

Review Article

A Review on Hazardous Effects and Regulation of Substance Abuse in a Resource-limited Setting

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Abstract

The objective of this review is to assess the hazardous effects of substance abuse in Ethiopia. Substance abuse is a maladaptive pattern characterized by repeated adverse consequences related to the repeated use of the substance. Alcohol, khat and cigarettes are commonly used substances in urban as well as rural areas. In this review first we stated the hazardous effect of substance abuse and then identifying the most commonly missed substance use and their legal consideration. In order to prevent and control the substance abuse is developing and implementing of laws and policy are important especially for developing countries like Ethiopia. Alcohol, khat and tobacco/cigarettes were reported to be commonly used. Substance abuse is recognized to be an emerging problem in Ethiopia; only limited information is available in the literature. The adverse impact of substance use on mental health, physical health and social wellbeing of students was also stated but not well reported. There is legal consideration from the Ethiopian proclamation and polices but still there is no clear and enough laws regarding for drug abuse.

ABBREVIATIONS

FCTC– Framework Convention on Tobacco Control; FDRE- Federal Democratic Republic of Ethiopia; FMHACA –Food, Medicine and Health Care Administration and Authority, HSTP- Health Sector Transformation Plan; HIV/AIDS- Human Immune Viruses and Acquired Immune Deficiency Syndrome; USA \$ - United states America dollar, WHO- World Health Organization

INTRODUCTION

World health Organization (WHO), Defined Substance abuse as illicit consumption of any substance for the purpose of changing the way, in which a person feels, thinks or behaves without understanding the damaging physical & mental side-effects that are caused (1).

Almost all of the reviewed studies reported that a high level of substance use among university students in Ethiopia. The current

prevalence for drinking alcohol was 26.65% for smoking tobacco was 6.83% and for khat chewing was 13.13%. Although the prevalence of these substances was reported to be high, only few of the studies reviewed looked at the reasons for use which were very diverse and the adverse consequences on the students (3).

Age, mental health, peer pressure, use among the family members and friends, being male, availability of substance, alert and concentrated while studying, academic performance, detachment from the family (living alone, monthly pocket money (income) were the main driving factors for current substance abuse consumption of school adolescents and youths. Lack of a standard and protocol for selling of substances are also other factor (4).

Substance misuse and associated adverse health and social consequences are a universal problem affecting humanity. In addition to being a serious health-threatening behavior, it is

often associated with detrimental consequences and creates certain difficulties for not only their individuals who misuse the substances, but also their parents, families, school, peers, and society as a whole (5).

The solution to counter this problem is education and awareness campaign, providing alternative recreational option, restricting access through campus policies, rules and regulations, Management of substance induced disorders that are one of the most common interventions to prevent substance abuse in universities (6).

Recent studies showed that substance abuse and their effect are raising major public health and socio-economic problems worldwide, particularly in developing countries like Ethiopia. Especially, the young segments of the Ethiopian population (from high school through college and university students) are among the most at risk of using substances (7).

Ethiopia is placed among the least developed countries in the world facing recurrent drought, poor living standard, high unemployment rate, wide spread of HIV/AIDS and many other socioeconomic problems. The hardly recognized social problem, drug abuse attributes to these problems. A study conducted among high school adolescents in Ethiopia from 2001 to 2002 reported that about 8.9% drunk alcohol at least on a weekly bases, where as other reports among students in Southern Ethiopia and a private school in Addis Ababa found a prevalence of 57.7% and 19.2% respectively. These studies indicate the rising future burden of substance abuse (8).

Realizing the fact that drugs impose huge health, economic and social problems to individual users, families, the community and the nation as a whole, the Ethiopian government has ratified international conventions to control drug abuse and has also established organizational structures such as the Ethiopian Drug Administration and Control Authority, the Illicit drug control units in the Federal and Regional police commissions and drug treatment centers to deal with drug issues (9).

As the prevalence of use of substance abuse continues to increase, educating and taking preventive measure will be an increasingly important methods to reduce the consequence of substance abuse. The high prevalence of substance abuse is happening regardless of the universities and countries rules, regulations and policies to prevent substance abuse. This literature review identifies the most commonly used substance abuse in Ethiopia and assessing their hazardous effects and reviews laws that is applied in Ethiopia to control these problems and identifying their limitation that challenge the implementation of existing regulations.

