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The Impact of Socio-Economic and Demographic **Factors on Health Seeking Behavior of Urban** Households, Bangladesh

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Research

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Abstract

Aim: As households' health-seeking behavior depends enormously on socio-economic and demographic factors particularly in developing county like Bangladesh, it contributes differently to health-care seeking behavior varying household to household. This study intends to explore the nature of the health seeking behavior of urban residents in Sylhet city through assessing the socio-economic and socio-demographic factors.

Subject and Methods: A 150 household survey has been completed in Sylhet city, using a multistage cluster sampling method. A household survey questionnaire was used to collect data on socio-demographic and socio-economic factors and their impacts on health-seeking behavior. Chi-square test and logistic regression analysis investigate the extent of association between different socio-economic and demographic factors and health-seeking behavior.

Results: We found that among the 150 participants, the majority (88%) of household heads are male because gender is significantly associated with priority in choosing health care in the study. The result of binary logistic regression indicates the households who have a minimum level of education (primary or above) are 10.617 more likely to use public health care facilities. Income is statistically associated with the main source of health service. The interference of income in seeking treatment has a relationship with the employment sectors (public or private). Moreover, the reasons for choosing a specific source of health care have a significant relationship with the main source of health care (public or private).

Conclusion: This study recommends that government should introduce health insurance policy for city dwellers for reducing the inequalities in health services among city dwellers.

Background

Health seeking behavior refers to decision or an action taken by an individual to maintain, attain, or regain good health and to prevent illness. Health seeking behavior determines how different classes of people use health services from the health professionals and the health service organizations.

A number of factors that determine health seeking behavior are: physical, socio-economic, cultural and political (Musoke et al. 2015; Mahmood et al. 2009, p. 6; Kroeger 1983). The health status and health care service in developing countries are determined by the socio economic status and the affordability and utilization of the health facilities (Guru et al. 2015). So, investigation of socio-economic factors is one of the vital issues in health services in Bangladesh.

The effectiveness of a health system depends on the availability and accessibility of services in a form which the people are able to understand, accept and utilize (Islam and Biswas 2014). However, a large number of the people in Bangladesh, particularly in rural areas, remain with little access to health care facilities (Islam and Biswas 2014). Osman (2008) study found that the factors that contribute to poor accessibility of health care in developing countries are illiteracy, poverty, poor funding of the health sector, inadequate water and poor sanitation facilities. Mahejabin et al., (2015) study found that health seeking behavior in different socio-

economic levels of any community is crucial for proper planning and implementing of effective health services, particularly for poor community.

Education is one of the factors that reduce infant mortality (NIPORT 2013). Empirical studies from Bangladesh and few other developing countries found that socio-economic condition is highly considerable factors in health seeking behavior (Biswas et al. 2006).

Socio-demographic factors such as age is a factor which varies the health care seeking behavior from person to person. A study of Engeda et al., (2016) found that age was significantly associated with visiting modern health care facility. In contrast, Amin et al., (2010) study examined that age and education factors were less pronounced in the differentials of health seeking behavior of maternal care and child health care in rural Bangladesh (Amin et al. 2010). Sun et al., (2013) found that health literacy is also affected by prior knowledge and age; the effect from prior knowledge is positive and that from increasing age is negative. Health literacy is a direct influencing factor of health behavior, but its effect is weaker than that of prior knowledge.

