

# Factors contributing to inequality in access to urban health service delivery in low resource setting country

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## Research

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# Abstract

## Background

Health is considered as constitutional and fundamental right for general people in Bangladesh. Due to poor socio-economic conditions, income disparities, and socio-cultural barriers, many poor people have limited accessibility in health services and also unable to afford quality health care. This study attempts to examine the factors associated with accessibility and affordability of urban health services.

## Methods

This is an explanatory research which is being carried out using mixed research approach. Primary data was collected using simple random sampling technique from 150 household's residents in Sylhet City who have experience in receiving services from the urban public health care centers. This study uses a structured interview schedule including both open ended as well as close ended questions. Moreover, descriptive statistics are used for analyzing field data for understanding accessibility of health services.

## Results

This study found that 56% urban poor people have inadequate accessibility of health services as they have different types of financial difficulties including maintaining medical expenditure. The health system prevail discrepancy between mentioned services in citizen charter and availability of services as education and the existence of superstitions significantly impact on access to public health care but religion and age have a little impact in getting health services. Most of the respondents either satisfied (47%) or highly satisfied (29%) with the cordiality of senior consultants, and almost half of the respondents assumed the standard of cabin service is satisfactory (44%) as well as highly satisfactory (2%); however, wealthy and powerful people of the society always get privileges over disadvantaged people paying extra money or social network to get a cabin. Unfortunately, the professionalism of nurses and 4th class employees of public hospitals are not satisfactory. Moreover, there exists a high level of corruption and bureaucratic resistance in public hospitals which hinders equal access of general people to get services. The economic and cultural factors in this research are not highly influential issues for access to health care, but adequate information is one of the challenges for access to health care. Besides, administrative factors in this study have significant influence on the accessibility of health services.

## Conclusion

Equal access to health services from public providers are prime need and right for every resident in Sylhet city. Reform in health system management and service provision are useful for promoting accessibility in

health services. Therefore, expansion of health coverage, introduction to health insurance scheme, empowerment of urban poor, and ensuring efficient and accountable health service management in public hospital must be ensured for getting adequate health services.

## Background

Accessibility of health care helps to get an adequate health service which is a public demand for urban people. It is a fundamental right which is enshrined in Bangladesh's constitution. World Bank stated that while over half (55.71%) of the world's population is living in urban areas in 2019, it was merely 33.6% in 1960[1]. A study of the World Health Organization [2] supposes that this rapid increase of urban population growth compels the authority to focus on the living conditions, challenges and opportunities in urban health in a large extent [2]. Rapid urbanization is also occurring in Bangladesh where the urban population expanded by 35 percent from 2001 to 2011, which is projected to account for more than half of Bangladesh's total population by 2050[3]. However, the unplanned urbanization process adversely impacts on health and wellbeing of urban citizens, and undoubtedly the urban poor are the main victim in this regard [4].

People of Bangladesh have to rely on the private health sector due to inadequate government services. In addition, they have to buy medicines from self-expenditure as government clinics lack adequate stock [5]. Moreover, poor people of the society cannot utilize the healthcare services because of their costly livelihood concerns, distance of health facilities from residence, inappropriate health facility limited operating hours, as well as financial and cultural barriers [2]. The challenges faced by Bangladesh are the lack of a clear urban health strategy, inadequate resource allocations, and the absence of uniformly applied standards [3]. The urban poor people face lack of access to health care services in spite of reasonable or good availability of health care facilities in towns and cities. Additionally, economic, social and geographic factors adversely impact the access of the urban poor to these facilities [2].

