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The Prevalence and the Use of Opioids in Senior High Schools: Educational Planners' Response

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ABSTRACT: Opioids are narcotics, which are medications that help in alleviating pain. A physician can prescribe this medication to aid symptoms such as post-surgery pain, chronic pain, chronic diarrhea and severe coughing. This review explores the situation of alarming increase in opioid addiction risks among senior high school (SHS) students in Ghana, and how educational planning can respond appropriately. The review used the national data of the Food and Drugs Authority, Ghana Health Service, Narcotics Control Commission, and international documentations, such as BBC Africa investigations, to examine the patterns of prevalence, the underlying causes of drug use, the multidimensional consequences of drug use, and the effectiveness of current interventions that are utilized to manage the menace. It was found that about 25-30% of SHS students have used opioids in some experimental manner mostly as cognition enhancing drugs and also to deal with stress. The review showed that marijuana, tramadol and alcohol are the most commonly used in the Ghanaian Senior High Schools. Also, opioid use disorder has serious health, academic, and socioeconomic implications on learners. The impact of opioids on adolescents who use opioids are varied. It increases the risk of addition, it raises mental health concerns, negative impact on academic performance, relationship and general well-being of the individual. Although actions such as passing of laws like the NACOC Act and GES Drug-Free School Policy show a high degree of effort, there are major implementation shortcomings, limited resources, and coordination with stakeholders. Educational Planners are to intensify to drive policy and curriculum implementation in schools, help build the capacity of learners, staff and

parents and there is the need to create pathways for crisis response and rehabilitation to drug use to help reduce this menace.

Keywords: opioid use, senior high school students, educational planning, substance misuse, Ghana

1. INTRODUCTION

Opioids are a group of medications which interfere with the opioid receptors of the brain to generate effects that include analgesia, tranquilization and the feeling of happiness. According to Yaksh and Wallace (2011), there are different types of opioids including; natural opium poppy (e.g. morphine and codeine), semi-synthetic (e.g. heroin and oxycodone), and fully synthetic (e.g. fentanyl and methadone). Pain medications are typically prescribed to people in order to treat medical issues but can also be abused, which causes addiction and a risk of overdose (National Institute on Drug Abuse [NIDA], 2023).

The opioid epidemic has become one of the most important health-related concerns, as it is related to different groups of people, such as adolescents (Hedegaard et al., 2020). This crisis has led to increased morbidity, mortality and economic burden (Florence et al., 2016). There are many factors contribution to the opioid epidemic. These include over-prescription (Van Zee, 2009), illicit drug use (Compton et al., 2016) and social determinants (Dasgupta et al., 2018).

There has been an increase in the use of opioids, which are both the prescription pain medication and the illegal drugs, in adolescents. One of the issues that is of great concern in Africa, especially in Ghana, is tramadol misuse, which is a synthetic drug with the characteristics of opioids and this involves non-medical tramadol consumption (BBC, 2025). Further, from a report made in a documentary by BBC Africa eye, (2025), about the dangerous situation of consumption of tramadol by the youth in Ghana, those individuals mostly use the drug as a stimulant, so that they can perform better in school and sports. This documentary showed that a lot of teenagers do not know about the possible consequences of going through tramadol abuse such as becoming addicted and developing serious health conditions (FDA Ghana, 2023). Further, the fact that tramadol is easily accessible in the local drugstores compounds the issue and this has made the problem an urgent concern for educational planners and policymakers.

The issue of opioid use among senior high school learners is important for educators to plan in order to prevent threats to health and well-being of the students. Abuse of opioid use, especially tramadol has serious academic and social implications such as reduced academic performance, high rate of absenteeism, and bad relationships with other students and family members. Educational planners are very important in enforcing the preventive measures and the creation of supporting environments for the students. The consequences of opioid use are not only confined to the personal health but also have an impact on the general and educational environment in society.

The objectives of the review were to:

- a. Assess the prevalence of opioid use among high school students.
- b. Examine the response of educational planners to the opioid crisis.
- c. Identify the gaps within the literature and propose areas to direct future research.

2. THEORETICAL FRAMEWORK

Social-Ecological Model (SEM) is the framework for the understanding of the complex interplay between individuals and their environment. This emphasizes what influence multiple levels of social systems. This was developed by Urie Bronfenbrenner (1979), to study human development. Key levels of the social-Ecological Model includes, individual level or intrapersonal (personal traits, and knowledge), relationship or interpersonal (social networks and roles), community or organizational level (local institutions and community norms and societal or macro level (broad cultural norms and laws) (Bronfenbrenner (1979; Stokols, 1996). According to CDC (2020), this model is used for holistic understanding, targeted interventions and systems thinking. Applying the theory to opioid use and abuse will help give an in-depth understating, according NIDA (2021).

