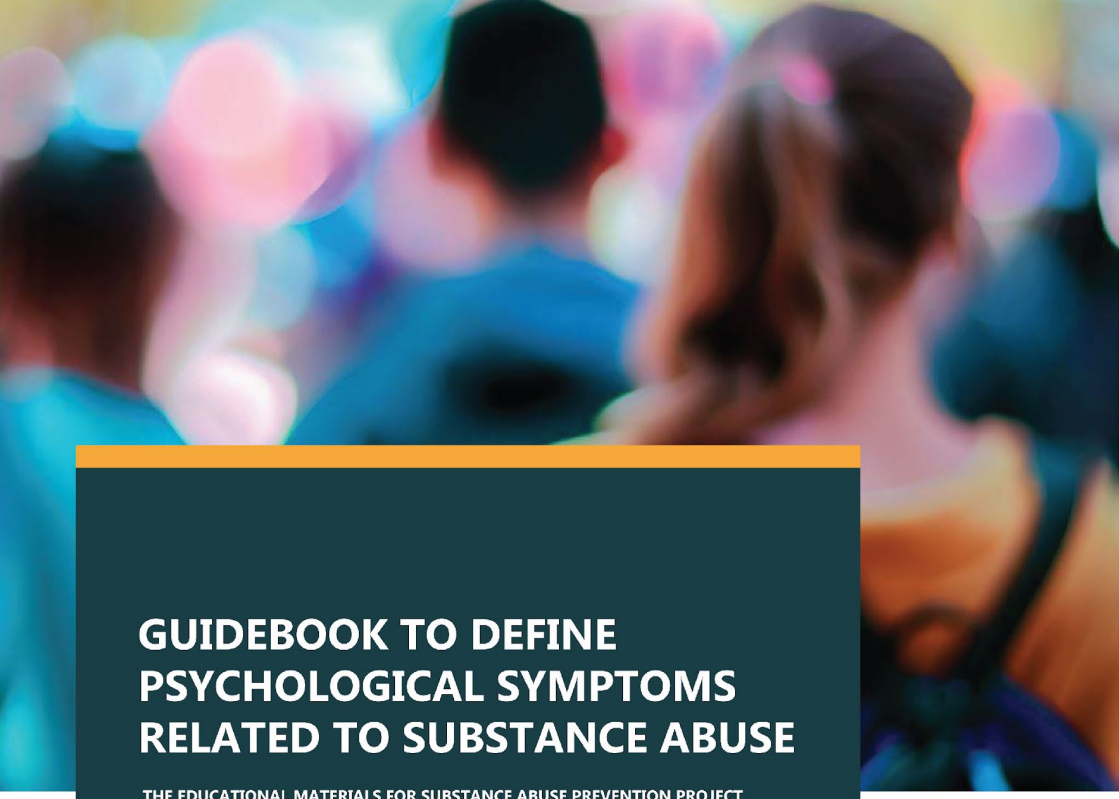

GUIDEBOOK TO DEFINE PSYCHOLOGICAL SYMPTOMS RELATED TO SUBSTANCE ABUSE

THE EDUCATIONAL MATERIALS FOR SUBSTANCE ABUSE PREVENTION PROJECT

EDU MAP

The guidebook is prepared as part of the **EDU MAP project**
www.edu-map.eu
info@edu-map.eu

Led by ZISPB - Žmogiškųjų išteklių stebėsenos ir plėtros biuras, VšĮ - Lithuania
www.zispb.lt
biuras@zispb.lt

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The authors are: Toma Burinskytė (Lithuania), Asta Trijonienė (Lithuania), Katerina Antoniou (Cyprus), Batuhan Alişoğlu (Austria), Mounir Ould Setti (Finland), Zdenka Wltavsky, PhD (Slovenia), Asli Sicim (Turkey), Konstantina Tsakalou (Greece)

The handbook was reviewed by the following experts:

- Raimonda Monstvilaitė - MA in Counseling Psychology
- Sofia Rönkkö, BE & MScS - Researcher in Social Pedagogy
- Tamara Filipaj, MA in special and rehabilitation pedagogy, special development and learning difficulties
- Rynata Alasker, Psychologist
- Maria Georgiou, Doctor of Education
- Dr.Senol Arslan, Teacher Training, DEU (Dokuz Eylul University)
- Thomas Theodosiou, MSc Clin Neuropsy (NKUA-McGill, exc), BSc Psy (UoC), PG Dip Medical Psy (NKUA)
- Konstantina-Argyroula Mavroudea, BSc (Hons) Psychology (University of East London) student

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2 How severe does substance abuse affect psychological conditions?

2.1 Adolescence and drugs are a challenge for everyone: the teenager, parents and others

Each period of a person's life has its own characteristics that change and shape his or her personality. Between each age there is a period of transition. Adolescence is one of the most difficult periods of a person's life, during which relationships with adults, friends and the surrounding environment are important. The period of adolescence cannot be precisely defined, as the boundaries are very different and variable, depending on many social factors. Adolescence is marked by a crisis of identification with the group and a crisis of disconnection. The adolescent has to come to terms with becoming an adult and find his or her way in life. He needs to adapt to a changing society and new attitudes. There is a lot of imitation in adolescence, but there is also a clear desire for originality, for originality, for distinction.

Adolescents are no longer satisfied with their inner world and look for a role model, an authority figure in their environment whom they worship and imitate, thus creating their own ideal. By imitating some of the actions and traditions of adults, and in order to assert themselves, adolescents begin to smoke, consume alcoholic beverages, or become intoxicated with various psychotropic substances. Adolescence often involves distancing from adults, a weakening of the parent-child relationship, and a critical evaluation of adults' advice to find oneself, new hobbies, and forms of leisure time. This is the period when the adolescent already wants to be an adult. It is often during this period that parents are perceived as being extremely restrictive of the young person's freedom. For this reason, the young person begins to look for his or her place in life.

Group dependency is a key characteristic of adolescents. If a teenager does not fit in at class or school, he or she seeks a way out of these conflicts and relaxation in informal interactions with friends, often under their negative influence. When they find themselves in an inappropriate social environment, adolescents often start smoking daily, sometimes drinking alcohol, and trying illegal drugs such as electronic cigarettes with synthetic additives, "pot" and other psychoactive substances. Often, adolescents at this age already have an attitude towards drugs, but this is not always the right attitude. It is therefore very important to help the adolescent to understand that drug use and experimentation can cause many problems, which can ruin their future plans, damage their emotional well-being and lead them to depression.

2.2 Psychological experiences influencing substance use during adolescence

Adolescence is a special age when a person is in search of himself, contradicting not only the people closest and dearest to him, but also himself. Choice is very important at this age: adolescents are always making choices, they are always hesitating, doubting, almost always questioning what to choose, and they are burdened by psychological experiences that often lead them to resort to substance abuse:

- The desire to be different, fashionable, free.
- Not realizing what they are doing and that it is dangerous and serious.
- Drinking or taking drugs to forget problems instead of solving them.
- Inner emotional experiences.
- Not wanting to stand out from your friends.
- Feeling lonely.
- The desire to become an adult sooner.
- Having nothing to do, not being busy.
- Avoiding responsibility and commitment.
- Low self-esteem, feelings of irrelevance.
- Emotion regulation through drugs.
- Pessimism and disillusionment with people.

Psychologists say that young people cannot be taught to be healthy without paying attention to their emotional social needs. Some young people try drugs out of curiosity, but some choose them as a means of appeasement or protest, without finding a suitable way out of a difficult situation.