Sylhet City has a population of 647,583 (estimated in 2010), of which 27% are slum dwellers [6]. Although Bangladesh has already met the target of MDG-4, reducing under-five mortality rate in 2015[7] and declined maternal mortality rate (MDG-5) significantly [8], health indicators in Sylhet are among the poorest including the highest total fertility rate, child as well as maternal mortality rate in spite of its economic advantage over the rest of Bangladesh[4,6]. The Bangladesh Demographic and Health Survey [9] report stated that while 29% women consume health facility on an average nationally, it is merely 21% for Sylhet division. The BDHS report also suggests that people of Sylhet regions receive health services 9.5% from public facility, 9.7% from private health service organizations, 1.8% from NGOs and 78.7% from their home facility [5]. The study [5] stated uneven coverage cannot be narrowly equated to socioeconomic status but it is also driven by urban-rural disparities. They further added Bangladesh government involves relatively small in scale and limited to the provision of primary health care services in slums across the cities [5]. The study also demonstrated that the cost of annual health insurance cover ranges from about \$500 per household in India and Pakistan to \$630 per household in Bangladesh, in all

these countries existing hospital autonomy and capacity is insufficient to meet demand and make quality improvements, with a need for administrative support from sub national governments.

World Health Organization [2] report explains that the urban public health delivery system is more underdeveloped than that of the private sectors, although the private sector is not uniformly accessible and affordable for all level of people. World Health Organization [2] also states that health facilities have been placed in geographical proximity to slums, and community mobilization programs implemented to enhance the accessibility of healthcare services. In addition, doorstep services, media promotions, and free ambulance services are crucial for urban dwellers for facilitating affordable healthcare. WHO [2] reports also shows that the low priority accorded to public health is demonstrated by the allocation of only 1% of the municipality's budget (and only 7% of the central government's budget) to healthcare. The challenges faced by Bangladesh are the lack of a clear urban health strategy, inadequate resource allocations, poor local governance and social commitment and the absence of uniformly applied standards [2]. Karim et al [10] study found that the extreme poor were less likely to use health services than that of the moderate poor and the non-poor [10]. A study suggested that treatment with credit and waived payment for the poorest could be affordable alternative private healthcare services [11].

Farzana et al., [12] explained that a satisfied patient is more likely to develop a deeper and longer lasting relationship with their medical providers, leading to improved compliance, continuity of care. In addition, Rao et al [13] claimed staff behavior has the largest effect followed by doctor behavior, medicine availability, medical information, and hospital infrastructure. Kelsall et al [14] study stated that the government of Bangladesh is committed to achieve Universal Health Coverage (UHC) by 2032 through creating a universal Social Health Protection Scheme (SHPS). The aim of this scheme is to reduce inequalities in getting health services and to ensure health care support for under privileged people so that available access to health care can be increased and sustained.

To sum up, urban health service is not well-developed for creating affordable health care in Bangladesh due to inadequate urban health policy. The reasons for poor affordability of urban health care include: poor allocation of budget in health sector, urban poverty and the excessive expenditure for medical services from the out of pocket. So, health service affordability can be improved through increasing source of income, purchasing capacity and empowering urban poor people. Thus, the level of affordability may promote accessibility of health services for urban people.

## **Methodology Of The Study**

### **Research Design**

This study is an explanatory and descriptive research as it investigates the undiscovered issues about the influence of demographic, socio-economic and organizational and behavioral factors and their relationships with accessibility of government health service facilities in Sylhet city. In this study, mixed

research approach was used because both qualitative and quantitative data will give a detail new understanding on health service accessibility.

## **Selection of Research Area**

This research selects Sylhet City Corporation (SCC) as the research area because a significant number of population lives in city area [15], and they have not adequate access to health care delivery [4]. In addition, Islam et al [16] study argues that Sylhet city including divisional Sylhet has the poorest health indicators in Bangladesh, for instances, higher mortality for both mother and child, and poor utilization of healthcare services. But none of field based research has been conducted earlier so far on accessibility of public health care delivery for urban people in the Sylhet city.

## **Population, Sample and Sampling**

Households who have received government facilities health services from June 2019 to July 2019 in Sylhet City Corporation are considered as population for this study. There are 27 wards, each ward consists of several Mohallas (small urban area) in Sylhet City Corporation and among these, 3 wards (ward no. 13, 17, 24) were selected randomly using lottery methods. A total of 150 respondents (household service users) were selected from 3 wards of three Mohallas, 50 from each Mohallas were selected randomly from the voter list of Sylhet City in 2019 (see Fig. 1). From the respondents, quantitative data was collected from social survey by multiple choice questions through applying Likert-Scale questionnaire.