METHOD

For this narrative review, literature search was conducted in Google Scholar, PubMed, Cochrane Library, and Science-Direct electronic databases for articles published between January 2000 and December 2020. A manual Google search was also used to identify some studies. A combination of Medical Subject Headings (Mesh) and free text searches are used by using structured searched words such as 'most abused substances',

'legal consideration on substance abuse', 'prohibited drugs under Ethiopian law' in key word searching. The criminal code of Ethiopia and proclamation related to drug abuse was reviewed. Boolean operators like AND/OR were used for the systematic identification of articles.

Studies were included in the review if they aimed to assess common substance abuse and legal consideration. Studies that were written in English, open access in portable document formats(PDF), and all study designs were included, while those studies published only as abstracts, editorials, or comments, and reports were excluded.

Operational Definition

Substance: something (such as drugs or alcoholic beverages) deemed harmful and usually subject to legal restriction.

Legislation: the process of making or enacting laws

Prohibition: is the forbidding by law of the manufacture, transportation, sale and use of substance.

Substance abuse: recurrent use of at least one of the substance alcohols, khat, cigarette or illicit drugs that causes clinically significant impairment including health problems, disability and failure to meet major responsibilities at work, school or home.

Substance misuse: any use of drugs that falls outside of its intended purpose.

Alcohol addiction: is persistent drinking that interferes with the person's health, legal position, interpersonal relationships, or means of livelihood.

Hazardous effect: potential for harm or an adverse effect in health, environment or economics caused by any substance use.

Proclamation: official declaration issued by a person of authority to make certain announcement.

Hazardous Effects of Substance Abuse

These components of substances produce changes in behavior characteristics by altering the chemistry of the brain. Once brain feature is altered, a man or woman experiences physical, psychological, and behavioral changes as a direct result. Changes in physical and psychological functioning are reason to damage the mind, body, behavior and can damage the social relationship. The extent to which these consequences can also relies upon the drug used, the individual using the drug, and instances below which the drug is used. People vary in their drug use, some people by no means experiment; some experiment and never use again. Others use substance irregularly, whereas others enhance addiction (10)

According to the United Nations Office report on the exercise of substance abuse, the problem of substance abuse grew to be worsening by means of complicated psycho-social challenges such as unemployment, poverty, crime, unwanted pregnancy and sexual assault. Despite challenges, drug dealers have exerted a profound influence on young men and woman to take substances so that once they emerge as addicted, they similarly have an effect on their friends into taking substances. These issues have

been overwhelming many families and communities throughout nations (11).

The accelerated exposure of younger people to western life styles through films and direct contact with young humans from those cultures who travel to their world nations has influenced demand for items of conspicuous consumption like quick music, alcohol and drugs. Substances abuse produces grave consequences, which are large and multi-sectorial in nature; consists of HIV/AIDS, health, financial and social problems. Drug abuse doesn't only affect precise individual users, however can also have a significant effect on families, friends, and subsequently the whole community of the country (12)

Hazardous Effects of Substance of Abuse on Social

A social difficulty is a hassle that influences many citizens inside a society. It is a frequent trouble in present-day society and one that many human beings attempt to solve. It is often the outcome of factors extending beyond an individual's control. Some of them are divorce, prostitution, unemployment crime (theft, hijacking, rape, forgery, etc.), violence and accident like Road traffic accidents (3).

The majority of contributors agreed that some students were intoxicated after alcohol drink. The situation leads to violent behaviors, not able to attend lesson and lab demonstrations due to overnight chewing, scoring low grades and dismissal. Damage to property and in the end ends up at police custody and/or face disciplinary measures that included suspension from campus for one year besides, the contemporary learn about uncovered other social effects like household relation difficulties, violence, accidents and different related problems are faced (13).

In a study carried out in central Ethiopia it was shown that the occurrence of sexual violent behavior among 1,294 male undergraduate college students accelerated by 67%, 33% and 67% due to khat, alcohol and cigarettes consumption, respectively (14).

Alcohol consumption is a robust contributing component to the mental and behavioral disorders of school adolescents and youths. It is attributable to expanded depressive signs and symptoms accompanied by drinking as a coping mechanism suicidal behaviors, deliberate self-harm, and improve delinquent behavior (15).