Engeda et al (2016) demonstrates that the more the educational level of people is, the better their understanding of diseases processes, availability of diagnosis, treatment options, and the risk of delay in medical care seeking will be. Sun et al., (2013) explains education is one of the powerful tools that affect seeking of health services. Bashar et al (2012) found a significant relationship (p < 0.05) between level of education with malaria prevalence which was conducted in Bangladesh. Mahoood et al (2009) presents the health-seeking behaviour of the people in Chakaria, a rural area in Bangladesh. The results show that treatment seeking was not equitable throughout the community. A clear gender differential in treatment seeking was observed in the area. The study showed that although more females reported being ill compared to males, treatment seeking was significantly higher among males compared to the females (Mahmood et al. 2009). The study Ahmed (2005) found socioeconomic indicators were the single most pervasive determinant of health-seeking behavior among the study population, overriding age and sex, and in case of health-care expenditure, types of illness as well. Qasim et al., (2014) reviewed the literature related to health seeking behavior and socio economic factor of women. They observed that there were the two main reasons for not seeking help, one is lack of finances (Qasim et al. 2014; Uddin et al., 2014) to access any health service and another is considering the symptom as something common not needing attention. In low-income countries such as Bangladesh, the less than optimum use of services could be due to low levels of health literacy where health literacy helps individuals to make effective use of available health services. According to Uddin et al., (2014), the quality of medical treatment was associated with urbanity and type of disease. The findings of the study show that seeking medical treatment from any provider in the last one year was higher in the rural than urban patients (Uddin et al. 2014). Amin et al., (2010) conducted a study where data collected from three divisions of Bangladesh and the major findings was that a household's relative poverty status, as reflected by wealth quintiles, was a major determinant in health-seeking behavior (Amin et al., 2010). This finding supports by the study of Uddin et al. (2014) as they examined that household asset quintile was the primary determinant of consulting trained providers in both sites; the higher the asset quintile the higher was the consultation rate. Mothers in the highest wealth quintile were significantly more likely to use modern trained providers for antenatal care, birth attendance, post natal care and child health care than those in the poorest quintile (Amin et al. 2010). Amin et al (2010) study found that both formal education and relative wealth were Loading [MathJax]/jax/output/CommonHTML/jax.js maternal and child health services. So, they suggested based on

the findings that, both the economic and educational improvement of the poor mothers would have a reinforcing effect on improved service utilization, so they both need to be strengthened.

Understanding health seeking behavior will assist to know how socio-economic inequalities in developing societies contribute to unequal health services. So, research on health seeking behavior is immediately required to ensure need based health care to the different segment of population. This study will examine some significant health service determinants such as socio-economic and demographic factors which are correlated with health seeking behavior. Some examples include gender, age, education, access to health, income, traditional beliefs and modern health care system (Islam et al 2006; Islam and Biswas 2014; NIPORT 2013). The study of Tipping and Segall (1995) also demonstrated that the decision to engage with a particular medical channel is influenced by a variety of socio-economic variables, including sex, age, the social status of women, the type of illness, access to services and perceived quality of the service.

This study hypothesizes that the level of socioeconomic factors increase the inequalities in health seeking behavior and also the degree of socio-demographic factors have a causal relationship with health care seeking treatment. Health seeking behavior is viewed as the varied response of individuals to states of ill-health, depending on their knowledge and perceptions of health, socioeconomic constraints, adequacy of available health services and attitude of healthcare providers (Afolabi et al. 2013).

Several studies stated that the various factors that influence the health service delivery and seeking behavior in rural and urban areas, causes of health inequalities, and poor accessibility of health in developing countries. But none of studies have been found on how socio-economic and demographic factors contribute to health seeking behavior and health inequalities particularly in poor resource setting urban areas in Bangladesh.

The following sections describe the methods and materials used in the study. After this section, detail results of this research have been explained. The final section concludes discussion and policy recommendations for this study.

Methods

This study used mixed research approach because both qualitative and quantitative data have been collected and analyzed for understanding the factors of socio-economic and their relationships with health seeking behavior of Sylhet city dwellers. This study have used qualitative approach for a detailed understanding of the research problem e.g., health seeking behavior, why behavioral pattern different, reasons of health service inequalities and how socio-economic factor contribute to health seeking behavior. A semi-structured questionnaire has been used for collecting qualitative data from the household health service users.

Quantitative approach typically concentrates on measuring or counting and involves collecting and analyzing numerical data like age, income, assets, service satisfaction, health service, distance from nearest health facilities from residents, challenges of using health facilities that will be represented in quantitative nature and applying statistical tests. Quantitative data has been collected from the sample of households of selected residents.

Location, Sampling and Subject of Research

This study selects two residential areas purposively e.g., Uposhohor under ward-22 and Nabab road under ward-10 located in Sylhet City Corporation on the basis of socio-economic status of city dwellers. Data from two different socio-economic areas enable this research to get new insights on health seeking behaviors which may meet the objectives of this study. The multistage cluster sampling method has been chosen to collect primary data from the large population (approximately 237,000) with different socio-economic background.

As sampling, the population of the Sylhet city divided into 27 clusters according to the geographical locations (wards). The specific number of sample has been selected randomly from two randomly selected clusters. The required number of sample size has been determined by (Kothari, 2006) putting the value in the following formula for infinite population as below:

$$n = \frac{z^2}{e^2}. p. q$$

Where, z = 1.81 (desired confidence interval level is 93% and value obtained from table)

p = 0.5 (Sample proportion)

$$q = 1 - p = 1 - 0.5 = 0.5$$

e = 0.7 (Acceptable error)

n = 167 (Sample size)

The sample size is decided to be reduced and rounded to 150 and 75 sample have been randomly selected from each cluster in this study where each cluster has been divided based on geographical location with the people belonging to different socio-economic background.

