



DRUG ADDICTION: “A CONSEQUENCE OF SOCIAL ILLS RATHER THAN INDIVIDUAL FLAWS”

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ABSTRACT

Addiction is a maladaptive pattern of drug abuse including alcohol, caffeine, cannabis, hallucinogens, inhalants, opioids, sedatives, hypnotics and anxiolytics, stimulants, tobacco and others that persists despite negative consequences. An article of New England Journal of Medicine says “addiction is a disease of the brain” whereas another leading journal specifies “Genetics contributes significantly to vulnerability to this disorder”. Neurological changes observed in long-term substance abusers are nearly identical to those seen in people struggling with obesity, porn aficionados, gamblers, internet “addicts”, compulsive shoppers and simply those involved in intense romantic relationships. As with many other brain diseases, addiction has embedded behavioral and social-context aspects that are important parts of the disorder itself. An increased incidence of addiction is clearly a reflection of social demoralization. In countries like Bangladesh, people are easily demoralized because of social or peer influence. And widespread corruption, creating severe social injustices, various types of criminal activities is very common here. Issues of moral value declines in common people are expressed in many literatures. Frustration, unemployment, lack of recreation facilities and bad companionship are the epic reasons of drug addiction among youth in this country.

Keywords: addiction; N-methyl amphetamine; drug abuse

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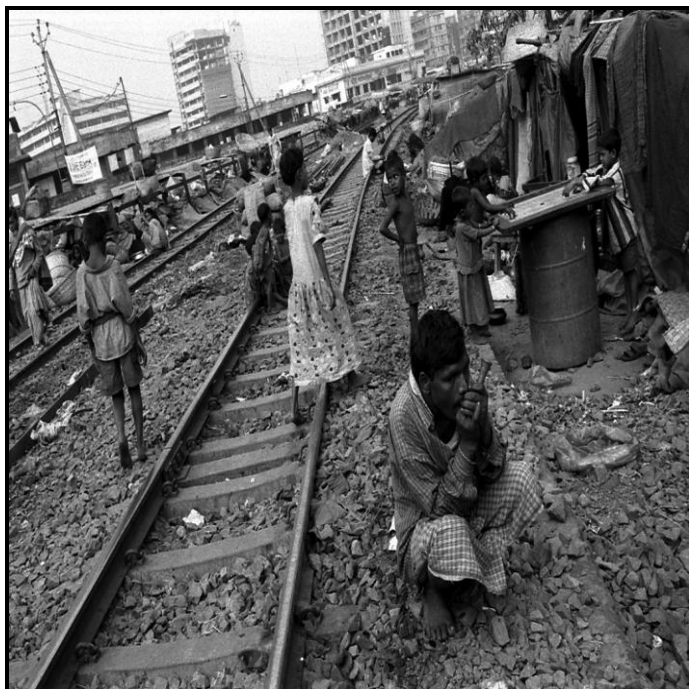


Figure 1: A Person Taking Cannabis in Public Place (Place: Tejgaon Railway Station) (Source: massimodallargine.com)

