DRUG ABUSE AND ITS TREATMENT FOR STUDENTS WITH PHYSICAL AND MENTAL DISABILITIES

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ABSTRACT
Drug abuse amongst students with physical and mental disabilities in a classroom setting can have a detrimental effect, especially on their academic performance. Students with physical and mental disabilities who are in their teens may begin misusing substances to cope with chronic pain, social isolation and stigma related to their disabilities, if not properly checked. This paper x-rayed some drugs that affect the brain and body of students with physical and mental disabilities in the area of self-help skills and academic attainment when used inappropriately. The authors highlighted some treatment and programmes for students with physical and mental disabilities who abuse drugs that alter brain functions. A multi-dimensional approach was recommended for government to adopt programmes to retain core elements like content, structure and delivery and establishment of drug-free school programme across the federation.

Keywords: Drug abuse, Physical and mental disabilities

INTRODUCTION
Drug abuse has a detrimental effect on the academic performance of individuals who are physically and mentally disabled. Hence, effort is being made to assist these individuals to live in the society where they belong and have access to equal education without discrimination because of their physical and or mental impairment. According to Dirth (2018), drug abuse occurs more often in a community where people who have physical and mental impairment operate than in the general population. American Addiction Centres (2018) pointed out that both people with and without disabilities often experience barriers that can make it difficult to get treatment even if they have the money and desire to get help. However, finding facilities that are fully accessible for those with physical disabilities or that provide the additional support needed for those with physical or mental disabilities can be difficult.

CONCEPT OF DRUG AND DRUG ABUSE
What is a drug? A drug is a substance used for medical purposes that changes the state or function of the body. When it enters the body, it can change either the function or structure
of the organism. According to World Health Organization, drug abuse is the harmful hazardous use of psychoactive substances including alcohol and illicit drugs. This could result in dependence syndrome, a phenomenon that develops after repeated substance use and strong desire to take the drug, difficulty in controlling its use and persistence in its use despite harmful consequences. It is pertinent to note that alcohol alone is responsible for about 3.3 million deaths every year in the world (American Addiction Centres, 2019).

Drug abuse is a major public health problem all over the world (UNODC, 2005). The use and abuse of drugs by students especially the physically and mentally disabled has become a most disturbing health related issue in Nigeria (NDLEA, 1997). NAFDAC in Halodu (2003) stated that drug abuse is an excessive and persistent self-administration of a drug without regard to the medically accepted patterns.

Drug abuse is the use of drugs for purposes other than medical reasons, it affects lives in a negative way, and the effect on students could be social, cognitive or physical. Some effects may be reflected on students’ tendency to engage in conflicts with friends, teachers and school authorities; while cognitive effects relate to the student’s lack of concentration on academic work, and memory loss (Sunrise House, 2016). Addiction leads many students (young and old, able-bodied and disabled, most especially those with physical and mental disabilities who cannot engage themselves in simple self-help schemes, like tying their shoe lace, buttoning their shirts well) into a downward spiral of hopelessness that in some cases end fatally.

Drug and alcohol abuse are problems that affect school-age youths at early ages especially when the student is having some disabilities. Young students frequently begin to experiment with alcohol, tobacco and other drugs during the middle school years. By the time they are in high school, rates of substance use are remarkably high (Botvin, 2000).

Zaman, Razzang, Hassa and Qureshi (2015) stated that drug abuse is the wilful misuse of either licit or illicit drugs for the purpose of recreation, and perceived necessity. Okoye (2001) defines drug as a substance that could bring about a change in biological functions through its chemical actions. It is also considered as a substance that modifies perception, cognition, mood, behaviour and general body functions (Balogun, 2006). Drugs alter body functions either positively or otherwise depending on the body composition of the user.

Sunrise House (2016) stated that families whose children abuse drugs or alcohol are likely to be experiencing guilt, shame and remorse over the harm done in their academic work. This is supported by Farco (2012) who warned that such students who exhibit symptoms of stress, anxiety, depression, behavioural changes, fatigue and loss or increase in appetite should be rehabilitated or treated by medical experts, special educators and counsellors to save them from death.
CLASSIFICATION OF DRUGS

Drugs can be classified chemically according to how they affect the brain and the body. However, common classification includes stimulants, depressants, hallucinogens and opioids. With regards to addiction and rehabilitation, drugs can be classified under five; these are: Narcotics, Depressants, Stimulants, Hallucinogens, Anabolic steroids (American Addiction Center, 2019; NAFDAC in Haladu, 2003). All these mentioned drugs are considered to be psychoactive and affect one or more of the mental faculties including moods, thoughts, perception, memory cognition and behaviours.

