IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 17, Issue 8 Ver. 10 (August. 2018), PP 36-40
www.iosrjournals.org

Tobacco Using Pattern and Health Status of Street Vendors in Dhaka City, Bangladesh

Md. Lutfor Rahman[1], Md. Maruf Hossain[2], Md. Shariful Islam[3], Maruf Rahman[4], Md. Adol Insan[5], Subal Chandra Roy[6,] Muhammad Al-Amin[7], Md. Abul Hossain[8]

[1]*former Principal, Tangail Polytechnic Institute, Tangail, Bangladesh.*
[2]*clinical Physiotherapist, Saic Institute Of Medical Technology, Bangladesh.*
[3,5]*research Assistant, Training And Research Institute Of Medicine, Agriculture And Nutrition (Triman) Nutriceuticals Limited,*
[4]*internship Physician, Dhaka Medical College And Hospital*
[6]*junior Scientific Officer, Samorita Medical College And Hospital, Dhaka*
[7]*research Officer, Training And Research Institute Of Medicine, Agriculture And Nutrition (Triman) Nutriceuticals Limited*
Corresponding author:[8]*Chief Researcher,*

Abstract: *Background: Street vending is a dominant occupation in urban areas of developing countries as well as very popular and customized in urban areas of Bangladesh. It offers goods or services for sale to the public without having a permanent built-up structure (head-load). Tobacco use is an important risk factor for non-communicable diseases (NCD). In Bangladesh 43.3% adults use tobacco on regular basis. Objective: Present study was conducted to assess the pattern of tobacco using and health condition of street vendors in Dhaka city.* ***Methods****: A cross sectional study was conducted among the street venders in Mirpur area of Dhaka city. Face to face interview was conducted using pre-tested semi-structured questionnaire for data collection. Data was analyzed using SPSS version 16.0. Results: Information about tobacco use and health status was collected from 190 street vendors. The mean age ± SD of the respondents were 34.85±10.71 years. Among the respondents 94% were male. Overall 26.2% respondents were tobacco user (Smoker 23.7%, smokeless tobacco (SLT) user 8.9%, and duel tobacco user 6.4%). Among the age group of less than 40 years tobacco user was 35.2% (smoking 32.3%, SLT 10.7%, duel user 7.8%) and age group of 40 years or above, 24.7% (smoking 20.9%, 8.6%, duel user 4.8%) was tobacco user. The mean ± SD of smoking sticks per day were 9.45±7.1. Among the currently smokeless tobacco users 33.4% used Sadapata and/or Jorda with battle leaves, 40.7% used Gul and 25.9% others. Before starting vending 20% and 13.3% respondent were with excellent and poor in health respectively. After six months of vending health condition had changed into better 51.7%, worse 41.7%, and unchanged 6.7%. Majority of them (63.3%) assumed that car fume and other environmental pollutions were highly linked with this job as health risks and 43.33% thanked road traffic accidents. The behavior of 73.3% respondent had changed and among them 33.3% got depression, 30% easily angered and 25% anxiety.* ***Conclusion:*** *Tobacco use among street vendors is highly prevalent. Special cessation programs and health awareness programs need to be taken among that group of population.*

Key words: *Tobacco Using Pattern, Health Status, Street Vendors, Vending Related Health Risk.*

Date of Submission: 07-08-2018 Date of acceptance: 24-08-2018

I. Introduction:

Footpath vending is very popular and customized in urban areas. It is a dominant occupation in urban areas of developing countries. Half of the world's populations now live in urban areas largely because of rural-urban migrant increasing.[1] Urbanization has led to an unmet demand for housing, transport and employment opportunities.[2] The unmet need for unemployment has initiated the creation of informal employment of which includes street vending. Urbanization in Africa has been phenomenal and puzzling; with a rapid shift from 15% in 1950 to about 41% urban proportion currently.[3] The UNFPA estimates that by 2030, the continent may attain 54% urban proportion.[4] A street vendor is a person who offers goods or services for sale to the public without having a permanent built-up structure but with a temporary static structure or mobile stall (or head-load). The total number of street vendors in India is estimated at around 10 million.[5] Some studies estimate that street vendors constitute approximately 2 per cent of the population of a metropolis. Mumbai has roughly 2,50,000 street vendors and Kolkata has nearly 2,00,000.[6] Street vendors have poor social protection and their working

