

Risk Behaviors among Street Adolescents in Urban Bangladesh: A Cross-Sectional Study

Abdullah Al Noman¹
Md. Borhan Uddin²
Shaheen Sultana³
Irfan Nowroze Noor⁴
Shaheda Hamid⁵
Mohammad Nurunnabi^{6*}

¹MPH Specialization in Health Economics
Umea University
Sweden.

²Department of Community Medicine & Public Health
BGC Trust Medical College
Chattogram, Bangladesh.

³Post-Graduation Fellow
Umea, Sweden.

⁴Doctoral Student
ASEAN Institute for Health Development
Mahidol University
Salaya, Thailand.

⁵Department of Maternal and Child Health
National Institute of Preventive & Social Medicine (NIPSOM)
Dhaka, Bangladesh.

⁶Department of Community Medicine & Public Health
Sylhet Women's Medical College
Sylhet, Bangladesh.

*Correspondence to:

Dr. Mohammad Nurunnabi
Assistant Professor
Department of Community Medicine & Public Health
Sylhet Women's Medical College
Sylhet, Bangladesh.
Mobile : +88 01672 43 64 04
Email : nur.somch@gmail.com

Date of Submission □: □10.11.2025
Date of Acceptance □: □12.12.2025

www.banglajol.info/index.php/CMOSHMCJ

Abstract

Background: Street children, marginalized and vulnerable, face exploitation and risky behaviors due to poverty, neglect and social deprivation. Rapid urbanization has led to a rise in their numbers, particularly in developing countries like Bangladesh.

Materials and methods: This cross-sectional study assessed risk behaviors among 260 purposively selected street adolescents aged 10–18 years in Dhaka and Chittagong. Data were collected through pretested, semi-structured interviews from January to December 2017.

Results: The majority of street adolescents were aged 13–16 years (76.2%) with a mean age of 14.8±1.6 years. Most were male (81.0%) and had little or no formal education. While 75.8% reported their parents living together, only 36.5% were living with them; many stayed with friends (81.2%) and spent time in public transit areas (60%). Key findings on substance use revealed that 73.8% of respondents used substances, primarily cigarettes (58.2%), ganja (25.6%), and glue (13.3%). Loneliness, mental pressure, and curiosity were significant contributing factors. A notable 12.7% of respondents reported experiencing early sexual harassment, mostly by relatives. Sexual risk behaviors included early sexual encounters (16.2%), with curiosity being the leading cause. Among those with sexual experience, 23.8% had engaged in sex as a profession. Chi-square and logistic regression analyses showed significant associations between substance use and factors such as age, education, family structure, and income ($p<0.05$). Older adolescents, males, and those not living with parents had higher rates of substance use. Family structure and parental presence played a protective role, with family substance use also influencing children's behavior.

Conclusion: These findings highlight the heightened vulnerability of street adolescents to substance abuse and sexual exploitation, emphasizing the urgent need for focused interventions that prioritize family support, education and prevention of substance use.

Key words: Risk behaviors; Street children; substance use.

INTRODUCTION

Street children are destitute boys and girls who live on the streets, earn a living there, or both.¹ Street children are categorized into two groups: Children of the street, who live and sleep on the streets with no permanent residence and Children on the street, who work on the streets during the day but return home or to a shelter at night, though some occasionally sleep on the streets.² Rapid urbanization and large-scale migration have led to the rise of street children in cities.³ Street children are a marginalized and highly vulnerable group in Bangladesh.⁴

According to 2017 estimates by the United Nations, there are approximately 150 million street children worldwide.⁵ Street children exist globally, with the majority residing in urban areas of developing countries.⁶ The Asia-Pacific area, comprising almost half of the world's child population, has a high number of street children. These children often become street dwellers due to the region's diverse economic and political conditions, with their numbers continuing to rise.⁷ Nearly 40% of Bangladesh's population is children, with 57.15 million under the age of 18.⁸ A 2005 survey by the Bangladesh Institute of Development Studies (BIDS) reported 674,178 street children by December 2004, an increase of over 244,000 since 2000. The distribution included 58.8% in Dhaka, 12.7% in Chittagong, 4.7% in Rajshahi, 1.4% in Sylhet, 2.2% in Barisal, and 9.5% in Khulna.^{7,9}