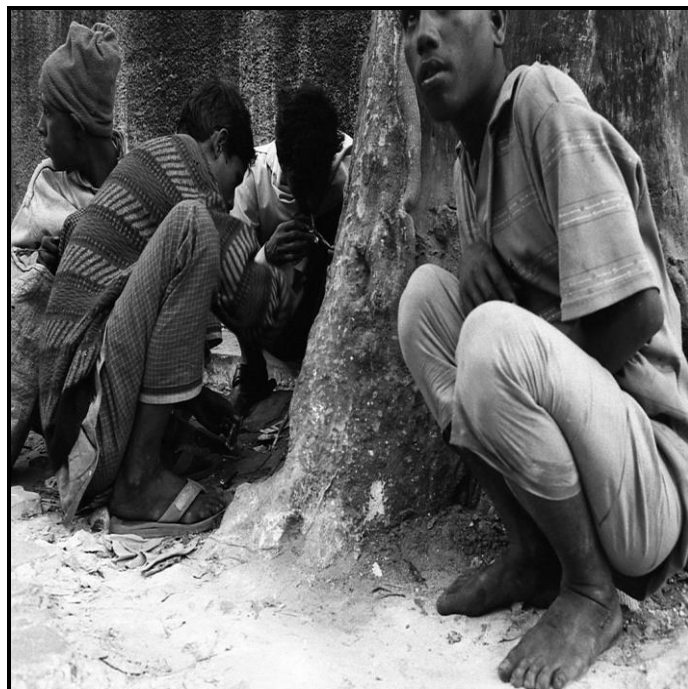


Figure 2: Heroin Intake in Open Place (Source: massimodallargine.com)

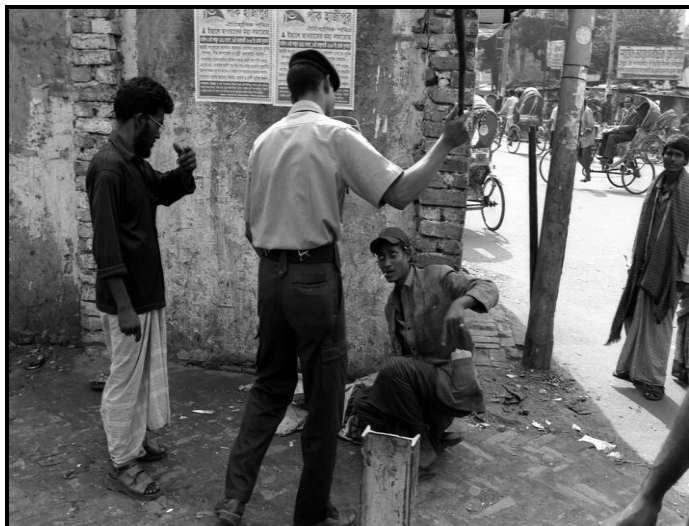


Figure 3: Community Guard Action on a Heroin Addict
(Source: massimodallargine.com)



Figure 4: Assistance of Pethidine in Public Place
(Source: Kamrul Hasan/DhakaTribune)



Figure 5: Phensedyl, Common Cough Linctus Brand of India, Caught Near Indian Border. It reigned over other intoxicants before Yaba became popular among addicts. The cough syrup is already banned in Bangladesh as its Codeine content is unusually high and attracts addicts, who cough up to three times the rate in India to buy these cough syrup bottles. Usually a single bottle was adulterated with other solvents and ingredients to make three or four (Source: bdnews24.com)

INTRODUCTION

Globally, 50% of deaths of liver cirrhosis, 30% of deaths of oral and pharyngeal cancers, 22% of deaths of interpersonal violence, 22% of deaths of suicide, 15% of deaths of traffic injuries, 12% of deaths of tuberculosis, and 12% of deaths of liver cancer were attributed to alcohol consumption, according to Journal of Family Medicine and Primary Care, 2019 [1]. The WHO estimated that there are 2 billion alcohol users, 1.3 billion tobacco users, and 185 million illicit-drug users worldwide [2]. Currently, 80% of tobacco users live in low- and middle-income countries (LMICs) [3] and also, 80% of tobacco-related deaths are predicted to occur in LMIC by 2030 [4]. Smoking and alcohol abuse attributable to 20% of tuberculosis (TB) disease worldwide and collectively made India a home of world's 27% of TB patients in 2017 [5]. Nearly 6,000 people die from alcohol-related diseases every year in Australia [6], where 30% fatal car crashes are "drunk and drive" cases [7]. The prevalence of alcohol use disorder is highest in Europe (7.5%) and the lowest among East Mediterranean Regions which includes Afghanistan, Bahrain, and Egypt [1]. In the US, the largest national economy of the world, 75% of high-school students have reportedly used illegal drugs, drunk alcohol or smoked tobacco [8], more than a million used heroin in 2016 [9] and opioids claim 70,000 death from overdose in 2017 [10,11]. Bangladesh is situated in the crucial point between the 'golden triangle' (Myanmar, Thailand and Laos) and the 'golden crescent' (Pakistan, Afghanistan and Iran) in terms of geographical location [12]. Bangladesh with its easy land, sea, and air access is becoming a major transit point [13]. Traffickers who supply drugs in the markets of Northern America, Africa, and Europe are routing their shipments through Dhaka, Chittagong, Comilla, Khulna and other routes in Bangladesh. It ultimately contributes to the number of drug abusers as well [14,15]. Drug abuse is now prevalent everywhere: in the house, streets, in the workplace, parks, slums, markets and even in educational institutions both in rural and urban areas. Virtually all segments of society are severely affected by this problem [16].

