A Review on Factors that Predispose Youths and Adolescents to Using Substances of Abuse in Developed and Less Developing Countries: Are Intervention Programs Useful?

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Introduction and Literature Review

Effects of substances of abuse

School based educational preventive programs for substances of abuse such as tobacco, alcohol, marijuana, cocaine, heroin, methylenedioxymethamphetamine (MDMA/ecstasy) and use of many other illicit substances should be encouraged globally. These substances include tobacco, alcohol, marijuana, cocaine, heroin, methylenedioxymethamphetamine (MDMA/ecstasy) and many others. Sensitizing the young generation of the harmful effects related to use of these substances is dangerous and can have serious consequences in terms of their health status as well as affecting their academic performance while in school. The United States in particular is in the drivers seat in engineering designing, implementation and sustainability of these preventive programs almost in every school. Such preventive programs are also highly needed by developing countries but they lack resources as these programs are expensive to maintain and sustain them.

Substance use has been shown to be an important factor associated with having unprotected sexual intercourse among adolescents [3]. However, the most common drugs used in conjunction with unsafe sex are marijuana, alcohol, methylenedioxymethamphetamine (ecstasy), inhalants and amphetamine [3]. Most substance follow the gateway hypothesis. This gateway hypothesis has significant influence when designing preventive strategies for adolescents substance users [4]. According to the gateway theory, the sequence of substance use initiation in adolescents is reported to begin with either alcohol or cigarettes and followed with marijuana and other illicit substances such as cocaine, methamphetamine and heroin [5,6]. However, the sequences of substance initiation vary between gender, between early- and late onset drug users [7].

School based programs

Such school based educational preventive programs being carried or done in the US if they were to be implemented in developing countries like Tanzania and many others in the Africa would be a great idea. These are good programs because they teach a pupil how to deal or escape all temptations exerted by peers/friends persuasion to use these substances. The pupil develops self esteem and efficacy in refuse to use these drugs. As these youth grow they are able to develop mechanisms of coping strategies on how to refrain from using drugs. Emphasis is kept in schools because this forms a good start or base for our youths and adolescents to start learning and understanding the where abouts related to illicit use of substances. Furthermore, they also learn what they can do to the body, especially when one starts using them at their young age.

Factors influencing substances use

It is well known that use of substances such as cigarettes, marijuana, alcohol and other illicit substances begins a younger age between 12-17 years [1]. However, use of these substances among youths (teens) and adolescents is reported to be due to several psychological factors. These factors are associated and influenced with group peers. Thus, close friends approval of use, self esteem, poor neighbourhood /dangerous environment, broken families, lack of parenting skills contribute to illicit use of these substances [2]. It is generally agreed that drug abuse is destructive in nature and have devastating consequences for individuals, their families and the society at large.

Abstract

School based educational preventive programs for substances of abuse such as tobacco, alcohol, marijuana, cocaine, heroin, methylenedioxymethamphetamine (MDMA/ecstasy) and use of many other illicit substances should be encouraged globally in order to start sensitizing the young generation of the harmful effects related to use of these substances. Such educational programs if incorporated within the school curricula helps to make pupils or students grow while knowing that using these substances is dangerous and can have serious consequences in terms of their health status as well as affecting their academic performance while in school. The United States in particular is in the drivers seat in engineering designing, implementation and sustainability of these preventive programs almost in every school. Such preventive programs are also highly needed by developing countries but they lack resources as these programs are expensive to maintain and sustain them.

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This sequence of substance initiation does not mean that it is a hard rule that this process is always followed. The gateway just provides for a way in life how intervention efforts should be tailored targeting different drugs including individuals who use illicit substances [8].

**Negative effects of abused substances**

Tobacco for example among other substances of abuse, is generally associated with consequences which are well documented in developed countries like the U.S. Smoking by youth and adolescents globally represents an important health challenge where immediate interventions are needed targeting this age group of smokers. However, in Africa and particularly in Tanzania where tobacco is locally grown for economic reasons for both individuals as well as raising foreign revenues for these poor governments it may be difficult for these countries to implement strict tobacco control measures.

The last 25 years have shown that smoking is increasing in most developing countries (UN, 2000). Tobacco use has been the leading preventable cause of deaths and lung, vascular and other coronary diseases in the U.S. [9]. This risk behaviour is reported to be often initiated during childhood and adolescence as more than 70% of adult smokers report to have started smoking before they reached age 18 [10].

According to the Center for Disease Control and Prevention (CDC), more than 60% of high school aged adolescents have ever smoked and almost 30% are current smokers [11]. Based on these statistics, the U.S Public Health Services was prompted to adopt a youth centered tobacco control policy advocating increased tobacco prevention and intervention programs at Local, State and Federal levels [10].