Globally, more than half of street adolescents are subjected to the worst forms of child labor, including slavery, physical abuse, trafficking, and prostitution. Criminal networks exploit these children for commercial sex work, theft, pickpocketing, smuggling and the distribution of drugs and weapons, generating significant profits.^{10,11} Due to various social and economic factors, street children leave home for an uncertain future. Many find work, such as cleaning cars or collecting waste, while others turn to drugs or engage in sex work. Some use inhalants, causing irreversible brain damage. Additionally, they have limited access to basic needs like health care, food, education and clothing. Children often perform certain tasks more efficiently and at lower cost than adults, increasing the risk of adult unemployment.^{10,12}

Street children are often viewed as criminals, victims, or free spirits, but the root causes lie in extreme poverty and social deprivation.^{13,14} Globally, they engage in various risky behaviors, with substance abuse, violence, and unsafe sexual practices being most common. Factors such as neglect, poverty, and exposure to abuse often lead to illegal or anti-social behavior.^{15,16} Risky behavior, peaking in youth, can cause social, biological, physical and psychological harm.^{17,18} Street adolescents are highly vulnerable to abuse and exploitation.¹⁹ There is a need to look beyond these children's background and address factors in family, community, school and work that hinder their development.^{20,21}

MATERIALS AND METHODS

This descriptive cross-sectional study was conducted to assess the risk behaviors of street adolescents in two purposively selected cities in Bangladesh: Dhaka and Chattogram. In Dhaka, the study sites included Kamalapur Railway Station, Bimanbandar Railway Station, Tongi Railway Station, Sadarghat Launch Terminal, Ramna Park, Chandrima Udyan, Shahbagh and Dhanmondi Lake. In Chattogram, the selected locations were Chattogram Railway Station, Pahartoli Railway Station, Sholoshahar Railway Station, Bangla Bazar Launch Terminal, Bohoddarhat Bus Terminal, Karnafuly Shishu Park, Foy's Lake area and 2-No Gate Market.

The study was conducted among 260 purposively selected street adolescents, aged 10 to 18 years, who had spent at least 3 months living or working on the streets. Participants included both male and female children within this age group who either lived on the streets, worked on the streets, or both.

Prior to the study, a pre-test was conducted on 15 respondents in Mohakhali to assess and refine the research instruments. Data collection procured place from January to December 2017, using a pretested, semi-structured questionnaire administered through face-to-face interviews at the participants' convenience.

The data were reviewed, cleaned, categorized and analyzed using IBM SPSS Version 23 (New York, USA). Descriptive statistics were reported as frequencies and percentages for categorical data and as means and standard deviations for continuous data. The chi-square test and multivariate logistic regression were used to evaluate the significance of associations between the variables. A p-value of <0.05 at a 95% Confidence Interval (CI) was considered statistically significant for all tests.

Participation was voluntary, and confidentiality was maintained. Informed written consent was obtained from each participant. The study received approval from the Institutional Review Board (IRB) of the National Institute of Preventive and Social Medicine (NIPSOM) Dhaka 1212, Bangladesh. (Reference: NIPSOM/IRB/2017/251)

RESULTS

The majority of street adolescents were aged 13–16 years (76.2%) with a mean age of 14.8±1.6 years. Most were male (81.0%) and had no formal education or only primary-level education. A significant proportion of fathers were day laborers (62.3%) and most mothers were homemakers (58.1%). While 75.8% reported their parents living together, only 36.5% were currently living with their parents. Among those not living with parents, most stayed with friends (81.2%). During the day, 60% spent time in railway, bus or launch stations and over half (53.5%) reported sleeping in slum areas at night (Table I)

Table II presents key determinants of substance use and work-related risk behaviors among the respondents. Most began working at a young age, with 39.5% starting at or before age 12 (Mean age= 13.0±2.3 years). Working hours varied, with over two-thirds working 6 hours or more daily. A majority (60.1%) earned ≤150 Taka per day, with an average daily income of 173.6±56.5 Taka. While most spent their income on food and personal needs (43.5%) or savings (37.5%) a notable 19% spent it on addictive substances. Substance use was highly prevalent, with 73.8% identified as users. Cigarette/Biri (58.2%) was the most commonly used substance, followed by Ganja (25.6%) and glue sniffing (13.3%). (Figure 1 and 2) Over half (56.3%) had been using substances for at least one year. Reported reasons included loneliness or mental pressure

(42.2%) curiosity or need for rest (37.0%) and peer or family-related pressures (20.8%). Notably, 90.4% reported substance use by a family member, indicating strong familial influence. While 62.5% had tried to quit, others continued, often citing feelings of relaxation (35.9%) reduced mental stress (39.1%) or increased work focus (25.0%) after use.