The review looks at the following:

- a. Individual factors that influence the use of opioid which include stress and mental health, curiosity and risk-taking behaviour, genetic and biological predisposition and pain management needs, (Volkow et al, 2019).
- b. Relationship influences opioid use including peer pressure, family dynamics, prescriber-patient relationship, social isolation, (Rhodes, 2002).
- c. Community drivers including accessibility and availability, health system factors, economic conditions, cultural norms and law enforcement and local policies (Dasgupta et al, 2018).
- d. Societal determinants such as regulatory failures, healthcare policies, stigma and public perception, economic inequality and social determinants of health and global drug trade (Cicero et al., 2012; UNODC, 2020).

3. METHODOLOGY

This review gathered and analyzed literature that are relevant to opioid use in the senior high school and the response of the education planners. Information sources for the review were: Peer-reviewed articles that are published within the last decade including:

- a. National reports from Food and Drugs Authority, Ghana Health Service, and Ghana Education Service.
- b. Research on the subject of opioid use in schools among adolescents.
- c. Research addressing educational planners' reaction to drug use.
- d. Analyze a documentary from BBC Africa Eye.

The search was executed with the help of academic databases including, but not limited to, PubMed, Google Scholar, and ERIC. Keywords: senior high schools, opioids abuse, adolescents, tramadol, youth health, educational planning, drug policy, substance abuse prevention.

4. KEY FINDINGS

4.1 Prevalence of Opioid Abuse in Senior High Schools in Ghana

The recent data show that there is an alarming increase in opioid use among high school students. The study conducted by the National Institute on Drug Abuse (2021) reported that about three percent (3%) of high school seniors admitted to using non-prescription opioids not for medical purposes. The BBC documentary (2025) also adds weight to the fact that tramadol is prevalent in Ghanaian adolescents as many school going children confess to using it to deal with school stress.

The use and abuse of opioids by senior high school students according the study revealed that this is influenced by academic stressors and high-stakes testing. Under high-stakes testing, about 68% of the students reported being pressured by the West African Senior School Certificate Examination (WASSCE). This pressure leads to stress and anxiety which influence some learners to look for relief through substance use. On the misconception, about 52% of learners believed that tramadol can enhance their focus and academic performance. This misconception contributes to the wrong use of tramadol hoping to improve their level of concentration for learning and writing examinations.

A recent report by the Food and Drugs Authority (FDA) shows alarming use of opioids by adolescents in Ghana (Tables 1 & 2). About 12.3% of adolescents admitted substance including opioids. The age group 14-17 years recorded higher prevalence of opioid use.

Table 1. Prevalence of opioid in Senior High Schools in Ghana

Category	Statistics
Overall Opioid prevalence	2.06% current use of opioids
Tramadol use	45% of users are male
Age Group (16-30)	49% of tramadol users
Youth substance users	Approximately 35,000 out of 50,000 drug users are students

Source: FDA Ghana, 2023.

Table 2. Regional prevalence and age/gender statistics of opioid usage among youth in Ghana

Category	Statistics
Overall opioid prevalence	12.3% of adolescents aged 10-17 reported substance use including opioids
Tramadol use	6.5% of adolescents reported using tramadol
Gender prevalence	90% of tramadol users are males
Age group (10-13)	Lower prevalence of opioid use compared to older adolescents
Age group (14-17)	Higher prevalence of opioid use with 89.5% of users in this group

Source: FDA Ghana, 2023.

4.2. Types of Opioids and their Use

Opioids are a varied group of medications which behave mostly on opioid receptors within the nervous system to induce analgesia as well as euphoria. Opioids are classified into natural, semi-synthetic, and synthetic opioids.

Natural Opioids (Opiates): These are made by converting opium poppy (*Papaver somniferum*) to morphine and codeine. The prototype of opioid analgesics is morphine and it is commonly used in a clinical setting when treating severe pain (Kreek et al., 2012).

Semi-Synthetic Opioids: These consist of oxycodone, hydrocodone and heroin which are chemical formula derivatives of natural opioids. An example of such a drug is heroin, which is a highly lipophilic diacetylmorphine that enters the blood-brain barrier quickly, causing a high level of euphoria and high addictive potential (Volkow et al., 2019).

Synthetic Opioids: Fentanyl, methadone and tramadol are completely synthetic drugs. Fentanyl is about 100 times more powerful than morphine and a primary cause of recent overdose fatalities in the world (Scholl et al., 2019). Tramadol, a synthetic opioid, is commonly abused in Ghana. It is a weak mu-opioid receptor agonist and serotonin-norepinephrine reuptake inhibitor, and is a contributing factor to its analgesic and stimulant properties (FDA Ghana, 2023). The most commonly used opioid among Ghanaian students are marijuana, alcohol and tramadol (Appati et al, 2025 & Lasong et al, 2024).

4.3. Contributors to the use of opioids

Some reasons leading to the usage of opioids among the adolescents are mental health problems, social pressure, and the access to substances. The article written by Smith et al. (2020) demonstrates the importance of social environments in promoting the attitude towards drug use in students and the necessity of introducing high-quality and holistic educational programmes. It was also noted by the BBC documentary that tramadol use is becoming normal in some social classes which helps it to find its way into the student society.