Hazardous Effects of Substance of Abuse on Health

Depending on the real compound, drug abuse such as alcohol may additionally lead to health problem, morbidity, injuries, homicides, suicides, physical dependence or psychological Addiction. Some of the mental illnesses experienced among alcohol and substance users showed depression, loneliness, risk of suicidal ideation, violent behavior and different related psychopath that triggers the importance of imposing anti-alcohol and drug strategies (16).

Some research stated concerning to physical health experiences, respondents pointed out that those who use substances like khat skip breakfast and lunch. As a result, they experience physical illnesses, weight loss and poor personal hygienic practices likely due to economic difficulties. Besides,

some respondents frankly indicated that they had been admitted to medical institution after having intoxicated and experiencing sustained damage (11).

Some studies have indicated that substance misuse is related with psychological distress, suicide tries, functional impairment, and physical ill-health and hazardous or risk taking behavior. In a study of over 10,000 adults in Butajira, a higher incidence of mental distress and suicide strive was discovered in those using alcohol and khat (17).

The studies that are performed on Risky Sexual Behaviors and Associated Factors among Jiga high school student in Amhara Region, 16% of respondents reported that they had sexual intercourse. From those who start sex, 14.7% were involved in risky sexual behavior which ought to predispose them to sexual and reproductive health problems. More than half, 56.3% of respondent's first sexual intercourse was before their eighteenth birthday. Factors associated with risky sexual behavior consists of respondents between the ages of 20 and 23 drinking alcohol, and having poor know how closer to HIV/AIDS (18).

Besides, this study observed that in spite of the scientific evidence that cigarette smoking used to be a dominant factor for lung cancer, people who smoke continue to expand risking the possibility of dependence and other health risks such as lung cancer (19).

More than 74% of HIV Seropositive in this study has mentioned that alcohol drinking increases their sex desire, which might be responsible for their exposure to HIV infection. Alcohol and drug use by mean of young people may additionally lead to earlier sexual initiation, unprotected sexual intercourse and multiple companions as properly as inserting young people at risk for sexually transmitted diseases (STDs) consisting of HIV/AIDS, unintended pregnancy, and sexual violence. A find out in Ethiopia has proven a widespread association of sexual dysfunction with intensity of khat chewing with the risk of being higher amongst early day users (9).

The studies that are done in Amanuel Psychiatric Hospital, Ethiopia, Khat consumption is section of the culture in some components of the country. The survey end result revealed that 41.86% of human beings with schizophrenia said that they abuse khat (20).

Some studies on and substance use problem amongst street homeless people in Ethiopia; 85.29% had psychotic disorders. Most of those with psychosis had schizophrenia 77.40%. Almost all of the participants had records of substance use 93.20% and about one in ten individuals had substance use disorders 10.54%. Most of the participants with substance use problems had co morbid other mental and neurologic disorder (21).

Hazardous Effects of Substance of Abuse on Economy

Since substances dependence should be taken regularly at increasing amounts when tolerance develops in order to prevent withdrawal symptoms, the negative economic consequences are evident. Additionally, the abuser spends much of his/her time searching for and then consuming the abused substance (22).

The negative economical penalties are: unemployment

ensuing in lowering national productivity, Increased expenditure by drug abusers for buying the substance of abuse, expanded value of violence, accidents and property crimes associated with drug abuse and dependence, increasing producers of substance of abuse that may occupy good sized areas of the land that in any other case be used for the cultivation of useful plants and food, Proliferations of criminal networks that make large income from trafficking substances of abuse most of them being illicit substances, transfer of illicitly obtained assets to different countries, Increased expenditure for health related issues (23).

While the apparent advantage of consumption for drug abusers have a tendency to be transient and are quickly outdated by way of a tremendous health and financial burden on society, there are possible great income for suppliers and traffickers of illicit drugs. This is without a doubt printed through the readiness of suppliers and traffickers to function in the illicit markets. Producer and trafficking countries, however, tend to pay a high social and political price for short-term financial gains (24).

Drug abuse occurs most frequently amongst young people in the 18-25 age groups. It hence consists of those who have entered or who are simply about to enter the workforce. Given the excessive unemployment rates in many countries, entry into the workforce is frequently a most important problem. Consumption of illicit drugs limits possibilities of entering or remaining in the workforce, whilst frustration induced by failure to locate sufficient employment favors drug consumption, as a result growing a vicious circle. The hyperlinks between low productivity, accidents and drug-taking behavior are nicely established. Drug abusers in the workforce impose good sized more fees on the enterprise sector, accordingly reducing its competitiveness (11).