Table III highlights the sexual risk behaviors of the respondents. A small proportion (16.2%) reported having had sexual experiences, with most first encounters occurring at age 17 (Mean age=16.8±0.5 years). Curiosity was the leading cause (54.8%), followed by ignorance (26.2%) and coercion (19.0%). Among those with sexual experience, nearly one-fourth (23.8%) had engaged in sex as a profession. Additionally, 12.7% of respondents reported experiencing sexual harassment at an early age. Alarmingly, relatives (66.7%) perpetrated the majority of such incidents.

Table IV shows significant associations between various socio-demographic characteristics and substance use status among respondents. Males were significantly more likely to use substances than females ($p<0.001$). Lower levels of education were associated with higher substance use, while those with primary education or higher had lower rates ($p=0.001$). Substance use was more prevalent among older adolescents (13–18 years) compared to younger ones ($p<0.001$). Children not living with their parents or whose parents were not living together were significantly more likely to be substance users ($p<0.001$). Spending most of the day in public transit areas (stations) was also linked to higher substance use ($p=0.001$). Those working alone and earning more than 150 Taka daily had significantly higher rates of substance use ($p=0.006$ and $p<0.001$, respectively). Additionally, having a family member who uses substances, staying alone or with friends instead of parents and sleeping in public areas like parks or stations were all significantly associated with increased substance use ($p<0.05$ for all).

In table V, the multivariate logistic regression reveals several significant associations between socio-demographic variables and substance use. Age was a strong positive predictor ($OR=3.786$, $p<0.001$) indicating that older individuals had higher odds of substance use. Males were significantly more likely to use substances compared to females ($OR=0.036$, $p<0.001$) suggesting a strong inverse relationship with being female. Children living with their parents ($OR=0.056$, $p<0.001$) and parents living together ($OR=0.170$, $p=0.023$) were both associated with lower odds of substance use, highlighting the protective role of family structure. Additionally, substance use by a family member was associated with decreased odds ($OR=0.245$, $p=0.022$) though this finding may require further exploration.

Table I Socio-demographic characteristics of the respondents (n=260)

Traits	Categories	Frequency (n)	Percent (%)
Age groups (In years)	10-12	18	6.9
	13-16	198	76.2
	17-18	44	16.9
	Mean±SD		14.8±1.6
Gender	Male	211	81.0
	Female	49	19.0
Education	Illiterate	60	23.1
	No formal education	99	38.1
	Primary and above	101	38.8
Father's occupation	Day labors	162	62.3
	Unemployed	54	20.8
	Farmers	10	3.8
	Others	34	13.1
Mother's occupation	Homemakers	151	58.1
	Day labors	52	20.0
	Maid servants	57	21.9
Respondent's parents living together	Yes	197	75.8
	No	63	24.2
Respondent's living with parents	Yes	72	36.5
	No	165	63.5
Respondent's stays other than parents (n=165)	Alone	36	13.8
	Friends	211	81.2
	Siblings	13	5.0
Respondent's by places of stay throughout the day	Railway, bus and launch station	156	60.0
	Street and over bridge	66	25.4
	Park, near market, slum	38	14.6
Sleeping place at night	Park/over bridge	59	22.7
	Railway/bus/launch station	62	23.8
	Slum	139	53.5

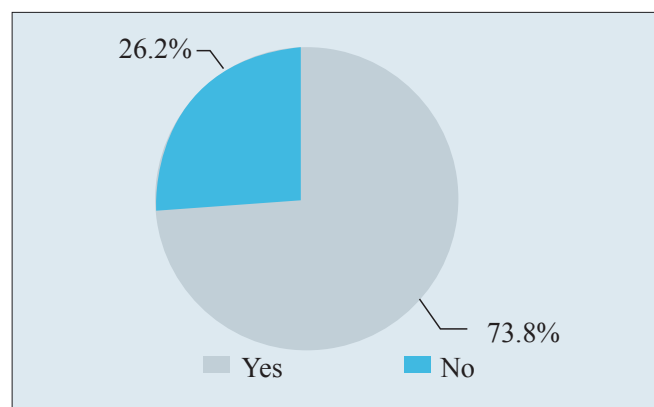


Figure 1 Substance user (n=260)