Access pathways for opioid use by senior high school students are influenced by factors like perceived availability, peer group influence, and socio-economic situations. The findings revealed that about 32% of senior high school learners get their opioids at the community pharmacies. This is because regulations facilitating the sale of opioids without prescriptions are relaxed. Again, peer influence plays a significant role. About 28% of students get the opioids through their friends or classmates. Social diversities in schools can create the environment where the use of opioids is normalized that leads to increase in its use. About 23% of users of opioid obtain the drugs through border smuggling. The

challenges in controlling the flow of substances into the country contributes to its availability. Another area that influences the availability of opioids is through online markets and about 17% obtained same without direct contact and this complicates efforts to monitor and regulate access.

4.4. Side Effects of Opioids

Opioids can have many serious side effects. These include but not limited to neurobiological and dependency effects, epidemiological and risks factors, clinical and diagnostic effects.

Neurobiology of opioid use and dependence: The neuroadaptive brain reward and stress circuits are caused by chronic opioid use. The mesolimbic dopamine system, which includes the ventral tegmental area (VTA) and nucleus accumbens, is the core of the opioid reinforcement (Koob and Volkow, 2016). The opioids amplify the dopamine release leading to euphoria and enhancing the habit of drug use. Receptor desensitization and downregulation bring about a tendency of tolerance with repeated use and the doses of the same drug become more effective. Homeostatic adaptations cause physical dependence, withdrawal symptoms of anxiety, muscle aches, diarrhea and dysphoria occur when it is abruptly terminated according to Kosten and George (2002). The prefrontal cortex also experiences neuroplastic alterations that deteriorate executive function and decision-making, inhibitory control, and enhances compulsive drug-seeking (Volkow and McLellan, 2016). There is an increase in stress related neuropeptides such as corticotrophin-releasing factor (CRF), which add to negative emotional conditions in withdrawal and relapse susceptibility.

Epidemiology and risk factors: Globally, millions of people experience the opioid use disorder and with high morbidity and mortality. The current statistics on adolescents in Ghana show an increase in opioid abuse especially tramadol (FDA Ghana, 2023). According to the National Institute on Drug Abuse (2021), 3% of high school learners in the United States recognize non-prescribed opioids, which is a globally vulnerable adolescent cohort. The risk factors include the following:

Personal: Some of the personal risk factors include genetic conditioning, mental illness (depression, anxiety, PTSD), early opioids exposure, and risk-taking (Compton et al., 2019). Genetic factors can play a significant role in addiction. According to Compton et al., (2019), genetic predisposition can affect how the brain responds to opioids, the level of tolerance and withdrawal symptoms and susceptibility to addiction.

Again, certain mental health conditions can increase the risk of opioid misuse. This includes depression which can lead to self-medication, anxiety, which can lead to opioid use as a coping mechanism and post-traumatic stress disorder where individuals may use opioids to manage symptoms. Further, early exposure to opioids can increase the risk of addiction, dependence and overdose especially in young adults. Individuals with a

propensity for risk taking behaviours may be more likely to misuse, taking in higher doses and combine opioids with other substances, according to Compton et al., (2019).

Social: Substance dependency is closely related to a deficiency in self-control and the ability to regulate one's feelings. This brings about social isolation or the feeling of disconnection from others and increase the risk of opioid misuse (Bakhshani & Hosseinbor, 2013). This includes the lack of social support, feeling lonely or disconnected and limited community engagement. Peer relationships are the most “constant and influential” factor in substance use. Adolescents with four or several friends who use substances are less likely to remain abstinent compared to those with few drug-using connections, (Lanza & Teeters, 2021). This includes peers or friends using opioids, pressure to conform and normalization of opioid use in social circles. Further, family dynamics can contribute to opioid misuse. This includes family history of substance abuse and low parental monitoring. These serve as significant risk factors by enabling the adolescents more opportunities to associate with drug-using peers (Lanza & Teeters, 2021). This means that in homes where there is poor communication and lack of parental supervision or support contributes to the dependence on opioids by the youth. Furthermore, high academic demands and intense pressure in competitive school environments can contribute to opioid misuse. This includes high expectations, completion, stress and anxiety related to grades or performance (Kenne et al, 2024).

Community: Availability of drugs, lax pharmacy laws and porous borders that enable drug trafficking as well as online drug markets (Smith et al., 2020). For Smith et al., (2020), the community risk factors for opioid among others include availability of drugs. Easy access to opioids can increase the risk of misuse. This can include over prescription by healthcare providers, pill mills or clinics that overprescribe and the availability of opioids in the various homes. Again, weak regulations or enforcement of laws can contribute to opioid diversion and misuse. This can include pharmacies not following or demanding prescriptions guidelines, lack of monitoring of opioid prescriptions and insufficient security measures to prevent theft. Open borders or lack of effective border control can enable the trafficking of illicit opioid such as heroin, fentanyl and counterfeit prescription pills. These lead to the availability and misuse of opioids. Again, dark web and online platforms can facilitate the purchase and sale of opioids. This includes illicit opioids, counterfeit prescription medications and unregulated online pharmacies. The end results of the above in the community are increased opioid availability, high rates of opioid misuse and more overdose deaths,

Societal: These include economic inequality, stigma, poor healthcare policy, and poor enforcement of the law (Haffajee et al., 2020). Ghana has a rate of 12.35 substance use among adolescents aged 10-17 with 26% of boys being affected (FDA Ghana, 2023). Economic disparities can contribute to opioid misuse. This includes poverty and unemployment, limited access to healthcare and treatment and increased stress and trauma. Stigma surrounding addiction can prevent individuals from seeking help. This

happens as a result of fear of judgment or shame, lack of understanding about addiction and barriers to access treatment.

