M. P. (1996). The social context of substance uses among African American youth: Rural, urban and suburban comparisons. Journal of Alcohol and Drug Education, 41 (3), 68-85.

Elliott, et al. (2009). The Scope of Adolescent Prescription Drug Abuse. Emerg Med 41(1):16.

Ford, Jason A. Nonmedical Prescription Drug Use Among Adolescents: The Influence of Bonds to Family and School Youth Society 2009 40: 336

Félix-Ortiz, M. and M. D. Newcomb. (1999). Vulnerability for drug use among Latino adolescents. Journal of Community Psychology, 27 (3), 257-280.

Friedman, R. A. (2006). The changing face of teenage drug abuse--the trend toward prescription drugs. New England Journal of Medicine, 354(14), 1448-1450.

Friedman, A. S., S. Granick, et al. (1995). Gender differences in early life risk factors for substance use/abuse: A study of an African American sample. The American Journal of Drug and Alcohol Abuse, 21 (4), 511-531.

Goldsworthy, et al. (2008). Beyond Abuse and Exposure: Framing the Impact of Prescription-Medication Sharing. American Journal of Public Health, 98 (6): 1115 – 1121

Grant & Dawson (1997). Age of onset of drug use and its association with DSM-IV alcohol abuse and dependence: results from the National Longitudinal Alcohol Epidemiologic Survey. Journal of Substance Abuse., Vol. 9, pp. 103 – 110.

Gerra, G., L. Angioni, et al. (2004). Substance use among high- school students: Relationships with temperament, personality traits, and parental care perception. Substance Use & Misuse, 39 (2), 345-367.

Hawkins, D. J., Catalano, R. F., & Miller, J. Y. (1992). Risk and protective factors for alcohol and other substance problems in adolescence and early adulthood: Implications for substance abuse prevention. Psychological Bulletin, 112 (1), 64–105.

Hingson et al. (2006). Age at drinking onset and alcohol dependence: age at onset, duration, and severity. Arch Pediatric Adolescent Med, 160: 739–46.

Herman-Stahl, M., Krebs, C., Kroutil, L., & Heller, D. (2006). Risk and protective factors for nonmedical use of prescription stimulants and methamphetamine among adolescents. Journal of Adolescent Health, 39 (3), 374-380.

Hernandez, S.H. and Nelson, L.S. (2010) Prescription Drug Abuse: Insight into the Epidemic. Clinical pharmacology & Therapeutics Vol. 88 No. 3

Hall, Matin T. et al. (2010). Prescription Drug Misuse Among Antisocial Youths. Journal of Studies on Alcohol and Drugs, 7 (6), 917-924.

Hawkins, J. D., M. W. Arthur, et al. (1995). Preventing Substance Abuse, from Building a Safer Society: Strategic Approaches to Crime Prevention, Volume 19. Michael Tonry & David P Farrington, eds.

Herman-Stahl, et al. (2006). Risk and protective factors for nonmedical use of prescription stimulants and methamphetamine among adolescents. Journal of Adolescent Health, 39 (3): 374 – 380.

Hernandez, S. H. and Nelson, N.S. (2010). Prescription Drug Abuse: Insight into the Epidemic. Clinical pharmacology & Therapeutics 88 (3), 307 - 317

Joranson (2002). Pain Management and Prescription Monitoring. Journal of pain and symptom management Volume 23 (30): 231 – 238

Kandel et al. (1992). Stages of progression in drug involvement from adolescence to adulthood. Further evidence for the gateway theory. J Stud Alcohol, 53: 447–57.

- Kasarda, John D., and Morris Janowitz. 1974. Community attachment in mass society. *American* Sociological Review 39 (3): 328–339.

- Kubrin, Charis, and Ronald Weitzer (2003). New directions in social disorganization theory. Journal of Research in Crime and Delinquency 40 (4): 374–402.

Laxmaiah Manchikanti (2007), National Drug Control Policy and Prescription Drug Abuse: Facts and Fallacies. Pain Physician; 10: 399 – 424.

Lowry (2010). Prescribing of Controlled Medications to Teens and Young Adults Increasing. Pediatrics, Volume:126 pg:1108

Lessenger, J. E. et al. (2008). Abuse of Prescription and Over- the-Counter Medications. Journal American Board Family Medicine, 2008: 21 (2): 175.