**Interaction between parents and children**

There are several studies which have proposed that monitoring (watching) of children behavior by skilled and responsible parents is important. However, it has been further reported that well monitored youths are less likely to be involved in delinquent and other problem related behaviors [12]. These authors further suggested that instead of only saying that parents should monitor their children, there should be an establishment of a two way system (i.e children should as well get time to discuss or ask their parents and parents must make sure they make themselves available to listen and discuss with their children). In this way of free dialogue with their children can build a strong relationship and confidence and thereby making children able or free to disclose or share anything with their parents only if a close relationship is built in or exists.

It was found that parents and parent knowledge came mainly from child disclosure and child disclosure was the source of knowledge that was most closely linked to broad and narrow measures of delinquency (norm breaking and police contact) [12]. However, it was concluded from the study that monitoring or watching childhood behavior/movements was not the best approach or method for parental behavior and that new methods or approaches need to incorporate and use other factors as well that determine or influence child disclosure.

There are still questions or concerns on how much influence parents have on their children's substance use. Once the answers become known or clear they can help to determine whether current school based prevention programs that address peer pressure may be sufficient or whether parents need to be involved. It has been reported that there is an increasing number of parents and friends using substances which were associated with greater risk of adolescent substance use and had lower levels of refusal self-efficacy [13].

Furthermore, there are reports showing a significant adverse effects of alcohol and marijuana use in high school graduate students in the U.S [14]. In particular evidence comes from their study which show that an increase in incidence of frequent drinking liquor and wine consumption, and frequent marijuana use, significantly reduce their chances to graduate or perform well or complete their high school education [14].

When other interventions were instituted such as discrimination of alcohol, cigarettes by raising prices and raising minimum drinking age for liquor increased or improved the probability of high school graduation in adolescents [14]. But the relationship between becoming a less frequent drinker, marijuana decriminalization and marijuana use was not significant. From this study it was concluded that marijuana use and frequent drinking are substitute activities. Illicit substance abuse reduces the rate of high school completion, reduces expected future earnings and creates potential health problems. Thus, school based preventive programs which discourage substance use (alcohol, cigarettes, marijuana, cocaine, opiates, methamphetamine) are highly recommended in order to alleviate these problems at an early age before they become chronic abusers.

**Influence of peers and siblings**

It has also been reported that presence of older siblings in homes with behavioral willingness (BW) to use substances can have a strong influence to other younger siblings in the family and this interaction was found to be stronger for families living in high risk neighborhood or broken families [15,16]. Furthermore, granies as well have been reported to have both positive as well as negative influences to adolescents when staying with their grandparents (being raised) over a much longer period of time [16].

The already established school based preventive programs should consider incorporating and involving parents as well in their preventive efforts. Information sharing can help each other to lay strategies how to deal with drug problem related behaviors in adolescents/school children. In this way both parties can be that alcohol, and drugs are a real life fact in this modern world. As soon or later kids will make their own choice and decisions about alcohol and other drug use. Parents must be aware and accept the fact that when a child is growing he/she may begin to use alcohol and other illicit substances at a much earlier than ever before. This may be as a result of attaining adolescence at a much earlier period than ever before. In such situations normally conflict prevails in these families if the child does not want to listen to what parents and teachers tell him/her/say about illicit substances.

When dealing with school based preventive programs, teachers and school boards must involve parents for the success of these programs and few parents should be incorporated in the school boards as members. Parents are extremely important in influencing children's positive development and behavior, though they are not the only influence. Other influencing factors or forces include biological (internal) and environmental (external) factors as well may be responsible in shaping the development of characteristics [17] and behavior of children though in this aspect parents contribute significantly to both forces (internal and external) [17].

Scientifically, parents are known to pass on the genetic code that determines characteristics such as on the genetic code that determines
characteristics such as gender, height, physical appearance and they greatly influence other attributes such as temperament, personality and the progression through the various developmental stages. Thus, genetic factors are suggested to be responsible in predisposing some children to use of alcohol and other illicit drug use behaviors [16].

Apart from genetic predispositions, there are other non-genetic factors as well being contributing to such drug use behaviors of children such as mothers use of alcohol or other drugs during pregnancy or a malfunction of an organ or a gland. All these can result in modification of the child’s biological make up.

Environmental factors that influence development of the child, are the child’s immediate social and psychological environment. This psychological environment consists of parents, intact families, child care personnel, siblings, relatives, teachers, peers and neighbors and other socio-economic and cultural world in which the child develops. Parents and teachers both play a significant role in creating this world. Furthermore, their economic resources partly determine where and how the child lives. Furthermore, cultural values and norms help to transmit or pass over significant influence on adolescent’s behaviors.

