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Research Article

An Examination Of The Physical And Psychological Consequences Of Juvenile Drug Use In North-East India: A Public Health Crisis

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Abstract

The rise in drug use among juveniles in North-East India poses a significant public health challenge, with severe physical and mental consequences. This paper explores the profound effects of drug abuse on the physical health and mental well-being of young individuals in the region. Drawing from current research, it highlights the long-term implications of early drug abuse, focusing on the unique vulnerabilities of juveniles during their developmental years. By examining the intersection of drug trafficking networks and socio-economic pressures, the paper also proposes targeted intervention strategies to combat the growing problem of drug addiction among youth in North-East India.

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1. Introduction

North-East India is geographically vulnerable to drug trafficking due to its proximity to the infamous "Golden Triangle," a major drug-producing region. The easy availability of illicit substances has exacerbated drug use among juveniles, a population already grappling with socio-economic struggles, unemployment, and limited access to education. The rise in substance abuse among youth in the region has drawn attention from health professionals, policymakers, and social reformers. While the legal framework, including the Juvenile Justice (Care and Protection of Children) Act, 2015, attempts to address these issues through rehabilitation, the physical and mental toll of drug use remains underexplored in the broader discourse.

This paper aims to address the physical and mental effects of drug use among juveniles in North-East India, focusing on the long-term consequences of substance abuse during adolescence. We will also analyze the socio-economic and

geographical factors that exacerbate this crisis and propose interventions to mitigate these effects.

2. Physical Effects of Drug Use Among Juveniles

The adolescent body, still undergoing development, is particularly susceptible to the harmful effects of drug abuse. The North-East region, where heroin, opium, and synthetic drugs such as methamphetamine are readily available, presents a unique set of challenges due to the range of substances abused by juveniles.

2.1. Neurological Damage

One of the most profound effects of drug use on juveniles is its impact on brain development. Adolescence is a critical period during which the brain undergoes significant growth, particularly in areas associated with decision-making, emotional regulation, and impulse control (Spear, 2000). Drug use during this period disrupts normal neurological development, leading to long-term cognitive impairments.

Substances such as methamphetamine and heroin, which are prevalent in North-East India, have neurotoxic effects that damage brain cells and alter neurotransmitter systems (Rawson, 2006). Methamphetamine, for instance, increases dopamine release, which can lead to structural changes in the brain, resulting in memory loss, impaired motor skills, and reduced cognitive function (Volkow et al., 2001). Juveniles who abuse drugs are thus at a heightened risk of academic failure and behavioural problems, as the neurological deficits impair their ability to focus, learn, and interact socially.

2.2. Cardiovascular and Respiratory Issues

Substance abuse also exerts a significant toll on the cardiovascular and respiratory systems. Drugs like heroin, often injected or smoked, can lead to severe cardiovascular problems, including heart attacks, collapsed veins, and infections of the heart lining and valves (NIH, 2017). Inhalants, which are sometimes abused by juveniles for their cheap accessibility, can cause immediate respiratory distress and, in severe cases, sudden death due to oxygen deprivation.

The combination of drug use with poor healthcare access in many rural parts of North-East India compounds these issues. Many juveniles do not receive timely medical attention for drug-related health problems, leading to long-term physical damage. Furthermore, injection drug use significantly increases the risk of contracting blood-borne diseases such as HIV and hepatitis C, both of which are on the rise in drug-affected areas of North-East India (NACO, 2019).

2.3. Malnutrition and Physical Stunting

Chronic drug use among juveniles is often associated with malnutrition and physical stunting. Many addictive substances suppress appetite, leading to inadequate nutrient intake and weight loss (Smith, 2006). This is particularly problematic in juveniles, whose bodies require substantial energy and nutrients for growth. Drug addiction often leads to neglect of basic needs, including food, resulting in stunted growth and weakened immune systems.

In North-East India, where food insecurity is already a problem in many areas, juveniles abusing drugs are doubly affected. Malnutrition not only hinders physical growth but also exacerbates the neurological damage caused by drug use, creating a vicious cycle of physical and mental decline.

3. Mental Health Effects of Drug Use Among Juveniles

While the physical effects of drug abuse are alarming, the psychological impact on juveniles is equally concerning. Substance abuse during adolescence can lead to a range of mental health issues, many of which persist into adulthood.