Data Collection

The data was collected between Sept 2018 to January 2019. The qualitative data have been collected through the in-depth interview schedule using semi-structured questionnaire which offered best opportunity to understand the interactions of researcher with finding possible insight factors and quantitative data has been gathered using household survey questionnaire. For quantitative data, a survey questionnaire has been used for collecting data on socioeconomic and socio-demographic factors that impacting on health seeking behavior.

We analyzed the data using SPSS (Statistical Package for the Social Sciences), Version- 20. Survey data have been analyzed using SPSS and semi-structured data have been analyzed through inputting in SPSS as the requirement of the study. Data processing is consist of office editing, coding of open-ended questions, data entry, and editing of inconsistencies found by the computer program and descriptive and inferential statistical tools have been used to analyze the data. Descriptive statistics are used to describe the characteristics of

Loading [MathJax]/jax/output/CommonHTML/jax.js | ferential statistics allow the researchers to examine casual

relationships between dependent and independent variables (socioeconomic factors). Inferential statistics help this study to draw general conclusions about the population on the basis of findings identified in a sample. Inferential statistical tools including chi-square and regression (binary logistic regression) have been applied in this study using SPSS software.

Results

Socio-demographic information of the respondents

Table-1: Socio-demographic characteristics in the study sample (N = 150)

Characteristics	Category	N	%
Gender	Male	132.0	88.0
	Female	18.0	12.0
	Total	150.0	100
Age	25-40	64	42.7
	40-75	84	56
	75-80	1	0.7
	80+	1	0.7
	Total	150	100
	Primary	32	21.3
Education	SSC	38	25.3
	HSC	23	15.3
	Degree or above	46	30.7
	No education	11	7.3
	Total	150	100.0
Construction of the house	Paka	122	81.3
	Semi-paka	27	18.0
	Katcha	1	.7
	Total	150	100.0
No of Children	1	22	14.7
	2-3	77	51.3
	4-5	36	24.0
	5+	11	7.3
	No Child	4	2.7
	Total	150	100.0

The Table-1 shows that the heads of the households of study population are male (n = 132, 88%) and female (n = 12, 12%). Considering the age group (Table 1), the highest proportion (n = 84, 56%) was found in the age group of 40-75 years and second highest proportion (n = 64, 42.7%) was found in the age group of 25-

Loading [MathJax]/jax/output/CommonHTML/jax.js mong the households (n = 46, 30.7%) obtained degree or above

education level. Only a few (n = 11, 7.3%) participants have no education of the study area. It is also clear from the above table-1 that more than half of the households (n = 77, 51.3%) have 2-3 children and very few respondents (n = 4, 2.7%) have no children.

The (table-1) also shows that the construction material of the walls of the room of the majority households (n = 122,81.3%) was Paka (made in concret) while only 18% (n = 27) of the households were semi-paka. Very few (n = 1,.7%) of the households had Katcha construction.

Table-2: Health-related behavior according to socio-demographic characteristics

	Priority in Choosing Health Care							
Gender	Traditional		Alternative			(x²) (P-value))		
	N	N %		N		%	0.05	
Male	19	14.4		113		85.6		
Female	8	44.4		10	10 55.6			
Total	27	18		123 10		100		
	Perc	eption a						
Gender	Useful Need Im		nprovement	Expensive		(x ²) (P-value)		
	N	%	N	%	N	%	0.21	
Male	50	37.9	22	16.7	60	45.5		
Female	11	61.1	5	27.8	2	11.1		
Total	61	40.7	27	18	62	41.3		
Education	Prio	Priority in Choosing Health Care					(x ²) (P-value)	
	Trac	litional (N,%)	Alternative(N,%)			.880	
Primary	4 (2.	4 (2.7%)		28 (18.7%)			·	
SSC	5 (3.3%)		27 (18.0%)					
HSC	5 (3.3%)		19 (12.7%)					
Degree or above	8 (5.3%)		36 (24.0%)					
No education	2 (1.3%)		16 (10.7%)					
Total	24 (16.0%)			126 (84.0%	5)			

The Association of Socio-Demographic Variables in Health Seeking Behaviour

The Table-2 shows that the male household head 85.6% choose alternative health care while 55.6% female households' head choose alternative health care. It also seems that the only 14.4% of the female choose Loading [MathJax]/jax/output/CommonHTML/jax.js

traditional health care while 44.4% choose alternative health care. However, P-value = 0.05 implies that there is a significant relationship between the gender of the household and the priority in choosing health care (Tipping and Segall, 1995).