Substances Misuse and legal Considerations in Ethiopia

Substance misuse refers to the use of psychoactive substances in a way that is harmful or hazardous to health. This includes alcohol, illicit drugs, over-the-counter and prescription medications in a way that they are not meant to be used. Over time, substance misuse can become an unhealthy way to respond to stress and anxiety, particularly when managing a chronic illness. Also can lead to dependency where cognitive, behavioral and physiological problems develop which results in a strong desire to take the drug, difficulties in controlling use, persisting in its use despite harmful consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance, and sometimes a physical withdrawal state (25).

It is important to limit the numbers of narcotic drugs and psychotropic substances to be used nationally. This would ensure that only narcotic drugs and psychotropic substances, which are necessary for the medical care of the population and research, are put on the market. Accordingly, Ethiopia has included the very important and essential narcotic drugs and psychotropic substances in the national list of drugs for Ethiopia. Internationally controlled narcotic drugs and psychotropic substances that are approved for use and included in the national list of drugs for Ethiopia are: narcotic include codeine, fentanyl, methadone, morphine, pethidine and psychotropic substance include Bromazepam Pentobarbital, Chlorodiazepoxide, Phenobarbital,

Methadone, Clonazepam, Temazepam, Diazepam, Medazepam, Oxazepam, Pentazocine (26).

Realizing the fact that drugs impose huge health, economic and social problems to individual users, families, the community and the nation as a whole, the Ethiopian government has ratified international conventions adopted by the UN to control drug abuse include; the 1961 Single Convention on Narcotic Drugs is the first comprehensive international legal instrument that consolidated earlier treaties and conventions on narcotics and broadened their scopes of application. The 1971 Convention on Psychotropic Substances establishes an international control system for psychotropic substances as a response to their increasingly expanded varieties that resulted from the advance in science and technology and the 1988 Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances provides additional legal mechanisms for enforcing the two earlier conventions and has also established organizational structures such as the Ethiopian Drug Administration and Control Authority, the Illicit drug control units in the Federal and Regional police commissions, drug treatment centers to deal with drug issues (27).

Most Commonly Used Substance and Legal Consideration in Ethiopia

Alcohol, Khat, Tobacco, Hashish (Itse-fars), Benzene sniffing/ Inhalation, Pethidine and Benzodiazepines are substances that are commonly abused in Ethiopia (4).

Alcohol: Alcohol is a central nervous system depressant and intoxicant; it is also the most commonly used psychoactive substance in both mentally healthy and mentally ill individuals. Alcoholism is the excessive use of ethanol-containing beverages. The exact nature of alcoholism and alcohol dependency remains controversial, because of socio-cultural variability in the use of alcohol and the apparent overlap between normal drinking behavior and alcohol abuse (4).

Regulation on Alcohol Users in Ethiopia: Ethiopia has banned all advertising of alcoholic drinks, as part of efforts to promote healthy living in the East African nation. In addition to banning alcoholic drinks commercials, lottery prizes connected with alcoholic drinks and billboards promoting alcoholic drinks are prohibited under the new proclamation. Under the new law, any advertisement of an alcoholic product shall contain a warning, as appropriate in writing or sound that it is illegal to sell it to a person under the age of 18. The law also prohibits selling any alcoholic drink in health institutions, education facilities, universities and colleges, government institutions, places of worship, sporting places, and cinema houses (28).

Khat: Khat (*Catha edulis*, Celastraceae) is a widely grown and used green leafy plant whose fresh leaves are chewed for brain stimulation and other purposes. Many historians believe that khat is a plant indigenous to Ethiopia. The use is deeply rooted in the regional customs and traditions. College and university students consume khat to get mental alertness and to work hard in their academic endeavors. The prevalence rates of khat are different from place to place in Ethiopia. In 2000 a study conducted in Jimma Town, the prevalence of khat chewing was 30.6% out of

which Muslims constituted 77.1%. About two thirds of the khat chewers were males (29)

Regulation on khat Users in Ethiopia: The approach of the Government of Ethiopia to the regulation of khat is characterized by policy dilemma. On the one hand, the Government includes khat in its annual earnings plan as one of its sources of foreign exchange earnings and source of tax-based revenue. On the other hand, the government exhibits disapproval towards the cultivation and consumption of khat that it has not addressed khat in its agriculture sector policy and strategy documents. It is not covered by the agricultural extension services package. The Health Sector Transformation Plan (HSTP) aims at reducing the number of khat consumers by 35% at the national level (30).

