



PSY 318

Child Psychopathology

Course Manual

Olanike A. Olusegun

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General Editor: Prof. Bayo Okunade

University of Ibadan,
Nigeria

Telex: 31128NG

Tel: +234 (80775935727)

E-mail: ssu@dlc.ui.edu.ng

Website: www.dlc.ui.edu.ng

Vice-Chancellor's Message

The Distance Learning Centre is building on a solid tradition of over two decades of service in the provision of External Studies Programme and now Distance Learning Education in Nigeria and beyond. The Distance Learning mode to which we are committed is providing access to many deserving Nigerians in having access to higher education especially those who by the nature of their engagement do not have the luxury of full time education. Recently, it is contributing in no small measure to providing places for teeming Nigerian youths who for one reason or the other could not get admission into the conventional universities.

These course materials have been written by writers specially trained in ODL course delivery. The writers have made great efforts to provide up to date information, knowledge and skills in the different disciplines and ensure that the materials are user-friendly.

In addition to provision of course materials in print and e-format, a lot of Information Technology input has also gone into the deployment of course materials. Most of them can be downloaded from the DLC website and are available in audio format which you can also download into your mobile phones, iPod, MP3 among other devices to allow you listen to the audio study sessions. Some of the study session materials have been scripted and are being broadcast on the university's Diamond Radio FM 101.1, while others have been delivered and captured in audio-visual format in a classroom environment for use by our students. Detailed information on availability and access is available on the website. We will continue in our efforts to provide and review course materials for our courses.

However, for you to take advantage of these formats, you will need to improve on your I.T. skills and develop requisite distance learning Culture. It is well known that, for efficient and effective provision of Distance learning education, availability of appropriate and relevant course materials is a *sine qua non*. So also, is the availability of multiple plat form for the convenience of our students. It is in fulfilment of this, that series of course materials are being written to enable our students study at their own pace and convenience.

It is our hope that you will put these course materials to the best use.



Prof. Abel Idowu Olayinka
Vice-Chancellor

Foreword

As part of its vision of providing education for “Liberty and Development” for Nigerians and the International Community, the University of Ibadan, Distance Learning Centre has recently embarked on a vigorous repositioning agenda which aimed at embracing a holistic and all encompassing approach to the delivery of its Open Distance Learning (ODL) programmes. Thus we are committed to global best practices in distance learning provision. Apart from providing an efficient administrative and academic support for our students, we are committed to providing educational resource materials for the use of our students. We are convinced that, without an up-to-date, learner-friendly and distance learning compliant course materials, there cannot be any basis to lay claim to being a provider of distance learning education. Indeed, availability of appropriate course materials in multiple formats is the hub of any distance learning provision worldwide.

In view of the above, we are vigorously pursuing as a matter of priority, the provision of credible, learner-friendly and interactive course materials for all our courses. We commissioned the authoring of, and review of course materials to teams of experts and their outputs were subjected to rigorous peer review to ensure standard. The approach not only emphasizes cognitive knowledge, but also skills and humane values which are at the core of education, even in an ICT age.

The development of the materials which is on-going also had input from experienced editors and illustrators who have ensured that they are accurate, current and learner-friendly. They are specially written with distance learners in mind. This is very important because, distance learning involves non-residential students who can often feel isolated from the community of learners.

It is important to note that, for a distance learner to excel there is the need to source and read relevant materials apart from this course material. Therefore, adequate supplementary reading materials as well as other information sources are suggested in the course materials.

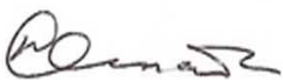
Apart from the responsibility for you to read this course material with others, you are also advised to seek assistance from your course facilitators especially academic advisors during your study even before the interactive session which is by design for revision. Your academic advisors will assist you using convenient technology including Google Hang Out, You Tube, Talk Fusion, etc. but you have to take advantage of these. It is also going to be of immense advantage if you complete assignments as at when due so as to have necessary feedbacks as a guide.

The implication of the above is that, a distance learner has a responsibility to develop requisite distance learning culture which includes diligent and disciplined self-study, seeking available administrative and academic support and acquisition of basic information technology skills. This is why you are encouraged to develop your computer skills by availing yourself the opportunity of training that the Centre’s provide and put these into use.

In conclusion, it is envisaged that the course materials would also be useful for the regular students of tertiary institutions in Nigeria who are faced with a dearth of high quality textbooks. We are therefore, delighted to present these titles to both our distance learning students and the university’s regular students. We are confident that the materials will be an invaluable resource to all.

We would like to thank all our authors, reviewers and production staff for the high quality of work.

Best wishes.



Professor Bayo Okunade
Director

Course Development Team

Course Writer

Olanike A. Olusegun Ph.D.

Content Editor

Prof. Remi Raji-Oyelade

Production Editor

Dr. Gloria O. Adedoja

Learning Design & Technologist

Folajimi Olambo Fakoya

Managing Editor

Ogunmefun Oladele Abiodun

General Editor

Prof. Bayo Okunade

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Study Session 1 Drugs and Consciousness

Introduction

In this study session, you will be introduced to the major classifications in studying and understanding substance abuse. We will start by examining how drugs can alter human consciousness.

Learning Outcomes

When you have studied this session, you should be able to:

- 1.1 summarize the major psychoactive drugs and their influences on consciousness and behavior.
- 1.2 explain the different classifications of psychotropic substances.

1.1 Altering Consciousness through Drugs

Essentially, consciousness can be altered through the ingestion of chemical substances in form of drugs. This includes **psychotropic substances** which are a class of drugs that alter consciousness. The drugs exert their effects by influencing specific neurotransmitters in the brain or by chemically altering the action of the neurons in other ways. The effect also ranges from mild relaxation to vivid hallucinations. The frequency of their usage is what makes their effect more enormous.

- How will you define psychotropic substances?
- Psychotropic substances are drugs that alter consciousness, and particularly our perceptions and moods.

1.2 Classification of Psychotropic Substances

Psychotropic drugs can be divided into four major categories:

1. **Depressants:** These are the drugs that reduce the activities of the inhibitory centres of the central nervous system, leading to a sense of relaxation and lowered inhibitions.
2. **Stimulants:** Drugs that increase the activity of the motivational centres and decrease the action in inhibitory centre of the central nervous system, providing a sense of energy and well-being.
3. **Hallucinogens:** These produce dreamlike alterations in perceptual experience.
4. **Inhalants:** These are common household chemicals that are put to dangerous use by inhaling. When they are inhaled, they produce feelings of intoxication.

Box 1.1 Note

Marijuana does not fit into the broad classification; it also induces a relaxed sense of well being in most persons. Other abused substances are designer drugs and Act-Alike drugs

- Psychotropic drugs
 - a) alter conscious experience.
 - b) are illegal.
 - c) are primarily used for research purposes.
 - d) heighten creativity.
- If you have chosen option A, then you are correct. Options B, C and D are not entirely valid in some cases. For instance, some psychotropic substance such as inhalants are household items and therefore not illegal in that sense.

Summary

In this Study Session you learnt that:

1. Consciousness can be altered through the use of chemical substances.
2. These drugs exert their influence on the neurotransmitter in the brain.
3. Psychotropic substances are mainly categorised into four: depressants, stimulants, hallucinogens and inhalants.
4. Marijuana and other designer drugs though not strictly categorised as part of the four group of substances are also popular drugs that alter consciousness.