conditions on the streets expose them to a variety of safety and health issues. The SNDT – ILO study on Mumbai found that around 85 per cent of the street vendors complained of stress related diseases – migraine, hyper acidity, hyper tension and high blood pressure.[7] But the street vendors market many goods, such as clothes and hosiery, household goods and food items, manufactured by home based workers, who have no other channels of marketing the products that they produce. They also ensure the availability of goods and services at cheaper rates to people. The lack of recognition of the role of the street vendors culminates in a multitude of problems faced by them: obtaining license, insecurity of earnings, insecurity of place of hawking, gratifying officers and musclemen, constant eviction threat, fines and harassment by traffic policemen. Bangladesh is a highly populated developing country. Hawking and street business are very easy and popular in this country. Millions of people survive their family doing street business. But there was no study in Bangladesh about footpath vending and their health. So, it was needed to determine and explore the health, health practice, health behavior of footpath vendors in Bangladesh.

II. Methods and materials:

Descriptive type of cross sectional study was conducted at Mirpur in Dhaka city of Bangladesh to determine about the tobacco use and health status of footpath vendors. The subjects of the study were the persons, who were continuing vending in the street. They able to verbally communicate, agree to give answers of the questionnaire and age between 15 to75 years. The data were collected with pre-tested, modified, semi-structure questionnaire since 05 April 2017 to 25 April, 2017 while the vendors had been working. Areas were selected purposively and the sample size 190. Data were entered and analyzed using SPSS software 16 version.

III. Results:

Analysis of socio-demographic variables and found from table 1, majority of the respondents (44.74%) belong to age group of 20-30 years with mean age ± standard deviation (SD) 34.85±10.71 and over 50 years of age 13.16%.

Table 1: Distribution of respondents by socio-demographic characteristics (n=190)

Variables	Group	Frequency	Percentage
Age	20-30 years	85	44.74
	31-40 years	53	27.89
	41-50 years	27	14.21
	50+ years	25	13.16
	Mean ± SD = 34.85 ± 10.71		
Sex	Male	179	94.21
	Female	11	5.79
Marital status	Married	148	77.89
	Unmarried	42	22.11
Education	No formal education	49	25.79
	Primary to higher secondary	35	18.42
	Degree/ honors	34	17.89
	Post graduation and above	27	14.21
Total		**190**	**100**

Among them 94.21% were male and married 77.89%. The educational level of the respondents were no formal education 25.79%, less than primary to higher secondary18.42%, degree/honors 17.89%, post graduation and above 14.21%.

Table 2: Tobacco users in percentage of the respondents (n=190).

Variables	Smoker	Smokeless tobacco user	Duel user
Over all (26.2%)	23.70%	8.90%	6.40%
≤40 years age (35.2%)	32.30%	10.7	7.80%
> 40 years age (24.7%)	20.90%	8.6	4.80%
Mean ± SD of smoking sticks per day 9.45±7.1			
Smokeless tobacco user	**Gul**	**Sadapata/Zarda with battle leaves**	**Others**
	33.40%	40.70%	25.90%

The study found over all tobacco user 26.2%. Mean ± SD of smoking sticks per day 9.45±7.1. Smoking is more preferable tobacco to the users than smokeless tobacco. Increasing trends to smoke (32.30%) in the age group of ≤40 years than the age group of > 40 years (20.90%) as well as smokeless tobacco use and both (duel user). Regarding the smokeless tobacco 33.40% used Gul, 40.70% Sadapata/Zarda with Battle leaves, and 25.90% others of the respondents.

Table 3: Showing the physical health and behavior conditions before starting and after six months of vending of the study subjects (n=190).

Variables	Health status	Frequency	Percentage
Health condition before vending	Excellent	38	20
	Very good	38	20
	Good	87	45.8
	Poor	27	14.2
	Very poor	0	0
Health condition after six months of vending	Excellent	9	4.7
	Very good	41	21.6
	Good	105	55.3
	Poor	31	16.3
	Vary poor	4	2.1
Behavioral health	Anxiety and easily startled	54	28.4
	Angrier	58	30.5
	Depression	63	33.2
Total		**190**	**100**

Before vending on the footpath the health conditions of 20% respondent was both excellent and very good, 45.8% good and 14.2% poor. There was no respondent with very poor in health before starting vending. Six months after vending physical health turned into excellent 4.7%, very good 21.6%, good 55.3%, poor 16.3% and very poor 2.1%. Behavioral health of the respondents turned into anxiety and easily startled 28.4%, easily angrier 30.5% and depression 33.2%.