Table II Determinants of substance use and work-related risk behaviors (n=260)

Traits	Categories	Frequency (n)	Percent (%)
Age at the onset of work (In years) (n=253)	≤12	100	39.5
	13	72	28.5
	≥14	81	32.0
	Mean±SD		13.0±2.3
	Respondent's working hours in a day (n=253)	≤6	81
	6	95	36.5
	>6	77	29.6
Daily income and expenditure (n= 253)	Daily income (in taka): ≤150	152	60.1
	>150	101	39.9
	Mean±SD		173.6±56.5
	Respondent spends income:		
	Food and personal	110	43.5
	Savings	95	37.5
	Addiction	48	19.0
Duration of substance use (In years) (n=192)	1	108	56.3
	2	69	35.9
	3	12	6.3
	4	3	1.6
	Cause of substance use (n=192)	Loneliness/mental pressure	81
Peer pressure/family problem		40	20.8
Curiosity and rest		71	37.0
Substance use by family member	Yes	235	90.4
	No	25	9.6
Tried to quit substance use (n=192)	Yes	120	62.5
	No	72	37.5
Feelings after substance use (n=192)	Relaxation	69	35.9
	Decrease mental pressure	75	39.1
	Decreases appetite and improves concentration		
	at work	48	25.0

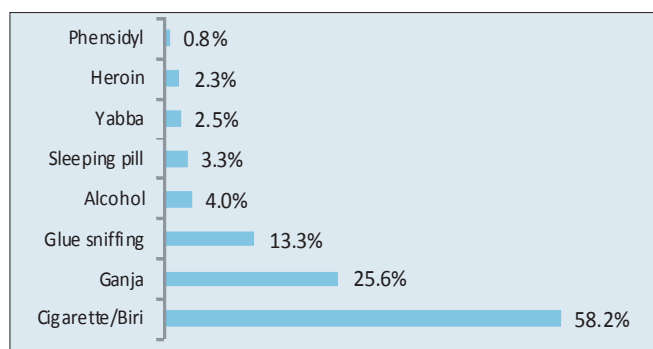


Figure 2 Type of substances (n=192)

Table III Respondent's sexual risk behaviors (n=260)

Traits	Categories	Frequency (n)	Percent (%)
Sexual experiences (n=260)	Yes	42	16.2
	No	218	83.8
Age of first sexual experience (n=42) (in years)	16	10	23.8
	17	30	71.4
	18	2	4.8
	Mean±SD		16.8±0.5
Cause of sexual experience (n=42)	Ignorance	11	26.2
	Curiosity	23	54.8
	Forced by others	8	19.0
Respondents by taking sex as a profession (n=42)	Yes	10	23.8
	No	32	76.2
Sexual harassment in early age (n=260)	Yes	33	12.7
	No	227	87.3
Sexual harassment by people (n=33)	Relatives	22	66.7
	Neighbor	11	33.3

Table IV Association between socio-demographic characteristics with substance use status (n=260)

