

Drug Addiction and Abuse of Prescription Drugs

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Abstract:

Drug addiction and the abuse of prescription drugs have become significant public health concerns in recent years. This essay aims to explore the prevalence, causes, consequences, and potential solutions to this growing issue. It will examine the factors that contribute to the misuse of prescription drugs, the impacts on individuals and society, and the challenges in addressing this problem. By analyzing existing research, this essay will provide a comprehensive overview of drug addiction and prescription drug abuse, highlighting the need for effective intervention strategies.

Keywords: *drug addiction, prescription drugs, substance abuse, public health, intervention*

1. Introduction

Drug addiction can simply be defined as a chronic relapsing disorder characterized by compulsive drug seeking and use despite the consequences. It is a behavior which can affect people of all ages, social status, and intelligence level. This is due to the effects of drugs on the individual, and the increased vulnerability of a person in certain environments. Addiction is a learned behavior, and drug addiction results from the interplay of biological, genetic, and environmental factors. There are many who believe that drug addiction is only a problem in lower socio-economic populations, but they are misguided. Since the 1990s, there has been a dramatic increase in the amount of prescribed drugs that are available and in the manner in which they are advertised. With this increase, the prevalence of misuse and addiction to prescription drugs has increased dramatically, and is a cause for serious public health concern. This problem is something that the general population must be made aware of. (Scheepis et al.2020)[1]

1.1 Definition of Drug Addiction

When some people hear the word "addiction", they may think of dependence on a substance with addiction potential, such as alcohol or other drugs. However, health professionals view addiction as a far more complex and serious process. The following definition, written by the Association on Substance Abuse for Professionals (ASAP), is similar to the one used in DSM-IV, the fourth edition of the Diagnostic and Statistical Manual on Mental Disorders. Addiction is a primary, chronic disease of brain reward, motivation, memory and related circuitry. Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations. This is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors. Addiction is characterized by inability to consistently abstain, impairment in behavioral control, craving, diminished recognition of significant problems with one's behavior and interpersonal relationships, and a dysfunctional emotional response. Like other chronic diseases, addiction often involves cycles of relapse and remission. Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death. (Lüscher et al., 2020)[2]

1.2 Prevalence of Prescription Drug Abuse

Vital to understanding the magnitude of the problem is to appreciate the increases in specific types of prescription drug misuse and abuse. The Monitoring the Future study, which assesses drug use trends among adolescents and adults, found that past-year nonmedical use of the opioid painkiller Vicodin has increased among twelfth graders by 2%. Oxycodone has seen an even larger increase over a 3-year period and represents the 4th most commonly abused illicit drug in the 12-17 age group. Rates of ADHD medications abused remain relatively unchanged; however, there is a concern that as diagnoses for ADHD steadily increase, a parallel rise in abuse rates may begin to manifest. This marks a substantial increase for opiates in general among all age groups. High rates of abuse have also been seen in tranquilizers and sedatives, and the associated emergency department visits have more than doubled in the last 5 years. Finally, another area of concern is the co-ingestion of prescribed medications with alcohol, as it greatly compounds the risk of serious injury or fatality. Step into more in depth here on specific types of drugs and abuse rates. This paragraph essentially serves as an introduction for the whole section, briefly covering many of the points made in more detail later. (McCabe et al., 2020)[3]

Prescription drug abuse has been on the rise since the beginning of the 21st century. Some people believe it is no longer a major issue. To be sure, prescription drug abuse is a problem that is a long way from being resolved. According to the National Survey on Drug Use and Health (NSDUH), twice as many Americans regularly abused prescription drugs in 2010 as those who abused cocaine, hallucinogens, heroin, and inhalants combined. The NSDUH also showed that over the counter drugs are most commonly abused by twelfth graders. This is troubling as the perception of risk of harm related to OTC medications is more closely associated with the nonmedical use of these medications. Change in perception to the reality of prescription and over the counter drugs has clearly led to an increase in abuse. Abuse rates tend to be higher in the military than among civilians. (TALI, 2024)[4]