Children and young people are unable to control themselves and have to go through terrible crises, so they seek spiritual closeness among

close, beloved people. Without the help and understanding of their relatives, they try to save themselves with stimulants of all kinds, such as alcohol and drugs. Therefore, the help of those around them is important for these young people. This help must come from specially trained parents, teachers and psychologists. It is very important to educate the child to resist addictions. The aim of modern drug prevention is therefore to develop the willpower of young people to be able to resist and say 'No' to drugs, and it is important to provide children with the knowledge and information and to teach young people to resist drugs.

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3 Psychological effects of substance abuse on the individual

3.1 Mental effects on drug abuse

Substance abuse and mental health are linked because the psychological effects of drug addiction, including alcohol, cause changes in your body and brain. A careful balance of chemicals keeps the cogs turning inside your body, and even the smallest change can cause you to experience negative symptoms. Because the risk factors for mental health and substance abuse are comparable, this may be attributed to the fact that drug addiction can cause or worsen mental health conditions.

Excessive alcohol and drug use sends your nervous system into disarray, rewires your brain, and causes inflammation — all of which can cause mental illness. The latter leads to the emotional effects of substance use disorders.

3.1.1 Drug abuse affects the brain

One of the most profound changes that occurs in people struggling with drug abuse and addiction is in the reward center of the brain. Dopamine is responsible for feelings of motivation, pleasure, and reward – and alcohol, prescription drugs and illegal drugs hijack this pathway. If you or a loved one is suffering from drug or alcohol addiction, you may have noticed a change in priorities. The chemical compounds of illegal drugs alter brain chemistry and encourage more drug use.

Because an addicted person needs an increasing amount of the chosen substance to get equally intoxicated, he becomes more and more busy with the acquisition and use of substances. This is what leads to the most harmful effects of addiction. For the sufferer, friends, family, work and being an honest citizen become less important than drinking. More importantly, the cause and effect of drug addiction creates new mental health problems that can affect the user and the social network around them.

People in addiction treatment centers often recover after experiencing an endless cycle of guilt, emotional pain, and short-term relief from substances. This negative feedback loop can eventually lead to mental health problems and other side effects.

3.1.2 Health Problems Associated with Addiction

In addition to the psychological effects of addiction, drug and alcohol abuse have the potential to lead to an array of other health consequences and conditions. Chronic substance use is a risk factor for the following illnesses:

- Disorders that affect decision-making
- Heart disease including high blood pressure
- Psychosis
- Reduced immune function
- Stomach issues
- Respiratory problems
- Liver damage
- Kidney disease

3.2 Five devastating psychological effects of drug addiction, alcohol and drug abuse

Dopamine isn't the only neurotransmitter that affects your mood and mental state; serotonin, norepinephrine, and many more play a part. Just like addiction, mental disorders aren't usually the result of one trigger or cause. Not everyone will experience the following mental illnesses, but many people do. 5 examples are described below:

3.2.1 Anxiety

Anxiety is best described as a disorder of the fight-or-flight response, where someone perceives danger that isn't there. It includes the following physical and mental symptoms:

- Rapid heart rate
- Excessive worrying
- Sweating
- An impending sense of doom
- Mood swings
- Restlessness and agitation
- Tension
- Insomnia

There are a lot of similarities between anxiety and the effects of stimulants such as cocaine and methamphetamine. Conversely, using central nervous system depressants can also increase the risk of a person developing anxiety. Although they calm a person's nerves while they're intoxicated, they intensify anxiety when the effects wear off.

Additionally, many addicts experience anxiety around trying to hide their habits from other people. In a lot of cases, it's difficult to tell

whether anxious people are more likely to abuse substances or if illicit drugs and alcohol cause anxiety.

3.2.2 Shame and guilt

There's a stigma attached to addiction in society, and there's a lot of guilt and shame for the individuals who struggle with the condition. Often, this is adding fuel to a fire that was already burning strong. People with substance use disorders tend to evaluate themselves negatively on a regular basis, which is a habit that has its roots in childhood experiences. Continual negative self-talk adds to feelings of shame and guilt.

When you constantly feel as if you've done something wrong, it's tempting to try to cover up these challenging emotions with drugs and alcohol. These unhelpful emotions contribute to the negative feedback loop that sends people spiraling into addiction.

3.2.3 A Negative Feedback Loop

From an outside perspective, someone with an addiction looks like they're repeatedly making bad choices and ignoring reason. However, the truth is far more complicated and nuanced — so much so that it can be very difficult for people to overcome a substance use disorder without inpatient or outpatient addiction treatment. This is partly due to a negative feedback loop that occurs in the mind.

When someone is addicted to drugs or alcohol, they feel a sense of comfort they haven't been able to get elsewhere. Inevitably, this feeling is replaced by guilt and shame as they sober up and face the consequences of their actions. However, the weight of these feelings forces them to seek comfort in substances.

3.2.4 Depression

Another mental illness strongly associated with addiction is depression. Like anxiety, it's not clear whether the depression or substance abuse problem comes first — but there is a clear link. The main symptoms associated with depression are:

- Hopelessness
- Lack of motivation
- Dysregulated emotion
- Loss of interest
- Sleep disturbances
- Irritability
- Weight gain or loss
- Suicidal ideation

Some withdrawal symptoms overlap with the signs of depression, which can make diagnosing coexisting addiction challenging before the SUD has been treated. Most people require ongoing therapy to help them overcome depression.

3.2.5 Loss of Interest

Loss of interest in activities you used to enjoy is a key symptom of both addiction and depression, but overcoming the former makes it much easier to gain control over the latter. It's such a destructive symptom because of how demotivating it is to feel there's no joy in the world. Everyone has passions and interests, but getting back to finding them isn't easy for someone with these conditions.

3.3 The impact of substance misuse disorder on psychological aspects of clients' lives

The several studies showed that group two (marijuana) and group three (amphetamine) had a higher impact on anxiety and depression demonstrated that using illicit drugs to relieve symptoms of depression or stressors was widely spread between people. Similarly, marijuana had a three times greater impact on depression and anxiety than alcohol and heroin, although this was because the majority of their participants were addicted to alcohol and heroin. This result also confirms the finding, that depression was linked with amphetamine use/abuse.

In this study, self-esteem was found to be affected more by alcohol and amphetamine than the other substances. This finding shows a relationship between self-esteem and amphetamine use/abuse. This suggests that self-esteem is a key factor in the prevention of substance misuse, and participants should be encouraged to use available resources when handling challenging situations. It can therefore be assumed that self-esteem enhances individual capability to make irrational choices and/or actions. Interestingly, this was reflected in the hostility domain where it was apparent that people addicted to group one and group three substances had a higher tendency to aggression towards themselves or others (hostility). Hostility was linked with both alcohol and amphetamine. This might be explained by the fact that amphetamine produces grandiosity accompanied by aggressive behavior; and when individuals cease drinking their withdrawal symptoms include aggression. Childhood problems were a significant predictor for substance use disorder.

Furthermore, it has been found that self-esteem has both direct and indirect impacts on psychosocial domains such as depression and

relationships with others. This indicates that self-esteem reflects the power of self-control and/or self-efficacy when facing any challenge. Few studies measured this psychosocial aspect. However, in a similar context the relationship between positive and negative life events and self-efficacy on psychological distress was examined. The study concluded that negative life events cause substance use disorder and psychological distress; conversely, self-efficacy and positive life events were negatively correlated with substance use.

