

BMJ Open Health, illness and healthcare-seeking behaviour of the street dwellers of Dhaka City, Bangladesh: qualitative exploratory study

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ABSTRACT

Objective This study explored the illness experiences and healthcare-seeking behaviour of a cross-section of street dwellers of Dhaka City for designing a customised intervention.

Design A qualitative exploratory study of a sample of street dwellers of Dhaka City.

Setting Samples were taken from three purposively selected spots of Dhaka City with a high concentration of the target population.

Participants Fifteen in-depth interviews and six informal group discussions with 40 street dwellers (≥18 years), and key informant interviews with service providers (n=6) and policymakers (n=3) were conducted during January–June 2019 to elicit necessary data.

Primary outcome measures Qualitative narrative of illness experiences of the sampled street dwellers, relevant healthcare-seeking behaviour and experiences of interactions with health systems.

Results We focused on three main themes, namely, reported illnesses, relevant healthcare-seeking behaviour and health system experiences of the street dwellers. Findings reveal that most of the street dwellers suffered from fever and respiratory illnesses in the last 6 months; however, a majority did not visit formal facilities. They preferred visiting retail drug shops for advice and treatment or waited for self-recovery. Formal facilities were visited only when treatment from drug shops failed to cure them or they suffered serious illnesses or traumatic injury. The reproductive-age women did not seek pregnancy care and most deliveries took place in the street dwellings. Lack of awareness, financial constraints and fear of visiting formal facilities were some of the reasons mentioned. Those who visited formal facilities faced barriers like the cost of medicines and diagnostic tests, long waiting time and opportunity cost.

Conclusions The street dwellers lacked access to formal health systems for needed services as the latter lags far behind to outreach this extremely vulnerable population. What they need is explicit targeting with a customised package of services based on their illness profile, at a time and place convenient to them with minimum or no cost implications.

BACKGROUND

The marginalised populations are those who are socially excluded based on their ‘age, race, ethnicity, gender, disability status,

Strengths and limitations of this study

- This study was the first one to apply a qualitative approach to explore the common illnesses of street dwellers and their relevant healthcare-seeking behaviour in Bangladesh.
- Our purposive selection of respondents from different spots and age and sex groups captured the diversity of the health needs and priorities of the street dwellers, including their experiences of engaging with the health systems which is expected to help policymakers and practitioners to customise appropriate interventions.
- Data triangulation was done applying different methods, such as in-depth interview and informal group discussion with the street dwellers, and key informant interviews with the service providers and policymakers to obtain data from various sources to assure the reliability and validity of the research.
- This study covered a limited number of spots for recruiting study participants from the streets due to constraints in time and resources, and thus, results may not be generalisable for all street dwellers of Dhaka City or other metropolitan areas.

migration status and geographical location’, resulting in deprivation from receiving public services, including health services, and alienated from the mainstream of the society.¹ To reach the Sustainable Development Goal of Universal Health Coverage (SDG 3.8) by 2030 and thus ‘leaving no one behind’, priority must be given to the marginalised population,² besides expansion of services under the universal health coverage (UHC) agenda. This is all the more important because even in some high-income countries, it has been observed that the homeless people (aka street dwellers) suffer more from illnesses and face more difficulties in accessing healthcare services compared with the general population.³ Barriers include trouble in registering the homeless at a general practice due to lack



of evidence of address, poor signposting from healthcare providers, discrimination in healthcare facilities and perceived stigma.^{3 4} This is because these people frequently lack the knowledge and are physically or mentally incapable of navigating through the healthcare services.³

With the vision of becoming a middle-income country by 2021 and due to rapid urbanisation, the majority of the population of Bangladesh (more than 50%) will be living in urban areas by 2039.⁵ On arrival in Dhaka and other big cities, many of the migrants fail to find shelter (eg, in a slum or in makeshift settlements by rail lines) and land on its streets to become street-dwellers. According to an estimate, there are around 30 million (18%) 'marginalised' people in Bangladesh, including these street dwellers who have 'historically been prone to exclusion' and are thus 'extremely vulnerable'.⁶ They are visible in the streets of Dhaka and other big cities as porters and pushcart workers in the market, street vendors, scavengers, helpers in restaurants and garages and beggars,⁷ but 'invisible' to the service providing authorities as they rarely visit the formal facilities to seek services, including healthcare services, and are therefore hardest to reach.^{8 9}

