Review Article

Substance use in youth

Nazish Hussain Ali Pachani
Sigma Theta Tau International and Aga Khan University Hospital, Karachi.
Corresponding Author Email: nazishpachani@gmail.com

Abstract
Youth is the time period of vast exploration and curiosity. Young people begin to explore the world around. They acquire pleasure and satisfaction by carrying out risky behaviors to satisfy their impulse. Substance use is one such action that young people get attraction from certain individual, familial, social and environmental variables. Young people's past as well as present stressful experience and maladaptive coping style create strong affinity. Diverse researches have favored that pubertal transition, parenting style, family cohesiveness, maternal use, modeling, conditioning, and socialization reflect on youth's upbringing. It is evident that the substance use is one of the cognitive and behavioral outcome. There is a need to construct a most supportive zone around youth that enables them to broader their horizon of emotional intelligence. As a health care professional, knowledge about all the levels of prevention can aid communities to have an addiction free environment. Individual counselling, family therapy, national and international awareness programs would help in eradicating substance use. Collaborative work of Governmental and Non-Governmental Organizations (NGO’s) would motivate youth to acquire a substance free lifestyle.

Key words
Substance use, Youth, Environment, Stress, Awareness

Introduction
Fairy tales play an important role in the life of an individual. It helps to develop a child's imagination and perception to see the real world around. They identify the characters and form their consciousness. Fairy tale's ending mostly fantasies the thought that, after all, the odds there would always be a happy ending. Later, with the growing age child struggle to find that magic stick in order to have the desired result. They perceive it to be the only way to acquire happiness. Similarly, Eugene O'Neill, an Irish American play writer, quoted that; “Obsessed by a fairy tale, we spend our lives searching for a magic door and a lost kingdom of peace.”

When a child grows up into a youth, he/she tries to experiment with all new things that come in its way and satisfies their impulsivity in an attempt to acquire pleasure (McLeod, 2007). Youth is the time period between the dependence of childhood to the independence of adulthood, usually the age between 15-24 years (UNESCO, 2012). 1.8 billion Youth population lives on the earth today. This is the biggest figure ever reported in the human history. (UNFPA, 2014). Their big number imposes greater challenges for the societies. Young people try out with risky behavior and substance use is one of the behavior that begins in between 7th and 10th grades in high school (Arnett, 2000). In the United States 32.8-37.1% of high school youth drink alcohol (Centers for Disease Control and Prevention, 2013). In Pakistan, Anti-Narcotic Force (ANF) report states that four million Pakistani youths are victim of substance abuse (Aasadm, 2014). A cross-sectional study conducted at King Edward Medical
University in Lahore reported that substance used by students include cigarettes 78.9%, alcohol 26.2%, cannabis 25.5%, amphetamines 14.6%, benzodiazepines 3.6% and glue sniffing 0.4% (Imran, N., et al. 2011). Center on Addiction and Substance Abuse (CASA) at Columbia University researched that the utilization of alcohol, cigarettes, and marijuana is an entry or gateway drugs that will have potential to lead youth to become a regular drug addict in the future (Fortinash & Holoday-Worret, 2012). I have witnessed a lot of people at my work place who opt for substance use knowing all its side effects and dangerous outcomes, even though they repeatedly do it. This experience ponders me to determine the factors which fuel them. This paper would discuss about the individual, familial, social and environmental factors that motivate youth to substance use. Moreover, it also emphasizes some of the measures to decelerate the concern at different levels.