As regards childhood problems, the results indicated that marijuana and amphetamine are associated with this domain. While family intimacy and a positive relationship can direct children to make good decisions, children who face neglect or abuse from their family or society may take to substance use/abuse. The risk-taking domain has a significant relationship with both alcohol and amphetamine; male adolescents are more often involved in risky and unhealthy activities, reflected in their desire to obtain substances through wrong or dangerous practice. It can also be explained by the mechanism by which substances or drugs work on the brain and affect the functional tasks and chemical balance that play a role in thinking and situation analysis. People addicted to alcohol had family dysfunction and poor inter-personal relationships. In addition, the decision-making domain is strongly linked with alcohol. Further research in this domain is needed, to compare this domain and alcohol consumption.

We like to examine the psychosocial impact of the four substance groups. Although this study is rated as of good quality, it has several limitations. The clinical implication of the study is the need to integrate the biological, psychological and social components of treatment plans for substance misuse disorder. The prevailing biomedical paradigm is inadequate in dealing fully with the withdrawal symptoms associated with substance misuse disorder, and indeed the complex needs of people with mental illness in general.

This study strongly endorses the need to expand service provision in psychiatric clinics to consider social and psychological aspects in the treatment. It is crucial to engage family members in the management of patients because they can add knowledge about how to handle particular situations.

Drug abuse in individuals and different types of drugs can affect their lives at different stages. The treatment of addicts should therefore not be limited to the intoxication phase, but patients should be treated holistically; helping to solve problems related to addiction is an important role of nursing and other health care teams. This helps us to understand the difficulties in this area of practice that addicts may face in terms of their physical, social, emotional, psychological and spiritual health. Self-esteem, depression and anxiety are the most common aspects affected by various forms of substance use/abuse.

3.4 Psychological models of addiction

Psychological Models are a useful tool in understanding the unhealthy behaviors people are susceptible to from addiction. Psychological models hypothesize that substance addictions originate from psychological irregularities or abnormalities. The psychoanalytic models of addiction are associated with 'self-medication' theory - substance use is the individual's attempt to ameliorate the emotional pain caused by trauma or ego deficits.

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3.4.1 Psychoanalytical Models

The psychoanalytic models of addiction are associated with 'self-medication' theory – substance use is the individual's attempt to ameliorate the emotional pain caused by trauma or ego deficits (Cavaiola, 2009).

Sigmund Freud's (1923) personality theory describes the human psyche as consisting of three parts:

- **the id** – the primitive and instinctual part that contains sexual and aggressive drives and hidden memories;
- **the super-ego** – the moral conscience;
- **the ego** – the realistic part that mediates between the desires of the id and the super-ego.

Each part comprises unique features, yet they interact to form a whole, and each part contributes to behaviour. Psychoanalytic theories explain addiction as an imbalance between the id, superego, and ego. When the id overpowers the ego and superego, a person may take substances without thinking of the consequences.

3.4.2 Other Psychological Models of Addiction

Other psychoanalytic theorists explain addiction as intrapsychic conflict from an overly harsh superego. From this perspective, substance use represents a way of escaping anxiety, fear, or rage. Other Neo-Freudians believe trauma underpins addiction and addictive behavior develops as a way to cope with the trauma. This explanation finds some validity in the high correlation between post-traumatic stress disorders and substance use (Mills et al., 2006).

3.4.3 Psychopathology Models

There is correlation between addiction and types of mental disorders, including:

- Attention deficit hyperactivity disorder
- Conduct and other oppositional disorders
- Mood disorders
- Anti-social, borderline and narcissistic personality disorders.

Correlation does not imply causality, however, there are some instances where the self-medication hypothesis can also be applied to these models as causal agents.

3.4.4 Personality Models

This group of models explains addiction through personality variables and individual temperaments. These include:

- high need for novelty-seeking
- harm avoidance
- reward dependence
- low ego resiliency and poor ego control
- low attention span
- high emotionality and mood instability
- low sociability and social withdrawal
- low activity level
- low flexibility

The longer an addiction to drugs or alcohol lasts, the more stress and strain it places on an individual. There is an overwhelming number of long-term physical and emotional effects that addiction can have on a person.

The following information is designed to help you understand how addiction can harm your physical and mental health and how getting treatment can help to repair this damage.

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4 Links between substance abuse and mental health

4.1 Understanding the links between substance abuse and mental health

4.1.1 How substance abuse affects the brain and can lead to mental health disorders

Substance abuse, whether it's alcohol, drugs, or other addictive substances, can have a profound impact on the brain. When someone consumes these substances, they enter the bloodstream and eventually make their way to the brain. Once there, they interact with various receptors and neurotransmitters, which can have both short-term and long-term effects.[1]

In the short-term, substance abuse can cause a rush of pleasurable feelings, often referred to as a "high." This is because these substances can flood the brain with dopamine, a neurotransmitter that is associated with pleasure and reward. However, over time, repeated use can lead to changes in the brain's chemistry and structure, making it more difficult to feel pleasure and satisfaction without the substance.[2]

Long-term substance abuse can also cause lasting damage to the brain, which can contribute to mental health disorders. For example, chronic alcohol abuse can lead to changes in the brain's structure and function, which can cause cognitive impairment, memory loss, and mood disorders like depression and anxiety. Similarly, long-term use

of drugs like cocaine or methamphetamine can lead to changes in the brain's reward system, which can cause addiction, paranoia, and psychosis.[3]

It's also worth noting that substance abuse can worsen existing mental health disorders. For example, someone who has a genetic predisposition to depression may find that their symptoms are exacerbated by substance abuse. Additionally, substance abuse can cause mood swings, irritability, and impulsivity, which can make it more difficult to manage pre-existing mental health conditions. Substance abuse is also linked to schizophrenia. [3]

4.1.2 The impact of mental health disorders on substance abuse

The relationship between mental health and substance abuse is a complex one. In addition to substance abuse causing or exacerbating mental health disorders, the reverse is also true: mental health disorders can increase the risk of substance abuse.

Let's take depression as an example. People who suffer from depression may turn to drugs or alcohol as a way of self-medicating, trying to alleviate the pain and hopelessness that comes with the disorder. Unfortunately, this can quickly lead to a cycle of addiction, where the individual becomes reliant on substances to feel any sense of relief or pleasure.[4]

Similarly, individuals who suffer from anxiety disorders may turn to substances like alcohol or benzodiazepines to alleviate symptoms of anxiety. While these substances can provide temporary relief, they can also be highly addictive and lead to more serious mental health and substance abuse problems down the line.[5]

Another factor to consider is the impact of trauma on substance abuse. Individuals who have experienced trauma, whether it be

physical, emotional, or sexual, may turn to substances as a way of coping with the intense emotions and memories that come with trauma. In these cases, substance abuse can be seen as a maladaptive coping mechanism, a way of trying to dull or escape from the pain of the trauma.[6] It's important to note that not everyone with a mental health disorder will turn to substance abuse, and not everyone who abuses substances has a pre-existing mental health disorder. However, there is a clear relationship between the two, and it's important to address both issues in order to achieve long-term recovery.[7]

4.1.3 The importance of early intervention and treatment for both substance abuse and mental health

As just concluded, early intervention and treatment for both substance abuse and mental health disorders are crucial for improving outcomes and promoting recovery. The earlier someone receives treatment for substance abuse, the better their chances are for recovery. This is because substance abuse can cause physical and psychological damage that can become harder to treat the longer it goes on. Additionally, the longer someone abuses substances, the harder it can be to break the cycle of addiction and change maladaptive patterns of behavior.[7,8]