Prevalence of Addiction in Bangladesh

The Bangladesh Bureau of Statistics, 2013 found that 20–34 years was the age of initiation for most (47.3%) intoxicating substance abusers and 33% of abusers started between 15–19 years old [17]. A study conducted in the outpatient department of National Institute of Mental Health in Dhaka, revealed that 7.66% of respondents suffered from a substance-related disorder [18]. A similar study conducted in a private psychiatric clinic in Dhaka showed that around 30% of admitted psychiatric patients were suffering from substance-related disorder [19,20]. Meanwhile, a separate study conducted by ICDDR,B shows that in the capital, around 80% of the users are male and 20% are female [21]. The major illicit drugs available in Bangladesh are opium derivatives (heroin, pethidine), cannabis (marijuana, ganja, chorosh, bhang, hashish), stimulants (yaba, cocaine), sleeping pills, cough syrup (phensedyl, dexpotent etc.) and few others [22]. Despite prohibition, alcohol is available across the country and is produced locally. Locally produced alcoholic beverages are made from sorghum, maize, millet, rice, cider, fruit wine or fortified wine (*tari, bangla mod, haria,*

choani, ekchuani, do chuani, mohua, etc.) [23].Data from the HIV behavioral surveillance survey conducted in 2016 among people who inject drugs (PWID) in Dhaka city showed that 53.1% of PWID shared needles and syringes in the last week compared to 60% in 2006–2007. This clearly shows that the needle/syringe sharing practices have not changed among this segment of population over the past decade despite the ongoing Needle and Syringe Program (NSP) [24-26].Reportedly, Phensedyl is being sold at known drug spots across the capital between BDT 1,400 and BDT 2,000. Though Phensedyl addiction saw a decline with the rising popularity of yaba, in recent times, the smuggling of Phensedyl has seen a hike of 26% [27-29].Over half of the public vehicle drivers, who operate around 50,000 public transport vehicles, take drugs regularly and it could be the main reason for accidents in the country [30]. However, good news is bus drivers in Dhaka city would have to face dope tests to detect drug level in their blood from December 01, 2019 [31]. A recent study by four academics in Sylhet city found that 64% of drug users funded their habits with money from their family. A similar study published by the Police Staff College

journal in Dhaka found that 17%, the second largest group of users, got money from home [32].Sources at the DNC intelligence wing also said that around 10,000 cases are filed and 9,000 people are arrested every year in connection with drug-related violence and crimes [33]. In a survey, it was found that nearly 30% of the female drug users had pre-marital sexual experience and around one fourth had more than one sexual partner [34]. Kamal et.al, 2018 revealed that unmarried nearly 65% respondents were more likely to take substances than married [22]. Byron et.al, 2019 reported that the underemployed people often feel neglected and frustrated, and in the worst cases, they become addicted to drugs and indulge in criminal activities, say experts. The country has currently 13.8 million underemployed according to government study [35].It is difficult to take female drug addicts to the rehab center though it is easy to take male addicts. Dhaka Ahsania Mission says around 85% of the female addicts have to take treatment being pressurized by the families [33].