**Individual Factors**

Youth strives to create their unique and distinctive identity of its own. Their past experience and personality trait aid them to build their separate image in society. Psychodynamic approach assumes that our behaviors and emotions are governed by our past childhood experience (McLeod, 2007). More than 90% of drug users have evident one or more traumatic incident in their life time (Giordano et al., 2014). DSM-IV stressor criteria have listed down traumas that predispose individual to early substance use. This includes; a family member diagnosed with a malignant disease, being a victim of violence or abuse, physical or functional disability from a severe accident and having an emotional distress from the death of any significant person or pet (Crum et al., 2013). In response to these stresses, the child develops maladaptive schema leading to increase motivation for substance use (Hermann, Zupanick, & Dombeck, 2013). Moreover, certain individuality variables are thought to enhance an affinity towards addict's behavior (Townsend, 2011). Regulatory focus theory states that individual acquire behavior mainly for two purposes; to have pleasure or to avoid pain (Higgins, 2000). For instance, young children while doing preparation for exam use a central nervous system (CNS) stimulant that keep them alert and awake throughout the night and help them to focus better in exams (Maithya, 2009). Furthermore, children who tend to rely on CNS stimulant starts to use substance for an appetite-suppressant effect in order to control their weight (Fortinash & Holoday-Worret, 2012). Some clinicians believe that individuals with low self-esteem, multiple depression, inability to relax and communicate with others are at risk for substance use (Townsend, 2011). Therefore, people with maladaptive schemas, self-medicate themselves to regulate mood symptom as well as to attain relief from all psychic pain and anxiety (Crum et al., 2013). Youngsters, who demonstrate behavioral under control (deferred gratification) and poor self-regulation are more likely to use substances. For instance, deficient abilities, including planning, organizational skill, and problem solving are common cognitive and behavioral processes that become hard for youth to think about themselves (Lerner, R. M., & Steinberg, L. D., 2004). Eventually, youth perceive substance use to be their magic stick that would bring an end to all their stresses of life. Thus the creation of physiological euphoric state positively reinforces youth to continue illicit drug use at their own pace (Townsend, 2011). Once the child starts to use substances, then it is mostly difficult to prohibit it. This is because the child experience withdrawal symptom which negatively reinforce youth
to take it (The Etiology of Substance Abuse, 2009). This is an indirect variable to its etiology. This creates a strong cathexis in mind that motivates individual to use it again and again (Fortinash & Holoday-Worret, 2012). Another individual determinant mentioned in the Handbook of Adolescent Psychology emphasizes the relationship between the uses of a substance to pubertal transition (Lerner & Steinberg, 2004). They publish that those who acquire physiologic reproductive maturity earlier than their peer are more likely to indulged in substance use than to those who enter pubertal stage later (Lerner & Steinberg, 2004).

**Familial Factors**

Ineffective parenting, parental mistrust, family dynamics and maternal use have been depicted to play a critical role in developing risk for substance use in the long term. Secure attachment between a child and a parent promotes healthier interaction and aid the child to better comprehend their state of mind (Hermann, Zupanick, & Dombeck, 2013). If children observed a nonalignment in parent’s instruction and performance, it results in intra-psychic conflict leading to adolescent substance use (Maithya, 2009). Youth consider the substance use as an antidote for all psychic disputes rather than to adopt healthier coping strategies. Studies have shown that the offspring of alcoholics is thrice more likely to ingest alcohol as compared to other offspring whose parents do not (Townsend, 2011). In addition, those children who are being exposed by bar culture from their parents at the family events and ceremonies are tend to rely on substance use specifically alcohol later in life (Maithya, 2009). Besides this, it is being claimed that youth who unable to acquire unconditional positive regard from family, may be due to parent absenteeism, harsh discipline and those individuals living in hostels, opt to get this regard elsewhere from another group of people (Maithya, 2009). This had made their child vulnerable to join a network of substance users. Epidemiologic study in Karachi evident that 76.44% of respondent reported that their parents are unaware about their smoking habit, because their parent is working individuals and spend less time with them (Bushra et al., 2013). Furthermore, The Handbook of Adolescent Psychology highlights the strongest determining factor leading to substance use over time, is the mutual understanding among all family members. It states that the higher the instability in the family, the higher the risk to use illicit drug over time. This includes; family conflicts, lack of family cohesion, parental divorce and single-parent family have strong connections with illicit drug use by youth (Lerner & Steinberg, 2004). Studies have revealed that youth who lives in single-parent families are more prone to behavioral and emotional issues, including drug use (Hemovich & Crano, 2009). In Aas (alleviate addiction suffering) trust, a 22 year old high school boy admitted with a current history of taking the marijuana and alcohol for ten years. Upon interview he verbalized that he consumed marijuana daily and intake alcohol until intoxication. He mostly drunk at home while his mother at work. Upon history taking, it was reported that his parent were divorced and he lives with his mother and elder brother. Elder brother also has a long standing history of illicit drug use. This case highlights some of the underlying factors that determine substance use by youth. Moreover, maternal use of substances has a devastating impact on the fetus. Fetal alcohol spectrum disorders (FASD’s) cause developmental delay in children. This will predispose child to become drug abuser or to develop antisocial personality disorder and other
psychiatric condition later in the future (Fortinash & Holoday-Worret, 2012).