Table 4: After six months of vending

Item	Diseases	Frequency	Percentage	Total %
Skin disease	Rashes	63	33.2	48.4
	Boils	13	6.8	
	Foot Root	9	4.7	
	Cracked heels	35	18.4	
	Allergy	4	2.1	
Musculoskeletal diseases	Pains and aches	60	31.6	61.6
	Waist pain	53	27.9	
	Shoulder pain	43	22.6	
	Elbow and knee joint pain	13	6.8	
	Hand and leg muscle pain	4	2.1	
Respiratory diseases	Difficult breathing	38	20	49.5
	Catarrh	33	17.4	
	Sore throats	25	13.2	
	Cough	57	30	
Changing behavioral health	Anxiety and easily startled	54	28.4	73.7
	Angrier	58	30.5	
	Depression	63	33.2	

appeared diseases of the respondents (N=190)

After six months of vending the study subjects suffered from skin diseases 48.4%, among them the highest 33.2% suffered from Rashes. Total 61.6% suffered with musculoskeletal problems and the highest 27.9% suffered from waist pain. Almost halves (49.5%) of the respondents suffered from respiratory diseases and among them 30% suffered from cough.

Table 5: Distribution of the vending associated health risks and prevention Criteria (n=190).

	Types of risks	Frequency	Percentage
Health risks associated during street vending	Road traffic accidents	81	42.6
	Falls and Injuries	33	17.4
	Verbal abuse from customers, colleagues, authorities	84	44.2
	Physical abuse from customers, colleagues, authorities	43	22.6
	Car fume and other environmental pollution	119	62.6
	Harsh weather	43	22.6
Risks prevented by	Nothing	99	52.1
	Wear socks, mask, appropriate cloth	21	11.1
	Always careful	95	50
	Vaccination	16	8.4
	Regular check up	17	9
	Taking medicine	13	6.8

	Others	19	10

****** Multiple answers

Assumptions of respondents, car fume and other environmental pollutions ware associated with health risks 62.6%, verbal abused from customers, colleagues, authorities 44.2%, physical abused from customers, colleagues and authorities 22.6%, falls and injuries 17.4%, road traffic accidents 42.6%.and harsh weather 22.6%. The prevention from risks were nothing by 52.1%, wearing additional clothing such as socks, long sleeves shirts, nose mask 11.1%, always careful 50%, vaccination 8.4%, taking herbs, medicine, food 6.8% and others 10%.

Table 6: Hygiene Practice of the respondents by faececation and urination (n=190)

Variables	Faececation		Urination	
	Frequency	**Percentage**	**Frequency**	**Percentage**
Personal toilet	74	39	32	16.8
Public toilet	126	66.3	123	64.7
Open space	0	0	66	34.7
Official toilet	5	2.6	5	2.6

Study found the pattern of hygiene practice of the respondents regarding the place for excreting stool and urine, 66.3% used public toilet for faececation as well as 66.67% for urination. 39% and 16.8% used personal/family toilet for excreting stool and urine respectively. 34.7% used open places for urination but no one faececation. 2.6% used official toilet both for stool and urine excretion.