Laxmaiah Manchikanti (2007), National Drug Control Policy and Prescription Drug Abuse: Facts and Fallacies. Pain Physician 2007; 10 93), 399 – 424.

Latimer (2010). Epidemiologic Trends of Adolescent Use of Alcohol, Tobacco, and Other Drugs. Child and adolescent psychiatric clinics of North America. Volume 19 Issue:/ No.3.

Lyons, Linda (2005), drug Use still among Americans' worries. http://www.gallup.com/poll/15520/drug-use-still-among-americans-top-worries.aspx

McMurray, Coleen (April 2004). Youth Survey: Alcohol and drug Abuse among teens. http://www.gallup.com/poll/11236/youth-survey-alcohol-drug-use-among-teens.aspx

National Institute on Drug Abuse (NIH)/ 2011 – Drug Facts: Treatment statistics http://www.drugabuse.gov/publications/drugfacts/treatment-statistics

Newcomb, M. D. and M. Felix-Ortiz. (1992). Multiple protective and risk factors for drug use and abuse: Cross-sectional and prospective findings. Journal Of Personality And Social Psychology, 63 (2), 280-296.

Nielson & Barratt (2009). Prescription drug misuse: Is technology friend or foe? Drug and Alcohol Review, January 2009.

Pew Research Center (April 2014). America's New drug Policy Landscape – Two thirds favor treatment, not jail, for use of heroin, cocaine - http://www.people-press.org/2014/04/02/americas-new-drug-policy-landscape/.

Pew Research Center National Survey Report "Americans See U.S. Losing ground against mental illness, prescription drug Abuse (2013) http://www.pewresearch.org/fact-tank/2013/11/13/americans-see-u-s-losing-ground-against-mental-illness-prescription-drug-abuse

Pew Research Center Survey Report, "Half of Americans currently taking prescription medication," December 9, 2005. - http://www.gallup.com/poll/20365/halfamericans-currently-taking-prescription-medication.aspx

Raudenbush, Stephen, and Robert Sampson. 1999. "Eco metrics": Toward a science of assessing ecological settings, with application to the systematic social observation of neighborhoods. Sociological Methodology 29 (1), 1–41.

Robert J. Fortuna, et al. (2010). Prescribing of Controlled Medications to Adolescents and Young Adults in the United States. Pediatrics, 126:1108–1116

Rai, A.A., Stanton B., Wu, Y., Li X., Galbraith, J., Cottrell, L., Pack, R., Harris, C., D'Alessandri. D., and Burns, J. (2003). Relative influences of perceived parental monitoring and perceived peer involvement on adolescent risk behaviors: An analysis of six cross-sectional data sets. The Journal of Adolescent Health, 33 (2), 108-118.

Shillington, A. M., S. Lehman, et al. (2005). Parental monitoring: Can it continue to be protective among high-risk adolescents? Journal of Child & Adolescent Substance Abuse, 15 (1), 1-15.

Stewart, C. (2002). Family factors of low-income African- American youth associated with substance use: An exploratory analysis. Journal of Ethnicity in Substance Abuse, 1(1), 97-111.

Sung, H.-E., Richter, L., Vaughan, R., Johnson, P. B., & Thom, B. (2005). Nonmedical use of prescription opioids among teenagers in the United States: Trends and correlates. The Journal of Adolescent Health: Official Publication of The Society For Adolescent Medicine, 37 (1), 44-51.

Smith, G.M., & Fogg, C.P. (1978), Psychological predictors of early use, late use, and non-use of marijuana among teenage students. In D.B. Kandel (Ed.), Longitudinal research on drug use: Empirical findings and methodological issues, pp. 101-113.

---------- The End----------

[1] Gallup Survey, 2005. Available: https://news.gallup.com/poll/357134/drugs-problem-family-Americans-aspx

[2] Pew Research Center National Survey Report, 2013. "Americans see U.S. Losing ground against mental illness, prescription drug abuse." Available: http://www.pewresearch.org/fact-tank/2013/11/13/americans-see-u-s-losing-ground-against-mental-illness-prescription-drug-abuse

[3] Lyons, L., 2005. "Drug Use still among Americans' worries." Available: http://www.gallup.com/poll/15520/drug-use-still-among-americans-top-worries.aspx

[4] McMurray, C., 2004. "Youth survey: Alcohol and drug abuse among teens." Available: http://www.gallup.com/poll/11236/youth-survey-alcohol-drug-use-among-teens.aspx

[5] Becker, H., 1953. "Becoming a marihuana user." *American Journal of Sociology*, vol. 59, pp. 235-242.