When it comes to mental health disorders, early intervention is also crucial. Many mental health disorders, such as depression, anxiety, and bipolar disorder, can worsen over time if left untreated. Early intervention can help prevent the disorder from becoming more severe and reduce the risk of long-term negative consequences. It's important to note that early intervention doesn't just mean getting help as soon as symptoms appear. It can also mean taking preventative measures to reduce the risk of developing substance abuse or mental health disorders. For example, individuals who have a

family history of addiction or mental illness may benefit from early education and support to help prevent these issues from developing.[8]

Both substance abuse and mental health disorders are treatable conditions, and seeking help can make a significant difference in outcomes. Treatment may involve therapy, medication, support groups, or a combination of these approaches. The key is finding the right treatment for each individual's unique needs and circumstances. Early intervention and treatment are critical for both substance abuse and mental health disorders. With the right treatment and support, individuals can achieve long-term recovery and lead healthy, fulfilling lives.[8]

4.1.4 Common mental health disorders linked to substance abuse

As discussed, mental health and substance abuse are closely intertwined, with one often leading to or exacerbating the other. Common mental health disorders linked to substance abuse include anxiety, depression, bipolar disorder, post-traumatic stress disorder (PTSD), and personality disorders. These disorders can have a significant impact on an individual's life, making it difficult to maintain healthy relationships, perform daily tasks, and achieve personal and professional goals.

4.1.5 Anxiety disorders

Anxiety disorders are a group of mental health disorders characterized by intense feelings of fear, worry, and apprehension. People with anxiety disorders may experience physical symptoms such as sweating, trembling, and heart palpitations in response to triggers that can vary from person to person. Anxiety disorders can take many forms, with some of the most common including generalized anxiety

disorder, panic disorder, social anxiety disorder, and obsessive-compulsive disorder.[9]

Substance abuse and anxiety disorders are closely linked. In fact, anxiety disorders are among the most common mental health disorders that co-occur with substance abuse.[10] As mentioned earlier, many individuals who suffer from anxiety disorders may turn to drugs or alcohol as a way of self-medicating and managing their symptoms. While substances may provide temporary relief, over time, substance abuse can lead to addiction and worsen anxiety symptoms. Actual treatment for anxiety disorders and substance abuse often involves a combination of therapy, medication, and support groups. In fact, cognitive-behavioral therapy (CBT) is a common form of therapy that can be effective for both anxiety disorders and substance abuse. CBT helps individuals identify negative thought patterns and behaviors and replace them with healthier coping strategies.[7]

4.1.6 Depression

Depression is a common mental health disorder characterized by persistent feelings of sadness, hopelessness, and lack of interest or pleasure in daily activities. It can also cause physical symptoms such as changes in appetite and sleep patterns, fatigue, and difficulty concentrating.

As introduced earlier, depression and substance abuse are often linked, with individuals turning to drugs or alcohol as a way of self-medicating and coping with their symptoms. Also, substance abuse can worsen depression symptoms over time and increase the risk of addiction. Effective treatment for depression and substance abuse often involves a combination of therapy, medication, and support groups. As with anxiety, CBT can be particularly helpful in treating depression and substance abuse.[7]

Antidepressant medications, such as selective serotonin reuptake inhibitors, can also be effective in treating depression. However, it's important to note that these medications can interact with certain substances, including substances that are often abused. So, it's important that depression is treated by a professional healthcare provider. On the other hand, support groups such as alcoholic anonymous can also be helpful in maintaining sobriety and managing depression symptoms.[11]

4.1.7 Bipolar disorder

Bipolar disorder is a mental health disorder characterized by extreme mood swings, ranging from depressive lows to manic highs. During a manic episode, individuals may experience increased energy, irritability, impulsivity, and a decreased need for sleep. During a depressive episode, individuals may experience feelings of sadness, hopelessness, and loss of interest in activities they once enjoyed.

Substance abuse is common among individuals with bipolar disorder. This may be due, in part, to the self-medicating effect of drugs or alcohol on the symptoms of bipolar disorder. However, substance abuse can worsen the symptoms of bipolar disorder over time and increase the risk of addiction.[12]

Effective treatment for bipolar disorder and substance abuse often involves a combination of therapy, medication, and support groups. Mood stabilizing medications, such as lithium and anticonvulsants, can be effective in managing the symptoms of bipolar disorder. Antidepressants may also be prescribed to help manage depressive symptoms. It's important however that bipolar disorder treatment is monitored closely by healthcare professionals, as they can sometimes trigger manic episodes, interact with other drugs and medication, and cause toxicity. [12]

Psychotherapy, particularly CBT and psychoeducation, can be helpful in managing the symptoms of bipolar disorder and developing healthy coping strategies for both bipolar disorder and substance abuse. Support groups can also be helpful.

4.2 Self-esteem and its relationship to substance abuse and mental health

4.2.1 How low self-esteem can contribute to substance abuse and mental health issues

Based on research findings, low self-esteem is a fundamental contributor to substance use. It has been argued that individuals who engage in substance use tend to have lower levels of self-esteem. The period of adolescence is particularly vulnerable to the development of substance use disorders. As substance use initiation occurs at increasingly younger ages, the relationship between self-esteem and substance use is becoming increasingly relevant for this demographic.[13]

Low self-esteem has been found to have a direct association with other conditions that contribute to substance abuse, particularly impacting the social relationships of young people. Adolescents tend to spend time with peers who they perceive as suitable for their social needs, and as a result, are directly affected by the influence of low self-esteem on their social connections.

Peer groups are typically small, closed social groups formed around close friendships, usually consisting of two or three individuals. The formation of these groups is determined by various factors, with childhood and early adolescence friendship choices often based on proximity and longevity of the relationship. However, as individuals

progress through middle and high school, school transitions lead to a more diverse group of potential friends, with friendships forming around shared or complementary interests and personalities.

Adolescents place a great deal of importance on their peers and their opinions, and peer groups establish unspoken norms and expectations. Individuals who comply with these norms are accepted into the group, and every adolescent seeks to belong to a peer group. Being accepted by peers, developing friendships, cooperation skills, and leadership abilities are essential developmental tasks during adolescence. Successful completion of these tasks contributes to harmonious relationships with the environment, while failure to achieve them creates issues with personality adaptation and insecurity. The individual's confidence and self-respect significantly impact the timely completion of these tasks.[14]

Considering the significance of peer relationships during adolescence and the developmental tasks associated with them, creating a secure school environment and implementing strategies to prevent peer bullying while maintaining discipline could prove beneficial in preventing substance use among adolescents.

Numerous factors contribute to positive peer relationships among adolescents, including the quality of parent-child relationships during childhood and the establishment of secure attachments.[15] As such, promoting positive parenting practices and strengthening parent-child relationships may prove beneficial in improving the school environment and reducing substance abuse among adolescents.

4.2.2 Social phobia

Additionally, a closer examination of the concept of social phobia may enhance our understanding of the relationship between adolescent

(student) psychological states and substance use, as this term has short and long-term impacts on adolescent mental health and is linked to both the causes and consequences of substance abuse.