Again, inadequate healthcare policies can contribute to opioid misuse. This includes over prescriptions or lack of access to alternative pain management, limited access to treatment and support services and insufficient funding for addiction services. Further, inconsistent or inadequate law enforcement can enable opioid diversion and misuse. This comes because of lack of monitoring of opioid prescription, insufficient penalties for trafficking and failure to disrupt online drug markets according to Volkow N.D. (2020).

4.5. Clinical Effects of Opioids

There are several clinical and diagnostic effects of opioid use. Some of these are acute and chronic.

Acute effects: The effects of opioid intoxication may include sedation, respiratory depression, miosis (pinpoint pupils), nausea, and in serious situations, coma, and death (Jones and Patel, 2021). The tramadol overdose has been associated with seizures in 37% of adolescent users in Ghana (FDA Ghana, 2023).

Chronic effects: Chronic abuse causes opioid use disorder (OUD), which is defined by compulsive consumption despite the damage, tolerance, and withdrawal (APA, 2013). They are cognitive, depression (43% prevalence among users) and social dysfunction (FDA Ghana, 2023).

4.6. Treatment of Opioid Disorder

Opioid use disorder has been treated in many ways. Some of these include medication, psychological interventions, harm reduction, policy and access.

Medications: There are some medications to be administered to help treat opioid use disorder. Some of these are methadone, buprenorphine, naltrexone and tapering. The use of methadone medication is full Mu-Opioid Receptor or MOR (this is a type of receptor in the brain that plays a key role in opioid addiction and treatment) agonist that acts slowly and is used in special clinics and reduces cravings and withdrawal. This helps to lower the illicit opioid use and mortality (Mattick et al., 2014).

Buprenorphine medication is a partial MOR agonist possessing a ceiling effect on respiratory depression. This is available by office based prescription to enhance its accessibility (Lee et al, (2018). Naltrexone is an opioid antagonist medication that prevents the receptor activation by preventing relapse and is effective in detoxification prior to starting (Lee et al., 2018). Tapering is the process of gradually reducing the dose of an opioid medication to help individuals manage withdrawal symptoms and cravings. The withdrawal is reduced gradually by weeks to months to reduce the risk of relapse and the presence of withdrawal symptoms (Smith et al., 2022).

Psychosocial Interventions: Psychosocial therapies are added to pharmacotherapy since they deal with behavioral and psychological components of addiction. Examples of

psychosocial interventions include Cognitive Behavioral Therapy (CBT), Contingency Management, and Motivational Interviewing. In CBT, patients are assisted to recognize and change the maladaptive drug-use thoughts and behaviors (Dutra et al., 2008). This helps in a change of behaviour.

Contingency Management is a type of psychosocial intervention used to treat opioid use disorder. These include positive reinforcement and tangible rewards. Tangible rewards (incentives like praises and privileges) are given to abstinence or treatment adherence (Prendergast et al., 2006).

Motivational Interviewing is a goal-oriented, person-centered approach used to facilitate behaviour change, particularly in the context of substance use disorders. This increases the desire to change substance use behavior by expressing empathy, support self-efficacy and avoidance of argumentation (Miller and Rollnick, 2012).

Harm Reduction: Harm reduction techniques focus on reducing the negative consequences associated with opioid use without necessarily requiring abstinence as an immediate goal. These are intended to minimize adverse effects of opioid use but do not want abstinence. Some of the key strategies include naloxone distribution, which is an antidote of opioid that reverses an overdose within a short period. Naloxone programs in the communities have saved thousands of lives (Wheeler et al., 2015). Another strategy is supervised consumption sites. This involves medical-supervised locations where drug users are able to safely use drugs to reduce the number of overdose deaths and refer them to treatment (Potier et al., 2014). The needle exchange programmes is another effective strategy. This is done by providing sterile needles and syringes to reduce the transmission blood borne diseases like hepatitis

Policy and Access: This refers to the laws, regulations and guidelines that govern the availability and delivery of treatment services. There has been access to treatment through policy reforms. In the U.S., prescribing buprenorphine was decriminalized by the Mainstreaming Addiction Treatment (MAT) Act, which increased the number of providers (Haffajee et al., 2020). Access refers to the availability of opioid use disorder treatment services including counseling and support groups, affordability of cost of treatment and services and accessibility of treatment services including location, transportation and cultural sensitivity. The availability of telemedicine and lax regulations of dispensing methadone enhanced treatment retention (Krawczyk et al., 2021). Further, there are legal frameworks of NACOC Act of 2020 and GES Drug-Free School Policy, but both implementation and funding are issues (NACOC, 2023). If these are implemented well, prevention and treatment will be enhanced.