There are few places where these street dwellers can go when their illnesses compel them to seek healthcare. Among these are outpatient departments (OPD) of public hospitals, drug shops and some facilities operated by non-government organisations (NGOs) and religious entities. In Dhaka City, the outpatient services in public facilities charge a fixed minimum amount ('outdoor ticket' fee) for everyone. This only covers consultation and some low-cost medicines, if at all available in the attached dispensaries. Sometimes, the destitute are given free tickets. However, some public facilities introduced 'red card' services which provided free primary healthcare (PHC) services to selected urban slum dwellers. This card requires a few basic information, such as the national ID card number and corresponding address. The facility authorities use this card to visit and identify them in the slum and verify their eligibility based on their socioeconomic status (SES), as well as monthly income. Since street dwellers are homeless and have no permanent address, they are not eligible to receive this services.⁸

Bangladesh has made remarkable progress in improving the health of its population in recent times; however, the aggregate-level progress is not translated for the different socioeconomic groups equitably especially in case of the marginalised.¹⁰ There is a lack of disaggregated data which are needed to identify and understand the situation of these populations, not unlike other low-income and middle-income countries.¹¹ Thus, this study aimed to explore the illness experiences of these street dwellers of Dhaka City and relevant healthcare-seeking behaviour; besides, exploration is also made to elicit their experiences of interaction with the formal health systems. Targeting this population, we have conducted some quantitative studies earlier in Bangladesh; however, this is the first study which applied a qualitative approach

to explore in-depth the above issues related to their health and illness. The findings are expected to identify the gaps in policy and practice and inform the design of customised healthcare service for them towards achieving an inclusive and 'universal' health coverage (SDG 3.8) by 2030.

Conceptual framework

Based on the literature review on lifestyle, morbidity patterns and healthcare-seeking behaviour of street dwellers,^{7 8} we developed a conceptual framework for this study (figure 1). It shows the underlying factors for becoming a street dweller or homeless, for example, poverty and unemployment, natural and man-made disasters, forced eviction from land, abandonment by husband and drug abuse. After becoming a street dweller, they face livelihood challenges like ensuring daily meals, maintaining personal hygiene and sanitation, countering sexual harassment and physical violence, and dealing with political hoodlums, especially the women. As women face a greater proportion of violence and injury, eventually, they have different health issues. These factors precipitate various types of morbidities which further limit their livelihood activities and ultimately shape their healthcare-seeking behaviour.

MATERIALS AND METHODS

Our working definition of street dwellers was people who sleep on the streets and open spaces as used by the Bangladesh Bureau of Statistics.¹²

Study setting and sample

This exploratory study included in-depth interviews (IDIs) and informal group discussions with a sample of street dwellers, and key informant interviews (KIIs) with relevant healthcare service providers and policymakers. The sample of street dwellers was taken from three purposively selected spots of Dhaka City having a high concentration of the target population.⁶ The sample comprised six groups of street dwellers (≥ 18 years) living in these three spots for at least a month: young adult men (18–35 years), adult men (36–59 years), reproductive-age women (18–49 years), adult women (50–59 years), and elderly men and women (≥ 60 years) (table 1). We conducted 15 IDIs and six informal group discussion with the aforementioned six groups of street dwellers. Both sets of participants were interviewed at their sites of dwelling. Besides, we conducted KIIs with three each of the government and non-government healthcare service providers in nearby facilities usually visited by the street dwellers, and three KIIs with relevant policy-level persons in their offices. The recruitment of the sample of street dwellers started with purposive sampling technique according to their age, sex and living duration in the study sites, followed by snowball sampling to identify and reach the most appropriate respondents. Snowball sampling technique was applied