Self-Assessment Questions (SAQs) for Study Session 1

Now that you have completed this study session, you can assess how well you have achieved its Learning Outcomes by answering these questions. Write your answers in your Study Diary and discuss them with your

Tutor at the next Study Support Meeting. You can check your answers with the Notes on the Self-Assessment Questions at the end of this Module.

SAQ 1.1 (tests Learning Outcome 1.1)

Describe the ways chemical substances affect consciousness.

SAQ 1.2 (tests Learning Outcome 1.2)

Enumerate the different major classifications of psychotropic drugs.

Bibliography

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Study Session Two Problems Associated with Drug Use

Introduction

In the previous Study Session, we examined how drugs can alter consciousness. In this Session, we will highlight the risks involved in altering consciousness through drugs. These risks vary from drug to drug. However, the risks involved the same basic issue.

Learning outcomes

When you have studied this session, you should be able to:

2.1 discuss the effects of drug abuse on the user.

2.1 Risks Inherent in Drug Abuse

When drugs are used to alter conscious experience, it carries with it certain risks. These risks of course differ from drug to drug but the same basic issues are involved.

1. **Drug abuse:** When a drug is abused, it causes physical damage. For instance, liver damage may result because of much intake of alcohol or impairment of psychological or social functioning. Frequent drinking of alcohol can also lead to marital conflicts.
2. **Psychological dependence:** A psychological dependence may develop when the individual needs to use the drug regularly to maintain a comfortable psychological state. For instance, a person may feel edgy, if he or she is deprived of marijuana which he or she is used to.
3. **Physiological addiction, tolerance and withdrawal:** Many drugs easily become involved in chemical functioning of the body. The body adjusts to the extent that when the drug is not present, the body cannot function properly and the person experiences painful withdrawal symptoms. Addictive drugs produce progressively stronger addiction because over time, the body learns to adapt more easily to the drug in its system. As tolerance for the drug increases, larger doses are needed to produce the same effect on consciousness. Therefore, the addicted person's body chemistry becomes more progressively tied to the drug.
 - True/false, when someone requires larger doses of a drug to effect consciousness, he/she is psychologically dependent on same substance?
 - False, although the effect of the drug is telling on the user, the person is actually becoming *physiologically* addicted to the drug as his/her body increases tolerance for the drug.
4. **Direct side effects:** Psychotropic drugs usually have effects that are not limited to a single neurotransmitter or organ system. There are other serious side effects, such as annoyance, numbness in the throat caused by inhaling cocaine, brain damage, heart attacks, loss of control when driving or operating machines. Furthermore, violence and suicide are some of the common side effects of psychotropic drugs.
5. **Indirect side effects:** Drugs are dangerous not only because of their direct psychological and medical side effects but also because of their indirect effects. For instance, there may be increased risk of infection with Hepatitis or HIV if needles are shared indiscriminately. It also increases the risk of contacting serious diseases.
6. **Social effect:** This relates to the effect the addicted persons behaviour has on the immediate family, neighbours, co-workers etc. To sustain the habit, the addicted people also resorts to different forms of anti-social or deviant behaviour.

Reflection

Many people still engage in drugs abuse in spite of their knowledge about the grave consequences such actions entails.

Summary

You have learnt that:

1. Drug abuse causes different physical and psychological damages.
2. There are also direct, indirect and social effects of drugs.

Self-Assessment Questions (SAQs) for Study Session 2

Now that you have completed this study session, you can assess how well you have achieved its Learning Outcomes by answering these questions. Write your answers in your Study Diary and discuss them with your Tutor at the next Study Support Meeting. You can check your answers with the Notes on the Self-Assessment Questions at the end of this Module.

SAQ 2.1 (tests Learning Outcome 2.1)

Explain the effect of Drug Abuse.

Study Session 3 Variations in Responses to Drug Use

Introduction

In Study Session two, we highlighted the problems involved in drugs abuse. Notably however, individuals respond to drugs use in different ways. We will now examine the factors that cause these variations.

Learning Outcome

When you have studied this session, you should be able to:

3.1 state the ways people respond to drugs and factors for such variations.

3.1 Factors responsible for Variations in Response to Drugs

There are variations in how individuals respond to drug use. These responses are primarily due to a number of factors. Some of such factors are linked to the psychological effects of some of these widely used drugs.

1. **Dose and purity:** Necessarily, the amount of drugs taken at a particular time can influence its effect on the user. Sometimes, drugs purchased on the street are often cut (mixed) with other substances which can alter the effect of the drugs.
2. **Personal Characteristics:** The weight, health, age and even the personality of the person taking a drug can influence the drug's effect.
3. **Expectations:** The effect that a person expects a drug to have, based on his or her past experiences and what others have said about the particular drug can partly determine the effect of the drug on the person.
4. **Social Situations:** Other people influence a person's response to a drug. If the drug is taken alone, a person may respond differently from when it is taken in company of others at a party.
5. **Moods:** The mood of a person at the time of taking the drug can dramatically alter its effects. Alcohol, for instance, can make a happy person happier or a sad person more depressed, and it can unleash violence in an angry individual.

Summary

In this Study Session we examined how psychological effects of drugs serves as factors that determine how a person will relate to drug use. These psychological effects include:

- the dosage of the drug and its purity,
- personal characteristics,
- expectations,
- social situation, and
- mood of the user.

Self-Assessment Questions (SAQs) for Study Session 3

Now that you have completed this study session, you can assess how well you have achieved its Learning Outcomes by answering these questions. Write your answers in your Study Diary and discuss them with your Tutor at the next Study Support Meeting. You can check your answers with the Notes on the Self-Assessment Questions at the end of this Module.

SAQ 3.1 (tests Learning Outcome 3.1)

Discuss three factors that can account for variations in reactions to substance abuse?

Study Session 4 Drugs Abused

Introduction

In the following series of Study Sessions, various forms of drugs will be discussed. These drugs are generalised under different categories and classifications. They could be generally classified as stimulants, depressants, hallucinogens and inhalants as we shall discover in this Study Session.

Learning Outcomes

When you have studied this session, you should be able to:

- 4.1 outline the effects of stimulants on the central neuron system.
- 4.2 explain the effects of narcotic substance on behaviour.
- 4.3 discuss the effects of inhalants on brain.
- 4.4 Indicate the psychological effects of hallucinogens.

4.1 The Nature of Stimulants

Stimulants are drugs that activate the motivational centres and reduce activities in the inhibitory centres of the central nervous system (CNS). They are often called "Uppers".

4.1.1 Mild Stimulants

Stimulants include caffeine, which is often found in coffee, tea, soft drinks and some nonprescription drugs. It also includes nicotine which is found in tobacco products like cigarettes. These are relatively mild stimulants but are extremely addictive. They pose major health risks; though they fall under the socially acceptable drugs or legal drugs.

Nicotine from Tobacco

Tobacco plant is consumed in various ways. In many cultures, it is ingested or chewed as a dried leaf, smoked or sniffed in powdered form. In this section, we shall mainly focus on its consumption in smoked form.

Nicotine is contained in cigarettes and other smoked tobacco products. It is a stimulant, and it is one of the main factors leading to continued tobacco smoking. Although, the amount of nicotine inhaled with tobacco smoke is quite small (most of the substance is destroyed by the heat), it is still sufficient to cause physical and/or psychological dependence. The amount of nicotine absorbed by the body from smoking depends on many factors, including the type of tobacco, whether the smoke is inhaled, and whether a filter is used.