3.1. Anxiety, Depression, and Mood Disorders

Adolescents who use drugs are at a high risk of developing anxiety, depression, and other mood disorders. The psychoactive effects of drugs such as cannabis, heroin, and methamphetamine often trigger mental health problems due to their impact on the brain's chemical balance. For

example, cannabis use has been linked to the development of schizophrenia in adolescents who are genetically predisposed to the disorder.

In North-East India, the lack of mental health services exacerbates this issue. Many juveniles suffering from addiction do not receive adequate psychological care, leading to chronic mental health disorders. Moreover, the stigma surrounding both mental health and drug addiction further isolates affected juveniles, preventing them from seeking help.

3.2. Impaired Social Functioning and Behavioural Problems

Drug abuse severely impairs social functioning among juveniles. Adolescents who abuse substances often exhibit behavioural problems, including aggression, impulsivity, and defiance (Squeglia et al., 2014). These issues strain relationships with family, peers, and teachers, leading to social isolation and further entrenching the individual in a cycle of addiction.

In many cases, juveniles resort to criminal activities to sustain their drug habits, increasing their risk of being involved in the legal system. The intersection of juvenile delinquency and drug abuse is particularly prevalent in North-East India, where drug traffickers often exploit juveniles as couriers or peddlers, exposing them to violence and further mental trauma.

3.3. Addiction and Long-Term Dependency

One of the most concerning effects of juvenile drug use is the development of long-term addiction. Adolescence is a period of heightened neuroplasticity, which means that the brain is more susceptible to developing patterns of addiction (Giedd, 2004). Juveniles who begin using drugs are far more likely to continue using into adulthood, with many becoming dependent on substances to cope with emotional or psychological distress.

The long-term implications of drug addiction include chronic unemployment, homelessness, and ongoing mental health issues. For many juveniles in North-East India, the lack of rehabilitation services means that they remain trapped in a cycle of addiction with little hope of recovery.

4. Socio-Economic and Geographical Factors Exacerbating Drug Use

While the physical and mental effects of drug use are well-documented, it is essential to understand the socio-economic and geographical factors that make juveniles in North-East India particularly vulnerable to substance abuse.

4.1. Proximity to Drug Trafficking Routes

The North-East region's proximity to the "Golden Triangle" has facilitated the easy flow of drugs into local communities. Heroin and synthetic drugs such as yaba (methamphetamine) are smuggled across the porous borders with Myanmar and Bangladesh, making them readily available in the region's towns and villages (Narcotics Control Bureau, 2019). Juveniles in border areas, who are often marginalized and economically

disadvantaged, are frequently exposed to these drugs at an early age.

4.2. Socio-Economic Marginalization

Poverty, unemployment, and political unrest are pervasive issues in North-East India, and these socio-economic conditions create an environment conducive to drug abuse. Many juveniles turn to drugs as a form of escapism from their harsh realities, while others become involved in drug-related activities out of economic necessity. The lack of educational opportunities and social support networks further exacerbates the problem, leaving many juveniles trapped in a cycle of addiction and criminality.

5. The Role of Rehabilitation and Legal Interventions

Recognizing the devastating physical and mental impact of drug abuse, the government has implemented several legal and rehabilitative measures aimed at addressing juvenile substance abuse. The Juvenile Justice (Care and Protection of Children) Act, 2015 emphasizes rehabilitation over punishment, providing juveniles with access to Observation Homes and Special Homes designed to offer counselling and vocational training. However, the implementation of these measures in North-East India faces significant challenges. Many juvenile homes in the region are under-resourced and lack the necessary infrastructure to provide comprehensive care for drug-affected juveniles. Furthermore, the stigma associated with drug addiction often prevents juveniles from accessing these services, even when they are available.

6. Conclusion and Recommendations

The physical and mental effects of drug use among juveniles in North-East India are far-reaching and deeply concerning. The region's unique geographical and socio-economic challenges have created a perfect storm for the rise in juvenile drug abuse, with devastating consequences for the health and well-being of the affected youth.

Addressing this crisis requires a multi-faceted approach that includes:

- Strengthening cross-border law enforcement to curb the flow of drugs into the region.
- Expanding access to mental health services and rehabilitation centres, particularly in rural and marginalized communities.
- Implementing comprehensive school-based drug education programs to prevent juveniles from experimenting with drugs in the first place.
- Reducing the stigma associated with drug addiction to encourage affected juveniles to seek help.

By addressing both the physical and mental impact of drug use requires both government action and community involvement to mitigate the damage and protect future generation.

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