Characteristics		Substance user		χ ² value	p-value
		Yes (n%)	No (n%)		
Gender	Male	172 (89.6)	39 (57.4)	34.106	*0.000
	Female	20 (10.4)	29 (42.6)		
Education	Illiterate	47 (24.5)	13 (19.1)	13.862	*0.001
	No formal education	83 (43.2)	16 (23.5)		
	Primary and above	62 (32.3)	39 (57.4)		
Age	10-12	3 (1.6)	15 (22.1)	41.125	*0.000
	13-16	147 (76.6)	51 (75.0)		
	17-18	42 (21.9)	2 (2.0)		
Living with parents	Yes	39 (41.1)	56 (58.9)	83.354	*0.000
	No	153 (92.7)	12 (7.3)		
Parents living together	Yes	134 (68.0)	63 (32.0)	14.287	*0.000
	No	58 (92.1)	5 (7.9)		
Spends time throughout the day	Railway/bus/launch station	128 (66.7)	28 (41.2)	14.816	*0.001
	Street and over bridge	43 (22.4)	23 (33.8)		
	Park, near market, slum	21 (10.9)	17 (25.0)		
Respondent works	Alone	143 (77.3)	40 (58.8)	7.581	*0.006
	Group	42 (22.7)	28 (41.2)		
Daily incomes (Taka)	≤150	92 (49.7)	60 (88.2)	30.739	*0.000
	>150	93 (50.3)	8 (11.2)		
Substance use by family members	Yes	179 (76.2)	56 (23.8)	6.835	*0.009
	No	13 (52.2)	12 (48.0)		
Stays other than parents	Alone	34 (17.7)	2 (2.9)	9.192	*0.010
	Friends	149 (77.6)	62 (91.2)		
	Siblings	9 (4.7)	9 (4.7)		
Sleeping place	Park/over bridge	55 (28.6)	4 (5.9)	44.756	*0.000
	Railway/bus/launch station	58 (30.2)	4 (5.9)		
	Slum	79 (41.1)	60 (88.2)		

Chi-square test done, p<0.05 considered as statistically significant value.

Table V Multivariate logistic regression between socio-demographic variables with substance use

Variable	B	df	p-value	OR	95% CI for EXP(B)	
					Lower	Upper
Age	1.331	1	*0.000	3.786	2.278	2.278
Gender	-3.333	1	*0.000	0.036	0.009	0.138
Respondent's living with parents	-2.875	1	*0.000	0.056	0.019	0.165
Respondent's parents living together	-1.770	1	*0.023	0.170	0.037	0.784
Substance use by family member	-1.406	1	*0.022	0.245	0.073	0.819
Respondent works with	-0.522	1	0.330	0.593	0.208	1.695

$p < 0.05$ considered as statistically significant value.

DISCUSSION

The majority of respondents were aged 13–16 years (76.2%) with a mean age of 14.8 ± 1.6 years. In a study of Lahore, Pakistan showed that majority respondents mean age was 13 years.²² Most were male (81.0%) and had no formal education or only primary-level education. A study in Bangladesh found that 85% of street children were boys, while 15% were girls.²³ A study in Ghana found that 53.7% of 227 respondents were male, and 46.3% were female.²² Although female street children are generally fewer worldwide, their numbers are increasing. While 75.8% reported their parents living together, only 36.5% were currently living with their parents. Among those not living with parents, most stayed with friends (81.2%). A study among street children in Bangladesh showed that the majority of their parents were living together.²⁴ During the day, 60% spent time in railway, bus, or launch stations, and over half (53.5%) reported sleeping in slum areas at night. These findings reflect a vulnerable population with limited familial support and unstable living conditions.

Many began working early, with 39.5% starting at or before age 12 (Mean age: 13.0 ± 2.3 years). Over two-thirds worked more than 6 hours daily, and 60.1% earned ≤ 150 Taka per day (average income: 173.6 ± 56.5 Taka). A study in Western Kenya found that over half (53%) of the respondents were involved in income-generating activities, with 57% earning less than 1.00 USD per day.²⁵ Similarly, in another study in Bangladesh reported that nearly half (47.62%) of the respondents worked 7 to 9 hours daily, earning an average of 68.23 Taka per day.²⁶ Most spent their earnings on food and personal needs (43.5%) or savings (37.5%) but 19% used it to buy addictive substances. Substance use was widespread, affecting 73.8% of respondents. Cigarettes/Biri were most common (58.2%) followed by Ganja (25.6%) and glue sniffing (13.3%). More than half (56.3%) had used substances for over a year. Reasons included loneliness or mental stress (42.2%) curiosity or need for rest (37.0%) and peer or family pressure (20.8%). Notably, 90.4% reported substance use by a family member. While 62.5% had attempted to quit, others continued due to feelings of relaxation (35.9%) stress relief (39.1%) or improved focus (25.0%). These findings underscore the vulnerability of this

group due to early work exposure, low income, family influence, and psychosocial stressors.^{11,15} A study in Iran found that 66.7% of street children were current substance users, with 47.4% having smoked cigarettes- their first used substance.²⁷ A study in Western Kenya reported 74% had used drugs in their lifetime, mainly glue (67%) alcohol (47%) cigarettes (45%) marijuana (29%) and pharmaceuticals (8%).²⁵