Further, the Educational Management Organization prohibits teachers and students from using, among other things, khat in school premises. Similarly, Road Traffic Control Regulation issued by the FDRE Council of Ministers provides that no driver may drive vehicle while chewing or after chewing khat. Else, there is no comprehensive policy or legal instrument that pertains to or regulates the production, distribution and consumption of khat in Ethiopia. Chat locally produced and to be supplied for sale or destined for sale shall be charged at a tax rate of Birr 5 per kilogram. The exporters of chat shall be liable to pay the tax and 25% of the tax as penalty if they fail to export the chat (31)

Tobacco: The use of tobacco leaf to create and satisfy nicotine addiction was introduced to Columbus by Native Americans and spread rapidly to Europe. The use of tobacco as cigarettes, however, is predominantly a twentieth century phenomenon. Nicotine is the principal constituent of tobacco responsible for its addictive character. Addicted smokers regulate their nicotine intake and blood levels by adjusting the frequency and intensity of their tobacco use both to obtain the desired psychoactive effects and avoid withdrawal (32).

Tobacco attribute mortality is expected to increase from 14% of total mortality worldwide in 1990 to 23% in 2020. In Ethiopia in 1983, lifetime prevalence rate of cigarette smoking among college students was reported to be 31.9%. In 2001, the lifetime prevalence among college students decreased to 13.1%. A study done among Ethiopian university instructors in 2001 revealed a lifetime prevalence of 28.2% and current prevalence of 13.3% (32).

Regulation on Tobacco Users in Ethiopia:

- A. Smoking and the use of any tobacco product is prohibited in any part of all indoor public places, workplaces and on all means of public transport. Smoking is also prohibited in outdoor areas of schools and universities, government facilities, youth centers, amusement parks, among other places. Sub-national jurisdictions may enact smoke free laws that are more stringent than the national law.
- B. All indirect or direct forms of tobacco advertising and promotion are prohibited. However, the law excludes legitimate forms of expression recognized by the FCTC Art.13. Guidelines that could be construed as advertising such as trade newsletters, legitimate journalist or artistic expression among other things. All forms of financial or

other tobacco sponsorship are prohibited.

- C. Rotating text and pictorial health warnings are required to cover 70 percent of the front and the back of tobacco product packaging. Misleading packaging and labeling, including terms such as "light" and "low tar" and other signs, is prohibited.
- D. The law regulates specified contents of cigarettes, including banning characterizing flavors; ingredients that create the impression of health benefits; and ingredients that are associated with energy and vitality. The law requires that manufacturers and importers disclose to government authority's information on the contents and emissions of their products
- E. The law prohibits the sale of tobacco products via the internet and within 100 meters of schools, health institutions, and youth centers. In addition, the law prohibits the sale of shisha, single cigarettes, and small packets of cigarettes. The sale of tobacco products is prohibited to persons under the age of 21.
- F. The law bans the manufacture, wholesale, distribution, sale or offer for sale, and import to trade of any e-cigarette or "other related cigarette resembling technology product." There are no restrictions on use or advertising, promotion and sponsorship of e-cigarettes.
- G. Price and tax measures are an important and effective means of reducing tobacco consumption, especially among young people. Raising taxes and hence the price of cigarettes and other tobacco products has a double advantage: it not only generates revenue for government, but also produces a prompt decline tobacco use, particularly among young people and low-income groups. For example, there are case studies of well implemented price and tax measures from Norway, South Africa among others (33)

The direct or indirect dissemination of the advertisement of cigarette or other tobacco products and advertisement of narcotic drug or psychotropic substance Article 25(1) of this Proclamation shall be punishable with a fine not less than Birr 30,000 and not exceeding Birr 250,000. In this regard, the city of Mekele introduced smoke free laws at public places with measure and became the first to ban smoking in public places. It is provided that anyone who trespasses the ban will be subject to a fine of 1000 ETB and tobacco taxation prices of most sold brand, pack of 20 cigarettes is ETB 15.00 (28).