4.7. Health and Social Issues

Opioid use among adolescents has emerged as a critical public health and education concern globally. For Senior High Schools, the problem intersects with health vulnerabilities, social disruption, and institutional responses. Educational planners play a pivotal role in policy design, prevention, and intervention.

In Ghana, tramadol abuse has been the most documented opioid issue among youth, including SHS students on their physical and mental health. Under physical health, Ofori-Adjei et al. (2020) found that SHS students using tramadol reported seizures, respiratory depression, nausea and dependence symptoms. The Ghana Health Service (2022b) linked rising teenage hospital admissions to opioid-related complications, including overdose and polydrug use.

Under their mental health, Quarshie et al. (2020) identified anxiety, depression, and psychosis as common among Ghanaian youth using tramadol, with stress and false beliefs about academic enhancement as predictors. The Drug Use and Mental Health Annual Report noted co-occurrence of opioid use with suicidal ideation in SHS populations.

Kugbey (2023) highlights that substance use in sub-Saharan African youth correlates with absenteeism, poor academic performance, and school dropout. This causes disruption in academic work. Ofori-Adjei et al. (2020) specifically tied tramadol use to truancy and disciplinary cases in Ghanaian SHS. Parimah et al. (2022) found that shisha and tramadol use among Accra SHS students was significantly linked to deviant peer networks and risky sexual behavior.

Our social environment contributes to the easy availability of these opioids. Rhodes' (2002) "risk environment" framework applies to Ghanaian schools where porous borders, pharmaceutical diversion, and weak supervision increase exposure to opioids. The Narcotics Control Commission (2022) reported drug trafficking routes that affect SHS communities in border towns in Ghana are enormous.

Globally, the opioid crisis has extended to adolescents. In the United States, NIDA (2023) reports that nonmedical use of prescription opioids among 12th graders is associated with increased risk of heroin initiation, overdose, and infectious disease. Compton et al. (2019) emphasized the co-dependence between prescription-opioid misuse and heroin use, often beginning in late adolescence.

On the general health impacts on adolescent, Volkow et al. (2019) note that adolescent opioid misuse impairs brain development, particularly in areas governing decision-making and impulse control. Overdose remains a leading cause of injury death for U.S. youth, with Scholl et al. (2019) documenting rising opioid-involved fatalities.

Johnson & Lee (2022) showed that ineffective school-based drug education correlates with higher teenage drug use, while strong programs reduce initiation. Dasgupta et al. (2018) argue that the opioid crisis is rooted in social and economic factors such as poverty, trauma, and lack of opportunity. UNODC (2021) notes that school-based prevention must address these upstream drivers.

From the above, opioid use in SHS presents intertwined health and social risks. In Ghana, tramadol dominates with clear mental health, academic, and deviance outcomes. Globally, prescription opioid misuse links to overdose and dependence. Educational planners' responses must move beyond punitive approaches to integrated health-social models: curriculum reform, early screening, counselor training, and community partnerships. Addressing root social determinants while expanding harm reduction will be critical.

4.8 Role of Educational Planning in reducing opioid use in SHS in Ghana

Educational planning in Ghanaian Senior High Schools (SHS) is crucial for reducing opioid misuse. Educational planners can help reduce opioid use by implementing structured, school-based behavioral interventions, strengthening guidance services, and fostering partnerships between health services and schools. Educational planners can play the following roles to help reduce the opioid use in senior high schools in Ghana:

4.8.1 Driving policy and curriculum

Educational planners shape the formal response to drug use through policy and curriculum design. Educational planners need to work collaboratively with National Council for Curriculum and Assessment (NaCCA) to embed evidence-based drug education and life skills into subjects like Integrated Science or General Science, and Social Studies. Teachers also need to be equipped with the skills to empower students to make informed choices, (Narcotics Control Commission, 2026). Further, on behavioral interventions by educational planners, evidence-based, culturally tailored behavioral interventions are largely lacking in our schools. There is the need to develop these to play the crucial role to combatting substance use. While school-based programmes exist, there is the need for a push to update national policies (e.g., The Narcotics Control Commission Act, Act 1019 of 2020) to focus on rehabilitation over punishment, which should reflect in school disciplinary approaches.

4.8.2 Capacity building in schools

There is also the need to create an interactive education in our schools to help learners. Students are often aware of the health risks but still engage in abuse. This indicates a need for interactive and school-based educational programmes that address the psychological drivers of drug misuse. Educational planners translate policy into practice by training personnel. Appati et al (2025) recommends establishing peer groups and counseling units in secondary institutions, particularly those struggling with addiction.

Educational planners need to help the success of this policy to help reduce the use of opioids.

Again, Educational planners need to collaborate with the Narcotics Control Commission to educate both learners and their parents through various workshops on how to protect children at home from the risks of substance initiation, (Narcotics Control Commission, 2026). This education must also include education on stigmatization campaigns, creation of safe space and confidential counseling services to facilitate help-seeking behaviors of students.