Table 1: Variables related to drugs among students of Dhaka city [36]

Drugs are taken	Frequency	%	Duration of taking drug	Frequency	%
Phensedyl	74	37.0	One year	50	25.0
Heroin	30	15.0	Two years	54	27.0
Yaba	68	29.0	Three years	50	25.0
Ganja	38	19.0	More than 3 years	46	23.0
Total	200	100.0	Total	200	100.0
Reason for taking drug firstly	Frequency	%	Companion during taking drug	Frequency	%
Willingly	32	16.0	Friends	140	70.0
Friends	116	58.0	Alone	24	12.0
Bad result	10	5.0	Others	36	18.0
Failure in love	20	10.0	Total	200	100.0
Family condition	22	11.0	Cost of taking drug per month	Frequency	%
Total	200	100.0	<500	28	14.0
Collection of drugs	Frequency		500-700	20	10.0
Room delivery	44	22.0	700-1000	54	27.0
Nearest shop	24	12.0	1000+	98	49.0
Agent	82	41.0	Total	200	100.0
Other way	50	25.0	Impact on academic result of taking drug	Frequency	%
Total	200	100.0	Yes	134	67.0
Impact on health due to taking drug	Frequency	%	No	66	33.0
Yes	162	81.0	Total	200	100.0
No	38	19.0	Wish for giving it up	Frequency	%
Total	200	100.0	Yes	136	68.0
Taken step to give up drug	Frequency	%	No	64	32.0
Yes	42	21.0	Total	200	100.0
No	158	79.0			
Total	200	100.0			

The “Yaba” Turmoil

In recent times, Yaba has gained popularity and has become a "fashionable" drug [33]. It is estimated that there were about 4.6 million regular users of Yaba (several combinations of N-methyl amphetamine and caffeine sold within BDT 300 to BDT 2000, as red or pink pills) in Bangladesh on or before 2012 [37], which is around 10-15 million according to Association of Prohibiting Drug Abuse (MANAS) chief Dr. Arup Ratan Chaudhury [38]. Around 80% of drug abusers are young people aged between 16 and 35, said the Department of Narcotic Control report, 2016 by the Home Ministry. Cannabis comprises 50% of all the cases detected by the same report [39,40]. A BBC report April, 2019 says that Bangladeshi authorities seized 53 million Yaba tablets nationally in 2018. The total value of this illicit business is estimated to be worth upwards of \$1 billion a year [41]. The Naf River separating Bangladesh and Myanmar is used by drug smugglers bringing in enough yaba pills to allow the country to consume 2 million pills each day [32]. Police say apart from the listed godfathers, some 500 new dealers are active in Teknaf now [42]. According to Addiction Management Integrated Care (AMIC), some 250 female addicts took treatment at AMIC during the period of 2015 to 2018. A nearly half of them taken Yaba, mainly due to family unrest [43]. More than 40% unemployed youth are addicted. And among addicted, more than 40% are female, close to 50% are educated and 60% are sex offenders, around 95% are smokers and more than 85% get into consuming drugs under the influence of friends [44-48].

Effect of Addiction on Family and Society

The effects of drug addiction are felt on many levels: personal, friends, family and societal. Individuals who use drugs and alcohol experience a wide array of physical effects due to their drug and alcohol addiction that they had never anticipated. Additional effects of drug addiction include tolerance, withdrawal, sickness, overdose age, and resorting to a life of crime. The effects of drug addiction can disrupt family life and create destructive patterns of codependency [49]. A substance-dependent person in the family affects almost all aspects of family life, for example, interpersonal and social relationships, leisure time activities, and finances. Members may feel anger, frustration, anxiety, fear, worry, depression, shame and guilt, or embarrassment. Substance dependence invariably increases conflicts, negatively affects family members, and burdens the families. The financial burden, one of the major burden areas, is likely to be experienced by the families due to loss of patient's income and use up of funds to procure substances they are dependent on. Economic burden may be caused by money spent on substances, or money problems associated with the loss of jobs or reliance on public assistance. Alcohol use during pregnancy can harm fetal development causing birth defects and problems in child development. Infants born to opioid-dependent mothers are at increased risk for neonatal abstinence syndrome, which can contribute to developmental or cognitive delays [50]. Indirect losses also include losses due to premature death of addict either due to natural course of disease, trauma, or suicide by addict lead to additional burden on the family. Higher proportion of severe burden was reported by female

caretakers [50,51]. Substance abuse and addiction have grave consequences on our existing social systems, effecting crime rates, hospitalizations, child abuse, and child neglect, and are rapidly consuming limited public funds. The intravenous drug abuser represents the fastest growing vector of HIV virus [52].