Despite the design of various cigarettes advertised and even tested on machines to deliver less of the toxic tar, studies have shown that when smoked by humans instead of machines, still deliver the same net amount of smoke. Ingesting a compound by smoking is one of the most rapid and efficient methods of introducing it into the bloodstream, second only to injection, which allows for the rapid feedback which supports the smokers' ability to titrate their dosage.

Smokers report a variety of physical and psychological effects from smoking tobacco. Those new to smoking may experience nausea, dizziness, and rapid heartbeat. The unpleasant symptoms will eventually vanish over time, with repeated use, as the body builds a tolerance to the chemicals in the cigarettes, such as nicotine.

Most smokers say they enjoy smoking, which is part of the reason many continue to do so even though they are aware of the health risks. Taste, smell, and visual enjoyment are also major contributions to the enjoyment of smoking, in addition to camaraderie with other smokers. Ironically, chronic exposure to tobacco smoke may inhibit one's sense of taste and smell, rendering him or her less able to enjoy these aspects of tobacco smoking.

- True/false: but they produce intense psychological dependence.
- True, stimulants are not physically addictive, but they create psychological dependence on their users.

The Health Effect of Tobacco Smoking

Firsthand Smokers

Tobacco use leads most commonly to diseases affecting the heart and lungs, with smoking being a major risk factor for heart attacks, Chronic Obstructive Pulmonary Disease (COPD), emphysema, and cancer, particularly lung cancer, cancers of the larynx and mouth, and pancreatic cancer.

Secondhand Smokers or Environmental Tobacco Smoke (ETS)

Secondhand or Environmental Tobacco Smoke (ETS) is a mixture of smoke from the burning end of a cigarette, pipe or cigar and the smoke exhaled from the lungs of smokers. It is involuntarily inhaled, lingers in the air hours

after cigarettes have been extinguished, and can cause a wide range of adverse health effects, including cancer, respiratory infections, and asthma. Nonsmokers who are exposed to secondhand smoke at home or work increase their heart disease risk by 25-30% and their lung cancer risk by 20-30%

Tobacco Control

In some countries, tobacco products are not sold to minors (underaged). In Nigeria, for instance, tobacco companies are mandated by the Federal Ministry of Health the need to include warning captions "Smokers are liable to die young" on their packages.

Direct advertisement and consumption of tobacco products are prohibited of tobacco in public places. Tobacco companies are also heavily taxed. All these and many more are ways initiated to control tobacco usage.

4.1.2 High Stimulants



A man snoring cocaine (Source: nimbinwave.com)

Some other stimulant drugs include the following:

1. **Amphetamines.** It goes with the trade names as Dexedrine, Benzedrine and methedrine. These are stimulant drugs that generally produce a conscious sense of increased energy, alertness, enthusiasm and an euphoric sense of being "high". They are not physically addictive but produce an intense psychological dependence. Amphetamines physical danger lies in their effects on the heart. Psychologically, they cause amphetamine psychosis, which manifests as distorted thinking, confused and rapid changing emotions and intense suspiciousness. This is as a result of excessive use of stimulants.
2. **Cocaine:** This is another form of stimulant that is widely consumed, though illegally. It is made from the leaves of cocoa plants. It is taken in many forms but it is most commonly "sniffed" or inhaled as powder. It could also be smoked or injected. Cocaine produces alertness, high energy, optimism, self-confidence, talkativeness, happiness and exhilaration. It raises body temperature, breathing, and heart rate. It reduces desire for food and sleep. The "high" effect of cocaine is within minutes; its use is often repeated each time the effect wears off. Repeated cocaine use leads to addiction because of the way in which it exerts its effect on the brain. Like most consciousness altering drugs, cocaine alters the functioning of the brain by influencing the neuro-transmission at the synapse. Cocaine blocks the reuptake openings and prevents the re-absorption of the neurotransmitter by the axon. This means that the Neurotransmitters stays in the synapse longer than normal and continues to stimulate the dendrite of the next neuron. The state increases the craving for cocaine and the relief that is felt when cocaine is next used results in rapid dependence on the substances. It also produces in the user miserable depression, agitation, confusion, paranoia, anger and exhaustion. Withdrawal from cocaine differs considerably from heroine or nicotine addiction. The addict experiences intense depression, agitation and craving for cocaine. Going straight after becoming dependent on cocaine is a very great challenge for addicted person but it can be met by a genuinely motivated person if given proper treatment.

Activity 4.1

Allow 15 minutes

1. Fill the table below with a list of drugs that are classified as stimulants in their respective categories.
2. State the effects of these drugs on behaviour in corresponding column.

Mild Stimulants	Drugs	Effects
High Stimulants	Drugs	Effects

Box 4.1 Blue Box

- Stimulants are drugs that activate the motivational centres of the CNS.
- Some of the mild stimulants which are often socially consumed are highly addictive.
- Amphetamines are stimulants that generally produce a conscious sense of increased energy. Amphetamines physical danger lies in their effect on the heart, and they can produce amphetamine psychosis.
- Like most conscious altering drugs, cocaine alters the functioning of the brain. The effect of cocaine at the synapse is such that it blocks the reuptake openings and prevents the reabsorption of the neurotransmitters by the axon.

4.2 Depressants

This section will further your knowledge on psychotropic substances and their addictive nature. Specifically, we will now examine depressants.

4.2.1 Nature of Depressants

Depressants are a large class of psychotropic drugs that influence conscious experience by depressing parts of the central nervous system. Examples of depressants are tranquilisers, sedatives, narcotics and alcohol which is the most widely used depressant.

- How will you describe psychotropic substances?
- We noted in Study Session four, that they are chemical substances that affect the processes of the mind or body.

4.2.2 Categories of Depressant Drugs

Sedatives

As depressants, when taken in large doses, sedatives generally produce a state of calm relaxation. Under regulation or prescription, they are drugs to aid sleep and sometimes to combat anxiety. They are highly addictive and dangerous to withdraw from without medical supervision. Physicians do not often prescribe them unless it is very necessary.

Tranquilisers

These are wilder drugs similar to sedatives in the sense that they also produce a sense of calm relaxation for a period of time. They are often prescribed to reduce anxiety. Examples of such drugs are valium, Librium, Ativan, Milltown and Equanil. Most of these drugs are dangerous and addictive. They are difficult to withdraw from and also more dangerous when combined with alcohol. They must be taken with great care. They are regarded as "downers" and are wildly sold illegally.

Narcotics

These are powerful and highly addictive depressants. Opium derived from opium puppy as a narcotic has been taken in the Middle East for about 7000 years. Drugs derived from opium include morphine, heroin and codeine.

They are powerful narcotic drugs that dramatically alter consciousness. They relieve pain; induce a sudden sensation of "high" followed by a relaxed lethargic drowsiness. It creates physiological addiction. Prolonged addiction has damaging effect on the body.

To maintain or sustain their increasingly expensive habits, many addicts that abuse these drugs go into all kinds of crimes. This makes it an extremely significant drug abuse problem. In the Nigerian market many of these drugs go by different street names such as "Gbana", "White charley" and so on.