Social phobia is associated with a range of disorders, including panic disorder, obsessive-compulsive disorder, body image disorders, major depression, eating disorders, and substance abuse disorders. Therefore, there is a clear link between social phobia and substance abuse, with individuals using substances as a coping mechanism. This situation can have adverse effects, particularly among highly peer-influenced adolescents, where the risk of substance abuse becoming widespread is high. In a school environment, this situation can negatively impact other students. To prevent such outcomes, it is beneficial to establish a socially active school environment and organize activities that improve positive relationships among students.[16]

4.2.3 Strategies for promoting self-esteem and positive self-image

Promoting self-esteem and positive self-image is critical for individuals' overall well-being and success in various areas of life. Numerous strategies have been developed to improve self-esteem and positive self-image, and they have been found to be effective in different contexts. Here, we discuss some of the strategies that can be used to promote self-esteem and positive self-image.[17]

One effective strategy for promoting self-esteem is developing positive self-talk. This involves replacing negative self-talk with positive and encouraging messages that help individuals to focus on their strengths and accomplishments. For instance, instead of saying, "I can't do this," one can say, "I will do my best, and I am capable of achieving my goals." This approach helps individuals to cultivate a growth mindset and build their self-confidence.[18]

Another effective strategy for promoting self-esteem is practicing self-care. This includes engaging in activities that improve physical, emotional, and mental health. Such activities can include regular exercise, healthy eating, getting adequate sleep, and practicing relaxation techniques. By taking care of oneself, individuals can boost their self-esteem and develop positive self-image.[19]

Additionally, setting and achieving realistic goals can help individuals to improve their self-esteem and positive self-image. Setting achievable goals provides a sense of accomplishment, which can boost one's confidence and self-worth. Individuals can also develop a sense of self-efficacy by taking on challenges and achieving their goals.[20]

Moreover, cultivating positive relationships and seeking social support can help individuals to build self-esteem and positive self-image. Positive relationships provide individuals with a sense of belonging, acceptance, and validation, which can help to boost their self-esteem. Social support, on the other hand, provides individuals with encouragement and reinforcement, which can help to build their self-confidence and self-worth.[21]

In conclusion, one can almost say that substance abuse could be one of the consequences of an unhealthy social environment for self-esteem. Promoting self-esteem and positive self-image can have a significant impact on preventing substance abuse and improving mental health outcomes. Adolescents who feel good about themselves are less likely to turn to substances as a means of coping with negative emotions or peer pressure. Strategies such as providing positive feedback, encouraging healthy relationships with parents, promoting physical activity, and fostering a supportive school environment can all contribute to enhancing self-esteem and positive self-image in adolescents. By implementing these strategies, we can

help reduce the risk of substance abuse and improve overall mental health outcomes in our youth. It is important to continue researching and implementing effective interventions to support the well-being of young people and reduce the burden of substance abuse and mental health disorders in our society.

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5 Emotional effects of substance abuse on the individual

The opioid system is a complex network of receptors and neurotransmitters that are involved in the regulation of pain, pleasure, and reward. While opioids can provide temporary relief of emotional symptoms, long-term use can lead to tolerance, dependence, and addiction.

5.1.1 Heroin – Depression and Child Emotional Maltreatment

Depression is considered as one of the most prevalent emotional symptoms in substance abuse. The most common sign of depressive behavior is emotional abuse, which means the acts of commission and emotional neglect, which includes actions of omission. It has been reported that drug users affected by depression disorder are more vulnerable to greater use of injection and overdose, while they are supposed to have more negative reactions to treatment methods.

According to “Journal of Affective Disorders”, one factor that instigates the symptoms of depression is the Child Emotional Maltreatment (CEM), which is more frequent among heroin users. Depression related to the phenomenon of psychopathological distress of a heroin user can stimulate the CEM. On the other hand, the victim that suffers from CEM is vulnerable to experience emotional dysregulation or depression, because of the abuse or the neglect that they have received during the childhood period. As a result, the vast majority of the individuals having been abused or neglected until the age of 11 are prone to exacerbate negative emotions that can be expressed in different ways, including substance abuse.

Research has shown that heroin is a potent opioid substance that has the capability to have a significant emotional impact on users. Acute heroin usage can provide strong emotions of exhilaration, relaxation, and detachment from reality. However, once the effects of the medicine wear off, people could feel a variety of unfavorable emotions, including anxiety, despair, and irritability.

According to research, long-term heroin use can alter the brain's chemistry, which can result in emotional dysregulation as well as muted affect, apathy, and trouble perceiving pleasure. These emotional changes might make it challenging for people to stop using heroin and can increase the likelihood of recurrence.

The acute heroin use may slow down the brain's processing of unpleasant emotional inputs, which could help explain some of the drug's reinforcing effects. The abuse of heroin is able to intricate interactions between stress, emotions, and drug use in people with substance use disorders. It's crucial to remember that more investigation is required to properly comprehend the acute impacts of heroin on emotional processing. Medications that can assist to calm

mood and lessen cravings are frequently used in conjunction with treatment to treat heroin addiction. Both current and abstinent heroin users exhibited dysregulation of emotional response, with a pattern of negative heightening and positive blunting. Negative heightening refers to an increased sensitivity to negative emotional stimuli, leading to heightened negative emotions and greater distress. Positive blunting, on the other hand, refers to a decreased ability to experience positive emotions, leading to a reduced ability to experience pleasure and enjoyment. The heroin use may contribute to a dysregulation of emotional response, leading to both negative and positive emotional deficits. These emotional deficits may contribute to the persistence of drug use and the difficulty of achieving and maintaining long-term abstinence. Treatment for heroin use disorders should therefore address both the acute effects of heroin use and the long-term emotional deficits associated with drug use. This may include a combination of medication-assisted treatment, behavioral therapies, and support for emotional regulation and stress management.

5.1.2 Lysergic acid diethylamide (LSD)

Recent studies on substance abuse disorders have hypothesized that the quality of LSD can stimulate long lasting alterations in the mental

health and wellbeing of the users. The academic research, namely, “Distinct acute effects of LSD, MDMA, and D-amphetamine” has indicated that the use of LSD at an intermediate dose of 0.1 mg is able to provoke recreational emotions to the user. However, the consumption of 0.2 mg of LSD can stimulate subjective effects affecting the function of the brain. In addition to the consumption of LSD, the use of Methylenedioxymethamphetamine (MDMA) in intermediate dose, 125 mg, is considered as safe, used in the psychotherapy for the treatment of post-traumatic stress disorders (PTSD). Though, the abuse of higher doses of MDMA is expected to stimulate adverse effects. Despite the fact that MDMA does not cause profound alteration in the consciousness of the user, it is considered as a substance that belongs to psychedelic substances.

The same hypothesis used from the researchers in order to identify the effects of the use of D-amphetamine, which is included in the category of psychostimulants. In general, all the three substances have a common trait. All of them increase the sense of openness and the need for communication. According to the study, LSD can produce “introversion, inactivity, emotional excitation and anxiety compared with MDMA and D-amphetamine”. In comparison to LSD, MDMA and D-amphetamine are able to increase the sociability of the user, while LSD can provoke more perplexing changes of waking consciousness. Regarding the acute effects of three drugs - LSD, MDMA, and D-amphetamine - on healthy subjects.

LSD was found to produce profound changes in sensory perception, including alterations in color and depth perception, as well as changes in cognitive function such as increased introspection and a sense of interconnectedness with the environment.

MDMA, on the other hand, produced pronounced changes in mood and emotion, including increased empathy and sociability, as well as changes in sensory perception. D-amphetamine produced effects that were more closely related to traditional stimulants, including increased energy and wakefulness, as well as improved cognitive function such as increased focus and attention. Therefore, these drugs produced distinct and unique acute effects, which likely contribute to their different patterns of use and abuse. Understanding the acute effects of these drugs can help to inform both prevention and treatment efforts.