Majority of the male household head (45.5%) said that the bio-medical treatment is expensive, 16.7% claimed need improvement and 37.9% said that bio-medical treatment is useful shown in table-2. Majority of the household headed by female said that bio-medical treatment is useful while 27.8% need improvement and 11.1% of the females said that bio-medical treatment is expensive. It can be concluded that the perception of the bio-medical treatment has no relationship with the gender (p = 0.21 < 0.05).

The Table 2 reveals that about the quarter of the respondents among the households (24%) choose the alternative health care (Medical/bio-medical) health care who had the degree level education or above. All the respondents of different educational background choose the alternative (84%) more than traditional (16.7%). From field data, 5.3% of the respondents among the household heads' who earned degree or above give priority to choose traditional health care for their family. Those who have no education (1.3%) choose the traditional health care for their family which is relatively lower than the respondents who earned HSC, SSC and primary education are 3.3%, 3.3% and 2.7% respectively. We can see that Person Chi-Square (\mathbb{I}^2) (1.188) and P-value = .880 > 0.05. It implies that there is no significant relationship between education of the household heads' and priority in choosing health care (Amin et al., 2010).

Logistic Regression analysis for health seeking behavior of households by socio-demographic factors

Table-3: Binary Logistic Regression Analysis

Variables	В	P-value	Exp(B)/OR	95% C.I. for EXP(B)	
				Lower	Upper
Age (1 = 25-40)	989	.007	.372	.180	.768
Education (1 = Primary or above)	2.362	.004	10.617	2.124	53.065
Gender (1 = Male)	917	.410	.400	.045	3.548
Constant	243	.354	.785		

Source: Field data, collected from Uposohor and Nababroad, Sylhet City, September-October, 2018.

This study uses logistic regression (Table-3) to investigate the extent of association between propensity of public health care, with age, gender, and education from the field data through Odds Ratio (OR) and 95% Confidence Interval(CI). In binary logistic model, education (adjusted OR 10.617, 95% CI: 2.124–53.065) were associated with propensity of using public health facilities. It means the household heads who have minimum level of education (primary or above) are 10.617 times more likely to use public health care facilities.

The 95% CI: 2.124–53.065 for OR indicates that the household heads who have primary or above education are between 2.124 to 53.065 more likely to use public health care facilities compared to those household Loading [MathJax]/jax/output/CommonHTML/jax.js

heads who have no education. The coefficient of age and gender are not statistically significant. OR for age of the respondents is .372, which means the propensity of choosing public health care with respect to age group of the household heads belong to 25–40 is .372 less likely to use public health care facilities (Ahmed et al, 2005). The CI for OR is between .045 to 3.548 indicates that the male heads of the households are between .045 to 3.548 likely to use public health service compared to female heads of households under this study (Mahmood et al., 2009). This is not surprising since we have already concluded that gender and age has no statistically significant explanatory power in explaining variations in choosing public health care facilities (Amin et al, 2010). In contrast, the study of Engeda et al., (2016) found that the age was significantly associated with visiting modern health care facility.

Socio-economic information of the respondents

Table-4: Socio-economic characteristics in the study sample (N=150)

Characteristics	Category	N	%
Television	Yes	115	76.7
	No	35	23.3
	Total	150	100.0
Fan	One	14	9.3
	Two or More	136	90.7
	Total	150	100.0
Agricultural Land	Yes	37	24.7
	No	113	75.3
	Total	150	100.0
Mobile Phone	One or more	147	98.0
	None	3	2.0
	Total	150	100.0
Electricity	Yes	80	53.3
	No	70	46.7
	Total	150	100.0
Radio	Yes	22	14.7
	No	128	85.3
	Total	150	100.0
Bicycle/ Motorcycle	Yes	39	26.0
	No	111	74.0
	Total	150	100.0
Car/ Truck	Yes	16	10.7
	No	134	89.3
	Total	150	100.0
Computer	Yes	58	38.7
	No	92	61.3
	Total	150	100.0
Rickshaw/ Van nmonHTML/jax.js	Yes	2	1.3