In recent years, opiates derivatives are not the only kinds of narcotics drugs, there are synthetic narcotics used as painkillers with trade names like Demerol, Percodan, Methadone.

Box 4.2 Blue Box

- Depressants are psychotropic drugs that influence the conscious experience by depressing parts of the central nervous system.
- Sedatives produce a calm relaxation.
- Tranquillizers are another form of depressants that produce a sense of calm relaxation for a period of time.
- Narcotics which are depressants derived from opium leaves also alter consciousness.
- They are all difficult to withdraw from and are more dangerous when mixed with alcohol.

4.3 Inhalants



Fig 4.1 Inhalants (Source: narcotic.net)

Some of the psychotropic substances are categorized as inhalants. **Inhalants** are substances that produce a sense of intoxication when inhaled. The abuser will sniff the substance to produce a "high" effect. These substances are usually very toxic or poisonous. Such substances include, glue, cleaning fluids, paint, petrol or vehicles exhaust. Some of these substances are placed in paper bags or cans. They are inhaled or sniffed. This type of intoxication is common among children because the materials are easily to obtain. Inhalants are highly addictive and extremely dangerous. The toxic fumes often cause permanent damage to the brain and other serious complications may result.

Box 4.3 Blue Box

- Inhalants are substances sniffed to produce a sense of intoxication or feeling of being "high".
- Inhalants are highly addictive and dangerous as they often cause permanent brain damage.

Activity 4.2

Study the article on (Appendix A, [linked here](#)).

What are the effects of inhalants?

Discussion

What are the Physical Effects?

Inhalants leave the body with a feeling similar to intoxication. The difference is that this feeling comes on immediately instead of over time. When the gases or solvents are inhaled, they cut off oxygen to the brain. This causes the heart to beat more rapidly in order to increase oxygen, and the immediate reactions include dizziness, stimulant effects and distortions. As the brain begins to receive normal oxygen levels again, the effects go away. Unfortunately, one time is not enough for some, and they continue to inhale to get the same high.

Even when oxygen is restored, that doesn't mean that the user goes back to feeling normal. The senses are depressed, and proper blood flow must be restored. It's common for users to feel tired and lethargic, but they may also suffer from nausea or vomiting, headaches, loss of motor coordination and slurred speech. Inhalants affect all parts of the body, including the blood, bone marrow, heart, kidneys, liver and lungs. Some users also develop skin rashes around the nose and mouth from repeatedly inhaling toxic chemicals.

What are the Psychological Effects?

Inhalants affect both the mind and body. When using inhalants, users will experience a head rush, meaning that their perception of time and space are altered for a few seconds or minutes. During this short high, users may also get the giggles and stumble around as they try to regain coordination. The brain is being starved of oxygen, so it cannot make the proper connections to think clearly. Both short- and long-term inhalant use can lead to brain damage.

Digging deeper, inhalants affect all parts of the brain, including the cerebral cortex, cerebellum and ophthalmic nerve. Inhalants dissolve the protective myelin sheath that protects the brain, and it causes brain cells to die. Over a prolonged period of time, this loss of brain cells can lead to personality changes, memory impairment and learning difficulties.

4.4 Hallucinogens

Inclusive in the psychotropic series of drugs are hallucinogens. **Hallucinogens** are drugs that have the most powerful effect to alter consciousness. They typically alter perceptual experiences but when taken in large doses, they cause vivid hallucinations. In this mental state, the individual experiences imaginary visions and "euphoric" realities that sometimes seem more "real" to the abuser than the waking "realities" or consciousness. This, however, could be more attributable to the drug taker's dissatisfaction with everyday life than to the effect of the drug itself. Such drugs include lysergic acid diethylamide (LSD), mescaline (derived from the peyote cactus) and psilocybin (derived from a kind of mushroom).

Hallucinogens are not physiologically addictive, but individuals can become psychologically dependent on them. However, many of the drug-induced states (trips or taken to another euphoric world) produced by hallucinogens are often experienced as pleasant. It is quite uncommon to experience bad "trips" that are frightening and that elicit dangerous responses (McWilliams & Tuttle, 1973). Nonetheless, individuals who are already frightened about taking the drugs but still do so under peer pressure are more likely to experience bad "trips". These "trips" good or bad can sometimes recur as flashbacks without the individual taking the drugs. These acts of recurrence are often bad trips and are mostly triggered by stress or anxiety.

Marijuana is a popular consciousness altering drug that generally produces a sense of relaxation. It is usually planted in most parts of the world as cannabis plant. It is most commonly smoked in its dried form. In Nigeria it carries such street names like "weed", "gbanja", "harsh" etc. The most active ingredient is the chemical substance it produces, tetrahydrocannabinol (THC). It is sometimes classified as stimulants or hallucinogens due to the hallucinating effects on users. In some cases, the drug alters sensory experiences and the perception of time. In most countries like Nigeria, it is an illegal drug, yet it is widely used.

It is not physically addictive. In many cases, users' experience a reverse tolerance in which case, smaller amounts of the drug eventually come to produce the same effect of being "high". There is, however, some psychological dependence. There exists some evidence that prolonged marijuana use decreases the efficiency of cognitive processing. It weakens the body's immune response and decreases the action of male sex hormones (Wallace & Fisher, 1983). Moreover, like smoking any type of cigarette, marijuana greatly increases the risk of lung cancer. Operating machines or driving under marijuana intoxication is also dangerous.

Another drug under the category of hallucinogens is phencyclidine or PCP. This drug was originally developed as an animal tranquiliser but was abused by many adolescents particularly in the United States. The effect of this drug lasts for 4 to 6 hours. In some cases, the individual experiences auditory or visual hallucinations, feeling of numbness, lack of muscular coordination, anxiety, a sense of detachment from the environment and euphoria. The individual may also engage in some forms of unconventional behaviour, such as going to public places nude, violent behaviour towards others and psychotic episodes.

Box 4.4 Blue Box

- Hallucinogens are drugs that make its user experiences imaginary visions and realities that are ironically more real than the individual waking consciousness.
- Hallucinogens are not physiologically addictive, but individuals could be psychologically dependent on the drug.

Summary

In this Study Session, you learnt that:

- Stimulants are drugs that activate the motivational centres of the CNS.
- Depressants are psychotropic drugs that influence the conscious experience by depressing parts of the central nervous system.
- Inhalants are substances sniffed to produce a sense of intoxication.
- Hallucinogens are drugs that make its user experiences imaginary visions and realities.

Self-Assessment Questions (SAQs) for Study Session 4

Now that you have completed this study session, you can assess how well you have achieved its Learning Outcomes by answering these questions. Write your answers in your Study Diary and discuss them with your

Tutor at the next Study Support Meeting. You can check your answers with the Notes on the Self-Assessment Questions at the end of this Module.

SAQ 4.1 (tests Learning Outcome 4.1)

Describe the effects of Methamphetamine as a stimulant on the brain.

SAQ 4.2 (tests Learning Outcome 4.2)

What are the effects of depressants on the central nervous system?

SAQ 4.3 (tests Learning Outcome 4.3)

How are inhalants addictive?

SAQ 4.4 (tests Learning Outcome 4.4)

Explain the effects of hallucinogens on consciousness?

STUDY SESSION 5 Designer Drugs and Poly Drug Abuse

Introduction

The purpose of this Study Session is to expose you to other drugs that have not been seriously classified under the previously discussed substances in Study Session four. Marijuana, designer drugs and the concept of polydrug abuse are discussed in this Study Session.