Table 2: Impact of SUD on Family Life Cycle Stages [53]

Stage	Developmental Tasks	Impact of SUD on Developmental Tasks
Married without children	Establish healthy marriage with boundary from family of origin.	Poor communication, impairment of emotional and physical intimacy, increased conflict.
Childbearing families	Create safe, loving home for infant and parents. Establish secure attachment with child.	Home not physically or emotionally safe due to impairment and labile mood. Insecure attachment with infants.
Families with preschool children	Adapt to needs of preschool children and promote their growth and development. Cope with energy depletion and lack of privacy.	Inconsistent parenting, possible abuse, neglect, Child Protective Services involvement, removal of children, marital conflict.
Families with school-age children	Fitting into the community of school-age families. Encourage children's education.	Educational needs of children not met. Possible domestic violence, conflict at home.
Families with teenagers	Balancing freedom with responsibility. Establish healthy peer relationships. Develop educational and career goals.	Teens may follow model of parent with SUD. Children have difficulty forming healthy peer relationships due to impaired early attachment. School/legal problems and family conflict. Anxiety, depression, or oppositional disorders.
Families launching young adults	Release young adults with appropriate assistance. Maintain supportive home base. Young adults develop careers.	Failure to launch due to adult children being unable to support themselves, relationship conflict.
Middle-age parents	Rebuild the marriage. Maintain ties with younger generations.	Marital conflict, adult children may disconnect from parents and not want them to be around their young children.
Ageing family members	Coping with bereavement and living alone. Closing the family home or adjusting to retirement.	Isolation, depression can lead to SUD or vice versa.

The Major Risk Factors of Addiction

The spread of multiple drug use has aggravated the overall problem, personal and social days function, impairment of health, crime and other violent behavior. Youth are the most falling victims to drug abuse, which eventually

lowers their standards of education and attendance at schools and colleges. They abuse drugs due to social isolation, frustration, depression, curiosity and mostly refusal by loved ones. Mainly depression constitutes a key emotional configuration that can contribute to the initial voluntary decision of a person to use drugs [50], [54-56]. Major risk factors responsible for drug abuse are family disorganization, parental neglect, parent-child conflict, loss of spouse strife, indiscipline, isolation, lack of emotional support, rejection of love, complex relationship status, over-protection, unemployment, repeated failure and personality maladjustment and easy availability of controlled drugs without prescriptions [57].

CONCLUSION

It is high time for the leaders to wake up and save the endangered society as more new addicts join the ranks of the hardcore ones. The Drugs and Narcotics Department was created two decades ago, especially to counter the production and availability of addictive drugs. They have done tremendous jobs in recent years, no doubt, but a lot more is expected to eradicate the jeopardy. Preventive education against drug abuse is essential. Implementation of laws by the enforcing agency is needed to curb drug trafficking. There is evidence that willpower can be crucial in beating addiction. If we fail to control of this it will destroy the whole nation someday, for sure.