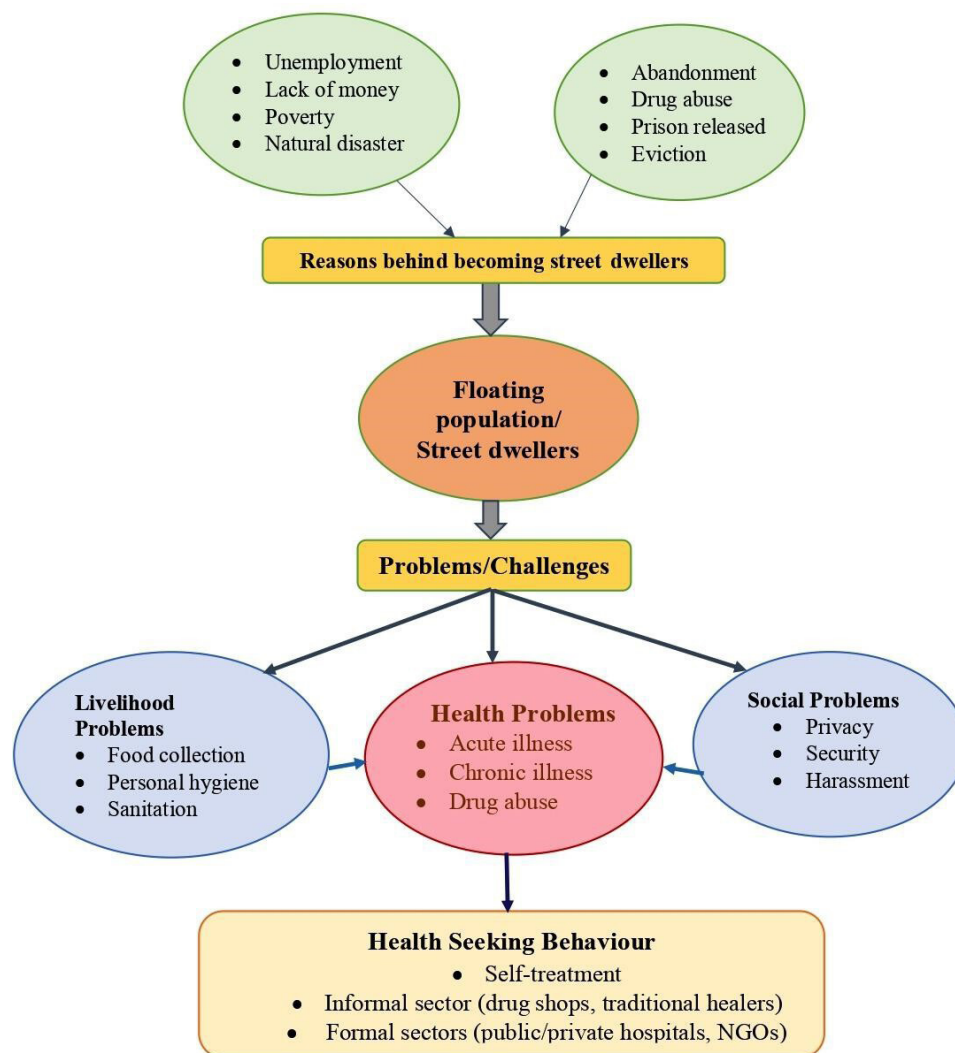


Figure 1 Conceptual framework of the study.⁶

when one participant referred to another appropriate one to conduct the interview.

Tool development, rapport building and data collection

We developed semistructured guidelines for individual IDIs and informal (group) discussions to explore the illness profile and relevant health care-seeking behaviour of the street dwellers of Dhaka City, including available healthcare services for them. We also developed KII guidelines to identify the gaps at the policy and programme levels as per study objectives, and the research team's previous experience of working with the street dwellers.⁶ Besides, we developed checklists to observe the street dwellers' living areas to understand the context and also to observe the health facilities to see whether and how these group of people sought care from those facilities. All interviews were conducted by the researchers (first and second authors) with help from the field research assistants who organised the sessions, took notes and filled in the observation checklists.

These field assistants were recruited based on their prior experience of working with the marginalised

populations and were trained extensively on the concepts, tools and processes of the study. Under the guidance of the researchers, they facilitated rapport-building activities with the target populations before actual data collection took place. These included visits to the selected areas to understand the context, find out the local gatekeepers who can serve as respondents for KIIs and review their daily routine to find out the best time for the interviews. With the help of the gatekeepers, the team organised the interview sessions in predetermined sites. The study was conducted during 10 January–15 June 2019. Data collected from multiple sources (IDIs, informal group discussion and KIIs) were triangulated to validate the findings.