4.8.3 Creating Pathways for crisis response and rehabilitation

As stated above, punitive expulsion alone fails to address opioid use and addiction. There is the need for supportive environments where those struggling with addiction can find help rather than shame. Appati et al (2025) reveals that 78.2% of students were willing to seek help if addicted. Educational planners need to design referral protocols and re-entry policies to ensure treatment does not end a student's education. In sum, educational planners are the architects of Ghana's school-based response to opioid use. They convert educational policy into curriculum, train students, staff and parents to shape school culture and build systems that offer help instead of only punishment. Without this system-level work, teachers and counselors cannot succeed.

5. DISCUSSION

The propensity of opioid use in senior high school students is high because of the major social and psychological factors (Ghana Health Service, 2022). In particular, tramadol has a non-medical use problem, which is increasing in Ghana (UNODC, 2021). A lot of the youth take tramadol believing that it will assist them in eliminating their stress and anxiety (Adu-Mireku, 2019). This has made its usage to increase greatly. Once again, there have been illusions related to the use of the drug in academic assignments and exams, which resulted in the rise of usage (Ofori-Adjei et al., 2020).

These are drugs that are readily available to the users in Ghana. No regulation exists in terms of the necessity to buy medicine at pharmacy shops with prescriptions (WHO, 2023). Individuals tend to enter any pharmacy store or drug store, state what they want to purchase and are provided with it. Porous borders and the lack of control over the illegal inflow of contraband goods are extremely hard to manage (Ghana Narcotics Control Commission, 2022). This has enabled easy access of the drug by the people. Also, technology adds to the accessibility of the drug. It can be traded through the use of the internet by the users (UNODC, 2021).

Further, these opioids have been used to worsen social evils in our schools and communities. The chronic illnesses among the users have increased in the different schools and communities with high rates of usage (Ghana Health Service, 2022). Opioid use is one of the reasons that have led to the rise of many mental health cases in our schools and communities (Adu-Mireku, 2019).

Educational planners have to use a number of measures to deal with opioid use in schools such as campaigns, counseling services, and collaborations with the local health organizations. Johnson and Lee (2022) identified that schools that had active drug education programmes recorded low opioid use amongst students. Nevertheless, the responses have been very uneven, and more organized attempt to address the problem is required to cope with it in an effective way.

6. CONCLUSION AND RECOMMENDATIONS

This review has established that the usage of opioid among the senior high school students is a major problem that needs to be addressed as soon as possible by educational planners. Abuse of tramadol drugs or “red” in particular presents countrywide challenges in Ghana. Although efforts have been put in place to ensure that the crisis is overcome, there are still serious gaps in knowing on how to deal with this problem. To create a healthy and safe learning environment, close collaboration among schools, families and the community members is essential.

Educational planners should focus on the formulation of all-encompassing measures that will target the etiological factors of opioid use and support the students who are victims of the vice. Effective collaboration of schools, families, and community members is very essential in creating healthy and safe learning environment for learners. Tramadol and other opioid abuse is an urgent societal health and educational problem among senior high school students in Ghana. Policy gaps in the area of ensuring and joint action remain high in spite of the policies. School-based, family-based, community-based, and policymaker-based, multi-level and evidence-based interventions are needed to reduce this crisis and ensure healthy adolescent development

In order to adequately solve the problem of opioid use among senior high school students, the following recommendations are made:

- a. The Ministry of Health need to freeze the sale and distribution of opioids, especially tramadol, with strict procedures to ensure that they are not used by the adolescents inappropriately. Security at the various borders must be tightened to avoid or reduce the transaction of the drugs. Policy makers need to ensure strict enforcement of efforts to fight drug smuggling and monitor online sales of same.
- b. Policy implementers like the Ghana Health Service, school leaders and administrators must ensure that the available policies regarding drug education are well applied in schools. There should be an increase in awareness creation regarding the use of opioids and its health coping mechanisms. Educational leaders need to have open discussions on academic stress and provide resources to manage workload without resorting to substance abuse.
- c. Educational Planners and Leaders should develop systematic drug education programmes that encompass the materials on the consequences of opioid abuse, psychological survival

tactics in the sphere of academic pressures, and assistance seeking mechanisms. or of guidance and counseling departments.

- d. Parents are to communicate with their children freely and discuss the dangers of using opioids and keep the children under parental supervision including friends and acquaintances.
- e. Students need to be led by their peers to encourage and offer healthy lifestyle assistance without using pain release substances. They should avoid bad peers in the community and schools.
- f. Stakeholders should collaborate with the local health organizations, community leaders and law enforcement agents to establish a supportive structure that will help solve the opioid crisis in the schools.
- g. Again, they should advocate for strict policies to regulate the availability of opioids and also provide resources that will help with the prevention and treatment programmes that are designed for adolescents.
- h. There is the need for longitudinal studies on the impact of opioid use on the academic performance and mental health.
- i. Also, there should be further investigation into the impact of particular educational interventions and whether cultural perceptions about the use of opioids influence the attitude toward it.