REFERENCES

- Eashwar VMA, Gopalakrishnan S, Umadevi R, Geetha A. Pattern of alcohol consumption and its associated morbidity among alcohol consumers in an urban area of Tamil Nadu. *J Family Med Prim Care*. 2019;8(6):2029–2035. doi:10.4103/jfmpc.jfmpc_226_19
- Li MD, Burmeister M. New insights into the genetics of addiction. *Nat Rev Genet*. 2009;10(4):225–231. doi:10.1038/nrg2536
- Akanbi MO, Carroll AJ, Achenbach C, et al. The efficacy of smoking cessation interventions in low- and middle-income countries: a systematic review and meta-analysis. *Addiction*. 2019;114(4):620–635. doi:10.1111/add.14518
- Asare S, Stoklosa M, Drope J, Larsen A. Effects of Prices on Youth Cigarette Smoking and Tobacco Use Initiation in Ghana and Nigeria. *Int J Environ Res Public Health*. 2019;16(17):3114. Published 2019 Aug 27. doi:10.3390/ijerph16173114
- Thomas BE, Thiruvengadam K, S R, et al. Smoking, alcohol use disorder and tuberculosis treatment outcomes: A dual comorbidity burden that cannot be ignored [published correction appears in *PLoS One*. 2019 Nov 1;14(11):e0224914]. *PLoS One*. 2019;14(7):e0220507. Published 2019 Jul 31. doi:10.1371/journal.pone.0220507
- NDRI (AU). Alcohol causes nearly 6,000 Australian deaths in one year, a third from cancer. Media release, 27 February, 2018.
- NRSP (AU). Fact Sheet: Drink Driving. Available From: https://s3-ap-southeast-2.amazonaws.com/cdn-nrsp/wp-content/uploads/sites/4/2017/03/21124016/drink_driving_fs-1.pdf
- Kehinde F, Oduyeye O, Mohammed R. Could the link between drug addiction in adulthood and substance use in adolescence result from a blurring of the boundaries between incentive and hedonic processes? *Subst Abuse Rehabil*. 2019;10:33–46. Published 2019 Jul 12. doi:10.2147/SAR.S202996
- National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Health Sciences Policy; Board on Health Care Services; Roundtable on Quality Care for People with Serious Illness; Alper J, Olchefske I, Graig L, editors. *Pain Management for People with Serious Illness in the Context of the Opioid Use Disorder Epidemic: Proceedings of a Workshop*. Washington (DC): National Academies Press (US); 2019 May 1. Proceedings of a Workshop. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK544145/>
- National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Health Sciences Policy; Committee on Medication-Assisted Treatment for Opioid Use Disorder; Mancher M, Leshner AI, editors. *Medications for Opioid Use Disorder Save Lives*. Washington (DC): National Academies Press (US); 2019 Mar 30. Introduction. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK541397/>