Data analysis and quality control

The ad verbatim Bangla transcripts were cross-checked by researchers against audio recording to ensure accuracy and later translated into English by them. Both a priori codes and inductive codes developed through repeated readings of the transcripts were used. Data familiarisation was done followed by charting of the data in tables

**Table 1** Distribution of interviews conducted from three study sites

Study participants	Study area	Types of interview	Age group and sex	Interviews (n)	Participants (n)	
Demand side (street dwellers)	Area A	IDI (5)	Young adult man*	1	1	
			Reproductive-age woman	1	1	
			Adult man	1	1	
			Adult woman	1	1	
			Elderly man	1	1	
	Area B	IDI (5)	Young adult man	1	1	
			Reproductive-age woman	1	1	
			Adult man	1	1	
			Elderly man	1	1	
			Elderly woman	1	1	
	Area C	IDI (5)	Young adult man	1	1	
			Adult man	1	1	
			Adult woman	1	1	
			Elderly man	1	1	
			Elderly woman	1	1	
Supply side (health service providers)	Government healthcare providers, for example, medical officers	Informal group discussion (2)	Young adult man	1	5	
			Reproductive-age woman	1	4	
			Adult man	1	4	
			Adult woman	1	4	
			Elderly man	1	4	
			Elderly woman	1	4	
	Non-government healthcare providers, for example, medical officer, health promoter and manager	Informal group discussion (2)	Reproductive-age woman	1	4	
			Adult man	1	4	
			Young adult man	1	1	
			Adult man	1	1	
			Adult woman	1	1	
			Elderly man	1	1	
	Total (15 IDIs, 6 informal discussions)				21	40
		Total (KIIIs with health service providers)			6	6
Policy level	High government officials			3 (KIIIs)	3	
		Total (KIIIs with policy level persons)		3	3	

Bold is used to make the total number of interviews more visible.

*Young adult man (18–35 years); reproductive-age woman (18–49 years); adult man (36–59 years); adult woman (50–59 years); elderly man (≥60 years); elderly woman (≥60 years).

IDI, in-depth interview; KII, key informant interview.

to produce a data matrix. The framework analysis used these matrixes to explore emerging patterns, identify themes, examine commonalities and contradictions in the data, and also allow a comparison by case and category of the respondents. Data analysis was done using Atlas ti software V.8.0. Measures to ensure the quality of data included strict adherence to study protocol and interview guidelines; extensive training of the research assistants' on-field activities, close supervision by the researchers on-the-spot and data analysis by the study team according to a plan under the guidance of the principal investigator. Besides, at the beginning of the qualitative tool, we included a sociodemographic profile section for each respondent. We also recorded their illness and type of healthcare-seeking behaviour. As all of them dealt with these issues, therefore, we inserted these data in an

Excel (Microsoft Office 2013) sheet and calculated the percentage accordingly.

Patient and public involvement statement

No patient was involved.

RESULTS

We conducted IDIs and informal group discussion with 40 street dwellers, including 22 men and 18 women, KIIs with 6 service providers and 3 policymakers.

Sociodemographic characteristics

The age of the street dwellers varied widely from 18 to 75 years; the majority of them were Muslim (98%), male (55%), landless (95%) and did not attend any school (65%) (table 2). Among the female respondents (n=18),

Table 2 Sociodemographic characteristics of the in-depth interview (IDI) respondents

Characteristics	n (%)
Sex	
Male	22 (55)
Female	18 (45)
Religion	
Muslim	39 (97.5)
Hindu	1 (2.5)
Marital status	
Married	15 (37.5)
Single	15 (37.5)
Widowed/separated	10 (25)
Education	
No formal education	26 (65)
Below primary	8 (20)
Primary education completed	5 (12.5)
Secondary education and above	1 (2.5)
Occupation	
Begging	15 (37.5)
Day labour*	11 (27.5)
Collecting trash	3 (7.5)
Newspaper hawker	3 (7.5)
Work at shop†	5 (12.5)
Domestic helper	2 (5)
Small business (oil)	1 (2.5)

*Day labour=van driver, rickshaw puller, cobbler and coolie, assist on wedding programme, shifting furniture during home change.

†Work at shop=tailoring, helper of a tea stall (men); and among them four women worked as commercial sex workers (CSWs) as well.

half were either separated or widowed. More than one-third (37.5%) were beggars. The respondents came to Dhaka from different districts of Bangladesh and their duration of living in the streets varied widely, for example, from 2 to 35 years; however, an elderly woman was living in the street since her birth.

Reported illnesses

Majority of the respondents were reported to be suffering from fever, common cold, cough, typhoid and pneumonia (table 3). A substantial proportion of the men (54.5%) reported traumatic injury, such as broken hands and/or legs due to harassment or abuse by police, local people or hoodlums. Eighty per cent of the reproductive-age women were reported to suffer from reproductive health illnesses or its complications; however, most of them did not visit health facilities even for pregnancy and delivery care. As a result, about one-third of the deliveries occurred on the street.