Regarding sexual risk behaviors, 16.2% of respondents reported having had sexual experiences, with most first encounters occurring around age 17 (mean age = 16.8 ± 0.5 years). The primary reason was curiosity (54.8%) followed by ignorance (26.2%) and coercion (19.0%). Among those with sexual experience, 23.8% had engaged in sex as a profession. Additionally, 12.7% reported experiencing sexual harassment at an early age, with the majority of incidents (66.7%) perpetrated by relatives. A study in Pakistan found that nearly half (48%) of the respondents were involved in transactional sex.²⁷ These findings highlight the high vulnerability of street children to sexual exploitation and abuse.

This study found that males were significantly more likely to use substances than females ($p < 0.001$). Substance use was also higher among those with lower education levels, whereas children with at least primary education had lower usage rates ($p = 0.001$). Older adolescents (13–18 years) showed significantly higher substance use compared to younger ones ($p < 0.001$). Children not living with their parents or whose parents were separated were more likely to engage in substance use ($p < 0.001$). Spending most of the day in public transit areas such as stations was also associated with higher substance use ($p = 0.001$). Working alone ($p = 0.006$) and earning more than 150 Taka per day ($p < 0.001$) were linked to increased use. Furthermore, having a family member who used substances, living alone or with friends and sleeping in public places like parks or stations were all significantly associated with higher substance use ($p < 0.05$ for all). Respondents currently using drugs other than glue were 3.5 times more likely to engage in risky sex, while those using glue along with other drugs were 4.7 times more likely.²⁴ Another study found a significant association between drug use and factors such as increasing age, family members' drug use, living in rented shelters, and being on the streets for over two years.²⁵

CONCLUSION

Most of the street adolescents were under 16, lived without family and were driven to the streets by poverty. Many used substances, with loneliness and curiosity cited as primary reasons. Sexual risk behaviors were prevalent, particularly among females. Statistically significant associations were found between substance use and factors like age, education, and family influence.

RECOMMENDATIONS

To improve the situation of street children, initiatives should include social security programs, strengthened family bonds, empowerment and employment opportunities, culturally appropriate interventions, drop-in centers for at-risk children, low-cost night shelters, educational and economic support and awareness programs on substance use, HIV/AIDS and its impacts.

ACKNOWLEDGMENTS

The authors are thankful to all the adolescents for participating in this study.

DISCLOSURE

The authors declared no competing interests.