- Slavova S, Delcher C, Buchanich JM, Bunn TL, Goldberger BA, Costich JF. Methodological Complexities in Quantifying Rates of Fatal Opioid-Related Overdose. *Curr Epidemiol Rep*. 2019;6(2):263–274. doi:10.1007/s40471-019-00201-9
- Azizul, Islam, and Faruque Hossain Md. "Drug Abuse and Its Impact on Bangladesh." *International Journal of Sociology and Anthropology*, vol. 9, no. 11, 2017, pp. 143–156, doi:10.5897/ijsa2016.0736.
- Banerjee S. Drug trafficking and Rohingya refugees in Bangladesh. Observer research Foundation, March 15, 2019.
- Islam, R., N. Tabessum, A. Safiuzzaman, and M. Sarker. "A Case Study of Drug Abuse". *Medicine Today*, Vol. 24, no. 2, May 2013, pp. 82–84, doi:10.3329/medtoday.v24i2.15014.
- Islam, R., N. Tabassum, A. Shafiuzzaman, B. Umar, and M. Khanam. "Methamphetamine (YABA) Abuse: A Case Study in Young Male". *Faridpur Medical College Journal*, Vol. 7, no. 2, Jan. 2013, pp. 102–4, doi:10.3329/fmcj.v7i2.13527.
- Firoz RA. Drug abuse in Bangladesh. *The Independent (STETHOSCOPE)*, 23 July, 2017.
- Maruf MM, Khan MZ, Jahan N. Pattern of Substance Use: Study in a De-addiction Clinic. *Oman Med J*. 2016;31(5):327–331. doi:10.5001/omj.2016.66
- Mohit MA. Diagnosis of patients attending outpatient department (OPD) of NIMH. *Bang J Psychiatry* 2001. Jun;15(1):5-12.
- Hossain MD, Ahmed HU, Chowdhury WA, Niessen LW, Alam DS. Mental disorders in Bangladesh: a systematic review. *BMC Psychiatry*. 2014; 14: 216. Published 2014 Jul 30. doi:10.1186/s12888-014-0216-9
- Fahmida A, Wahab MA, Rahman MM. Pattern of psychiatric morbidity among the patients admitted in a private psychiatric clinic. *Bang J Med Science* 2009. Jan;8(1):23-28.
- Shazzad, M. N., Abdal, S., Majumder, M. S., Sohel, J. ul, Ali, S. M., & Ahmed, S. (2014). Drug Addiction in Bangladesh and its Effect. *Medicine Today*, 25(2), 84–89. <https://doi.org/10.3329/medtoday.v25i2.17927>
- Kamal M, Huq N, Mali B, Akter H, Arafat SMY (2018) Epidemiology of Substance Abuse in Bangladesh: A Narrative Review. *J MentDisord Treat* 4: 165. DOI: 10.4172/2471-271X.1000165
- Islam JY, Zaman MM, Bhuiyan MR, et al. Alcohol consumption among adults in Bangladesh: Results from STEPS 2010. *WHO South East Asia J Public Health*. 2017;6(1):67–74. doi:10.4103/2224-3151.206168
- Khan SI, Reza MM, Crowe SM, Rahman M, Hellard M, Sarker MS, Chowdhury EI, Rana AKMM, Sacks-Davis R, Banu S, Ross AG. People who inject drugs in Bangladesh - The untold burden! *Int J Infect Dis*. 2019 Jun; 83: 109–115. doi: 10.1016/j.ijid.2019.03.009.
- 4th National Strategic Plan For HIV and AIDS Response 2018-2022, December 2016. Available From: https://www.unicef.org/bangladesh/sites/unicef.org.bangladesh/files/2018-10/NSP%204th%20%202018-2022_draft-250517-2.pdf