In addition, qualitative data was collected from the same respondents using semi-structured interview from service users from the selected research location in this study. Besides this, secondary sources of data for this study are relevant published books, journal articles, periodicals, government reports; international health organization reports and the daily newspapers etc. were gathered and used in the relevant part in this research.

## **Data Analysis Techniques**

The descriptive statistics tools were used for analyzing field data applying SPSS software. Various statistical data were generated and categorized according to the objectives in this research. The created data were presented in tables, graphs, and charts for in depth analysis in order to demonstrate accessibility of urban health service delivery. The characteristics of data on accessibility of health care were demonstrated through percentage which is the main indicator in descriptive statistics. Besides, some relevant data demonstrated relationships within the variables (factors) for deeper understanding on main themes in this research.

On the other hand, qualitative analysis of data requires an interpretive approach concerned with understanding the meaning which service users are involved in socio-cultural and organizational phenomena (actions, decisions, beliefs, values, etc.) during receiving health services. The collected interview data (descriptive part of questions) were transcribed in full and the accuracy was checked with the original data to justify the validity and authenticity by the authors. The transcripts data were narrated

using thematic understanding through inductive process so that very new knowledge can be found with regard to accessibility of health services in Sylhet city.

## **Ethical Consideration**

Ethical issues were strictly followed in this research. For this, a written statement has been used regarding the aim and purpose of this research, job description of the researchers, source of funding and the future plan. Participants are clearly provided sufficient information through verbal and written consent regarding this research and permission has been taken to publish the partial/ full findings of this research to a journal and newspaper. Moreover, researchers maintained integrity and honesty for data collection and data interpretation as per mentioned in this research. The SUST Research Centre has given the ethical approval of this research (Project ID: SS/2018/02/34).

## **Results**

The aim of this research is to demonstrate qualitative and quantitative research findings based on field data for understanding health service accessibility of government health organizations in Sylhet city.

## **Participants Demographic Details**

Table 1  
Demographic Information of the Respondents (N = 150)

Variables	Parameter	Frequency	Percentage
Gender Distribution	Male	105	70
	Female	45	30
Profession	Government employee	7	5
	Private employee	16	11
	Business	41	27
	Others(Day labor, Rickshaw puller, CNG driver)	86	57
Age Distribution	Under 20 Years	5	3
	20–30 Years	47	31
	31–40 Years	45	30
	40 + years	53	36
Level of Education	Below SSC	93	62
	SSC	12	8
	HSC	19	13
	Graduate	18	12
	Post Graduate and above	8	5
Number of family members	2–3	17	11
	4–5	66	44
	5+	67	45
Level of monthly income (In Taka)	Bellow 10000	57	38
	10001–15000	30	20
	15001–20000	28	19
	20001–25000	24	16
	Above 25000	11	7
Pattern of living house	Paka(made of brick with cement)	47	31
	Semi paka(made of brick, wood, and tin)	52	35
	Kacha(made of wood and tin)	51	34

Variables	Parameter	Frequency	Percentage
Monthly medical expenditure	Below 1000	36	24
	1001–2000	38	25
	2001–3000	25	17
	3001–4000	17	11
	4000+	34	23
Number of visiting to public hospital (yearly)	Once	16	11
	Twice	34	23
	Thrice	30	20
	More than thrice	70	47
Assistance in receiving health services	Myself	54	36
	With family members	55	37
	With relatives	33	22
	With friends	8	5

The above Table1 shows various demographic factors that states the notion of accessibility in Sylhet urban health services. Among the participants, the majority (70%) was male and the rest of (30%) was female. This study also demonstrates various types of professionals, age distribution and the level of education, among the respondents 57% are very poor, 62% are below the secondary school qualification.