MDMA use leads to a range of acute effects, including increased feelings of euphoria, sociability, and empathy towards others. MDMA also leads to changes in sensory perception, including increased sensitivity to touch, sound, and light. However, MDMA use can also lead to negative effects, such as anxiety, confusion, and paranoia. Some of the potential long-term effects of MDMA use are neurotoxicity and changes in brain structure and function. While the evidence for long-term effects is still limited and controversial, the review suggests that caution should be taken when using MDMA. Therefore, MDMA use can lead to a range of acute effects, both positive and negative. So far, further research is considered as necessary to fully understand the mechanisms underlying these effects and to identify effective strategies for preventing and treating MDMA-related problems.

5.1.3 Alcohol Consumption

Both alcohol consumption and alcohol expectancy have an effect on the categorization of emotional expressions. Specifically, alcohol consumption leads to a reduced ability to accurately categorize emotional expressions, while alcohol expectancy leads to an increased ability to categorize positive emotional expressions. All the pharmacological effects of alcohol and the individual's expectations and beliefs about alcohol can influence the perception and categorization of emotional expressions. So far, further research is needed to fully understand the mechanisms underlying the effects of alcohol on emotional processing and to identify effective strategies for preventing and treating alcohol-related problems.

5.1.4 Cocaine

The functional magnetic resonance imaging (fMRI) is able to measure changes in brain activity while users can see emotional stimuli before and after cocaine administration. The use of cocaine leads to changes in brain activity in several regions associated with emotion regulation and reward processing, including the amygdala, prefrontal cortex, and striatum. These changes are associated with altered emotional responses, including reduced sensitivity to negative emotional stimuli

and increased sensitivity to positive emotional stimuli. Moreover, cocaine is able to provoke dysregulation of emotional responses, which may contribute to the development of addiction and the difficulty of achieving and maintaining abstinence.

The use of cocaine leads to changes in brain activity in regions associated with emotion regulation and reward processing, including the amygdala, prefrontal cortex, and striatum. These changes are associated with altered emotional responses, including reduced sensitivity to negative emotional stimuli and increased sensitivity to positive emotional stimuli. The effects of cocaine on brain activity and emotion regulation are dose-dependent, with higher doses leading to more pronounced effects. The cocaine use can dysregulate emotional responses, which can contribute to addiction and make achieving and maintaining abstinence more challenging.

5.1.5 The impact on the parents and siblings

Substance abuse in adolescents can have a significant impact not only on the individual, but also on their parents and siblings. Parents of adolescents with substance use disorders may experience a range of negative emotional, physical, and financial consequences, including stress, anxiety, depression, and strained relationships. They may also face legal and financial repercussions related to their child's substance use, such as legal fees and medical bills. Siblings of adolescents with substance use disorders may also experience negative consequences, such as feelings of neglect or resentment, increased stress and anxiety, and a higher likelihood of engaging in substance use themselves. Siblings may also face challenges related to their academic and social development because of their sibling's substance use. It's important for family members of adolescents with substance use disorders to seek support and resources to help them cope with the impact of substance abuse. This can include family therapy, support groups, and individual counseling. Family involvement in treatment can also be an effective way to promote long-term recovery for the individual with substance use disorder and to address the impact of substance abuse on the family as a whole.

In conclusion, understanding the emotional effects of substance abuse is crucial for prevention and treatment efforts. The emotional impact of substance abuse can influence an individual's experience, behavior, and the challenges they face in recovery.

The opioid system plays a crucial role in pain regulation and reward, but long-term opioid use can lead to tolerance, dependence, and addiction. Depression is commonly observed in individuals with substance abuse, and emotional abuse is a significant sign of depressive behavior. Child Emotional Maltreatment (CEM) is more frequent among heroin users and can instigate depression symptoms. Individuals who experienced CEM are vulnerable to emotional dysregulation and depression, potentially leading to substance abuse. Heroin use can result in temporary feelings of pleasure but also unpleasant emotions once the effects wear off. Emotional dysregulation and muted affect can occur in long-term heroin users, making it difficult to stop using and increasing the likelihood of recurrence. Treatment for heroin use should address the acute effects of heroin and the long-term emotional deficits associated with drug

use, as these emotional effects play a significant role in substance abuse.

LSD at different doses can provoke recreational emotions and subjective effects affecting brain function. LSD induces introversion, inactivity, emotional excitation, and anxiety compared to MDMA and D-amphetamine. MDMA increases sociability and empathy, while D-amphetamine increases energy and focus. LSD produces profound changes in sensory perception and cognitive function, while MDMA primarily affects mood, empathy, and sensory perception. The emotional effects of these substances are essential to consider, as they play a crucial role in shaping the user's experience and behavior. Further research is needed to fully understand the acute and long-term emotional effects of these substances.

Alcohol consumption affects the categorization of emotional expressions, leading to reduced accuracy, while alcohol expectancy improves the categorization of positive emotional expressions. Both the pharmacological effects of alcohol and individual expectations influence emotional processing. The emotional effects of alcohol are significant, as they can impact social interactions, mood regulation, and decision-making processes. Further research is needed to fully understand the mechanisms involved and develop effective strategies for preventing and treating alcohol-related emotional problems.

Cocaine use leads to changes in brain activity and altered emotional responses, reducing sensitivity to negative stimuli and increasing sensitivity to positive stimuli. These changes contribute to emotional dysregulation and addiction, making abstinence challenging. The emotional effects of cocaine are critical to address in treatment approaches, as emotional dysregulation plays a significant role in relapse and the difficulty of achieving long-term abstinence. The impact of substance abuse extends to parents and siblings, who may experience negative emotional, physical, and financial consequences. Support and resources, such as therapy and counseling, are important for families dealing with substance abuse and the emotional effects it brings.

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6 Short-term and long-term physical and psychological signs of substance abuse on students

Substance use disorder can lead to short- and long-term negative health effects. These effects can be physical and mental and can range from moderate to severe.

6.1 Drug abuse vs. substance use disorder

This article references the term "drug abuse," which is a stigmatizing term. Instead, the Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5) uses the term substance use disorder (SUD). The manual defines SUD as a disorder involving the continued use of substances despite personal, professional, and health-related problems caused by the usage that negatively affect a person's day-to-day life.

Generally, drug misuse or SUD refers to the use of psychoactive drugs, which are substances that affect the brain. The effects on the body depend Trusted Source on the type of substance a person uses and their health history.

Examples of common psychoactive drugs include:

- alcohol
- cannabis
- cocaine
- heroin

- hallucinogens
- inhalants
- prescription opioids
- prescription stimulants
- methamphetamine
- tobacco or nicotine

6.2 Physical effects of drug abuse

Psychoactive drugs are chemical compounds that affect the mind and body.

Taking different drugs may cause:

- changes in coordination
- blood pressure and heart rate changes
- feelings of being more awake or sleepy
- improved sociability
- pain relief
- changes in the appearance of a person's body

When chronic substance use occurs over a long period, these short-term physical effects may cause long-term changes to a person's brain and body.

The specific physical effects of substance use may vary among individuals and depend on the substance, dosage, delivery method, and length of use.

Substance use can sometimes lead to serious health consequences, including Trusted Source overdose and death.