Social and Environmental Factors
Social and environmental factors, including social learning, conditioning, role selection, peer pressure and availability are important contributing factors for substance use in youth. According to Albert Bandura, the individual learns behaviors from observing their surroundings, i.e. nurture (Bundura, 1997). Youngsters are more influential to model, imitate and identify with those behaviors and characters which they experience around (Townsend, 2011). Nowadays the role of media is very significant in shaping the children’s behavior. They watch their heroes indulging in substance use, which motivates imperial children to try this out at home or with their peers irrespective of considering its side effects and adverse effect on health (Maithya, 2009). Moreover, the pleasurable effect of addicted substance conditioned youth to take it multiple times (Townsend, 2011). A youngster who regularly uses CNS stimulant feel more empowered, strong and motivated (Fortinash & Holoday-Worret, 2012). Furthermore, Elliott’s social control theory proposes that the children have many conventional roles of society to play such as of work, education, religion and relationship. Role strain in any of these selections has a profound impact on the initiation and continuation of drug use (Lerner & Steinberg, 2004). For instance, incompetency and disappointments from academic performance creates frustration that elevates the risk to indulged in deviant behaviors and in substance use over time (Gauffin, K., 2013). Sometimes substance use leads to underachievement at high school and sometimes failure to the desired school grades leads to illicit drug utilization. In 1986 Oetting and Beauvais put forward the peer cluster theory which highlights that those individuals who withdraw from school or from any religion and relationship collectively form a peer group. This peer group give each other acceptability and support in taking the drug together (Park, 2008). Within this group, drugs determines their polarization. This cluster becomes model for each other, signifies behavior as normative and aid in its availability and accessibility (Park, 2008). Even they term drug consuming as a sign of adult’s behavior (Maithya, 2009). This social positive reinforcement (i.e. Impression formation on others) provides evidence for drug using behavior in youth (The Etiology of Substance Abuse, 2009).

If my family, friend and surroundings have a culture of substance use, does that mean I also portray the same? Not, necessarily. Although, there are individual, familial, social and environmental factor that influence youth to substance use, but these factors also promote certain healthy behavior in society. For example, if one user omits from a group, it is 36% likely that others may try to practice the same (Coon & Mitterer, 2013). I have observed many of the youth in my community whose families have a culture of substance use but their new generation do not favor this. They even make attempts to cut its roots.