2. Causes of Prescription Drug Abuse

Similarly to reasons for abusing illicit drugs, dependence usually has physical, mental, and social factors. Some people become dependent because they're prescribed the drug by their physician and therefore think that it isn't harmful to use. Some people will intentionally abuse a drug for its stimulating, relaxing, or euphoric effects, knowing that it can lead to increased tolerance and dependence. The vast amount of pressure put on some individuals to alleviate their mental or physical pain can lead to dependency through self-medication with prescription drugs. Compare the reasons and motivations of people who have become dependent on prescription drugs with those who have become dependent on illicit drugs. All will have similar effects and symptoms, regardless of the substance. Physicians can attempt to prevent dependence from developing in those who actually need prescription drugs to manage an illness or disease by limiting the amount of the drug to the required dose and duration, monitoring the patient for any signs of developing dependency, and employing 'drug holidays' where they may be able to substitute a drug for others. Steps can also be taken to educate patients on the potential harm and addiction related to specific prescription drugs. (Pergolizzi et al.2020)[5]

2.1 Easy Access to Prescription Drugs

The abuse of prescription drugs, particularly among teenagers, has been gaining increasingly popular of late, and it has caused an alarmingly increased rate in addictions. Prescription drugs are readily obtained from the family medicine cabinet, making obtaining the drugs easy. According to the Office of National Drug Control Policy, young adults can very easily get their hands on prescription medications. Often friends and family will give/sell the medications to teenagers or young adults. 54% of the abused medications are obtained free from a relative or friend. Another reason it is easy to obtain prescription drugs is because they can be ordered over the internet. Many internet sites market and sell prescription drugs with the claim that it's cheaper and doesn't require a prescription. This is something that could become more regulated in the future, but as for present time, it's easy access for anyone with a credit card. The internet has not been the only contributor to the ease of purchasing prescription drugs; the advertising of prescription drugs has been noted to lead to an increase in misuse of prescriptions. In a report by Gil Kerlikowske, the director of National Drug Control Policy, the US spent \$5 billion on advertising in 2008. The promotion, advertising, and sales of prescription medications are glamorized and make it appealing to people who hold the belief that prescription medications are better and safer than illegal street drugs. This increase in direct-to-consumer advertising has occurred because in 1997 the Food and Drug Administration relaxed its direct-to-consumer marketing regulations. Different types of advertisements are used, but each advertisement works in its own way of convincing the viewer to ask their doctor about the advertised prescription. This can make young adults impressionable and vulnerable to the abuse of prescription drugs. (Ford et al.2020)[6]

2.2 Influence of Peer Pressure

Having observed though, that even with newer drugs, information about a friend's drug use can predict the same behavior by the individual consistent with previous work on cigarette use and marijuana use, the research team made the necessary adjustments to find a dependable method of predicting future adolescent and young adult drug behavior. The most recent finding was that measures on personal drug behavior by individuals showed the greatest relationship between contemporary peer behaviors, showing that the best prediction of future behavior may occur using the same or similar measures on personal drug behavior by the individual. The baseline hypothesis of the use of peer behaviors predicting the measure of the same individual behavior was supported throughout all models in the research. The final conclusion was that it is extremely likely that changes will take place in contemporary friend drug behavior predict measures on personal drug behavior on the individual and that the research initiated for the next long-term youth change progressions in behavior-specific friendships, which begin operationally. (Nawi et al.2021)[7]

Sussman, Dent, and Stacy (2002) used chi-square and logistic regression analyses to test complex models and used simple group contrasts to unpack significant effects. The findings revealed that there are friends who use medicine across age groups and that medicine use is not just a problem for older adolescents. The knowledge of a friend's medicine use in the past year can predict a young person's knowledge of the medicine use of that friend. These predictions go beyond global peer medicine norms. What this means is that, as future research measures personal medicine use by the adolescents themselves or related problems, it can more parsimoniously test this predictive relationship. (Vazquez-Ortiz et al.2020)[8]

The first research into determining whether adolescents are influenced by the medications their friends take was conducted by Sussman, Dent, and Stacy (2002). The researchers intended to measure how great of an effect would be witnessed due to the fact that, most of the time, peer behavior is the best predictor of subsequent behavior among adolescents and young adults. The base assertion was that there can be a wide variety of predictors for behavior but that peer behavior in relation to that behavior can be a

more accurate predictor of that behavior than the actual behavior being predicted. The researchers hypothesized that, in the future, adolescent medicine abuse can be predicted with considerable accuracy through measuring peer medicine abuse and related behaviors. The methodology used for the research was a probability sample of eighth grade students from a Midwestern community in the United States. Revisions were made to the Monitoring the Future questionnaire to lower the response time frame over the previous year. A 12-month horizon was used for predictions of medicine use among friends for predicting the likelihood of personal medicine taking behavior. (Allen et al.2021)[9]