Learning Outcomes

When you have studied this session, you should be able to:

- 5.1 discuss designer drugs.
- 5.2 explain poly drug abuse and its effects on individuals abusers.

5.1 Designer Drugs and Act-alike

Act-Alike drugs are substances that look and act like illegal substances. For example, a combination of high doses of powdered caffeine and over-the-counter decongestants produce some of the effects of amphetamines, hence they are called act-alike drugs. These drugs are considered dangerous because of their own serious adverse effects. The risk of accidental overdose is also very high.

There are other drugs considered as designer drugs. These drugs are designed by amateur chemists. They are derivative of amphetamines that produce a dream-like feeling of being "high" lasting for up to 8 hours. Examples of designer drugs are MDA and MDMA (ecstasy). Most of these drugs are sold under disguise or before they are recognised as illegal. New drugs are widely sold and used before anyone has a chance to evaluate their potentials side effects. Most of such drugs carry serious medical and psychological risks. (Carroll, 1989).

5.2 Poly Drug Abuse

Poly drug abuse refers to an individual who abuses many consciousness-altering drugs at the same time. This greatly increases the possibilities of addiction and dependence. Usually, the use of drugs will interfere with an individual's adjustment to school, work or family. The drugs will also interact chemically to produce toxic effects. Ordinarily, the use of any drug carries with it some level of danger but poly drug abuse is especially more dangerous. Poly drug abusers particularly have a high rate of mental health problems (Halikas & Rimmer, 1974). In the Nigerian context, an individual may habitually eat colanut. Some of them have problems sleeping, "insomnia" etc. To get sleep, they then take sedatives or tranquilisers like valium. Additionally cigarettes and alcohol form part of the drug in-take. Overtime, such individuals develop a series of physiological and psychological problems.

Summary

We have discussed that:

- Act-alike drugs are substances that look and act like illegal drugs.
- Designer drugs are produced by amateur chemists as derivatives of amphetamines that produce a dream-like feeling of being "high", an experience that could last for about 8 hours.
- Poly drug abuse refers to the usage of many consciousness altering drugs at the same time.

Self-Assessment Questions (SAQs) for Study Session 5

Now that you have completed this study session, you can assess how well you have achieved its Learning Outcomes by answering these questions. Write your answers in your Study Diary and discuss them with your Tutor at the next Study Support Meeting. You can check your answers with the Notes on the Self-Assessment Questions at the end of this Module.

SAQ 5.1 (tests Learning Outcome 5.1)

Explain designer drugs.

SAQ 5.2 (tests Learning Outcome 5.2)

Explain the implications of poly drug abuse.

Study Session 6 Youths and Substance Abuse

Introduction

In many cultures, youth's involvement in drugs is prevalent. The reasons for such involvements are diverse. Some of these bases will be examined in this Study Session.

Learning Outcomes

When you have studied this session, you should be able to:

6.1 give at least five reasons for youth involvement with drugs.

6.1 Reasons for Youth Involvement in Drug Abuse

It is sometimes difficult to understand why youths engage in activities that could bring them overwhelming problems. Some of them are quite unaware of the problems associated with substance abuse.

Some of the likely reasons for such deviant forms of conduct include; social disorganization, peer pressure, family factors, emotional problems, problem behaviour syndrome and rational choice.

- **Social Disorganisation**

An explanation that ties drug abuse to racial prejudice, low self-esteem, poverty and the stress of living in a harsh urban environment. This association between drug abuse and social disorganisation is linked to the high level of mistrust and defiance found in such socio-economic areas (Siegel, Welsh & Senna 2003)

- **Peer Pressure**

Research shows that drug abuse among youths is highly correlated with the behaviour of best friends especially when parental supervision is weak (Dishion, Capaldi, Spracklen & Fuzhong 1995). Sometimes, they join their peers to learn the techniques of drug use; their friendship with other drug-dependent youths gives them social support for their bad habits. Empirical research findings show that a youth's association with friends who are substance abusers increases the probability of drug use (Terence & Krohn, 1997). The reciprocal implication of this is that substance abusers also seek friends who engage in such behaviour.

- **Family Factors**

Drug abuse pattern may also result from observation of parents drug use. Youths who learn that drugs provide pleasurable sensations may be most likely to experiment with drugs. Therefore, a habit may develop. Other factors associated with youth drug involvement includes parental conflicts, failure to set rules, rejections, low parental attachment and so on.

- **Emotional Problem**

Psychodynamic explanations of substance abuse suggest that drug help youths to control or express unconscious needs. Some psychoanalysts believe that youths who internalise their problems may use drugs to reduce their feelings of inadequacies. Another view is that youths who externalise their problems and blame others for their perceived failures are likely to engage in anti-social behaviour including drugs. Substance abusers are also believed to exhibit some psycho-pathic or socio-pathic behaviour characteristics, which form an addiction-prone personality. Studies have shown that addicts suffer from personality disorders characterised by a weak ego, a low frustration tolerance, and fantasies of omnipotence.

- **Problem Behaviour Syndrome**

Studies show that youths who abuse drugs are maladjusted, emotionally distressed and have many social problems. Youths who abuse drugs have little regard for education, have a high drop-out rate and spend most of their time in peer activities.

- **Rational Choice**

Youths may choose drugs because they want to get the feeling being high, relax, improve their creativity, escape reality, or increase sexual responsiveness. They sometimes believe that it will facilitate their social behaviour. Substance abuse then may be a function of rational but mistaken belief that substance abuse benefits the user.

Summary

Some obvious reasons may be adduced for the involvement of youths in drug abuse. These reasons include social disorganization, peer pressure, family factors emotional problems, problem behavior syndrome, and rational choice

Self-Assessment Questions (SAQs) for Study Session 6

Now that you have completed this study session, you can assess how well you have achieved its Learning Outcomes by answering these questions. Write your answers in your Study Diary and discuss them with your Tutor at the next Study Support Meeting. You can check your answers with the Notes on the Self-Assessment Questions at the end of this Module.

SAQ 6.1 (tests Learning Outcome 6.1)

Highlight the reasons why youths get involve in substance abuse.

Study Session 7 Substance Abuse and Crime

Introduction

In the problem behaviour syndrome model, substance abuse is one of the many social problems experienced by at risk youths. In this Study Session, we will examine the relationship between substance abuse and anti-social behaviour or crimes of various sorts.

Learning Outcomes

When you have studied this session, you should be able to:

7.1 explain the relationship between substance abuse and crime.

7.1 The Link between Crimes and Drugs

Crime is an instrument through which the drug trade is festered. It is a fact that drug users also commit series of crimes to pay for their habits. Drug users are more willing to take risks because their inhibitions are lowered by substance abuse. Cities with high drug abuse rates are more likely to experience higher levels of armed robbery.

Persistent drug users also have these other characteristics:

1. They do poorly in schools and also have a difficulty in maintaining jobs.
2. They either started using drugs early or were involved in other
3. delinquent acts at an early age.
4. They use multiple drugs and commit other crimes frequently.
5. They have few opportunities to participate in legitimate and rewarding adult activities.