According to the US Drug Enforcement Administration (DEA, 2005), substances from any of these classes can lead to chemical dependence which suggests that the body has become habituated to the presence of a drug. There are drugs that act on the central nervous system, and can be classified according to their physical and psychological effects. These include:

1. Depressants: These are drugs that suppress the activity of the brain and nerves acting directly on the central nervous system to create a calming effect. This includes barbiturate (phenobarbital, thiopental, butalbital), benzodiazepines, alcohol, and gamma hydroxybutyrate. Depressants are taken to relieve anxiety, promote sleep and manage seizure activity.

2. Stimulants: Stimulants can make one to feel energetic, focused and alert. They can also make one feel edgy, angry or paranoid. Stimulants include cocaine, crack cocaine, amphetamine and methamphetamine. A report published by world drug under the office of the United Nations on drug and crime, amphetamine derived stimulants like ecstasy and methamphetamine are the most commonly abused drugs around the world after marijuana (American Addiction Centres, 2019).

3. Hallucinogens: These drugs act on the central nervous system to alter one’s perception of reality and time space. It can cause one to see or hear things that do not exist or to imagine situations that are not real. Hallucinogenic drugs include psilocybin (found in magic mushrooms), lysergic and diethylamide, peyote, and dimethyltryptamine.

4. Opioids: Opioids are the most commonly prescribed medicines worldwide and are used to treat pain and cough. They include heroin, codeine, morphine, fentanyl, hydrocodone, oxycodone and methadone.

5. Inhalants: Inhalants are frequently used and abused by children and adolescents. They include paint, glue, paint thinners, gasoline, marker or pen ink and others. All these substances pass through the lungs into the blood stream.

6. Cannabis: This is a plant derived drug that is illicitly used worldwide. It acts through the cannabinoid receptors in the brain (American Addiction Center, 2019).
Some commonly abused drugs prescribed by Nigerians and their potential adverse effects according to Wale (2015) include:

1. Paracetamol: Paracetamol comes in different brand names such as panadol, boska and M&B. It is frequently used for the treatment of fever, headaches as well as mild to moderate body aches. Evidently, the most dreaded adverse effect is hepatotoxicity (liver damage) which may occur after the maximum recommended dose of 4g (8 tablets) is exceeded. Other adverse effects are nausea, vomiting, abdominal pain and rashes.

2. Aspirin: Popular brand include Alabukun and Phenxic. Aspirin belongs to the group of drugs called non-steroidal anti-inflammatory drugs (NSAIDS), which are often used to treat severe headaches like migraine, dysmenorrhea (menstrual pain), rheumatoid arthritis. Others include Ibuprofen, diclofenac, piroxicam (feldene), and indometacin. The common adverse effect of aspirin and other NSAIDS is peptic ulceration. It can cause or lead to Reye Syndrome in children less than 16 years (characterized by liver damage and encephalopathy).

3. Codeine: Adverse effect of codeine can lead to dependence, tolerance, sedation and euphoria. Prolonged use can cause dizziness, vomiting, headaches and dry mouth.

4. Antibiotics: Antibiotics such as tetracycline, metranidazole (flagyl) and ciprofloxacin (ciprotab) are victims of widespread abuse. Tetracycline can cause too much discolouration when taken by children under 8 years or pregnant women in the third trimester as well as breast feeding mothers (Wale, 2015).

Nigeria’s progression from a simple stable and clean society to one that is drug-troubled may have taken long to come about. Given the deep-rooted nature of drug problems in the academic performance of students with physical and mental disabilities, it is a situation that will remain for a long time unless drastic measures are taken to restore their health. Before now, very little was known about drugs or their abuse beyond the usual culprit, Indian hemp, which has always been widely available. However, public execution for drug offenders is a drastic action that tugs at the heart strings, especially when the law under which the culprit of drug offence may be executed could be retroactive.

The United Nations Office on Drugs and Crime and the European Union (UNODC, 2015), stated that about 14.3 million Nigerians, representing 14.4 percent of the country’s population between the ages of 15 and 64 were said to have abused drugs in the past one year.

Most disturbing about Nigeria’s report on drugs and their impact on the academic performance of students is that 14.4 percent prevalence of drug abuse in the country is more than double the 2016 global average of 5.6 percent. Yet, given the rate at which the habit is spreading, it is expected that there will be massive failure in students’ achievements which in
turn will jeopardize the nation’s economy if the Nigerian government fails to combat the menace.