26. "Interagency Strategic Plan for Microbiome Research, FY 2018-2022." 2018, doi:10.2172/1471707.
27. Feroze T. Demon in a bottle. DhakaTribune, September 16, 2019.
28. Satkhira Correspondent. Police recover 1,400 Phensedyl bottles from onion-laden truck in Satkhira, arrest two. bdnews24.com, 05 April, 2019.
29. Correspondent, Chapainawabganj. 7,000 bottles of Phensedyl seized: Rab arrests the alleged drug peddler. The daily Star, March 05, 2019.
30. Antara NF. Why is drugged driving commonplace in Dhaka? DhakaTribune, September 07, 2018.
31. Staff Correspondent. Dhaka bus drivers to face dope test from Dec 1. NEWAGE, September 19, 2019.
32. Nathan A. Thompson. Inside Bangladesh's methamphetamine problem: Booming regional drugs trade takes its toll on country's youth. Nikkei Asian Review (Economy), July 23, 2017.
33. News Desk. Why BD women turn to drugs? The Daily Asian Age, 01 July 2017.
34. Dhaka Ahsania Mission. Drug addiction takes alarming turn; addiction rising among females. Available from: <http://www.ahsaniamission.org.bd/drug-addiction-takes-alarming-turn-addiction-rising-among-females/>
35. Byron RK, Alamgir M. 1.38cr people underemployed: Finds government study. The Daily Star, October 13, 2019.
36. Ahmed F, Ahmed S. "The Impact of Drug Addiction Among the Students of Tertiary Level in Bangladesh." Journal of Education and Practice, 2019, doi:10.7176/jep/10-7-03. Available From: <https://www.iiste.org/Journals/index.php/JEP/article/view/46936/48465>
37. Fattah, Sk Abdul. "Yaba Addiction-A Rising Concern in Bangladesh." Faridpur Medical College Journal, vol. 7, no. 2, 2013, p. 50., doi:10.3329/fmcj.v7i2.13496.
38. Khan MJ. Indian gangs smuggling yaba into Bangladesh. The Daily Star, August 22, 2019.
39. Anadolu Agency. Bangladesh government urged to end rampant drug abuse: More than 7 million people in Bangladesh addicted to drugs, nongovernmental body head tells. Asia Pacific, 30 December, 2017.
40. Department of Narcotics Control. Annual Drug Report, Bangladesh 2016. Available from: https://dnc.portal.gov.bd/sites/default/files/files/dnc.portal.gov.bd/annual_reports/c6b7af4e_6b16_49c0_9ba6_68e6c694adb0/Annual%20Report,%202016.pdf
41. Pressly L. Yaba: The cheap synthetic drug convulsing a nation. BBC News, Bangladesh 25 April, 2019.
42. Khan MJ, Jinnat MA. 43 godfathers still at large: All named in home ministry list; yaba shipments from Myanmar keep coming. The Daily Star, February 18, 2019.
43. Islam F (BSS). Female drug addiction on the rise. The Daily Sun, 10 January, 2018.
44. Rabbi AR. 43% of unemployed population addicted to drugs. DhakaTribune, February 27, 2019.
45. Mahmud T. Female drug addict numbers on the rise. DhakaTribune, February 23, 2017.
46. Rahman, F., M. Ahmad, and M. Ali. "Socio-Economic Status of Drug Addicted Young People in Dhaka City". Journal of Armed Forces Medical College, Bangladesh, Vol. 12, no. 2, Dec. 2016, pp. 15-20, doi:10.3329/jafmc.v12i2.41079.
47. BSS, Dhaka. Drug abuse alarmingly rising in Bangladesh: Addicts spend Tk 70m for illegal narcotics per day. The Daily Star, August 14, 2013.
48. Zaman, M., W. Almajidi, and D. Hurunnaher. "Knowledge on the Effects of Drug Abuse Among the Students In A Selected High School In Dhaka City". Bangladesh Journal of Dental Research & Education, Vol. 3, no. 2, Oct. 2013, pp. 12-18, doi:10.3329/bjdre.v3i2.16603.
49. Sani, MahbubaNaznin. "Drug Addiction among Undergraduate Students of Private Universities in Bangladesh." Procedia - Social and Behavioral Sciences, vol. 5, 2010, pp. 498-501., doi:10.1016/j.sbspro.2010.07.131.
50. Daley DC. Family and social aspects of substance use disorders and treatment. J Food Drug Anal. 2013; 21(4):S73-S76. doi:10.1016/j.jfda.2013.09.038
51. Sharma A, Sharma A, Gupta S, Thapar S. Study of family burden in substance dependence: A tertiary care hospital-based study. Indian J Psychiatry. 2019;61(2):131-138. doi:10.4103/psychiatry.IndianJPsychiatry_123_15
52. Hoffman RS, Goldfrank LR. The impact of drug abuse and addiction on society. Emerg Med Clin North Am. 1990 Aug;8(3):467-80.
53. Lander L, Howsare J, Byrne M. The impact of substance use disorders on families and children: from theory to practice. Soc Work Public Health. 2013;28(3-4):194-205. doi:10.1080/19371918.2013.759005
54. Hosseinbor M, YassiniArdekani SM, Bakhshani S, Bakhshani S. Emotional and social loneliness in individuals with and without substance dependence disorder. Int J High Risk Behav Addict. 2014;3(3):e22688. Published 2014 Aug 25. doi:10.5812/ijhrba.22688
55. Andersen SL. Stress, sensitive periods, and substance abuse. Neurobiol Stress. 2018;10:100140. Published 2018 Nov 27. doi:10.1016/j.ynstr.2018.100140
56. Flores Mosri D. Affective Features Underlying Depression in Addiction: Understanding What It Feels Like. Front Psychol. 2019;10:2318. Published 2019 Oct 17. doi:10.3389/fpsyg.2019.02318
57. Shazzad, M. N., S. Abdal, M. S. Majumder, J. ul Sohel, S. M. Ali, and S. Ahmed. "Drug Addiction in Bangladesh and Its Effect". Medicine Today, Vol. 25, no. 2, Feb. 2014, pp. 84-89, doi:10.3329/medtoday.v25i2.17927.