Nonetheless, there is little evidence why some drug-abusing youths stop crime while other remains active. Over the years, evidence has shown that incarcerated youths are much more likely to be involved in substance abuse than youths in the general population. (David 1995). This drug abuse crime relationship is supported by Bruce et al (1998).

In different cultures, the relationship between crime and drug use has been established. However, it is not too certain whether:

- a) drug use causes delinquency,
- b) delinquency leads youths to engage in substance abuse,
- c) both drug abuse and delinquency are functions of some other factors.

The direction of this relationship may not be too clear but drug is not necessarily the cause of delinquency. Most youths become involved in crime before they are initiated into drugs. If this is the case, it then becomes difficult to conclude that drug use necessarily cause crime. Though, to sustain the habit user get involve in different crimes.

Youths engaged in drug abuse usually start committing petty crimes and smoking cigarettes or drinking alcohol. They later proceed to harder drugs and more serious crimes. Their level of violence also increases at this time. The initial drugs taken before they progress to harder drugs are referred to as "**gateway drugs**". Both drug abuse and crime are parts of an urban underclass lifestyle involving limited education, few job skills, unstable families, few social skills and different patterns of law violations.

Summary

Crime is an instrument through which the drug trade festered. Cities with high drug abuse rates are more likely to experience higher levels of armed robbery. Incarcerated youths are much more likely to be involved in substance abuse than youths in the general population.

Self-Assessment Questions (SAQs) for Study Session 7

Now that you have completed this study session, you can assess how well you have achieved its Learning Outcomes by answering these questions. Write your answers in your Study Diary and discuss them with your Tutor at the next Study Support Meeting. You can check your answers with the Notes on the Self-Assessment Questions at the end of this Module.

SAQ 7.1 (tests Learning Outcome 7.1)

What are the factors promoting the relationship between substance abuse and crime?

Study Session 8 Drug Control

Introduction

In the previous Study Session, we observed that there is a consequent association between substance abuse and crime. We have also examined the diverse effects of drug abuse. Thus, it is imperative to discuss efforts made to curtail drug incidence.

Learning Outcomes

When you have studied this session, you should be able to:

8.1 point out strategies that can be employed to reduce drug trafficking and consumption.

8.1 Drug Control Strategies

Drug control describes the various means employed to reduce the incidence of drug trafficking and consumption within a locality. These strategies will be discussed in three forms. These include: supply reduction, demand reduction and community intervention strategies.

1. **Supply Reduction:** This strategy is the law enforcement efforts to deter drug use through the stoppage of drug inflow into the country, apprehending dealers or traffickers and street level Peddlers. This strategy is basically geared towards reduction of supply and to also discourage would-be users from drug abuse. In Nigeria, the agency primarily saddled with such responsibility is the National Drug Law Enforcement Agency (NDLEA). This body was primarily established to combat drug offences. The officials of the body arrest and arraign suspects of drug offences for prosecution before the law court. They maintain border control to cut off supplies from entering the country. However, these efforts are greatly hampered by the vast and unprotected borders of the control. Nonetheless, even if such efforts have been successful, home grown marijuana is easily available to replace other hard drugs at relatively low cost. Though, the law prohibits them, yet these drugs are gaining more popularity.
2. **Demand Reduction:** The demand reduction effort is another aspect of the responsibility of the NDLEA. The strategies relate to the reduction of substance abuse through education and awareness programmes. It emphasizes components that teach young people the causes and effects of drugs, resisting peer pressure and referrals of abusers for counselling and treatment. These demand reduction strategies are complimented by other Non-Governmental Organisations (NGO's) and Faith-Based Organisations. However, the effectiveness of this programme is in doubt because most of the cases they attend to are the ones referred to the agency. Demand reduction programmes are structured to be taken from one school to another or communities with drug prevalence.
3. **Community Intervention:** Another type of drug control is community intervention efforts, which rely strongly on community groups. These community groups include, representatives of local government agencies, faith-based organisations, civic societies, and others. Their activities include drug free school zones which encourage the police and other stakeholders to keep drug dealers away from the schools; neighbourhood watch programmes which are geared towards reporting drug dealers; citizen patrols which frighten dealers away from public housing projects and community centers which provide an alternative to the street culture. Such community programmes also provide counselling and social supports to users.

In other words, to effectively combat substance abuse, a multi-pronged approach that involves every member of the community is needful.

Summary

Thus far, we discussed that:

- Drug control includes supply reduction, demand reduction and community intervention strategies.
 - Supply Reduction strategy is the law enforcement efforts to deter drug use through the stoppage of drug inflow into the country, apprehending dealers or traffickers and street level peddlers.
 - Demand Reduction strategies relate to reduction of substance abuse through education and awareness programmes.
 - Community intervention strategies entail the involvement of various community groups in the fight against drug abuse.

Self-Assessment Questions (SAQs) for Study Session 8

Now that you have completed this study session, you can assess how well you have achieved its Learning Outcomes by answering these questions. Write your answers in your Study Diary and discuss them with your Tutor at the next Study Support Meeting. You can check your answers with the Notes on the Self-Assessment Questions at the end of this Module.

SAQ 1.1 (tests Learning Outcome 8.1)

How can drugs be controlled?

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Study Session 9 Treatment of Substance Abuse

Introduction

In Study Session eight, we pointed out strategies of controlling drug abuse. We will now explore approaches to the treatment of substance abuse. Often some of these procedures follow what may have been considered as the initial cause for substance abuse and the type of drug abused.

Learning Outcomes

When you have studied this session, you should be able to:

9.1 review at least three processes that you can employ in the treatment of substance abuse.

9.1 Approaches to Treatment of Substance Abuse

Treating substance abuse can be a very challenging endeavour that involves different approaches. Some of these efforts follow from the premise that users have low self-esteem. Such premise leads to the various techniques to build up the user's sense of self-worth.

9.1.1 Multi-systemic Treatment

In achieving treatment, psychological counselling and other Multi-systemic Treatment (MST) techniques developed by Scott Henggeler is adopted. MST process directs attention on family, peer and psychological problems by focusing on problem-solving and communication skills. Some other approaches involve the inclusion of the users in out-door activities like sport.

9.1.2 Group Therapy

These are programmes that bring users together under a group leader, who tries to give users the skills and support that can help them reject the social pressure to use drugs. This kind of programme is fashioned after the Alcoholic Anonymous (AA) philosophy that users find the strength in themselves to stay clean and that support from those who understand their experience can be a successful way to achieve a drug-free life.

9.1.3 Residential Programme

This is a rehabilitation programme that is used with more heavily involved drug abusers. Such people go through detoxification procedures medically to wean them from the addictive drugs. Drugs like methadone and Naxalone are given to counter the effect of narcotics and ease the trauma of withdrawal. Other programmes attempt to deal with the psychological causes of drug use in "therapeutic communities", hypnosis, and Aversion therapy - getting users to associate drug with unpleasant sensations e.g. Nausea. Counselling, biofeedback and others.

However little evidence shows that such residential programmes are effective in terminating substance abuse. This could be due to a number of factors:

1. Often these programmes are very expensive for the individual addict.
2. Most of the addicts do not enter the programme voluntarily. So, they have little motivation for change.
3. Staying in such a programme stigmatizes the residents.
4. There is also the possibility of being exposed to hard-core users who they could easily associate with upon release from the programmes.

Evidence shows that drug use can be curtailed during rehabilitation but after release or discharge the user easily **relapse** (goes back to drug).