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	No	148	98.7
	Total	150	100.0
Air Conditioner	Yes	3	2.0
	No	147	98.0
	Total	150	100.0

Descriptive analysis of household possession was performed on 150 household in the Sylhet City. The Table-4 shows that the electricity (n = 80, 53.3%) was available. Televisions have accessibility in most of the households (n = 115, 76.7%) under this study. Around 90.7% of the households had television while only 38.7% (n = 58) and a few of 2% of the respondents had computer (n = 10) and air conditioner (n = 3) respectively. Almost 98% of sampled households (n = 147) possess mobile phones. More than one quarter (26%) of the households' personal transport, such as bicycles/motorcycles, only a few (1.3%) had rickshaw or van, the proportion of tenth percent of the households owned car/truck. The table also shows that 90.7% of the respondents (n = 136) possess fan in their household.

Association between Socio-economic Factors and Health Seeking Behaviour

The Table-5 demonstrates that maximum number (4%, n = 6) of households who have higher income labeled as 60,000 + in this study choose the private clinic as their main source of health service. Even, in the middle income group whose monthly Tk.18,000–60,000 BDT (Bangladeshi currency) is 27.3% (n = 41) also choose the private clinic services. In the lower income group, approximately 20% (n = 28) of the respondents choose public hospital as main source of health service. In fact, a greater percentage of the respondents (48.7%, n = 73) choose the private clinic as their main source of health service. The P-value = .001 < 0.05 implies that there is a statistically significant relationship between the income group of households and the source of health service (Raihan et al, 2014).

The majority households whose member employed in private sectors (60.9%, n = 67) could not bear the medical costs for getting sufficient treatment with their income revealed in (table-5), while almost 39.1% (n = 43) said their income was sufficient to get medical care. The households members employed in public sector (80%, n = 32) did not suffer for seeking good health care with their monthly income while only 20% (n = 8) of the households could not seek care properly for their low income. The relationship between the employment sector and interference of income for perceived illness is statistically significant (P = .000 < 0.05).

The Table-5 also demonstrates that the households (64.3%, n = 63) under this study choose private service health care including private clinic, pharmacy and traditional healer because of better service while 44.2% (n = 23) of the respondents choose public health care as a source of health service. The second highest reason for choosing private service is proximity (22.4%, n = 22), in contrast, the second highest reason in terms of choosing the public health care (30.8%, n = 16) is the free medicine. A few numbers of households choose both services because of receiving good behavior from health practioners. So, it is surprising that good behavior

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was less important among the participants in the Sylhet City. However, the reasons for choosing the health care have a significant relationship with the selection of main source of health care as P = .001 < 0.05 (Qasim et al. 2014; Uddin et al., 2014).

Table-5: Health seeking behavior according to socioeconomic characteristics

		Main source of health service				Total	(x ²) (P- value)	
		Private Clinic	Public Hospital	Pharmacy	Traditional healer		.001	
Income of the	Higher income	6(4.0%)	3(2.0%)	4 (2.7%)	3 (2.0%)	16 (10.7%)		
Households	Middle income	41 (27.3%)	11(7.3%)	3 (2.0%)	3 (2.0%)	58 (38.7%)		
	Lower	26(17.3%)	28(18.7%)	12 (8.0%)	10 (6.7%)	76 (50.7%)	_	
Total		73(48.7%)	42(28.0%)	19 (12.7%	16 (10.7%)	150(100.0%)		
		Income inte	rfere by perce	iving illness			(x²) (P- value)	
		Yes		No			0.00	
Employment	Public	67 (60.9%)		43(39.1%)				
	Private	8 (20.0%)		32(80.0%)				
Total		75 (50.0%)		75(50.0%)				
	Source of H	ealth Care					(x²) (P- value)	
Reasons for choosing		Private		Public			.001	
specific source of health service	Better service	63(64.3)		23(44.2)				
	Proximity	22(22.4)		10(19.2)				
	Free medicine	6(6.1)		16(30.8)				
	A good behaviour	7(7.1)		3 (5.8)				
Total		98(100)		52(100)				

Discussions

The study present focused on factors that influence health seeking behavior. The general level of health behavior linked with socio-demographic and socioeconomic characteristics of the study sample (households in Sylhet city). The health care behavior in the sample was differentiated by gender, age, education, income etc. In some cases this, the health related behavior according to socio-demographic and socioeconomic characteristics are statistically significant.