[6] Bursik, R. J., 1988. "Social disorganization and theories of crime and delinquency: Problems and prospects." *Criminology*, vol. 26, pp. 519–551.

[7] Kasarda, John, D., and Janowitz, M., 1974. "Community attachment in mass society." *American Sociological Review*, vol. 39, pp. 328-339.

[8] Kubrin, C. and Ronald, W., 2003. "New directions in social disorganization theory." *Journal of Research in Crime and Delinquency*, vol. 40, pp. 374–402.

[9] Raudenbush, Stephen, and Robert, S., 1999. "Eco metrics: Toward a science of assessing ecological settings, with application to the systematic social observation of neighborhoods." *Sociological Methodology*, vol. 29, pp. 1–41.

[10] Birckmayer, 2004. "A general causal model to guide alcohol, tobacco, and illicit drug prevention: Assessing the research evidence." *Journal of Drug Education*, vol. 34, pp. 121-53.

[11] Elliott, 2009. "The scope of adolescent prescription drug abuse." *Emerg. Med.*, vol. 41, p. 16.

[12] Laxmaiah, M., 2007. "National drug control policy and prescription drug abuse: Facts and fallacies." *Pain Physician*, vol. 10, pp. 399 – 424.

[13] Compton and Volkow, 2006. "Abuse of prescription drugs and the risk of addiction." *Drug and Alcohol Dependence*, vol. 83, pp. 4-7.

[14] Herman-Stahl, M., Krebs, C., Kroutil, L., and Heller, D., 2006. "Risk and protective factors for nonmedical use of prescription stimulants and methamphetamine among adolescents." *Journal of Adolescent Health*, vol. 39, pp. 374-380.

[15] Barteis, 2006. *Evidence-based practices for preventing substance abuse and mental health problems in older adults*. Samhsa, pp. 4-25.

[16] Culberson and Ziska, 2008. "Prescription drug misuse/abuse in the elderly." *Geriatrics*, vol. 63, pp. 22-31.

[17] Hernandez, S. H. and Nelson, L. S., 2010. "Prescription drug abuse: Insight into the epidemic." *Clinical pharmacology and Therapeutics*, vol. 88, pp. 307- 317.

[18] Hernandez, S. H. and Nelson, N. S., 2010. "Prescription drug abuse: Insight into the epidemic." *Clinical pharmacology and Therapeutics*, vol. 88, pp. 307-317.

[19] Kandel, 1992. "Stages of progression in drug involvement from adolescence to adulthood. Further evidence for the gateway theory." *J. Stud. Alcohol*, vol. 53, pp. 447–57.

[20] Sung, H. E., Richter, L., Vaughan, R., Johnson, P. B., and Thom, B., 2005. "Nonmedical use of prescription opioids among teenagers in the United States: Trends and correlates." *The Journal of Adolescent Health: Official Publication of The Society For Adolescent Medicine*, vol. 37, pp. 44-51.

[21] McCabe, S. E., West, B. T., and H., W., 2007. "Trends and college-level characteristics associated with the non-medical use of prescription drugs among U.S. college students from 1993 to 2001. Addiction,102 (3):455–465."

[22] Hall, M. T., 2010. "Prescription drug misuse among antisocial youths." *Journal of Studies on Alcohol and Drugs*, vol. 7, pp. 917-924.

[23] Stewart, C., 2002. "Family factors of low-income African- American youth associated with substance use: An exploratory analysis." *Journal of Ethnicity in Substance Abuse*, vol. 1, pp. 97-111.

[24] Ford, J. A., 2009. "Nonmedical prescription drug use among adolescents." *The Influence of Bonds to Family and School Youth Society*, vol. 40, p. 336.

[25] Friedman, R. A., 2006. "The changing face of teenage drug abuse--the trend toward prescription drugs." *New England Journal of Medicine*, vol. 354, pp. 1448-1450.

[26] National Institute on Drug Abuse (NIH)/), 2011. "Drug facts: Treatment statistics." Available: http://www.drugabuse.gov/publications/drugfacts/treatment-statistics