Psychotropic: A psychotropic drug is any chemical agent that primary or significant effects are on the central nervous system. E.g., Cannabis (Marijuana or Hashish), Cannabis is more commonly known as hashish in Ethiopia, referring to marijuana. Unlike alcohol and tobacco products, marijuana is illegal in Ethiopia. The cannabis plant is cultivated in several places in the country, but more widely in central, western and northwestern locations. A well-recognized place for its cultivation is the Shashemenee area in southern Ethiopia. Cannabis is consumed as marijuana smoke, although it is not locally known by this name (35).

Regulation on Cannabis Users in Ethiopian: Cannabis use is forbidden by law. If you're found in possession of it, you could be given a six-month prison sentence and a fine. However, it's not widely used in the country, only 2.6% of Ethiopians use cannabis. If you are arrested for cannabis possession in the country, you are meant to be brought to court within 48 hours. It is also illegal to sell cannabis in Ethiopia and penalties are more severe for this type of offence. They range from five to ten years' imprisonment plus a fine of 100,000 Ethiopian birr. The authorities regularly conduct checks at border crossings and ports of entry. The law does not permit you to buy or sell cannabis seeds in Ethiopia. This means you can't mail them through the post (27).

Regulations on Narcotic Drugs and Psychotropic Substances in Ethiopia:

- A. A special license issued by the Authority shall be required to import, export, manufacture or distribute narcotic drugs and a person's having drug trade license shall be issued only to persons having drug trade license organizations
- B. Any person having a permanent special license to import or export narcotic drugs or psychotropic substances shall apply for a special import or export permit for each consignment; such special permit shall be valid only for ninety (90) days. No person shall import or export narcotic drugs or psychotropic substances through post office or by ship and packing them with other drugs or articles.
- C. Only a medical practitioner who is registered and have a special license shall prescribe narcotic drugs. No medical practitioner shall prescribe narcotic drugs and psychotropic substances for himself. It is only being prescribed on a special prescription paper. The management of and standard that any prescription for narcotic drugs or psychotropic substances shall fulfill would be set forth in the regulation to be issued pursuant to this Proclamation
- D. Storage Narcotic drugs and psychotropic substances and invoices, registers, and prescriptions shall be stored in a lockable metal cupboard or in a special room the key of which shall at all times remain in the hands of the authorized professional.
- E. Any person shall keep damaged, expired, or seized narcotic drugs or psychotropic substances in a separate place and shall dispose them in accordance with the directive to be issued by the Authority pursuant to this Proclamation.
- F. Any person who is licensed pursuant to this Proclamation and who ceases to operate his business shall deal with the stocks of narcotic drugs, psychotropic substances, invoices, other documents, and prescriptions related to same as directed by the Authority.
- G. Any person who is licensed pursuant to this Proclamation shall keep records and send reports about narcotic drugs or psychotropic substances in accordance with a directive that shall be issued by the Authority (36)

Proclamation No 414/2004 the criminal code of the FDRE

Article 525, producing making trafficking in or using poisonous or Narcotic and Psychotropic substances is an aggravate offence the provision who ever without special authorization and intent of trafficking cultivates, produces, makes transforms or manufactures poisons, narcotic drugs or psychotropic substances or plants, or possesses, offers for sell, dispatch, distributes, or procures for another any of those substance listed under can be punishable with regrious imprisonment for not less than 5-15 year and fine not exceeding 100,000 Birr (24).

Other sub articles of this provision stated that every offender are punish with regrious Imprisonment not exceeding five years-seven years with 50,000 Birr fine. Even if 1957 penal code Art 510 revised the provision stated that who so ever, without lawful authority, produce or makes, transform, imports or transport, aQUIRES or receives, stores, offers for sale or distributes, or procures for another, poisons, drugs or narcotic substances is punishable simple imprisonment of not less than 3 months to a regrious imprisonment not exceeding 5 years as well as a fine of 20,000-3,000 birr respectively (24).