With regard to monthly income 38% respondents is below Tk.10,000.00, 20% respondents is in the range of Tk. 10,001.00 to Tk. 15,000.00, 19% respondents is in the range of Tk.15,001.00 to Tk. 20,000.00, 16% respondents is in the range of Tk. 20,001.00 to Tk.25,000.00 and the rest 16% respondents is above Tk. 25,000.00. The monthly medical expenditure of 24% respondents is below 1000.00, 25% respondents are in the range of Tk. 1001.00 to Tk. 2000.00, 17% respondents are in the range of Tk. 2001.00 to Tk. 3000.00, 11% respondents are in the range of Tk. 3,001.00 to Tk. 4,000.00 and the rest 23% respondents are in Tk. 4,000.00 and above.

This study found that 11% of the respondents visited hospital once, 23% of the respondents visited twice, 20% of the respondents visited thrice and the rest 47% of the respondents visited more than thrice to hospitals yearly. When the respondents of the study were asked about the assistance through going to public hospital, 36% said they went for their own treatment, 37% said they went to public hospitals for the treatment of family members, 22% said they went to public hospitals for the treatment of relatives and the rest of the respondents 5% went hospital to visit sick friends.



# Factors of Economic Accessibility in Health Services

Economic accessibility refers to capacity to afford health services without any difficulties or getting health service without receiving loan or selling valuable resources. This study has identified various factors e.g., financial ability, poverty, cost of transport, expenditure of medicine and diagnostics test for understanding the concept-economic accessibility in health service delivery.

Table 2  
Economic accessibility in urban health services

Statement on economic accessibility	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)	Total (%)
Easy access of poor people to Public health service facilities	7 (5)	28 (19)	8 (5)	84 (56)	23 (15)	150 (100)
Receiving health service without financial hardship	2 (1)	26 (17)	16 (11)	89 (59)	17 (12)	150 (100)
No access of poor without required fees	32 (21)	71 (47)	13 (9)	24 (16)	10 (7)	150 (100)
Transportation cost cause hindrance to get access	7 (5)	60 (40)	35 (23)	38 (25)	10 (7)	150 (100)
Received loan for medical treatment	5 (3)	29 (19)	3 (2)	71 (48)	42 (28)	150 (100)
Insolvency in conducting prescribed diagnostic test	33 (22)	57 (38)	5 (3)	54 (36)	1 (1)	150 (100)
Insolvency in purchasing prescribed medicine	12 (8)	71 (47)	7 (5)	54 (36)	6 (4)	150 (100)
Availability of financial assistance for medical treatment of extreme poor by government and private organizations	6 (4)	26 (17)	36 (24)	52 (35)	30 (20)	150 (100)
Financial inability to visit doctor for treatment	19 (13)	66 (44)	9 (6)	50 (33)	6 (4)	150 (100)
Availability of special care for disable and underprivileged patients	4 (3)	34 (23)	70 (46)	32 (21)	10 (7)	150 (100)
Source: Survey Data, 2019						

This table demonstrates that 56% of respondents disagree, alternatively, only 5% strongly agree and 19 % agree with regard to easy access of poor people to all prevailing services of public health facilities. Data also shows that 59% respondents disagree that they are able to pay medical cost without financial

difficulties, only 17% respondents express that they have no financial difficulties. This table also shows that 21% strongly agree and 47% agree that without paying fees public health facilities are unavailable, but 16% state disagree in this regard.

This study found transportation cost, receiving loan for treatment, cost of diagnostic test, cost of visiting doctor frequently have recognized as economic factors influencing access to urban health services. Only 17% respondents in this study supposed that they run their treatment without financial hardship, in contrast more than half (approximately 60%) of the respondents disagree in this regard. In case of receiving loan for medical treatment, the highest number (approximately 50%) of respondents disagree and about 25% of the respondents strongly disagree where only a few respondents (approximately 20%) stated they run their treatment borrowing money from different sources. Financial inability is the prime hindrance to get access to public health care [11]. It compels citizen unable to visit doctor when they become sick. This study reveals that most of the respondents (13% strongly agree and 44% agree) don't want to visit doctor due to financial hardship, whereas only a little more than 30% of the respondents express disagree in this regard.