Table 3 Frequency of reported illness by sex of the street dwellers

Illness categories (multiple answer)	Male (n=22)	Female (n=18)	Total (N=40)
	N (%)		
Fever and respiratory illness	13 (59.09%)	14 (77.7%)	27 (67.5%)
Trauma/injury	12 (54.5%)	6 (33.3%)	18 (45%)
NCDs	6 (27.2%)	4 (22.2%)	10 (25%)
Gastrointestinal illness	5 (22.7%)	4 (22.2%)	9 (22.5%)
Paralysed/disabled	4 (18.1%)	2 (11.1%)	6 (15%)
Pains/aches	3 (13.6%)	3 (16.6%)	6 (15%)
Skin disease	1 (4.5%)	1 (5.5%)	2 (5%)
Reproductive health illness	N/A	8 (80%)	8 (80%)*
Others	6 (27.2%)	2 (11.1%)	8 (20%)

*Among total of 10 reproductive-age women.
NCD, non-communicable disease.

Interestingly, over one-fifth of the street dwellers (27% male and 22% female) reported that they suffered from different non-communicable diseases such as diabetes, high blood pressure, heart disease, chest pain and stroke, while another 22% suffered from gastrointestinal illnesses (eg, jaundice, gastric acidity, constipation and diarrhoea). Of the total sample of street dwellers, 11% male and 18% female were physically disabled. Health-care service providers confirmed that the street dwellers used to visit health facilities when complications occurred from the previously reported illnesses. Moreover, policy-makers and other key stakeholders also agreed that the listed illnesses were common among the street dwellers.

Drug shops, formal facilities and structural barrier to access services free of cost

Majority of the respondents' first choice for treatment seeking was retail drug shops (87%), plausibly so because of the convenient location, opportunity cost and prompt service. This was possible because medicines were dispensed without asking for prescription or eliciting clinical history or conducting physical examination (table 4). In some instances, they practised self-medication with home remedies, as one elderly woman stated with confidence.

I prefer to go to the pharmacy/drug shops, when I have some money... But when I have no money, I try home remedies to recover from my disease, for example, I eat 'telakochu pata' (kind of leaf) to recover from diabetes instead of going to the doctor. I used to collect this 'pata' from different parts of this area. (Elderly street woman)

The personal relationship with the drug shop attendants and trust developed over time also played a role, enabling them to access hassle-free services in time:

Table 4 Healthcare-seeking behaviour of the street dwellers

Source of treatment (multiple answer)	Male (n=22) n (%)	Female (n=18) n (%)	Total (N=40) n (%)
Drug shops	18 (81.8)	17 (94.4)	35 (87.5)
Public hospital	5 (27.7)	6 (33.3)	11 (25.0)
NGO	2 (9.09)	4 (22.2)	6 (15.0)
Self-care	2 (9.09)	3 (16.6)	5 (12.5)
Traditional healer	1 (4.5)	1 (5.5)	2 (5)

Self-care=self-medication/taking rest/eating food or juice to improve the health condition; traditional healer=provide services using herbs, minerals, animal parts, for example, Kabiraj; drug shops=a retail store where medicines are sold, also called pharmacy.
NGO, non-government organisation.

Most of the people like me prefer going to the pharmacy/drug shops for seeking treatment... medicine sellers provide suggestions and necessary medicines. People perceive that they will get the best medicines from the drug shops rather than from the hospital. ... most of us are managing money either by begging, or rickshaw pulling, or working as a van driver. (Young adult man)

KIIs with service providers and policymakers also concurred, noting that poor patients, including street dwellers, were reluctant to visit formal facilities until the illness became critical. According to the providers, most of them have a misconception about the fees charged for services in the formal facilities, and also there is the misperception that once they come for services, they have to come again and again and would never be cured. By the time they visit the formal facilities, they would already have spent quite a large sum of money for critical and complicated illnesses, and have left with nothing to cater to the treatment costs at the formal facilities:

Most of the poor patients initially seek care from the pharmacy or retail drug shops; they use to buy medicines and antibiotics and take it directly without any consultation with a doctor... they spend their money on buying medicines from the drug shops. But, when their illness doesn't get better, they come to visit us in the hospital... and at that time they cannot afford the cost. (Service provider, government medical college hospital)