2.3 Self-Medication and Pain Management

Patients who use painkillers, tranquilizers, or sleeping pills can become dependent on these medications without even realizing it. The symptoms of dependency can sometimes disguise themselves as the reasons a person might be taking a medication in the first place. For example, a person may begin taking a drug to relieve pain from a surgical procedure, injury, or chronic condition (arthritis for example). They may come to rely on the medication in order to function normally during the day. They take it to lessen anxiety or tension, or to sleep better at night. This pattern of use to relieve symptoms can be a slippery slope if the patient does not have a clear treatment endpoint defined by their physician. The patient may begin to think that they need to take the medication in order to feel normal, and that they cannot function properly without it. If a healthcare provider is not supervising the use of the medication and monitoring treatment endpoints, the patient may be at risk for harmful medication use. This can be especially dangerous if the patient taking the medication has access to a greater amount of the drug than was prescribed. Patients who consume excessive amounts of medication are at risk of overdose and other negative health effects. It is important for healthcare providers to closely monitor patients who are taking these types of medications to ensure their safety and well-being. (Babiloni et al.2021)[10]

3. Consequences of Prescription Drug Abuse

3.1 Physical and Mental Health Effects The effects of drug abuse vary depending upon the drug that is being used. Pain killers and anti-anxiety medications create a relaxing effect, and stimulants can produce feelings of great energy and confidence. The most commonly abused prescription drugs approximate the effects of street drugs. Opioid painkillers produce a "high" similar to heroin, and are usually taken in the same way, while Adderall and Ritalin are often taken to excess by college students to produce euphoric effects or improve concentration. Thus many consequences of prescription drug abuse mirror those of street drug abuse, such as addiction, erratic behavior, and increased risk of overdose. The most addictive drugs such as Vicodin or OxyContin have severe withdrawal symptoms including nausea, sweating, anxiety, and depression. Abuse and addiction to depressant drugs such as benzodiazepines have even more severe withdrawal symptoms, which can in rare cases be life-threatening. (Carlson et al.2020)[11]

Prescription drug abuse can have serious consequences for the user. The most damaging impairment is psychological dependence. Many persons begin taking drugs as part of a treatment plan, and find that they cannot cease unless under a doctor's supervision. The most severe form of drug abuse is entwined with financial and/or psychological ruin. (McCartney, 2022)[12]

3.1 Physical and Mental Health Effects

The consequences of this abuse go far beyond the original problem and pain they were intended to treat. The abuse of prescription drugs has been identified as a significant risk factor for developing a 'harder' drug addiction. Not only do prescription drugs act as a gateway to other drugs, they can also produce their own adverse physical effects, including serious illness and death. Each class of prescription drugs has its own set of harmful side effects, but there are some generalizations that can be made. Opioids, sedatives, and antidepressants are central nervous system depressants and act like street drugs such as heroin. Taking high doses of these medications can cause respiratory depression and death. This is notably a risk with opioid painkillers. Another danger of using central nervous system depressants is the risk of psychological and/or physical dependence. This can be incredibly difficult to recover from and can ultimately lead to relapse with other drugs, including heroin. Stimulant drugs such as Ritalin are believed to act on the body similarly to cocaine, which means that the effects and abuse potential for these medications are similar to the effects and abuse potential of cocaine itself. High blood pressure, seizures, and even strokes are potential side effects of taking high doses of stimulant medications. Any of these adverse side effects can have a severe impact on the health of the abuser and lead to the need for further treatment. The mental effects of prescription drug abuse are no less harmful. Many medications have a range of psychiatric side effects, some of which will occur in the majority of patients. Behavior and thinking changes can be an adverse effect of any medication, with some individuals becoming uncharacteristically agitated, irritable, or even violent. Stimulant medications can cause hostility or paranoia, and psychotic symptoms such as hallucinations or delusional thinking. The worst-case scenario is suicide, a risk that is present with all classes of prescription medications. Any mental effect of prescription drug abuse will impair the individual's judgment and decision making, potentially leading to further drug abuse or taking unnecessary risks with other activities. (Luo et al., 2022)[13]