Regulation on Illegal Drug Trade:

- 1) Any licensed person who impedes the work of inspector assigned pursuant to Article 14 of this Proclamation shall be punishable with imprisonment for not more than six months or with a fine not exceeding ten thousand Birr or with both.
- 2) Transfers the licenses issued to him to any person by way of any means shall be punishable with imprisonment of not less than one year and not more than three years and a fine of not less than five thousand Birr and not exceeding twenty thousand Birr.
- 3) Any licensed drug manufacturer, importer, exporter or wholesaler who sales drug to a person without a license shall be punishable with imprisonment of not less than two years and not exceeding five years and with a fine of not less than five thousand Birr and not exceeding twenty thousand Birr.
- 4) Any person who trades drug without a certificate of competence shall be punishable with imprisonment for not less than five years and not exceeding seven years and with a fine of not less than twenty thousand Birr and not exceeding fifty thousand Birr.
- 5) Any licensed drug retailer who wholesales, or dispenses drugs in excess or less quantity than that justified by medical practice or purchase drugs from a person who is not licensed pursuant to this proclamation shall be punishable with imprisonment of not less than two years and not exceeding five years and with a fine of not less than 5,000 Birr and not exceeding 20,000 Birr.
- 6) Any person exercising unfair trade practice by counterfeiting, or adulterating or affixing or enclosing mislabel to packaging material, or buying or selling substandard or expired drugs shall be punishable with imprisonment of not less than 10 years and not exceeding 20 years and with a fine of not less than 20, 000 Birr and not exceeding 50, 000 Birr.

7) Any person, who fails to comply with the provisions of this Proclamation, or regulations and directives issued pursuant to this Proclamation, shall be punishable with imprisonment of not exceeding two years and with a fine of not exceeding ten thousand Birr. For the execution of this Article drug shall mean any substance excluding narcotic drugs and psychotropic substances.

8) Sells or supplies narcotic drugs or psychotropic substances on presentation of a prescription, where he knows that the presentation is forged, unlawfully altered, cancelled or expired, shall be punishable with imprisonment of not less than 7 years and not exceeding 15 years and with a fine of not less than thirty thousand Birr and not exceeding fifty thousand Birr (36).

CONTROL METHODS

Control of substance abuse in generally includes: Control of production, supply and availability stopping the supply process at its source, Crop eradication, Crop substitution, provision of suitable alternative sources of income, Control of distribution and access. Demand reduction: -Reducing consumption. Increase prices Control of advertising and promotion. Increase individual resistance from social pressure through health education. Ethiopia is a party to the Single Convention on Narcotic drugs of 1961 and the 1971 convention on psychotropic substances. In accordance with the stipulations of the conventions, the Ministry of Health, Pharmacy Department is the central body to exercise all control measures to reduce the supply and demand for drugs and thereby limit the use of drugs to exclusively medical and scientific purposes (1).

The principal laws under which Narcotic drugs and psychotropic substances are regulated in Ethiopia are: The Penal code of 1956 and the Pharmacy Regulation of 1964. The basis of drug control legislation is the pharmacy regulation of 1964, which regulates the supply of pharmaceutical products at all stages, including registration, manufacture, import, export, store, quality control and distribution (27).

CONCLUSIONS

Currently, substance abuse is one of the most burning public health problems in Ethiopia. Although, it has been known that this public health problem is a pressing issue, the real extent and magnitude of drug abuse is not yet properly explored. Alcohol, khat and tobacco/cigarettes were identified as most commonly used substance. The adverse impact of substance use like chat, smoking on academic performance has been reported by some studies, although its impact on mental health, physical health and social wellbeing of students was also stated but not well reported.

After realizing the consequence of substance abuse, we over viewed their legal consideration from the Ethiopian proclamation and policies but still there is no clear and enough laws regarding for drug abuse like kchat. Lack of discussion on the topic by the Government of Ethiopia is perhaps driven by silent contentment over rising tax revenues as well as concerns over the sensitivities of regulating a substance grown by millions of farmers and consumed by millions of citizens.

RECOMMENDATIONS

The following Recommendations are given based on the findings of the literature review:

- The Ministry of Health and FMHACA should gather and keep information about substance related health complications including deaths, and mental and physiological injuries.
- Law enforcement organs including the judicial system, the Ministry of Justice, the Police and prisons administration should collect and record data of persons arrested for drug abuse related offenses, the punishment or other measures they received; seizures of articles made; and the resource deployed for the arrest, trial and correction of the offense.
- The traffic police should collect and keep data of persons arrested for traffic infractions related to drug and alcohol abuse, the number of lives lost and physical injuries and property damages sustained.
- The Ministry of Education can gather and keep a record of information on substance abuse problems at universities and schools and should take interventions so as to improve the situation.
- The media has a significant contribution to make by launching concerted awareness creation exercise.
- The society should participate in prevention and control of substance abuse
- Government may also need to look for alternative sources of employment and income generation.

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