## **Informational Issues that Affect Health Services Accessibility**

Table 3  
Informational accessibility in urban health care, Sylhet

Issues of information accessibility	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)	Total (%)
General citizen have sufficient Knowledge on health policy of Bangladesh	9 (6)	26 (18)	16 (11)	70 (45)	29 (20)	150 (100)
Knowledge regarding citizen charter of concerned Public Health Care Centre	6 (4)	69 (46)	28 (18)	41 (28)	6 (4)	150 (100)
Discrepancy between mentioned services in citizen charter and availability of services	29 (19)	30 (20)	47 (32)	31 (21)	13 (8)	150 (100)
Well informed citizen about existing consultants of the public health center and services provided by them	3 (2)	27 (18)	46 (31)	61 (41)	13 (8)	150 (100)
Knowledge regarding available services provided by concerned public health care centers	8 (5)	28 (19)	52 (35)	53 (36)	9 (5)	150 (100)
Satisfactory health care services prevail in public hospitals	5 (3)	30 (20)	26 (17)	52 (35)	37 (25)	150 (100)
Helping attitude (Benevolence) of service providers facilitate access to information	30 (20)	59 (39)	18 (12)	34 (23)	9 (6)	150 (100)
Poor attendance at help desk is a barrier to access to proper information	27 (18)	57 (38)	28 (19)	31 (20)	7 (5)	150 (100)

Source: Survey Data, 2019

The Table 3 demonstrates the informational factors and the views of service users with regard to accessibility of health services. Adequate knowledge of health services assists in getting better services at urban public health care. This study found a few respondents (24%) have knowledge on health policy of Bangladesh. In addition, majority respondents were not well-informed about the prevailing consultancy system of the senior consultants. Data also presents that half of the respondents (4% strongly agree and 46% agree) have knowledge about existing citizen charter of the public hospitals but 49% service users express discrepancy between mentioned services in citizen charter and availability of services. Interestingly, about 60% respondents express that health care providers have helping attitude towards patients which make availability of health information. Moreover, majority of respondents (56%) perceive

that poor help desk system in public hospital affect adequate access to information and better health care.

## Impact of socio cultural factors in getting access to public health care services

Table 4  
Socio-cultural factors and the accessibility of health services

Socio-cultural factors	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)	Total (%)
Gender is a vital factor in getting health services	5 (3)	16 (11)	2 (1)	87 (58)	40 (27)	150 (100)
Age is important for access to health care	3 (2)	24 (16)	6 (4)	89 (59)	28 (19)	150 (100)
Education is matter for accessing quality health care	21 (14)	51 (34)	27 (18)	44 (29)	7 (5)	150 (100)
Religion affects health service accessibility	0 (0)	0 (0)	3 (2)	71 (47)	76 (51)	150 (100)
Superstition is one of the vital factors for access to health care	12 (8)	55 (37)	23 (15)	45 (30)	15 (10)	150 (100)
Source: Survey Data, 2019						

Among the socio-cultural issues (Table 4), gender is a vital factor in getting access to public health care center, 58% of the respondents disagree, 27% strongly disagree, but only 11% agree. Similarly, age is vital factor in access to health care. This study found 59% express disagrees, 19% strongly disagree, however 16% respondents express agree with this view.

Religion makes matter in getting access to public health care, 47% response as disagree, 51% strongly disagree, but none of respondent express agrees with this view. However, education is a vital factor in getting access to public health care center, as 14% and 34% of the respondents express strongly agree and agree respectively where as 29% of the respondents disagree in this regard. Superstition affects health care services, 45% express positively and 40% express negatively with this view only 15% of the respondents convey neutral views.