3.2 Social and Economic Impact

Social and economic impact of drug abuse In the long run, prescription drug abuse can have a serious impact on the user's economic situation. The cost of obtaining drugs can become very expensive. Doctor shopping in an attempt to obtain multiple prescriptions for the drugs often leads to increased healthcare costs and diverts funding from legitimate patient care. The abuse of drugs can harm

the body in many different ways, from physical health problems to psychological damage. The person who is addicted to drugs would find it harder and more difficult to eat each time they indulged in drug taking. Most drugs affect the brain, which can lead to mental problems, and many drugs weaken the immune system, which will bring about more sickness and a higher number of sick days taken from work. The economic effects can be seen at a macroeconomic level. Increases in healthcare costs are very prevalent and can have a significant effect on national budgets. Workers with drug problems could be less productive, more absent, late for work, more prone to having accidents on the job, more likely to file workers' compensation claims, and more prone to having conflicts with co-workers. This can also cause a significant increase in costs to employers who have to provide healthcare for their employees. The abuse of prescription drugs has a very high chance of affecting each and every individual in society. Purposely or accidentally, users may persuade others to take their drugs; this is very common in teenagers and young adults with drugs such as painkillers and ecstasy. Often times the other person may not realize the effects or their own limit and end up abusing the drug. Also, the vast quantity of drugs which are not taken by the original user is at risk of being stolen. Prescription drugs are no exception to other drugs and often have a very high resale value. The stealing of drugs can have adverse effects on those who have been robbed, which may lead to further disputes and a lack of trust between people. This can also have indirect effects on the original user if they feel obliged to obtain drugs for the victims. (Vincent Rajkumar, 2020)[14]

3.3 Legal Consequences

An addiction to prescription drugs can have serious legal consequences. In the eyes of the law, the misuse of prescription drugs is the same as the use of an illegal drug and is treated as such. Fake prescriptions or altering prescriptions from a doctor can lead to a felony charge. In addition, many people addicted to prescription drugs are always seeking drugs and, in doing so, turn to illegal methods of obtaining prescriptions, such as buying them off other addicts or from illicit online stores. This too can lead to legal repercussions and if caught, can damage an addict's reputation in the community. As an addiction deepens, many people turn to crime to support their habit. This may involve theft from a friend or family member's medicine cabinet, identity theft to obtain prescription drugs, or shoplifting from pharmacies or medical centers. Addicts convicted of such crimes may face probation, large fines, and even imprisonment. Besides causing great distress to an addict's friends and family, a criminal record further diminishes job prospects and only furthers an addict's feelings of hopelessness and despair. (May et al.2020)[15]

3.4 Relationship and Family Issues

There is a clear relationship between prescription drug abuse and family relationships. This is seen with the irritability and mood swings that are common in drug addicts. If a person is abusing drugs and is short-fused, they are likely to lash out at the people that they love. This can cause an immense amount of stress on a family, especially if the addict is a parent or child of the other family members. An increase in stress can also be caused by the addict taking out loans from a parent or sibling without their knowledge, and the debt can quickly turn into a large financial burden on the family. Family members may begin to feel that the addict is taking advantage of them. Trust between family members can be damaged when an addict will steal money from a parent or child to purchase prescription drugs. The trust can be lost for a long period of time even if the addict seeks help and improves their addiction. This can be an incredibly unhealthy environment for the family to continue living in, and in quite a few cases, it leads to separation of the family unit. Due to the amounts of stress, damaged relationships, and sometimes financial burdens caused by an addict, some family members may feel that it is necessary to stage an intervention for the addict in an attempt to make them seek help. If successful, this can be a positive turning point for the addict and the family; however, it may also cause further damage to relationships if the addict feels betrayed by the intervention. In an event where an intervention does not work and the addict refuses to cease drug abuse, family members may feel the need to cut ties with the addict. This can be an incredibly difficult thing to do, but if the addict is causing excessive damage to the family unit, it may be the best option. (Richert et al.2020)[16]

4. Prevention and Treatment of Prescription Drug Abuse

Since education and awareness programs are long-term solutions, prevention of prescription drug abuse in the short term is best addressed through monitoring programs. Specifically, prescription drug monitoring programs (PDMPs) are state-run programs that gather information on prescription and distribution of drugs for the intention of providing tools to healthcare providers to make more informed decisions and to prevent prescription drug abuse, addiction, and diversion nationwide. Although all PDMPs vary from state to state and are faced with resource limitations, a study from the California HealthCare Foundation found that physicians who were high users of a PDMP changed their prescribing behaviors 41% of the time, equally increasing and decreasing the number of Schedule II opioids and sedative hypnotics prescribed. This is key since more than 7 million Americans abuse prescription drugs, according to the 2009 Substance Abuse and Mental Health Administration's National Survey on Drug Use and Health. In conclusion, by having an informed public who knows the dangers and risks of prescription drugs, along with the availability of tools to make more informed decisions, the potential for prescription drug abuse can be greatly diminished. (Leichtling et al.2020)[17]