9.1.4 Balanced and Restorative Justice (BARJ)

This method integrates the traditional rehabilitation with increasing societal concern about victims' rights and community safety. The BARJ programme attempts to make offenders more accountable by having them make amends to the victim and community while at the same time improving their competence development by changing their behaviour and improving functional skills. An important aspect of the programme is a system of graduated sanctions that hold the addicts responsible for their actions and reward them for positive progress towards rehabilitation. Good behaviour results in increased freedom or other rewards, while negative behaviour result in more severe sanctions or restrictions to a more intensive therapeutic environment. This approach is usually applied to specialised juvenile drug court, where the juvenile's progress is generally monitored by a judge who relies on a variety of professionals in assessing needs and monitoring behaviour.

Summary

In this Study Session, we discussed approaches to treating substance abuse; these approaches include:

- Multi-systemic Treatment (MST) technique process direct attention on family, peer and psychological problems by focusing on problem solving and communication skills.
- Group Therapy leader tries to give users the skills and support that can help them reject the social pressure to use drugs.
- Residential Treatment Programme attempts to deal with the psychological causes of drug use through different means. These include detoxification, aversion therapy and other psychological procedures.
- Balanced and Restorative Justice (BARJ) method integrates the traditional rehabilitation with increasing societal concern about victims' rights and community safety.

Self-Assessment Questions (SAQs) for Study Session 9

Now that you have completed this study session, you can assess how well you have achieved its Learning Outcomes by answering these questions. Write your answers in your Study Diary and discuss them with your Tutor at the next Study Support Meeting. You can check your answers with the Notes on the Self-Assessment Questions at the end of this Module.

SAQ 9.1 (tests Learning Outcome 9.1)

What are the treatment modalities for the treating drug abuse?

Notes on the Self-Assessment Questions (SAQs) for Study Session 1

SAQ 1.1 – Chemical substances that affect consciousness are referred to as psychoactive substances. The effects of most psychoactive substances can be explained by the changes they cause in the action of neurotransmitters, especially in the brain. Psychoactive drugs affect consciousness by influencing how neurotransmitters operate at the synapses of the central nervous system (CNS). Some psychoactive drugs are agonists, which mimic the operation of a neurotransmitter; some are antagonists, which block the action of a neurotransmitter; and some work by blocking the reuptake of neurotransmitters at the synapse.

SAQ 1.2 – According to this Study Session, we can classify psychotropic drugs according to:

- 1) Depressants
- 2) Stimulants
- 3) Hallucinogens
- 4) Inhalants

Notes on the Self-Assessment Questions (SAQs) for Study Session 2

SAQ 2.1 – In responding to this question, we expect you to note the specific ways by which drug can affect its abuser, that is: psychological dependence, physiological addiction, tolerance and withdrawal. Also are the direct, indirect and social consequences of drug abuse.

Notes on the Self-Assessment Questions (SAQs) for Study Session 3

SAQ 3.1 – We don't know what you have considered. But your discussion may dwell on any of the following:

- i. Dose and purity
- ii. Personal Characteristics
- iii. Expectations
- iv. Social Situations
- v. Moods

Notes on the Self-Assessment Questions (SAQs) for Study Session 4

SAQ 4.1 – Let us start by noting that risk factors (poverty, racism, social dysfunction, weak families, poor education, poor upbringing, and substance-abusing peer groups) - as well as other environmental and genetic factors - only influence an individual's initial decision to use substances of abuse. But after initial use, an individual continues to use a substance because she likes its effects: Use modifies mood, perception, and emotional state. All of these effects are modulated through the brain.

For substances of abuse to exert their effects, they must first get to the brain. The four most common routes of administering psychoactive (mood-changing) substances are

- 1) oral consumption (i.e., swallowing),
- 2) intranasal consumption (i.e., snorting),
- 3) inhalation into the lungs (generally by smoking), and
- 4) intravenously via hypodermic syringe.

To enter the brain, a substance's molecules must first get through its chemical protection system, which consists mainly of the blood-brain barrier. Tight cell-wall junctions and a layer of cells around the blood vessels keep large or electrically charged molecules from entering the brain. However, small neutral molecules like those of MA easily pass through the blood-brain barrier and enter the brain. Once inside the brain, substances of abuse begin to exert their psychoactive effects.

The physiological effects of MA are: increased heart rate, elevated blood pressure, elevated body temperature, increased respiratory rate, and pupillary dilation. Other acute effects include rapid heart rate, irregular heart rate, and irreversible, stroke-producing damage to small blood vessels in the brain.

MA's psychological effects include a heightened sense of well-being or euphoria, increased alertness, increased vigor, decreased food intake, and decreased sleep time. Acute administration has been shown to increase socialization in humans. High doses may produce repetitive and automatic acts in both humans and animals, and in humans, may cause irritability, aggressive behavior, excitement, auditory hallucinations, and paranoia (delusions and psychosis). MA users tend to engage in violent behavior. Mood changes are common, with the user rapidly changing from friendly to hostile. Dangerously elevated body temperature and convulsions occur with MA overdoses, and if not treated immediately, can result in death.

SAQ 4.2 – Central nervous system depressants slow down the operation of the brain. They first affect those areas of the brain that control a person's conscious, voluntary actions. As dosage increases, depressants begin to affect the parts of the brain controlling the body's automatic, unconscious processes, such as heartbeat and respiration.

SAQ 4.3 – When inhalant use continues over a period of time, a user will probably develop a tolerance to inhalants. This means that the user will need more frequent use and greater amounts of a substance to achieve the effect desired. This, in turn, leaves a user at much greater risk of suffering from possible negative effects of the drug, such as liver, lung, and kidney impairment, brain damage, nervous system damage, and even death.

Physical dependence can also result, and when a user tries to give up the inhalant habit, withdrawal symptoms such as hallucinations, headaches, chills, delirium tremors, and stomach cramps may occur

SAQ 4.4 – Hallucinogens do have some kind of effect on serotonin. The effects of hallucinogenic drugs are caused by the effects that hallucinogenic drugs have on the post-synaptic activity of serotonergic neurons. Hallucinogenic drugs directly affect the serotonin receptors (specifically the serotonin receptor subtype, 5-HT₂), which is what eventually results in a complex pattern of action potentials and activity. Hallucinations and other effects of hallucinogens are however very complicated experiences. They are not simply a part of a cause and effect system in the brain, where hallucinogenic drugs act on serotonin and cause hallucinations. Instead, hallucinogenic drugs act initially on the serotonin system, which sends into motion, a pattern of complex action potentials and activity. Other neurotransmitters may be involved in these activities as well. The effects that inputs and outputs have on each other in this system as well as the pattern of action potentials mediated by hallucinogenic drugs help to cause many of the complex changes that allow hallucinations to happen.

Hallucinogenic drugs cause both physical and psychological effects on humans. The physical effects of these drugs include: dilated pupils, elevated body temperature, increased heart rate and blood pressure, appetite loss, sleeplessness, tremors, headaches, nausea, sweating, heart palpitations, blurring of vision, memory loss, trembling, and itching. A user of hallucinogenic drugs will also experience a number of psychological alterations in the brain. These drugs may cause hallucinations and illusions as well, as the amplification of sense, and the alterations of thinking and self-awareness. It is quite possible to have a bad reaction to hallucinogenic drugs. This is referred to as a "bad trip" and may cause panic, confusion, suspicion, anxiety, and loss of control. The long-term effects of these drugs can be quite dangerous. These long-term effects may include: flashbacks, mood swings, impaired thinking, unexpected outbursts of violence and eventually possibly depression that may lead to death or suicide.