Strategic Interventions
Pakistan has carried out a lot of research on finding the prevalence of substance abuse by multiple cross-sectional studies, but the implementation is confined to publications only. This is the biggest dilemma in its execution. Implementation of these measures would help to control the substance use worldwide. These strategies are planned at individual, institutional and community level. At the individual and community level, Health care providers can play a crucial part to motivate users in
successful quitting behaviors. Provision of effective support, training and feedback would result in early cessations and modification of attitude among youth (Center for Disease Control and Prevention, 2014). One of the major approach is cognitive behavior and AIETA model, in which a psychiatrist develops self-efficacy and reduces the risk of relapse in youth (Stuart, 2013). At institutional level, creating safe hospital policies, staff capacity building and professional seminars are mainly focusing on creating positive turbulence. Interventions such as the aversion therapy is recently been used in the different rehabilitation centers for the management. This therapy is based on the concept of Pavlovian conditioning of behavior. A chemical is provided with the exposure of alcohol. This chemical is used as a placebo effect to induce nausea and vomiting. It works as an anti-craving treatment for these clients (Elkins, et al., 2010). Additionally, the motivation to change is also one of the important aspects to take into account. According to the author it is a readiness state which helps an individual to quit the addiction (Stuart, 2013). However, pharmacotherapy, psychotherapy, family therapy, and counseling are some fundamental approaches to treatment. Next, the law enforcing bodies should form policies to completely restrict all kinds of inducement and sponsorship that is giving clues to the younger children to further explore and purchase their products (WHO, 2013). Escalation in tax and price of substances can show a decline in its demand. Moreover, restricting imports and export of substances by international travelers can decrease its availability to youth. Besides, encourage them and praise them upon carrying tobacco free products. Furthermore, there are certain non-price measures which can eradicate its epidemic. Media has played a great influence on the psychology of youth. The prohibitions on advertisements, promotion and sponsorship are some of the most effective methods to protect young people. In addition, media platforms can be used as to deglamorize substance use among youth. The countries that used this strategy showed an average of 7% reduction. (WHO, 2013). These effective programs should organize in different organizations, health care systems, and at the workplace, in order to condense the burden of disease from the country (WHO, 2013). Public access to information and a plan of cessation can be made available through websites, online discussion, and blogs aimed to maintain the confidentiality and preventing individuals from prejudgment of others. Diverse cross-sectional and cohort studies have been carried out, but sensitization and convention to cessation measures are limited. A body for research should be established to introduce new methodologies and to surveillance the efficacy of programs at sectoral and inter-sectoral level. This will contribute in providing periodic evaluation, identifying the success rate of policies and support in making amendments.

**Conclusion**

Youth's substance use is widespread in our society as a "mental virus." Individual, family, social and environmental factor determine its etiology. There is a need to construct a most supportive zone around youth that enables them to broader their horizon of emotional intelligence. This would require a collaborative approach of parents/family, elder siblings, school teachers, counselors and health care professionals to understand them and guide them in attaining self-actualization.

**Competing Interests**

There are no competing interests for this publication.
Acknowledgements

I am particularly grateful for the assistance given by my faculty of Behavioural Psychology named Zahra Ali in improving my manuscript.

References

- Aasadm. (2014). Eradicating the Anathema of Drug Abuse in Pakistan - Aas Trust. Retrieved from http://www.aastrust.org/eradicating-the-anathema-of-drug-abuse-in-pakistan/
- Arnett, J. J. (2002). Emerging adulthood: A theory of development from the late teens through the twenties. American Psychologist, 55, 469.
- Bundura, A. (1997). Social Learning Theory. Stanford University, 1-46.
- Bushra, R., Aslam, N., Khan, U., Bano, N., Jamal, A., Sial, A. A., . . . Sherwani, S. K. (2013). Prevalence of Smoking in Teenagers Male Undergraduate Students a Study of Karachi, Pakistan. International Journal of Basic Medical Sciences and Pharmacy (IJBMSP), 3(2), 49-54. Retrieved from ISSN:2049-4963
- Center for Disease Control and Prevention. (2014). Best practices for comprehensive tobacco control program. Retrieved from http://www.cdc.gov/tobacco/stateandcommunity/best_practices/pdfs/2014/section A-III.pdf
- Centers for Disease Control and Prevention. (2013). CDC-Youth Online: High School YRBS 2013 Results. Retrieved from http://nccd.cdc.gov/youthonline/App/Results.aspx?TT=&OUT=,&SID=HS&QID=H43&LID=,&YID=,&LID2=,&YID2=,&COL=,&ROW1=,&ROW2=,&HT=,&LCT=,&FS=,&FR=,&FG=,&FSL=,&FRL=,&FGL=,&PV=,&TST=,&C1=,&C2=,&QP=G&DP=,&VA=CI,&CS=Y,&SYID=,&EYID=,&SC=,&SO=
- Coon, D., & Mitterer, J. O. (2013). Introduction to psychology: Gateways to mind and behavior (2nd ed.). Belmont, CA: Wadsworth Cengage Learning.
- Crum, R. M., Mojtahabai, R., Lazzareck, S., Bolton, J. M., Robinson, J., Sareen, J., . . . Green, K. M. (2013). A Prospective Assessment of Reports of Drinking to Self-medicate Mood Symptoms With the Incidence and Persistence of Alcohol Dependence. JAMA Psychiatry, 70(7), 718-726. doi:10.1001/jamapsychiatry.2013.1098
- Elkins, R. L., & Whitford, J. L. (2010).
- Patient and Provider Acceptance of Chemical Aversion Substance Dependence Treatments. Retrieved from American Psychological Association Retrieved from: http://schickshadel.com/wp-content/uploads/2013/06/Chemical-Aversion-Substance-Dependence-Treatments.pdf
- Fortinash, K. M., & Holoday-Worret, P. A. (2012). Psychiatric mental health nursing (5th ed.). St. Louis, MO: Elsevier Mosby.
- Gauffin, K., Vinnerljung, B., Fridell, M., Hesse, M., & Hjern, A. (2013). Childhood socio-economic status, school failure and drug abuse: a Swedish national cohort study. Society for the Study of Addiction, 108, 1441-1449. doi:10.1111/add.12169
- Giordano, G. N., Ohlsson, H., Kendler, K. S., Sundquist, K., & Sundquist, J. (2014). Unexpected adverse childhood experiences and subsequent drug use disorder: a Swedish population study (1995-2011). Society for the study of addiction, 109, 1119-1127. doi:10.1111/add.12537
- Hemovich, V., & Crano, W. D. (2009). Family Structure and Adolescent Drug
Use: An Exploration of Single-Parent Families. Substance Use & Misuse, 44 (14), 2099-2113. doi:10.3109/10826080902858375