IV. Discussion:

The study found mean age with standard deviation (SD) of the respondents was 34.85±10.71 and highest 44.74% belongs to age group 20-30 years. Over fifty years of age was 13.16%, where as in Yaounde, Cameroon this age group was 30.71%, more than fifty years only 3.22% [11] and in Accra, Ghana age group of 20-29 years was the highest 58.3%, more than 50 years 0.3%.[12] In this study female respondents were 5.79% but in Yaounde 58.42% and in Accra 68.3% [12] that makes far difference from Bangladesh. Also no formal education found 23.3% and 3.3% completed the post graduate degree among the respondents in Dhaka. On the contrary no formal education 20.8% and no post graduation found in a study in Cameroon. Study revealed that 26.2% population consumed tobacco but in Papua New Guinea 40%[13], our result was consistent with that study. This study also found 35.2% was tobacco user among the age group of less than and/or equivalent 40 years and 24.7% was more 40 years of age group and their Mean ± SD cost was 94.50± 70.00 BDT per day[14]. Another study showed tobacco user was 70.3% between the 35-49 years of age[15] and their tobacco consumption cost per day was it was extremely more than double of our findings. More over a study in Timor-Leste reported current cigarette smoking prevalence were 51 % of age less than 15 years and 45 % were in grade 2 students and 57 % were found in 15 years plus age group.[16] This study found got anxiety and easily startled at least noise 25%, easily angered 30% and depression 33.3%. It is almost similar to the SNDT – ILO study on Mumbai found around 85 per cent of the street vendors complained of stress related diseases – migraine, hyper acidity, hyper tension and high blood pressure.[6] This study also found 68.33% used public toilet for faececation as well as 66.67% for urination. Ministry of Housing and Urban Poverty Alleviation. National Policy on Urban Street Vendors, 2004, found 78% used the public toilet[9,10] in India.

V. Conclusion:

The demand and popularity of street vending are increasing day by day in Bangladesh, because of enough earning against of risk free and small investment. On the contrary, behavioral health problems are arising among the vendors. Health care and awareness need for them.

Disclosure: There is no conflict and competing of interest to the authors.

Acknowledgement: We would like to express my deepest regards, gratitude and thanks to my respected and honorable teacher as well as mentor Engineer Md. Lutfor Rahman, former principal of Tangail Polytechnic Institute, Tangail and the vendors who help us by giving the informations.

References:

[1]. The Hindu. 'Bill on street vendors to be introduced in parliament' 18 August 2012, http://www.thehindu.com/news/cities/Delhi/article3788463.ece
[2]. National Association of Street Vendors of India (NASVI), http://nasvinet.org/newsite
[3]. United Nations Population Fund (UNFPA). State of world population 2007- Unleashing the potential of urban growth; 2007.
[4]. Background Note on Street Vendors.
[5]. http://hdl.handle.net/123456789/5867
[6]. Ministry of Housing and Urban Poverty Alleviation. National Policy on Urban Street Vendors, 2004
[7]. http://www.india-seminar.com/2006/568/568_sharit_k_bhowmik.htm

[8]. Manushi: Forum for Women's Rights and Democratic Reforms, www.manushi-india.org
[9]. Bhowmik, S., Social Security for Street Vendors. Available from: http://www.india-seminar.com/2006/568/568_sharit_k_bhowmik.htm.
[10]. Singh, S.U., Repnik, A., Chanchani, Seshadri, S., & Viswanath, R., (2012). Negotiating Lives and Spaces.
[11]. Elizabeth, A., & Chris, K. M. A. (2009). Violence Against Women in Nigeria: How the Millennium Development Goals. *The Journal of Pan African Studies*, 3(3).
[12]. Nguendo Y. H., Blaise (2014). An Assessment of Hygiene Practices and Health Status of Street-food Vendors in Yaoundé, Cameroon, *International Journal of ROPICAL DISEASE & Health*, 4(11): 1153-1170.
[13]. Tobacco Consumption in Papua New Guinea, (2015). The World Bank Group, Australian Aid. (96795-BRI-PUBLIC-Box391467B-Tobacco-Knowledge-Briefs-Final-version-May-27).
[14]. Hossain, M.A., et.al., (2017). Assessment of Health of Street Vendors at Mirpur Area in Dhaka City, Bangladesh. *The Journal of Macro Trends in Health and Medicine*, 5(1), 39-47.
[15]. Bangladesh Bureau of Statistics, *Prevalence of Smoking in Bangladesh*, Dhaka: 1996.
[16]. Sarmento, D.R., Yehadji, D., (2016). An analysis of global youth tobacco survey for developing a comprehensive national smoking policy in Timor-Leste. *BMC Public Health*. DOI 10.1186/s12889-016-2742-5.

Md. Lutfor Rahman" Tobacco Using Pattern and Health Status of Street Vendors in Dhaka City, Bangladesh."IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), vol. 17, no. 8, 2018, pp 36-40.