# Service provider's attitudes and behavior in getting access to health care

Table 5  
Organizational and behavioral factors and the health service accessibility in Sylhet city

<b>Issues on attitude and behavior</b>	<b>Highly Satisfactory (%)</b>	<b>Satisfactory (%)</b>	<b>Neutral (%)</b>	<b>Dissatisfactory (%)</b>	<b>Strongly dissatisfactory (%)</b>	<b>Total (%)</b>
Cordial responses of senior consultants	43 (29)	71 (47)	12 (8)	17 (11)	7 (5)	150 (100)
Prompt responses of nurses	5 (3)	25 (17)	18 (12)	56 (37)	46 (31)	150 (100)
Responses of 4th class employees	0 (0)	17 (11)	13 (9)	45 (30)	75 (50)	150 (100)
Quality of the services of diagnostic tests	3 (2)	44 (29)	49 (33)	48 (32)	6 (4)	150 (100)
Adequate opportunity in getting free medicine	0 (0)	28 (18)	21 (14)	70 (47)	31 (21)	150 (100)
Quality of outdoor services	3 (2)	54 (37)	46 (30)	45 (29)	3 (2)	150 (100)
Opportunity for getting hospital cabin	0 (0)	22 (15)	34 (21)	63 (45)	31 (19)	150 (100)
Standard of cabin services	3 (2)	65 (44)	47 (31)	27 (18)	8 (5)	150 (100)
Standard of ward services	0 (0)	24 (16)	29 (19)	88 (59)	9 (6)	150 (100)
Availability of seats at ward	0 (0)	10 (8)	15 (10)	87 (58)	38 (25)	150 (100)
Quality of meal supplied for admitted patients	0 (0)	35 (23)	52 (35)	52 (35)	11 (7)	150 (100)

Source: Survey Data, 2019

Issues on attitude and behavior	Highly Satisfactory (%)	Satisfactory (%)	Neutral (%)	Dissatisfactory (%)	Strongly dissatisfactory (%)	Total (%)
Behavior of service providers	3 (2)	31 (21)	24 (16)	63 (42)	29 (19)	150 (100)
Source: Survey Data, 2019						

Table 5 shows the behavioral factors that influence in public health service accessibility. This study found respondents were highly satisfied only in case of cordiality of senior consultants (29%) and standard of cabin service (2%) among behavioral factors. They also satisfied with cordiality of senior consultants (47%), free medicine service (18%), standard of cabin services (40%). But half of respondents (50%) in this research express highly dissatisfaction on the behavior of lower class hospital staff. In addition, a significant proportion of respondents are not only dissatisfied (47%) but also highly dissatisfied (21%) with free medicine service provided by the public hospitals.

## An assessment of administrative factors for understanding health services accessibility

Table 6 will be here



Table 6  
Administrative factors and health service accessibility

Administrative factors for health service accessibility	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)	Total (%)
Existence of high level of corruption in public hospitals	74 (49)	59 (40)	12 (8)	5 (3)	0 (0)	150 (100)
Existence of bureaucratic resistance	19 (13)	55 (37)	31 (21)	14 (9)	31 (20)	150 (100)
Existence of cheating by employees	33 (22)	71 (47)	27 (18)	19 (13)	0 (0)	150 (100)
Demanding bribe for better services	60 (40)	64 (42)	12 (8)	10 (7)	4 (3)	150 (100)
Existence of hygienic environment	0 (0)	17 (12)	15 (10)	59 (39)	59 (39)	150 (100)
Existence of hygienic sanitation	0 (0)	6 (4)	4 (3)	37 (24)	103 (69)	150 (100)
Source: Survey Data, 2019						

Table 6 presents that the largest proportion (69%) of respondents are highly dissatisfied with sanitation system and viewed it as very unhygienic. In addition, a large number of respondents showed their resentment against unhygienic environment (39% strongly disagree and 39% disagree) about the existence hospital environment. It is alarming that almost all of the respondents identified urban public health system as corrupt sector (49% strongly agree and 40% agree) and half of the respondents supposed there exist bureaucratic resistance (13% strongly agree and 37% agree) in providing services. Besides this, service receivers have to provide bribe for better services and sometimes they are cheated by hospital's employees. As public hospital has various administrative problems in providing services e.g., corruption, bureaucratic resistance, cheating by employees, unhygienic environment, unhygienic sanitation system ,therefore urban people who have affordability receive health services from private health care centers.