REFERENCES

1. □ The State of the World's Children 2006: Excluded and Invisible. United Nations Children's Fund (UNICEF): 2005. <https://www.unicef.org/reports/state-worlds-children-2006> (Cited December 20, 2019).
2. □ Strategies to Combat Homelessness. UN-HABITAT: 2001. <https://unhabitat.org/strategies-to-combat-homelessness> (Cited December 20, 2019).
2. □ Islam F, Kar S, Debroy A, Sarma R. Substance abuse amongst the street children in Guwahati city, Assam. *Annals of medical and health sciences research*. 2014;4(3):233-238.
4. □ Ahmad F, Hossain KJ, Ahmed M, Rajia J, Salma U, Haque A, Sultana H, Nurunnabi M, Abbas MG. Health related Quality of Life and Relative Attributes among Substance Users. *Journal of Sylhet Women's Medical College*. 2023;13(1):20-27.
5. □ UNESCO 2017 Report. United Nations Educational, Scientific and Cultural Organization (UNESCO): 2017. <https://unesdoc.unesco.org/ark:/48223/pf0000261971>.
6. □ Working with Street Children: A Training Package on Substance Use, Sexual and Reproductive Health Including HIV/AIDS. World Health Organization (WHO): 2000. https://iris.who.int/bitstream/handle/10665/66756/WHO_MSD_MDP_00.14.pdf.
7. □ At the Margins: Street Children in Asia and the Pacific. Asian Development Bank: 2003. <https://www.adb.org/sites/default/files/publication/29163/margins.pdf> (Cited December 22, 2019).
8. □ The State of the World's Children 2007. UNICEF: 2007. <https://www.unicef.org/reports/state-worlds-children-2007> (Cited December 22, 2019).
9. □ Muzzi ME. UNICEF Good Practices in Integrating Birth Registration into Health Systems (2000-2009) Case Studies: Bangladesh, Brazil, The Gambia and Delhi, India. <https://microdata.worldbank.org/index.php/citations/3679> Cited December 25, 2019).
10. □ Nurunnabi M, Tarafdar MA, Begum A, Jahan S, Islam AFMR. Adolescent Suicide and Suicidal Behavior: A Review. *Z H Shikder Women's Medical College Journal*. 2021;3(2):38-42.
11. □ World Day against Child Labour. United Nations (UN): 2016. <http://www.un.org/en/events/childlabourday/background.shtml> (Cited December 25, 2019).
12. □ Ahmed SM, Hossain S, Khan AM, Islam QS, Kamruzzaman M. Lives and Livelihoods on the streets of Dhaka City: Findings from a population-based exploratory survey. *BRAC*. 2011;19: 1-56.
13. □ Towe VL, ul Hasan S, Zafar ST, Sherman SG. Street life and drug risk behaviors associated with exchanging sex among male street children in Lahore, Pakistan. *Journal of Adolescent Health*. 2009;44(3):222-228.
14. □ Nurunnabi M, Tarafdar MA, Islam MS, Uddin NMM, Akter F, Begum A. Demographic Trends of Adolescent Suicidal Hanging Deaths in Sylhet. *Z H Shikder Women's Medical College Journal*. 2024;6(1):21-25.
15. □ Ballet J, Sirven N, Bhukuth A, Rousseau S. Vulnerability to violence of girls of the street in Mauritania. *Children and youth services review*. 2011;33(5):656-662.
16. □ Khan AA, Khan A, Bokhari A. The HIV epidemic in Pakistan. *Journal of Pakistan Medical Association*. 2010;60(4):300-307.
17. □ Nada KH, El Daw AS. Violence, abuse, alcohol and drug use, and sexual behaviors in street children of Greater Cairo and Alexandria, Egypt. *AIDS*. 2010;24:S39-44.
18. □ Reyna VF, Rivers SE. Current theories of risk and rational decision making. *Developmental review*. 2008;28(1):1.
19. □ Subarna NF, Biswas AK, Shikdar MK, Hassan A. The social life of street children in Khulna City of Bangladesh: A socio-psychological analysis. *Asian Journal of Social Sciences & Humanities*. 2014;3:1.
20. □ Nurunnabi M, Khan FA, Noor IN, Alam MB, Begum A. Factors Influence in Provision of Adolescent Friendly Health Services by Outreach Workers. *Z H Shikder Women's Medical College Journal*. 2022;4(2):16-20.

REFERENCES

21. □ Thapa K, Ghatane S, Rimal SP. Health problems among the street children of Dharan municipality. *Kathmandu University Medical Journal*. 2009;7(3):272-279.
22. □ Mahmud I, Ahsan KZ, Claeson M. Glue sniffing and other risky practices among street children in urban Bangladesh. World Bank, Washington, DC. 2011.
23. □ Opong Asante K, Meyer-Weitz A, Petersen I. Substance use and risky sexual behaviours among street connected children and youth in Accra, Ghana. *Substance abuse treatment, prevention and policy*. 2014;9:1-9.
24. □ Embleton L, Ayuku D, Atwoli L, Vreeman R, Braitstein P. Knowledge, attitudes, and substance use practices among street children in Western Kenya. *Substance use & misuse*. 2012;47(11):1234-1247.
25. □ Farid S, Mostari M. Lives and livelihoods of children living in street situation in Dhaka city of Bangladesh. *Bangladesh Research Publications Journal*. 2015;11(1):40-48.
26. □ Ansari H, Moghaddam AA, Mohammadi M, Arbabisarjou A. Predictors of high-risk behaviors among street children in Zahedan, Southeastern Iran. *International Journal of High Risk Behaviors and Addiction*. 2016;5(4):10-5812.
27. □ Sherman SS, Plitt S, ul Hassan S, Cheng Y, Tariq Zafar S. Drug use, street survival, and risk behaviors among street children in Lahore, Pakistan. *Journal of urban health*. 2005;82:iv113-24.