6.2.1 Short-term physical effects

Using any drug can cause short-term physical effects. The following are Examples of common drugs, their short-term physical effects, and potential health risks due to SUD:

- **Alcohol**
  - deficits in coordination
  - a quickened heartbeat
  - reddening of the skin or face
  - dizziness
  - nausea and vomiting
  - potential hypothermia
  - potential coma
  - methamphetamines
  - increased wakefulness and physical activity
  - decreased appetite
  - increased breathing
  - increased or irregular heart rate
  - increased blood pressure
  - increased temperature
- **Cocaine**
  - narrowed blood vessels
  - enlarged pupils
  - increased body temperature, heart rate, and blood pressure
  - headache
  - abdominal pain and nausea
  - erratic and violent behavior
  - heart attack
  - stroke
  - seizure
  - coma

- **Benzodiazepines**
  - slurred speech
  - dizziness
  - problems with movement
  - slowed breathing
  - lowered blood pressure
- **Heroin and other opioids**
  - dry mouth
  - itching
  - nausea
  - vomiting
  - slowed breathing and heart rate
- **Tobacco and nicotine**
  - increased blood pressure
  - increased breathing
  - increased heart rate
  - greatly increased risk of cancer — lung cancer due to smoking
  - Trusted Source or oral cancer due to chewing
  - chronic bronchitis
  - emphysema
  - heart disease
  - leukemia
  - cataracts
  - pneumonia

6.2.2 Long-term physical effects

Using substances for an extended time may have long-term health consequences. These lasting effects depend on multiple factors, including the substance, the amount, and how long a person has used it.

Examples of commonly used drugs and potential long-term physical effects of SUD include:

- **Alcohol**
  - heart disease
  - stroke
  - liver disease and inflammation (alcoholic liver disease)
  - pancreatitis
  - digestive problems
  - cancer of breast, mouth, throat, esophagus, voice box, liver, colon, and rectum
  - weakened Trusted Source immune system
  - alcohol use disorder or alcohol dependence
- **Methamphetamines**
  - severe dental problems
  - weight loss
  - intense itching leading to skin sores
  - risk of HIV, hepatitis, and other diseases from shared needles
- **Cocaine and heroin**
  - when a person snorts them, these drugs may cause:
    - loss of sense of smell
    - nosebleeds
    - nasal damage and trouble swallowing
  - other effects include:
    - infection and death of bowel tissue from decreased blood flow
    - inadequate nutrition and weight loss
    - collapsed veins
    - abscesses
    - infection of the lining and valves of the heart
    - constipation and stomach cramps
    - liver or kidney disease

    - pneumonia
    - fatal overdose
- **Tobacco or nicotine:**
    - greatly increased risk of cancer — lung cancer due to smoking
    - Trusted Source or oral cancer due to chewing
    - chronic bronchitis
    - emphysema
    - heart disease
    - leukemia
    - cataracts
    - pneumonia

6.3 Mental effects of drug abuse

Long-term SUD may affect a person's memory, behavior, learning, consciousness, and concentration.

Substances, such as alcohol, cannabis, stimulants, and opioids, are psychoactive drugs that may change an individual's brain function and structure after chronic use. This can result in cognitive and behavioral changes and deficits that may remain even after someone stops using.

The exact mental or cognitive effects of SUD may vary depending on the type of drug and the duration of use.

SUD may also exacerbate symptoms of other mental disorders, and early drug use is a strong risk factor for the later development of substance use disorders. It may also be a risk factor for developing other mental illnesses.

For example, frequent cannabis use in adolescents can increase the risk of psychosis in adulthood in individuals who carry a particular gene variant.

6.3.1 Short-term mental effects

Examples of common drugs and their short-term mental effects include:

- **alcohol:**
    - feelings of euphoria
    - reduced anxiety
    - easing of social interactions
    - irritability and anxiety upon withdrawal
- **cannabis:**
    - enhanced sensory perception
    - feelings of euphoria and relaxation
    - anxiety
    - irritability upon withdrawal
- **benzodiazepines:**
    - drowsiness
    - concentration issues
    - dizziness
    - reduced anxiety
    - problems with memory
    - heroin:
    - feelings of euphoria
    - restlessness upon withdrawal
- **prescription opioids:**
    - pain relief
    - drowsiness
    - feelings of euphoria
    - methamphetamine:

- increased wakefulness
- anxiety upon withdrawal

6.3.2 Long-term mental effects

Examples of common drugs and mental effects associated with long-term SUD include:

- alcohol:
  - depression
  - anxiety
  - learning and memory problems
  - social problems
- prescription opioids:
  - increased risk of overdose
  - methamphetamines:
  - anxiety
  - confusion
  - insomnia
  - mood problems
  - violent behavior
  - paranoia
  - hallucinations
  - delusions
- heroin:
  - risk of overdose
  - tobacco and nicotine:
  - in teens, they can affect the development of brain circuits that control attention and learning
  - irritability, attention and sleep problems, and depression upon withdrawal
- cannabis:
  - mental health problems

- irritability, trouble sleeping, anxiety upon withdrawal

6.4 What is substance use disorder?

To get a diagnosis of SUD, a person has to qualify for 11 criteria that the DSM-5 outlines.

These include:

- using more of a substance than a person intends or using it for longer than they mean to
- trying to cut down or stop using the substance but being unable to
- experiencing intense cravings or urges to use the substance
- needing more of the substance to get the desired effects (tolerance)
- developing withdrawal symptoms when not using the substance
- spending more time getting and using drugs and recovering from substance misuse
- continuing to use even when it causes relationship problems
- giving up important or desirable social and recreational activities due to substance use
- using substances in potentially harmful settings that put a person in danger
- continuing to use despite the substance causing problems to physical and mental health

6.4.1 How to get help

Finding the right treatment program may feel overwhelming. Here are a few things a person can consider when seeking treatment for SUD.

- Consider whether inpatient or outpatient services would be most suitable.
- Find local treatment centers using the Substance Abuse and Mental Health Services Administration's treatment finder tool.
- Know that state-run treatment centers and programs may be free of charge.
- Look for programs that use evidence-based treatment strategies.

6.4.2 Treatment

SUD is a complex but treatable disease that affects a person's cognitive function and behavior. No single treatment is right for everyone.

However, effective treatment for SUD should address all of a person's mental and physical health needs.

Treatment aims to help individuals develop a healthier relationship with drugs, helping them live productive lives in relationships with their family, work, and society.

Treatment may involve some of the following components:

- Medications: Can help minimize withdrawal symptoms and prevent the return to unsafe use.
- Behavioral counseling: Helps individuals modify their attitudes and behaviors related to substance use, increase healthy life skills, develop problem-solving skills, and stick to treatment plans.
- Group therapy: Gives people the chance to acknowledge, share, and work through the psychological aspects of recovery with a group of peers under professional guidance.

- Additional support: May include vocational training and other resources that address problems associated with SUD, such as mental health conditions, unemployment, and medical conditions.

6.4.3 Frequently asked questions

Here are some common questions and answers regarding SUDs.

6.4.4 How do I know if I or someone I know is misusing drugs?

Healthcare professionals use 11 criteria to determine if an individual has SUD. Some of them include:

- using more of a substance than a person intends
- using it for longer than they mean to
- trying to cut down or stop using the substance but being unable to
- experiencing intense cravings or urges to use the substance
- needing more of the substance to get the desired effects
- continued use despite social/interpersonal problems
- activities/hobbies reduced or given up.
- developing withdrawal symptoms when not using the substance
- failure to fulfill major obligations
- recurrent use in physically hazardous situations
- tolerance.

what's that look like?