**Students with Physical and Mental Disabilities**

A disability refers to inability or loss of ability in an individual to carry out a given task that is within the norms of the society. Disabilities can be physical in nature (for example, inability to walk due to amputation, muscular or neurological dysfunction) or mental in nature (for instance, decreased sensory, cognitive, emotional and psychomotor skills). Ozoji, Unachukwu and Kolo (2016) stated that a person with physical disability is one whose physical impairment resulted to a traumatic sign of damage or disfigurement to a specific vital organ (legs, hands, toes, fingers, muscles, skeleton, spinal cord and nervous system) required for effective daily life functions such as mobility, spatial orientation or body coordination. It is a limitation on a person’s physical functioning, mobility, dexterity or stamina. The authors explained that the student is incapacitated or has difficulty in movement or bodily movement for daily life functions, hence the disabling condition results in a handicapping situation by creating an obstacle between the tasks expected to be performed with ease. Okyere and Adams (2013) opined that a person with physical disability is one who acquires congenital impairments that involve the body’s neurological or muscular systems that affect movement. The impairment interferes with school attendance or learning to such an extent that the student needs special needs education services.

In the same vein, an individual with mental disability is one whose state of functioning is characterized by decreased cognitive, affective and psychomotor skills resulting to a developmental disorder. Ozoji, Unachukwu and Kolo (2016) considered mental disability as a significant sub-average intellectual functioning existing concurrently with related limitations. Similarly, it is a deviation of intellectual capacity from the normal range for one’s age. Dirth (2018) reiterated that a person with mental disability is characterized by below-average intelligence and lacks skills necessary for day to day living. This limitation could be seen in the areas of a student’s intellectual functioning and adaptive behaviours,

Students with physical and mental disabilities have a lower rate of substance use in general, but there are special circumstances related to their impairments that can make them vulnerable to drug abuse and addiction. However, among those who have access to and regularly use intoxicating substances, there is higher risk of abuse and addiction. Tragically, students with physical and mental disabilities who abuse drugs are disproportionately vulnerable to physical, emotional and sexual abuse, delinquency, insanity and premature death. (Fareo, 2012).
EFFECT OF DRUG ABUSE ON STUDENTS WITH PHYSICAL AND MENTAL DISABILITIES

There are long and short-term effects of drug abuse on persons with physical and mental disabilities, but in this paper, only the long-term effects will be considered. American Psychiatric Association (2013) stated that some general consequences associated with long term use of drugs, or addictions that interfere with work, school or home life are job loss, poor work or school performance, suspension or expulsion from school, and legal problems. Below are some drugs and their effects on abusers:

1. Alcohol: Alcohol can be detrimental to both physical and mental health. Some of the potential long-term effects of alcohol abuse include:
   a. Alcoholic hepatitis
   b. Liver cancer
   c. Pancreatitis
   d. Cadiomyopathy (stretching and weakening of heart muscle)
   e. Irregular heart rhythm
   f. High blood pressure
   g. Stroke
   h. mouth, breast, and throat cancer

2. Hallucinogens: The effects of hallucinogens include persistent memory impairment, psychological dysfunction, imbalance of hormone production, decreased connectivity between brain areas.

3. Opiates: Opiates abuse can cause brain damage due to respiratory depression. Long term effects include sexual dysfunction, irregular menses in women, intravenous consequences, peripheral edema, tuberculosis, infection of the heart lining and HIV or hepatitis virus contraction.

4. Inhalant: This can lead to many severe health problems. Long-term effects include bone marrow damage, brain damage, bronchitis, asthma, sinus infection, depression and anxiety (National Institute on Drug Abuse, 2012 & 2014).

TREATMENT PROGRAMMES FOR STUDENTS WITH PHYSICAL AND MENTAL DISABILITIES WHO ABUSE DRUGS

According to American Association on Health and Disability (2013), some programmes needed for persons with physical and mental disabilities who abuse drugs are:

i. Integrated substance abuse treatment and vocational rehabilitation. This is done by integrating vocational training course like electrical work, plumbing work within and outside the school setting. Engaging abusers in activities that will distract them from...
taking such substances. Some of the vocational rehabilitation centres available for such training courses include:

1. Oji River Rehabilitation Centre, Enugu
2. Jos University Teaching Rehabilitation Centre, Jos
3. Asaba Rehabilitation Centre, Delta State
4. Gwari Area Council Rehabilitation Centre, Abuja
5. Akpodium Mbaise Rehabilitation Centre, Imo State

ii. Accessibility: Allowing them to access some mobility aids like braille, audio materials, sign language interpreter for the deaf. Allowing them to practice with carved letters of the alphabets by placing the letters in the appropriate space could also help.

iii. Physical therapy and exercise: Many facilities incorporate exercise programs as part of treatment. This is done by a physiotherapist. The students are meant to raise their hands, legs as well as engage in wrist, limbs movement. Whatever they see the therapist do, they will do. Exercises like hopping, jogging turning their head to the left, right, left again may provide motivation and can help a student to manage cravings and triggering emotions.