Notes on the Self-Assessment Questions (SAQs) for Study Session 5

SAQ 5.1 – A designer drug is an analog, a chemical compound that is similar in structure and effect to another drug of abuse but differs slightly in structure. Designer drugs are usually produced in clandestine laboratories to mimic the psychoactive effects of controlled drugs. Theoretically, the number of potential synthetic analogs that can be made and distributed is very large. The most commonly known types of synthetic analog drugs available through the illicit drug market include analogs of fentanyl and meperidine (both synthetic opioids), phencyclidine (PCP), and amphetamine and methamphetamine (which have hallucinogenic and stimulant properties). The street names of designer drugs vary according to time, place, and manufacturer, and they change frequently.

SAQ 5.2 – Polydrug abuse is a dangerous trend in which the user combines different drugs to get desired effects. Mixing illicit, prescription, and over the counter drugs can cause some serious side effects, some potentially fatal. Many drugs cause negative side effects, and many drugs used in combination can cause serious damage to someone's internal organs or brain.

Notes on the Self-Assessment Questions (SAQs) for Study Session 6

SAQ 6.1 – Some of the reasons why youths get involved in substance abuse includes:

- social disorganisation
- peer pressure
- family factors
- emotional problem
- problem behaviour syndrome
- rational choice

Notes on the Self-Assessment Questions (SAQs) for Study Session 7

SAQ 7.1 – Drugs and crime are linked in a number of ways including:

- i. People who use or supply illegal drugs;
- ii. People who commit violent offences while under the influence of drugs,
- iii. Drunkenness is associated with a majority of murders, manslaughters and stabbings and half of domestic assaults.
- iv. Alcohol and drug-related driving offences;
- v. Violence involving drug dealers who may clash with rival gangs or be violent towards drug users who owe them money.

Some research studies have found that a lot of acquisitive crime (stealing) is committed by dependent users of heroin and crack cocaine trying to pay for their drugs. Some show a high proportion of people arrested for a range of offences testing positive for drug use. It has been suggested that one third to over a half of all acquisitive crime is related to illegal drug use.

Many people who are dependent on drugs like heroin and crack cocaine were involved in criminal activity before becoming dependent on drugs, so the drug use may not be the cause of the crime. Poverty, unemployment and social exclusion are often underlying factors rather than the drug use itself. Many people commit crimes in order to feed, clothe and house themselves and their families.

Notes on the Self-Assessment Questions (SAQs) for Study Session 8

SAQ 8.1 – We don't know what you have considered, but your list may include the following strategies:

- i. supply reduction,
- ii. demand reduction, and
- iii. community intervention.

Notes on the Self-Assessment Questions (SAQs) for Study Session 9

SAQ 9.1 – There are many ways to treat substance abuse. Depending on the substance(s) involved, treatment may include medications, behavioral treatments, or a combination of both.

Medications are available to treat addiction to opiates, nicotine, and alcohol, but none have yet been approved for treating addiction to marijuana, stimulants, or depressants. However, behavioral therapy can be helpful in these cases.

The first step in a substance treatment program is often detoxification (“detox”), the process of allowing the body to get rid of the substance under supervised care. For some drugs, this may require a gradual reduction in the amount of drug. It is important to note that detoxification by itself is not treatment, and must be followed by behavioral therapy and/or medications.

Detoxification under medical care allows the physician to treat the symptoms of withdrawal. Withdrawal is the sick, sometimes unbearable feeling that people have when trying to stop or cut down on a substance they have become addicted to or have been taking for a long time. The type and length of withdrawal symptoms vary with the substance. For example, withdrawal from certain stimulants may lead to fatigue, depression, and sleep problems. Withdrawal from barbiturates and benzodiazepines can lead to rebound seizures and should be done only under a doctor's supervision.

Medications can aid treatment. Different types of medications may be useful at different stages of treatment - to help a person stop abusing a substance, stay in treatment, focus on learning new behavioral skills, and avoid relapse. Medications for substance abuse help the brain adjust to the absence of the abused substance. These medications act slowly to quiet drug cravings and mental agitation.

Behavioral therapies can also help. Behavioral therapies can make treatment medications more effective and can help people stay in treatment longer and avoid relapse. Behavioral therapies help people learn how to change the way they think and cope with cravings and other “triggers” that may prompt them to relapse.

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Appendix A - Effects of Inhalants Abuse

Inhalants are ordinary household products, if abused can become very destructive. There are hundreds of household products on the market today that can be misused as inhalants. Examples of abused products include model airplane glue, nail polish remover, cleaning fluids, hair spray, gasoline, the propellant in aerosol whipped cream, spray paint, fabric protector, air conditioner fluid (Freon), cooking spray and correction fluid. These

products can influence if sniffed, snorted, bagged (fumes inhaled from a plastic bag), “huffed” (inhalant-soaked rag, sock, or roll of toilet paper in the mouth) or sniffed directly from the container.

Physiological Effects caused by Inhalants Abuse

This article explores the effects on the human body after using inhalants. Even though children may believe that something they can find in their own homes isn't harmful, studies show otherwise.

Neuropathy

Inhalants may cause widespread and long lasting effects on the brain and other parts of the nervous system. The neurotoxic effects of prolonged inhalant abuse include neurological syndromes that reflect damage to parts of the brain involved in controlling cognition, movement, vision, and hearing. Brain damage, which can lead to personality changes, impaired memory, hallucinations, loss of coordination and difficulty in walking, slurred speech and vision problems.

Cardiovascular complications

Prolonged sniffing of the highly concentrated chemicals in solvents or aerosol sprays can induce irregular and rapid heart rhythms and lead to heart failure and death within minutes. Various nitrites & methylene chlorides found in paint thinners and varnishes may cause blood oxygen depletion which may result in blackouts. Benzene, which is a known carcinogen, is used in gasoline and may also lead to bone marrow damage resulting in anemia.

Respiratory complications

People who use inhalants can lose their sense of smell; experience nausea and nosebleeds; and develop various respiratory problems. When large amounts of inhalants are inhaled, these products may deprive the body of the oxygen needed to survive, which may lead to asphyxiation & choke a person to death! Inhalant users can die by suffocation, choking on their vomit, or by heart attack.

Muscular dystrophy

Chronic use of inhalants can lead to muscle wasting and reduced muscle tone and strength. Heavy inhalant use may also lead to hand tremors & muscle cramps. Hexane (found in gasoline and glues), or nitrous oxide (present in some gas cylinders) may lead to numbness, tingling or spasms.

Psychological Effects caused by Inhalants Abuse

Users usually experience a "head rush" when using inhalants. This is a short-lived high that involves a distortion of reality (visual and auditory) and a loss of inhibition. During the peak of this high, users are often compelled to sit in a stupor and giggle – this explains why nitrous oxide is commonly referred to as "laughing gas." Both short-term and long-term inhalant use has been shown to cause brain damage, hindering transmission of information.

A Tarun Gupta Article adapted from <http://inhalant-info.blogspot.com/2008/03/physiological-effects-caused-by.html>