- I used to use it twice a day; now, to maintain the desired effect, I use it 5 times a day.
- 3 pills used to make me feel great; now, to achieve the desired effect I take 6 pills.

6.4.5 What are the risk factors for drug misuse?

Certain factors may increase an individual's risk for SUD. These risk factors include:

- family history of substance use
- difficulties with parental monitoring
- parents' substance use
- family rejection of sexual orientation or gender identity
- association with substance-using peers
- lack of school connectedness
- academic achievement difficulties
- childhood sexual abuse
- mental health issues

6.4.6 Conclusion

SUD can affect several aspects of a person's physical and psychological health.

Certain substances may lead to drowsiness and slow breathing, while others may cause insomnia, paranoia, or hallucinations. Chronic substance use has links to cardiovascular, kidney, and liver disease.

In addition to physical and mental effects, substance use can adversely affect a person's relationships, home and work life, and mental health.

Care providers should tailor treatment to a person's needs. Community-based organizations and state-funded treatment programs usually involve a combination of behavioral therapy, group therapy, and medication.

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7 Practical tips to teachers

7.1 Introduction

Our society faces an increasing substance abuse problem, and prevention should be a top priority for every household and community (American Addiction Centers Editorial Staff, 2022). Due to the high rate of substance exploration by students during their school years (Gizyatova, 2016), educators play a crucial role in preventing substance abuse (Handrianto et al., 2021; Gizyatova, 2016) since they both spend most of their time in a school environment (National Crime Prevention Centre (Canada), 2009), and the best course of action is primary prevention, both in terms of effectiveness and preference (Gizyatova, 2016).

It has been shown that evidence-based prevention programs have significantly reduced substance abuse rates (The Importance of Drug Prevention, 2020) since students were hesitant to try drugs after being educated about them, suggesting that schools have a significant role in creating awareness about the consequences of drug abuse (Adhani & Anshori, 2018). As noted by Splett et al. (2019), providing information and training to teachers and guiding access to care is crucial for delivering effective and efficient prevention and intervention services for children with mental health problems that can be linked to substance abuse.

However, the quality of drug prevention programs depends on the level of teacher training and individual motivation. Hence, teachers need to have both topic knowledge and pedagogical expertise to communicate the dangers of drug abuse to students through their

teaching plans, curriculums, and learning strategies (Handrianto et al., 2021).

Here are some practical tips that educators can use to help guide students and assist in the prevention and intervention of substance abuse.

7.2 Practical Tips for Teachers

- **Educate yourselves about substance abuse and be aware of the behavioral and physical signs associated with it.** Often, teachers are nervous about taking the lead, worried they do not know enough and fear saying the wrong thing (Cohen, 2015). However, when it comes to drug education, they do not have to be experts (Gizyatova, 2016); instead, they need to possess sufficient knowledge to act as facilitators (UNICEF, 2001). The lack of confidence that teachers still have when using interactive methods illustrates the importance of training (Stead, 2006). Learning can involve reading online resources and participating in training sessions.
- **Provide a safe environment where students can express concerns without feeling judged**. A student's fear of being judged is often the driving force behind their reluctance to speak up (Cohen, 2015). Creating a safe environment includes establishing values and expectations for behavior, incorporating experiential learning and behavior modeling, and including a substance abuse prevention program in the curriculum. Student discipline is positively viewed, and community involvement is encouraged.
- **Show students that you care about them**. Building a trusting relationship between teachers and students begins with learning their

strengths and weaknesses. Respect and embrace differences. This way, they may discuss substance abuse more easily or open up if needed.

- **Involve parents in the prevention and intervention process of substance abuse.** Parent-involved programs are more successful because they empower and educate them (United Nations Office on Drugs and Crime, 2004). By improving communication between parents and schools, building partnerships, and implementing effective teaching and behavior management practices, family relationships can be improved, and substance abuse risks can be reduced.
- **Recognize the signs of substance abuse.** The previous chapters provide information on understanding if students are using substances. The most important thing to remember is to act discreetly and carefully if you notice any of these signs. The first step is to communicate privately with the student and let them know what you are noticing without judging them. Notify your guidance counselor of the need for extra support and act accordingly. Tell the student you will be available whenever they need to talk, and you can share a story to encourage them to open up (Utti, 2016).
- **Engage school leaders and other teachers in the development of life-skills training.** High school students' attitudes toward drug abuse and addiction improved when they participated in a life skills program that included lectures and video clip-based educational methods (Bonyani et al., 2018). Life skills training is undoubtedly an invaluable prevention tool. It prepares students to recognize, prevent, and refrain from using drugs because they possess the skills to do so. A life skills training program aims to help children learn how to listen, communicate, express themselves, evaluate their positive and negative characteristics, and act appropriately. Through this program, students are encouraged to reflect on themselves and think critically, as well as

to understand their social and family roles and relate to their surroundings (Ives, 2005)

- **Develop an e-learning course on substance abuse, including the effects on a person psychologically and socially.** Based on the research results of (Griffin et al., 2022), a hybrid digital preventive intervention significantly reduced substance use. It increased health skills, knowledge and life skills among students who received the intervention compared to students who did not.
- **Getting students actively involved in the learning process is crucial to ensuring that learning occurs and that they feel comfortable asking questions.** Provide age-appropriate information through games and interactive and engaging activities. Please select an activity that appeals to their age and accommodates all learning styles. Include videos, presentations, podcasts, and anything else that speaks to their generation. Here are some examples of activities you can implement as teachers in the classroom to become practical and useful in substance abuse prevention problems.

Pooling ideas: Write something on the board about substance abuse (for instance, addiction) and have the students brainstorm while sharing some related examples in one minute without commenting. Afterwards, let the students discuss the words on the board. Find out what their perspective is and ask them to elaborate.

Kahoot! Use Kahoot to create a quiz to help students better understand substance abuse and its effects on their emotional, personal, and social lives. The ability to respond from their own devices without anyone knowing who they are allows them to express themselves freely. It can be an effective way to engage students in their learning process and have fun.

Work in Groups: Divide students into groups and ask them to create a presentation using Google Docs so that everyone has access at once. Give each group a different topic and ask them to gather information online and prepare a presentation. As a result of this activity, students explore and develop awareness rather than passively following along. Teachers can restrict students to websites based on their age.

Choose a podcast that is motivational and inspiring, and appropriate for your age group. A variety of options are available online. Students can listen to the podcast and discuss it afterwards.

- **Talk about health and brain science, not morality (We are Teachers Staff,** 2016). Educating teens about drugs and alcohol and their lasting effects may be the most effective prevention method. Rather than using scare tactics, explain how drug use can affect the things youth value most, such as sports, driving, health, and appearance. (Mayo Clinic Staff, 2022)
- **Ensure that Safe Resources are available to them** to navigate themselves if they feel uncomfortable asking questions or seeking assistance. Provide them with contact information of organizations that can help them or a close relative. They may not feel comfortable talking about it with you, but if you can provide them with a phone number they can call if they need assistance, this could be helpful.
- **Bring an expert** and ask them to present age-appropriate information. Students can hear about substance abuse, realize its dangers, and ask questions freely.
- **Be a role model.** An educator has a constant presence in the life of a child and can have a very significant effect on their attitudes. Thus, it is crucial to serve as a positive role model who exemplifies honesty, integrity, respect, responsibility, fair play and trust. "A teacher affects

eternity; he can never tell where his influence stops." (Henry Brooks Adams 1907 as cited in Sunder, 2022)

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