## Discussion

Chart 1 demonstrates the average score of economic, information, socio-cultural and administrative factors in this research to understand how much each factor influences health service accessibility.

The majority of the respondents express disagree with economic, socio-cultural and information factors are challenges in accessibility of health services. However, 30% respondents are agree, 21% respondents are strongly agree that administrative factors are barrier for getting quality health services. Besides this, more than 31% respondents agree on economic factors, 28% agree on information factors, 20% agree on information factors affect health service accessibility. The chart also shows that 22% respondents express neutral on information factors and their significant for access to health care.

Most service users prefer public hospitals as it requires less cost for receiving standard health services because admission, consultancy and cabin cost are comparatively lower and more affordable than private hospitals. Doctors of the public hospitals spend quality times to patients and they give importance to patients, and the equipment and operation materials of the public hospitals prevails skilled human resources and costly equipment than private hospitals [17], however Molla [18] study found that only six basic equipments are available adequately at only 28 percent public health care system in Bangladesh.

This research found that social network including political and local influence are very useful mechanism in getting quality service, because sometime good relation of patient or his well-wishers with doctors or hospital management facilitates for easy accessing good quality health services. Alternatively, patients are dissatisfied with public hospital health services because of unhygienic environment, rigid bureaucracy, corruption and excessive politicization of health professionals [19]. Therefore, quality healthcare service has yet reached to the standard level [20].

Data also found that people get free medicine from the hospitals, enjoy outdoor service with low cost, got appointment of specialist doctors, quality of surgery services from the experienced doctors. Therefore, they prefer to visit public hospital instead of private one. However, the behavior of the lower class staffs in public hospital is very uncomfortable, non sympathy and non-cooperative attitude because sometimes the lower staffs of the public hospital demand bribe in order to assist service seekers for providing better services [21].

Affluent patients prefer private health care services because of better hygienic environment, good behaviors of doctors, nurses and hospital staff [22] although private hospital has lack of skilled manpower, poor quality equipment, higher treatment cost, commission based services, prescribing unnecessary drugs and diagnostic tests [23,24,25,26,27,28,29]. However, apart from affluent people someone go to public providers, as they avail special services through utilizing their social and political connectivity and power. Moreover, government officials, people's representatives and other renowned personalities of the society get high priority in public hospitals due to their social and organizational status. In this context, a large numbers of poor and marginalized people get services every day from public hospitals through facing various harassments and irregularities as demonstrated in table 5 and 6 in this research. For example, some marginalized people manage seats in hospital ward paying bribe to hospital staff and management.

Medical expenditure in Bangladesh is increasing by leaps and bounds [30, 31, 32], therefore poor patients are in trouble to bear their medical expenditures. In addition, doctors suggest diagnostic test from outside

diagnostic centers, which increases medical expenditure. They have to take loan from relatives, NGOs and friends to meet the expenditure which affect their livelihood, few NGOs offer health insurance scheme to lower income people which covers a limited facilities [33].

Data also shows that poor people are not able to visit specialist doctors during extreme illness due to financial crisis and also unable to complete the full course of medicine, recommended tests according to doctor advice. Overall, evidence suggests that social and cultural values, economic behavior and organizational policy and practice contribute to health care variations and inequality in regard to accessibility of health care for urban dwellers in Sylhet city.