• Higgins, E. T. (2000). Does Personality Provide Unique Explanations for Behavior? Personality as Cross-Person Variability in General Principles. European Journal of Personality, 14, 391-406.

• Hoermann, S., Zupanick, C. E., & Dombeck, M. (2013, December). Cognitive-Behavioral Theory Expanded: Schema Theory - Personality Disorders. Retrieved from http://www.mentalhelp.net/poc/view_doc.php?type=doc&id=41566&cn=8

• Hoermann, S., Zupanick, C. E., & Dombeck, M. (2013, December). Attachment Theory Expanded: Mentalization - Personality Disorders. Retrieved from http://www.mentalhelp.net/poc/view_doc.php?type=doc&id=41563&cn=8

• Imran, N., Haider, I. I., Bhatti, M. R., Sohail, A., & Zafar, M. (2011). Prevalence of Psychoactive Drug Use Among Medical Students in Lahore. ANNALS, 17(4), 343-346.

• Lerner, R. M., & Steinberg, L. D. (2004). Handbook of adolescent psychology (2nd ed.). Hoboken, N.J: John Wiley & Sons.

• Maithya, R. W. (2009). Drug abuse in secondary schools in kenya: developing a programme for prevention and intervention.

• McLeod, S. (2007). Psychodynamic Approach | Simply Psychology. Retrieved from http://www.simplypsychology.org/psychodynamic.html

• Park, J. (2008). Korean American Adolescents' Alcohol Abuse. Michigan State University.

• Stuart, G. W. (2013). Principles and practice of psychiatric nursing (10th ed.). Maryland Heights, MO: Elsevier Saunders.

• The Etiology of Substance Abuse. (2009). Retrieved from http://psy.ed.asu.edu/~horan/drugcourse/decem.htm

• Townsend, M. C. (2011). Essentials of psychiatric mental health nursing: Concepts of care in evidence-based practice. Philadelphia: F.A. Davis Co.

• UNFPA (2014). The State of World Population 2014, The Power of 1.8 Billion: Adolescents, Youth and the Transformation of the Future.

• UNESCO. (2012). Youth - Definition | United Nations Educational, Scientific and Cultural Organization. Retrieved from http://www.unesco.org/new/en/social-and-human-sciences/themes/youth/youth-definition/

• WHO. (2013, May 23). WHO | Ban tobacco advertising to protect young people. Retrieved from http://www.who.int/mediacentre/news/releases/2013/who_ban_tobacco/en/