Once problems have been identified and solutions have been proposed, the most effective way to prevent the progression of prescription drug abuse is through education and awareness. Indeed, an informed public is better equipped in making decisions about prescription drug use compared to an uninformed public. One way to inform the public about prescription drug abuse is through the means of the Internet. With the recent advances in technology, the Internet is a valuable tool used by millions on a daily basis. Creating a website specifically about prescription drug addiction that is interactive and educational can target a large and

diverse audience. If done correctly, this website can serve as an aid to shape public opinion and behavior about prescription drug abuse. Another approach to educate the masses is through public service announcements (PSA). Frequently used in the past for anti-drug campaigns, PSAs are an appealing and simple approach to expose the risks and dangers of prescription drugs. Lastly, an important way to reinforce the knowledge of prescription drug abuse is through the means of the educational system. Implementing a prevention based curriculum that incorporates teachers, parents, and community leaders have the potential to change the beliefs and behaviors of young people who are at highest risk for abusing prescription drugs. (Khalil Zadeh, 2020)[18]

4.1 Education and Awareness Programs

Public media campaigns are another effective tool in changing people's beliefs and attitudes towards drugs. Research has shown that prevention messages are effective if they are targeted, well-funded, and well-executed. Successful anti-tobacco campaigns targeted the general population. However, there are campaigns that are specifically targeted to high-risk populations to maximize the effect. An example of this is the NIDA campaign to prevent marijuana use among inner-city youths. School-based programs and public media campaigns can be successfully combined for an added effect. This combined approach was used in the NIDA Methamphetamine campaign in the Midwest and rural Oregon. (O'Keefe & Reid, 2020)[19]

Education and awareness programs are designed to prevent drug abuse by reducing the demand for the drug through information dissemination and the strengthening of anti-drug attitudes and norms. School-based prevention programs are the most cost-effective way to prevent drug use. On average, every \$1 invested in school-based prevention will save \$18 in costs for drug abuse. There are a variety of types of school-based prevention programs, including: comprehensive social competence programs designed to teach personal and social skills to children or their parents in order to help prevent drug use; public health/healthy lifestyles curriculum that cover a wide range of health-related topics and may include drug issues; and drug education programs. (Counts et al., 2022)[20]

4.2 Prescription Drug Monitoring Programs

Prescription drug monitoring programs (PDMPs) provide useful information to prevent prescription drug misuse, abuse, and diversion, and help healthcare providers and pharmacists improve patient care and safety. PDMPs are state-run electronic databases used to track the prescribing and dispensing of controlled prescription drugs to patients. Information from PDMP databases can help healthcare providers and pharmacists recognize if a patient may be receiving treatment from multiple providers for the same condition, and can help determine the appropriate course of treatment. PDMPs can also help healthcare providers and pharmacists identify patients who may be at risk for prescription drug abuse because the data in the report is a strong predictor of future abuse. Using this information to inform clinical practice may reduce the likelihood of patients progressing to more harmful drugs or receiving higher doses of prescription opioids. PDMP data can facilitate a healthcare provider's or pharmacist's professional decision making, and can help identify patients who would benefit from early interventions. PDMP data can also be useful for patients when included as part of a comprehensive approach to pain management. Information derived from the PDMP report may stimulate a conversation between the patient and the healthcare provider or pharmacist about the balance of safety and effectiveness when using prescription drugs to manage pain. In addition, this information may facilitate an informed decision to continue the use of prescription drugs at the current dosage, or to taper and discontinue the use of the prescription drugs. PDMP data can shed light on progress or lack of progress when using prescription drugs to manage pain, and can assist in the identification of any adverse effects the drugs may be causing. Using PDMP information to initiate a conversation about the safety and effectiveness of using prescription drugs to manage pain may help prevent opioid misuse and abuse by setting realistic expectations and goals for the patient, and can help avoid escalation to higher doses or more powerful drugs. PDMPs can be a source of data for criminal and/or civil law enforcement investigations. An integrated approach to PDMP data with other sources of information, including but not limited to investigation findings, reports from healthcare regulatory boards, and Medicaid Fraud Control Unit, will identify potential prescription drug abuse or diversion. PDMP data and other information may identify specific healthcare providers or pharmacists who are unlawfully prescribing or dispensing prescription drugs. Use of this information to hold these individuals accountable will protect the public and maintain the integrity of the profession. PDMP data and other information may also identify patients who are engaged in activity to fraudulently obtain prescription drugs. Use of this information to hold these individuals accountable will prevent further misuse/abuse and avoid any harm to the patient and others caused by the obtaining or use of the prescription drugs. (Puac-Polanco et al.2020)[20]