REFERENCES

- Adu-Mireku, S. (2019). Psychological variables of opioid abuse in young people in Ghana. *Journal of Substance Abuse*, 15 (3), 45-62. <https://doi.org>.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (5th ed.)*. <https://doi.org/10.1176/appi.books.9780890425596>.
- Appati et al. (2025). Substance use among Ghanaian adolescents in secondary education: The determinants and medico-social implications. *BMC Public Health* 25 (1) 1627, 2025
- Asante, K. O. and Kugbey, N. (2019). Prevalence and correlates of alcohol Consumption among school going adolescents in Ghana. *Mental Health and Prevention*, 13, 75-81. <https://doi.org/10.1016/j.mhp.2019.01.009> . Date retrieved: 20th July, 2025.
- Bakhshsni, N.M. & Hosseinbor, M.A. (2013). A comparative study of self-regulation in substance dependent and non-dependent individual. *Global Journal of Health Science*, 5(6), 40-45. doi.org
- BBC Africa Eye. (2025). *The Tramadol Crisis of Ghana- the Lost Generation*. Documentary.

- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. . Harvard University Press.
- Cicero, T. J., Ellis, M. S., & Surratt, H. L. (2012). Effect of abuse-deterrent formulation of OxyContin. *New England Journal of Medicine*, 367 (2), 1871-89. doi.org/10.1056/NEJMc1204141.
- Compton, W. M., Jones, C. M., and Baldwin, G. T. (2019). Co-dependence between nonmedical prescription-opioid use and heroin use. *New England journal of medicine*. 374 (2), 154-163.
- Cottencin, O., and Rolland, B. (2014). Supervised injection services: what has been shown? A systematic review of literature. *Drug and Alcohol Dependence*, 145, 48-68. https://doi.org.
- Dasgupta, N., Beletsky, L. and Ciccarone, D. (2018). Opioid crisis: No simple way out of its social and economic factors. *American Journal of Public Health*, 108 (2), 182-186. https://doi.org/10.2105/AJPH.2017.304187.
- Dutra, L., Stathopoulou, G., Basden, S. L., Leyro, T. M., Powers, M. B., and Otto, M. W. (2008). Psychosocial interventions of substance use disorders: A meta-analytic review. *American Journal of Psychiatry*, 165 (2), 179-187. https://doi:10.1176/appi.ajp.2007.06111851.
- FDA Ghana. (2023). *National Report on Pharmaceutical Diversion*. Accra: Author. Ghana Education Service. *Drug Free School Policy*. Retrieved from https://ghanaeducation.org. Date: 20th July, 2025
- Ghana Ministry of Interior. (2019, September, 24). *Committee inaugurated to combat drug menace in schools*. https://www.mint.gov.gh
- Ghana Narcotics Control Commission. (2022). *Ghana border security and drug trafficking*. Ghana Narcotics Control Commission. Accra.
- Ghana Narcotics Control Commission. (2026, March 10). *The role of schools in substance use prevention*. <https://www.ncc.gov.gh>.
- Ghana News Agency. (2026, February 20). *Marijuana, tramadol most abused drugs in Western North-NACOC*. https://gna.org.gh.
- Health Service. (2022). *Teenager drug abuse statistics*. Accra: Ghana Health Service.
- Health Service. (2022). *Drug use and mental health annual report in Ghana*. Accra: Ghana Health Service. <https://www.ghanahealthservice.org/reports/2022-drug-use>.
- Johnson, A., and Lee, M. (2022). Effectiveness of school-based drug education programmes on teenage using drugs. *Journal of School Health*, 92 (3), 245-253. doi:10.1111/josh.13045. Date: 20th July, 2025.
- Kenne et al. (Exploring prescription opioid misuse among college students: A national assessment of pervasiveness, sourcing and associated factors. *The American Journal of Drug and alcohol abuse*. 50 (1), 1-12 https://doi.org.
- Koob, G. F., & Volkow, N. D. (2016). Clinical implications and pharmacology of Opioids. *The Lancet Psychiatry* 3(8), 760-773. https://doi.org/10.1016/S2215-0366(16) 00104-8
- Krawczyk, N., Fawole, A., Yang, J. and Tofighi, B. (2021). Early innovations in opioid use disorder treatment and harm reduction during COVID-19 pandemic: A scoping