The socio-demographic factors like gender of the household heads have a significant relationship with priority in choosing health care. Other study (Engeda et al., 2016) confirm found that age was significantly associated with visiting modern health care facility.

On the other hand, this study found other factors like education have no significant relationship with priority of choosing health care. Admittedly, some studies yielded different results using different methods that the higher level of education of respondents was significant factor to visit modern healthcare facility more likely than illiterate (Engeda et al., 2016). In contrast, the study of Amin et al (2010) found applying different context and sample that age and education were less pronounced in the differentials of health seeking behaviour (maternal and child health care). But other significant studies confirm that education is one of the powerful tools that affect seeking of health services (Sun et al. 2013, Bashar et al. 2012). Moreover, the result of logistic regression which performed to investigate the propensity of using public health care indicates that the coefficient of education is statistically significant.

This research also concerned the nature of relationships between socio-economic characteristics and health seeking behaviour. The field data shows that socio-economic factors are a major determinant for shaping health seeking behavior of a locality in Sylhet city. Other studies also confirmed that socioeconomic indicators were the single most pervasive determinant of health seeking behaviour (Ahmed, 2005) overriding age and sex, and in case of health- care costs, types of diseases as well. Lack of finance is one of the reasons to not to access any health services or not seeking help (Qasim et al. 2014; Uddin et al. 2014). Moreover, a household's relative poverty status, as reflected by wealth quintiles, was a major determinant in health-seeking behavior (Amin et al. 2010). Some studies yielded the results that demonstrated the decision to engage with a particular medical channel is affected by a variety of variables including age, access to services and perceived quality of service, the social status, the attitude of health care providers, socio-economic constraints (Tipping and Segall, 1995, Afolabi et al. 2013). It is also demonstrated in thus study that perception about the income interference in seeking treatment for perceiving illness according to employment sector has a significant relationship which shapes the health related behavior of the households.

It is noticeable in this study, more than half of the sample population in the study of Sylhet city prefers private health services rather than public health services due to better service quality and modern equipment.

Limitations

Several limitations of the present study should be highlighted. As the study was conducted only in some parts of Sylhet city, the sample cannot be probably representative or generalized. So, the generalization of its findings must be limited. The smaller number of female participants precludes analyses based on gender groups (generally household' head is male). In the future study, it would have interesting results on how men Loading [MathJax]/jax/output/CommonHTML/jax.js all health behavior.

List Of Abbreviations

NIPORT- National Institute of Population Research and Training

BDT-Bangladeshi Currency

OR-Odds Ratio

CI- Confidence Interval

SPSS- Statistical Package for Social Sciences

Conclusion

Despite some limitations, the study is one of the first attempts to describe the health seeking behavioral factors of households of Sylhet City in Bangladesh. It provides encouragement to develop new ways of thinking about long-term policies for health development. Although various types of health behavior seem to have different determinants, our findings indicate that the significance of the above-mentioned factors (socioeconomic and socio-demographic) is largest for household's health-related behavior. Many factors like gender, age, education, income etc influence the health seeking behavior as explained in the earlier sections.

Based on field data the following recommendations are suggested for improving health services.

- As socio-economic factors is the main determinant in seeking health care, the culture of health insurance system should be established and government should coverage this system in the health policy of Bangladesh to reduce the inequalities in health service and the access of poor communities to minimum standard of quality health care.
- The government should create income generating sources for the poor people so that they can access and afford the quality health care as income is the major restraint and determinant in health seeking behavior.
- Urban health facilities need to be improved through providing healthy funds to Sylhet City Corporation.

Declarations

1. Ethics approval and consent to participate: Humans

All procedures performed in this study involving human participants were in accordance with the ethical standards of the institutional research committee and Mayors of Sylhet City Corporation. Informed consent was obtained from all individual participants included in the study.

2. Consent for publication:

The data used in this study is primary. Not applicable.

3. Availability of data and material:

Not applicable
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4. Competing interests:

The authors declare that they have no conflict of interest.

5. Funding:

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6. Authors' contributions:

All authors contributed to the study conception and research design. Material preparation and data acquisition, the methodology section, analysis were performed by Parvin Begum and Supervised by Dr. Mohammad Shafiqul Islam. The first draft of the manuscript was written by Miss Parvin Begum and corrected by Dr. Mohammad Shafiqul Islam. All authors read and approved the final manuscript.

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