## Conclusion

Adequate health service resources and the effective management are the highest priority areas for improving accessibility of urban health service delivery in Bangladesh. Different factors as identified in this research contribute inequalities in health service system. For instance, this study has examined that the higher income earners have easy access to health facilities than that of lower income group people. Similarly, basic educational expertise and skills positively impact on access to health care, because it is a fundamental social determinant of health and ensure equity in getting access to health care between higher income and lower income people [34]. Educated persons have better understanding than that of lower educated counterpart about public health care center's citizen charter, existing service provisions, and health policy. In contrast, lower educated respondents are not well-informed about existing public health care center's bureaucratic resistance because of their ignorance, whereas higher educated respondents showed resentment to public health center's services. Moreover, the service provider's behavior and the weak management system do not allow the urban dwellers particularly the poor people to access equal and adequate health facilities. Money, education, and social power are big challenge for ensuring equal accessibility of health service delivery. Considering the effective public health care and the adequate accessibility in regard to urban health system require reform and reorganize through health system management. The following recommendations may promote access to health care for urban residents:

- Expansion of health coverage which is a global agenda, therefore government should take necessary steps for taking new health schemes so that every urban resident can get access adequate health services without facing any challenges.
- Ensuring health insurance for general people so that health service should be settled and people can access good quality of health services[ 35 ].
- City Corporation is a vital agency in providing primary health care for urban residents. This will increase the accessibility of health services for city dwellers. For this, strengthening primary urban health scheme under City Corporation for promoting urban health service delivery.
- Evidence shows that urban poor have lack of awareness about their health and the health service system which should be effectively addressed through appropriate health education, campaigning

and empowerment interventions including promoting strong community organizations and networks.

- Community health workers and volunteers can play an important role in health education and empowerment of the urban poor. Strong community organizations and social network must be established through the supports of NGOs and related government organizations.

## Declarations

- **Ethical approval and consent to participate:** The study is a part of authors SUST research project (Project ID: SS/2018/02/34) which has been approved by the SUST Research Centre. Relevant ethical issues including consent to participate by the respondents have been taken and approved by the Ethics Committee. A copy of consent to participate is available to the authors.
- **Consent for publication:** The authors themselves collect data and take verbal consent from the respondents for publishing data in the journal article. A copy of verbal consent is available to the authors.
- **Availability of data and materials:** The softcopy of data is kept in the personal computer of the authors and also available for journal editor if necessary.
- **Funding:** The authors have been received fund from the SUST Research Centre for conducting this research and the centre has no conflict of interest in this research.
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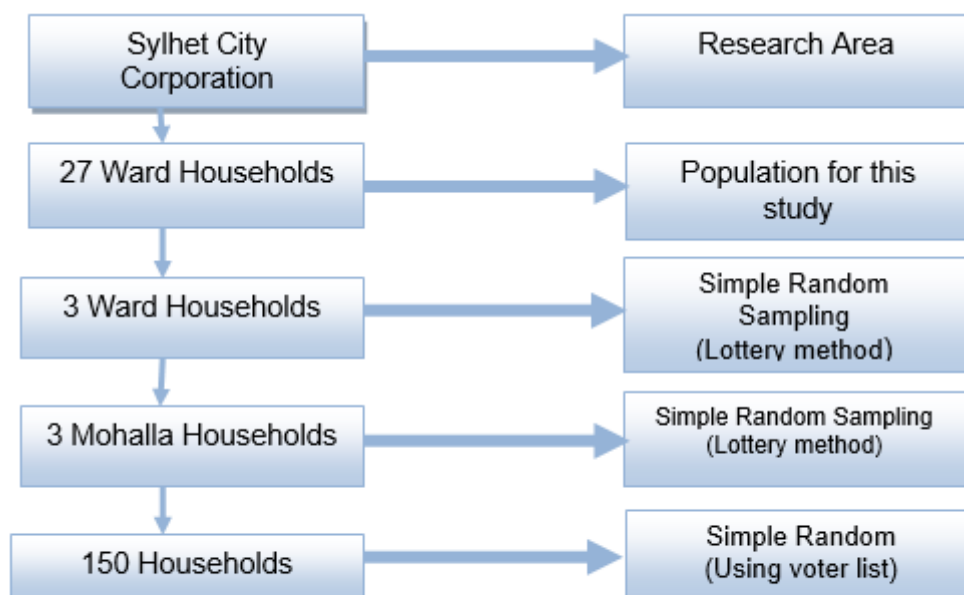
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## Figures



[Source: Contributed by the Authors]

Figure 1

Population, sampling and sample size for the study

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