4.3 Rehabilitation and Counseling Services

A variety of effective treatments are available for prescription drug abuse and addiction. While no treatment is appropriate for all individuals, it is important to share with those who are addicted to prescription drugs the fact that drug addiction can be successfully treated. The most common treatment for prescription drug abuse and addiction is a combination of medication and behavioral therapy. For example, treatment of people addicted to opioids often includes the prescription of a replacement drug such as methadone in combination with behavioral therapy approaches. In addition, the use of antidepressants or treatment for depression is often recommended since depression is frequently an underlying factor in prescription drug abuse and addiction. Behavioral therapies, ranging from group counseling to cognitive-behavioral therapy, have been successful in treating prescription drug abuse and addiction. Cognitive-behavioral therapy helps modify the patient's drug use expectations and behaviors and increases coping

skills to manage triggers and stress. Motivational incentives, which use positive reinforcement to encourage abstinence from the drug, have also proven to be effective in treating prescription drug abuse and addiction. (Ray et al.2020)[21]

4.4 Support Groups and Aftercare Programs

Aftercare Aftercare is the most common approach to sustained recovery from substance addiction. Aftercare provides scheduled support and continuous care in individual and/or group settings for treatment graduates in the period following formal treatment. The main objectives of aftercare are preventing relapse and promoting successful long-term recovery. The duration of aftercare should be at least 90 days, but studies show that the effectiveness of aftercare is increased with longer duration. Extended aftercare is the addition of auxiliary treatment sessions as needed and regular contact with treatment professionals. This includes case management, telephone counseling, and assertive community treatment. (McKay, 2021)[22]

Support Group A support group can provide an ongoing network of community and relational support for the addicts of prescription and OTC drugs. Members of support groups often share experiences and advice. It can be useful for addicts to get help from others who have had similar experiences and to be around people who understand their situation and are non-judgmental. The understanding of others and social support provides a beneficial effect in reducing the stress of the addict. Support groups also serve as a vital link between formal treatment and continued care, as well as provide numerous resources for sustaining recovery from substance addiction. There are also available online support groups in recent years, especially during the COVID-19 pandemic. However, the effectiveness of online support groups for prescription or OTC drug addicts is still unknown, based on the lack of existing literature. (McMillan et al., 2021)[23]

Home» Publications» DrugFacts» Prescription and Over-the-Counter Medications (Marathe et al.2020)[24]

5 Methods

However, with drug addiction, drug abuse, or the presence of drugs, it is more effective for an individual to attend a non-hospital residential setting. This can be helped by providing balanced information on the effects of drug abuse, over and above scary tactics. The availability of informal weigh-up sessions and the use of written work can clarify clients' ambivalence and help to build motivation to change. This method also provides an opportunity for environmental evaluation, identifying and addressing areas of high risk within the client's home context. Another method of changing drug-related behavior is through the Community Reinforcement Approach (CRA), which is a broad spectrum treatment for heavy drug users and has also been altered to be effective in treating people with low or moderate level problems. This intervention is based on the belief that the individual's excessive drug use has been sustained by its positive reinforcement and what is needed is an alternative source of reinforcement to replace the reinforcement available from drug taking. These next two methods are very different from the previous approaches mentioned and are both overt teaching attempts. The first is a new incentive-based method known as voucher-based reinforcement therapy. This has been found in certain American studies to work well for initiating treatment engagement and promoting abstinence from drugs. The individual who is drug-free or has turned up for treatment is given points which are then exchangeable for goods that are consistent with a drug-free lifestyle. This method has an elaboration on what has been learned from an experimental analysis of behavior, showing that substance-using behavior is related to a relative availability of the reinforcers for alternative substance-free behaviors. This is reinforced by a study by Higgins et al. (1991) which provides evidence that cocaine-dependent adults will reduce consumption of the substance when provided with alternative reinforcement and will increase consumption when the alternative reinforcement is removed. Finally, the last method is a very literal translation of the idea of drug addicts needing an alternative reinforcement. It is known as social skills training and involves teaching generic life skills to help people refuse drugs and to plan alternative activities to drug taking. This has shown some positive results in the short-term as well as being deemed cost-effective. (Khalid et al., 2024)[25]