**RISK FACTORS FOR DRUG ABUSE AND ADDICTION**

Risk factors can serve as barriers to getting treatment. One of the biggest barriers is lack of information for both the physically and mentally disabled. However, whether or not they have a higher rate of substance use disorders, individuals with physical and mental disabilities have unique risk factors for drug abuse and addiction. Sunrise-House (2016) lists the risk factors to include: increased risk of physical and sexual abuse, unemployment and poverty, increased risk of mental illness, easier access to prescription medications, chronic medical problems and pain, social isolation, lack of access to education (Sunrise-House, 2016).

Understanding substance abuse issues can help provide programmes that meet individual needs of students with physical and mental disabilities. For example, persons with spinal cord injuries may abuse prescribed pain killers; this can lead to higher levels of depression and non-acceptance of the challenges leading to proper recovery outcomes (American Addiction Centres, 2019).

Substance abuse treatment for individuals with physical and mental disabilities must be sensitive to their individual unique health as well as their medical and social needs. For treatment to be effective, rehabilitation programmes must be accessible, compassionate and aimed at treating the substance use disorder. American Addiction Centres (2018) listed some qualities required of the treatment programmes for persons with physical and mental disabilities who abuse drugs. These include:
i. Simplification of presentations and resource materials: This involves intellect, attention or retention of information. Examples of resource materials are:

a. Snake and Ladder: The students are taught the concept of addition and subtraction through a fun filled game called Snake and Ladder where 2-4 students can be involved. The 1st player would roll the dice and take his chance. If the player positioned himself to the 5th number and there is no connecting ladder or snake touching to, there will be no change in position. The player who reaches the topmost position i.e 100th position will be the winner of the game. This treatment will help the students to understand the concept in a very simple manner. See figure 1:

![Figure 1: Snake and Ladder game](image)

b. Fun with tables: This focuses on fostering the logical ability of learners by using creative ideas on table presentation form. Example: There are nine flowers; each flower represents a table from 2 to 10 by reading the digit in the centre of the flower. Multiply the centre number with the numbers on the small petals in the first cycle one by one. After multiplying, students will get outer cycle. This game can make students learn tables. See figure 2:
c. Time on my clock: This will make the students identify the functioning of the clock in terms of hours as well as minutes.

For example: The clock has movable needles and each number unfolds the seconds denoted by it. The students can open the digit and discover the fact that there is an addition of 5 to every new digit (Iriwi, 2017). See figure 3:

![Figure 2: Flower Game](image1)

ii. Comprehension checks and repetition: This can help students keep track of information and retain knowledge better. Information given could be repeatedly checked. Example, concept of addition and subtraction through fun filled games learnt will be checked and repeated to ascertain mastery.

iii. Variety: Providing various types of information – visual, auditory, or tactile can help students maintain interest for a long period of time. Example: visual games of snake
and ladder is presented, audio tapes teaching the concepts of games of snake and ladder is played for them to listen.

iv. Teaching rather than sharing: Teaching general model and helping students to avoid using drugs and alcohol is achieved through using concrete objects. Things they can feel, see, hear. Example, lecturing them on dangers of abuse and showing them drugs that could be dangerous to their health.

v. Specialized staff: Staff who are trained in managing and supporting students with physical and mental disabilities on drug abuse are important in providing the specialized care needed. Example: psychologists, specialist in special needs education, nurses, mental health aids workers, counsellors and peer-support (American Addiction Centres, 2018).

RECOMMENDATIONS

A multi-dimensional approach is recommended. Robertson, David and Rao (2003) stated that programs for students with physical and mental disabilities on drug abuse should target improving academic and socio-emotional learning to address risk factors for drug abuse.

1. Education should focus on the skills of self-control, emotional awareness, social problem-solving.

2. Government should adapt programmes that would retain core elements which include: structure, content and delivery (how the program is adapted, implemented and evaluated).

3. Safe and drug-free school programmes should be established in schools across the federation by the government. This will help to design and strengthen programs that will prevent the use of alcohol, tobacco, drugs and violence in and around schools.

4. Existing rehabilitation homes should be funded, made functional and students’ teachers and other members of the community should be involved in the programme.

CONCLUSION

The prevalence of drug or substance abuse among persons with disabilities is very high. Sunrise House (2016) stated that the prevalence rate exceeds 50% for people who experience spinal cord injuries, traumatic brain injuries or forms of mental illness. However, despite the pressure of caregivers, opportunities to abuse drugs or alcohol still exist. Consequently, for students who experience mental or physical forms of disabilities, the process of recovering from addiction is complicated by barriers that simply do not exist for others. Treatment for such students involves simplification of presentations and resource materials. Attempts to recover from an addiction to substances can however be greatly hindered by issues associated
with physical or mental disabilities. Teachers, parents and care givers can team up to make sure treatment for students with physical or mental disabilities succeeds.

REFERENCES