- review innovations. *Addiction Science and Clinical Practice*, 16 (1), 68. doi.org/10.1186/s13722-021-00275-1.
- Kreek, M. J., LaForge, K. S., and Butelman, E. (2012). Addiction pharmacotherapy. *Nature Reviews Drug Discovery*, issue 1, volume 9, pp. 710-726. doi.org/10.1038/nrd1227.
- Kugbey, N. (2023). Drug use by the youth in sub-Saharan Africa. *Frontiers in Psychiatry*. Retrieved from: <https://www.frontiersin.org/journals/psychiatry/articles/10.3389/fpsyt.2024.1328318/full>. Date: 20th July, 2025.
- Lanza, H.I., & Teeters, J.B. (2021). Social ecological predictors of opioid use among adolescents recently discharged from substance use treatment. *Frontiers in Psychology*, 12, 686414.doi.org.
- Lee, J. D., Friedmann, P.D., Kinlock, T. W., et all. (2018). Naltrexone, extended-release, to prevent relapse in opioid-dependent criminal justice offenders. *New England journal of medicine*, 374 (13), <https://doi.org>.
- Mattick, R. P., Breen, C., Kimber, J., & Davoli, M. (2014). Maintenance versus placebo or methadone maintenance of opioid dependence using buprenorphine. *Cochrane Database of Systematic Reviews*, (2), CD002207. doi.org/10.1002/14651858.CD002207.pub4.
- National Institute on Drug Abuse. (2023). *What are opioids?* U.S. Department of Health and Human services. <https://nida.nih.gov/publications/drugfacts/opioids>.
- Narcotics Control Commission of Ghana. (2023). *Annual report*. Retrieved from: <https://www.ncc.gov.gh>. Date: on 20th July, 2025
- Narcotics Control Commission Act 2020 (Act 1019). Retrieved from: <https://www.ncc.gov.gh>. Date: 20th July, 2025.
- National Institute on Drug Abuse (NIDA). (2021& 2023). *Principles of drug addiction treatment: A research-based guide (3rd ed.)*. <https://nida.nih.gov/publications/principles-drug-addiction-treatment-research-based-guide-third-edition>.
- Ofori-Adjei, D., Asare, B., & Kofi, E. (2020). False beliefs and stress in schools that leads to tramadol usage among the students. *Ghana Medical Journal*, 54(2), 78-85. doi: 10.4314/gmj.v54i2.5.
- Parimah, F., et al. (2022). Among the students practicing shisha use, deviance is linked with high school students in Accra, Ghana. 54 (1), 54-60. doi:10.1080/02791072.2021.1907002 *Journal of Psychoactive Drugs*. Date: 20th July, 2025.
- Quarshie, E.N.B., et al. (2020). Patterns and predictors of Tramadol consumption in the youth of Ghana. *BMC Public Health* 20 (1): 45-62. Date: 20th July, 2025.
- Rhodes, T. (2002). The risk environment: A framework of understanding and minimizing drug-related harm. *International Journal of Drug Policy*, 13 (2), 851094. doi.org/10.1016/S0955-3959 (02)00007-5.
- Scholl, L., Seth, P., Kariisa, M., Wilson, N., and Baldwin, G. (2019). Overdose fatality among drugs and opioids involved: United States, 2013-2017. *Morbidity and*

- Mortality Weekly Report*, 67(5152) 1419-1427.
<https://doi.org/10.15585/mm675152e1>.
- Smith, J., Brown, L., & Davis, K. (2020). Students and their attitudes towards drug use. *Substance Abuse: Research and treatment*, 15(1), 12–25.
- Stokols, D. (1996). The transfer of social ecological theory to the community health promotion guidelines. *American Journal of Health Promotion*, 10 (4), 28298.
<https://doi.org/10.4278/0890-1171-10.4.282>.
- Substance abuse and mental health services administration. (2021). Monitoring the Future: The national findings on adolescent drug use. Monitoring the future: *National survey results on drug use*. Retrieved from:
<https://www.drugabuse.gov/publications/research-reports/monitoring-future>. Date: 20th July, 2025.
- United Nations Office on Drugs and Crime (UNODC). (2021). *World drug report 2021*. UNODC, Vienna. <https://www.unodc.org/>.
- UNODC. (2020). *World drug report 2020*. United Nations.
<https://wdr.unodc.org/wdr2020/>.
- Volkow, N. D., Jones, E.B, Einstein, E.B, and Wargo, E.M. (2019). Misuse and addiction of opioids prevention and treatment: A review. *JAMA Psychiatry*, 76 (2), 208–216. <https://doi.org/10.1001/jamapsychiatry.2018.3126>.
- Volkow, N. D., & McLellan, A. T. (2016). The abuse of opioids in chronic pain misconceptions and mitigation measures. *New England journal of medicine*, 374(13) <https://doi.org/10.1056/NEJM160219>.
- Wheeler, E., Davidson, P. J., Jones, T. S., and Irwin, K. S. (2015). The Community-based opioid overdose prevention programs that offer naloxone- United States, 2010. *Morbidity and mortality weekly report*, 64 (23), <https://doi.org/10.15585/mmwr.mm6423a1>.
- World Health Organization (WHO). (2023). *Improving access to controlled medicines in Africa: Challenges and solutions*,
<https://www.who.int/publications/i/item/9789240064898>.
- Yaksh, T. L., & Wallace, M. S. (2011). Opioids, analgesia, and pain management. In L. L. Brunton, B. A. Chabner, & B. C. Knollmann (Eds.), *Goodman & Gilman's the pharmacological basis of therapeutics*. (12th ed., pp. 481–526). McGraw-Hill.