There are other many more biological and environmental factors that affect characteristics and behaviors. Sadly enough is to say that the social and cultural world is not entirely under the parents and teachers control. Many people other than parents and teachers, help to shape the child’s immediate social and psychological environment. Parents need to know that their contribution to child development and behavior is both powerful and significant.

Role of parents and teachers

Parents and teachers have the role to play in preventing children from various forms of harm whether at home or at school. Therefore, their functional role includes parenting children from bodily harm by making the home and school as safe environment, sheltering children from elements. This helps in preventing physical abuse or sexual assault and guarding their developing sense of personal adequacy and competence. It involves as well protecting children from various forms of peer group harm or influence and pressure to engage in other problems related behaviors.

Other forms of harm particularly for the ethnic minorities in developed countries, is the damage that racial and ethnic discrimination can do to a child’s developing identify. Parents and teachers have to protect their children from all these preceedings at all times throughout history. Presently, parents and teachers are concerned about the physical, social and psychological dangers of the wide use of alcohol, cigarettes, marijuana, cocaine, opiates etc. The protective function must be adapted and enhanced in order to address these increased threats to children in homes, neighbourhoods, and in schools as part of school or home based preventive care / educational programs [16].

Parents as role models

Parents and teachers have a major role in providing guidance (facilitate and direct development). They are supposed to be involved in guiding all aspects of their children's development, whether they were aware of it or not. They affect physical development for example... by feeding, cleaning, and dressing children, attending to their health care and needs by nurturing children and providing them love and acceptance. They are supposed to guide social development by providing and setting limits and helping them to learn socially appropriate and acceptable behavior. They are influential in their children's intellectual development by providing in home learning opportunities. Parents and teachers instill also spiritual, moral, cultural norms and values.

The child-guidance function is carried out by communicating verbally and physically. It also goes further to sharing information and by providing parental models consistent with the characteristics and values parents want to promote. The overall goal of child guidance is to seek and improving the quality of parent-child-relationship and create a warm, happy and secure home environment. Good communication, effective limit setting, and problem-solving skills seems to help serve as protective buffer against alcohol and other substances of abuse.

Parents provide an ideal primary connection between their children and other people and societal institutions. This is because, it is the parents who introduce children to extended families, neighbors, friends, television, health facilities and practitioners [18]. So they play an important role of advocacy function in this aspect. They also help their children to understand the purpose of cultural norms and values of various institutions. However, minority parents may face particular challenges in carrying out this function. Parents may often have to be sensitive to ways which these institutions or society view them and their children.

It is important to emphasize the role of parents as role models in bringing up children. An important literature discusses the influence of drug and alcohol use at an early age on the development of dependence/addiction [19]. Thus, both parents and the society has a big role to play in ameliorating any such pre-dispositions in the affected youths and adolescents. For example, current trends show that youth or children stand a high risk of being drug abusers if raised by parents who are irresponsible, alcoholics, fragmented families or being raised by a single parent [2,19]. Thus, youth of high risk such as those raised by alcoholics and other addicted parents should be focal points or targets for of any available interventions. In fact this is a very painful and troublesome situation as the parent(s) may be suffering from substance use disorders and may be incapable of providing necessary expected guidance for their children. Yet these parents may be the most influential source as children grow they always see what adults/parents are doing and they usually imitate behaviors.

Why Prevention Programs?

From this review it may be suggested that primary prevention is an important preventive program. This is because it discourages heavy use which may yield public health benefits. Furthermore, the need to institute secondary prevention programs should as well be considered as it discourages progression of heavy use among current users. In addition to discouraging heavy use, other elements of drug education programs based on harm-reduction principles should be applied. These might include discouraging progression from using one drug or less dangerous drugs to using multiple drugs or more dangerous combinations [20].

There exists some contradictions, as it is reported that zero-tolerance campaigns and fearful messages addressing only negative consequences of substance use may be less credible. Therefore, adolescents programs acknowledging both the positive and negative aspects of these compounds should be applied and instituted to these individual groups [20]. In school based program we expect teachers to just deal with teaching about the negative aspects. However, it remains to be resolved that may be school based programs should as well incorporate and address the positive aspects of these drugs if any?
One would ask why should more preventive emphasis be given or directed towards schools? The answer is that adolescents are given attention because adolescence is developmentally a period of value and identity formation. Furthermore, health risk behaviors exhibit during this time period and may be exacerbated in adulthood [21]. Hence the importance of giving priority to school health preventive programs about substances of abuse especially if any country aims at building a future healthy nation. As most substance abusers start at an young age and progress to adulthood. This is a productive age of energetic people and an important human resource (work force) for any country be a developed or a developing one.

References