6 Results

The effects of drug abuse, where no immediate problems occur, can still have long-lasting and damaging effects on the user. These fall into the categories of effects on mental health and effects on the body. High doses of drugs can cause acute psychosis, which in some cases can last up to a year. High drug use can contribute to the development of mental disorders, and in people with an existing disorder, drug abuse can make symptoms much worse. Diseases in major organs such as cardiovascular disease, heart attacks, liver failure, lung disease, and diseases of the gastrointestinal tract can also have long-lasting effects on those who abuse drugs. High doses can also cause prolonged impairment of both cognition and memory. (Chiappini et al.2020)[26]

Short-term effects in drug users include changes in appetite and mood, breathing problems, confusion, constipation, diarrhea, dizziness, dry mouth, headaches, increased heart rate, exhilaration, memory loss, nausea, lightheadedness, drowsiness, sensory distortion, tremors, and vomiting. Although many of these effects do not have negative connotations, the fact that they occur due to drug abuse can lead to problems. A change in mood can cause negative effects on personal relationships, and memory loss can have serious repercussions, especially in a work or educational environment. High doses can lead to toxic reactions and, in some cases, death. Many drug users develop a feeling of invincibility, and as a consequence of high doses of drugs, hospital admissions of young

people due to drug-related mental health and behavioral disorders have more than doubled in the last ten years (1993-2004). (Al-Daghastani & Naser, 2022)[27]

Drug abuse causes many different effects on the user, which can have both damaging short-term effects and appalling long-term consequences. Some effects are only short-term and less harmful compared to the more serious long-term effects. (Ali et al., 2024)[28]

7 Discussion

The future goal for those who possess knowledge on this topic should be to clearly define a more serious attachment of stigma to those who abuse or are addicted to prescription medicine. The current image of the prescription drug addict is often a clean-cut, well-to-do person who is searching for an easy way to get high. By default, society lumps these people with those who abuse street drugs, and this is not a correct association to make. Prescription drug abusers and addicts, as outlined in this research, are far more widespread and diverse than one could imagine, and often, the person does not even understand the risk and seriousness of what they are doing. This is by no means an attempt to alienate a certain group of people but rather a way to foster prevention tactics designed specifically for those being targeted. (Park et al.2020)[29]

This research has also been an awakening for the author. Writing on this topic has allowed a greater understanding of the seriousness of prescription drug abuse and addiction. During the literature review process, it was found that there is a clear lack of useful information directed towards the public about this topic. The desire for further information about prevention methods and risky behaviors that the prescription drug abuser or addict display has given insight into the paths for further study in the field. Despite constant reinforcement from professionals in the field about how serious prescription drug abuse is, a truly effective method to get the message across to a wider public audience remains a mystery. (Vanyukov, 2023)[30]

8 Conclusions

In conclusion, prescription drug usage is on an alarming rise, especially amongst our youth. The need to spread awareness and educate the public about the dangers of prescription drugs is far greater today than it has ever been. In an environment where many young people and adults have a common misconception that prescription drugs are "safer" and less addictive than street drugs, our aim should be to correct the disturbing lack of information and then move towards effective prevention. (Jones, 2020)[31]

The prescription drugs problem has become an issue in many countries, but perhaps the most worrying is the increasing use of prescription stimulants and antidepressants in the UK. These are not being used to help the work or education of those taking them, but as ways to escape. Stimulants are being used to create artificially induced states of concentration, while those taking antidepressants are often using them as quick fixes for emotional problems. The worry is who is going to help these people with their problems when they come off the drugs? With ever-increasing waiting lists for the mental health services and a lack of faith in the effectiveness of counseling, these people may find themselves drawn to illegal drugs when they can no longer gain access to prescription drugs. This could result in an increase of addiction in society, which would be a costly and difficult problem to fix. We need to address the society's need for quick fix solutions to behavioral and emotional issues and provide greater support for those who are having difficulty coping with the pressures of life. (Dai et al.2021)[32]

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