The policymakers also agreed that there are no customised services as such for the street dwellers or for the very poor as a result of which healthcare services may become quite costly for these people. The public sector facilities charging a minimum of Bangladeshi taka 10 only for consulting a doctor in the outpatient may be unaffordable as they do not always have savings for the rainy days. Over and above, the supposedly free and prescribed medicines

may not always be available or may be out-of-stock and have to be bought from outside. The respondents were afraid of the visiting public facility as some of them had a bitter experience of spending a large amount of money on medicines and diagnostics:

For blood test, I needed BDT 500 and for ultrasonography BDT 300, which summed up to a total of BDT 800 only. I don't have any source to get this huge amount of money..... eventually, I couldn't continue my treatment. (Reproductive-age woman)

An elderly respondent expressed:

I will not go to the public hospitals. They do not provide medicines, they charge a huge amount of money for diagnostic tests... we cannot even afford our food, so why should we bother for treatments?' (Elderly man)

According to the service providers, whenever they found that a patient was unable to pay the cost of outpatient department (OPD) ticket, they tried to provide services free of cost. The providers and the policymakers insisted that public hospitals provide services at a minimum cost with waivers for the very poor and destitute, besides subsidies from the attached social welfare department of the Government of Bangladesh. However, for availing these services, patients have to go through a formal process of verification of their financial conditions, which may be time-consuming. Street dwellers struggled with the process as questions related to their socioeconomic condition and other information, such as address and national identity (NID) card appeared difficult for them to comprehend and respond. One of the key informants mentioned:

All the public hospitals have social welfare department, including ours... besides, we have a poor fund in every department to help our poor patients with the costs of lab investigations, if required. We are helping the ultra-poor patients with the fund. (Service provider, public medical college hospital)

Thus, these practices were ad hoc and informal, and not formalised institutionally. Allegedly, the street dwellers were also not aware of service availability and the associated costs.

Health systems experiences: long waiting time, no identity card and no services for police cases

One of the reasons mentioned for not visiting formal facilities includes long waiting time, which is not compatible with their daily life:

...it is difficult to stand in a queue in the public hospital, there is too much crowd ... I faced huge trouble... once I visited a public hospital and it took around 40 minutes in the queue...so I do not want to go there anymore. (Adult woman)

The other important barrier was the lack of an identity card, which is especially asked for by the providers for providing treatment for accidents, violent injuries or accidents where there is a possibility of police case:

Once the ferry ghat leader beat me and my legs and head were injured... when I visited the public hospital, they asked for my identity and address!...they did not provide services to me... provider told me to visit the police station and file a case against the leader... After that we try not to tell them that we were abused, rather we would tell that it was an accident. (A reproductive-age woman, mother of two children)

Besides, the providers mentioned that some public sector facilities provided red card (a special card for free PHC services to the slum dwellers based on SES and monthly income, verified by the NID number and address). Unfortunately, due to lack of NID and a corresponding address, street dwellers were deprived of this card and PHC services were not free for these group of people. Interestingly, our policy level KII respondents appeared not to be concerned in general, and they rather said that this would be expected as the cost of care is low in public sector hospitals, including the opportunity of consulting different specialists under one roof. As to their best of knowledge, there was no specific indication in the existing health policy for customising services specifically for the destitute, including the street dwellers:

The health policy is common for everyone. To my knowledge, there is no specific policy for the street dwellers, maybe no one even thinks of the necessity of any policy for them... nutrition and health policies are needed for them. (High government official)

DISCUSSION

Principal findings

The street dwellers of Dhaka City are one of the most marginalised population groups in the urban area with a substantial need for healthcare services in addition to the necessities of daily living. Towards this end, we explored the illness experiences of this population and relevant healthcare-seeking behaviour, including experiences of interaction with the formal health systems. Findings reveal their common practice of visiting retail drug shops when ill for advice and treatment, their reluctance to visit formal facilities until compelled by serious illness or injury, and also lack of effective mechanism in the formal health systems to reach them with needed services.

Strengths and weaknesses

There have been a few quantitative studies done earlier on the street dwellers of the metropolitan areas in Bangladesh; however, this is the first one to apply a qualitative approach to investigate in depth the issues delineated earlier. Our purposive selection of respondents from different spots with a high concentration of the street

dwellers, and age and sex groups, allowed us to capture the diversity of their health needs and priorities, which is expected to help the policymakers to design a customised health intervention for them. Data were triangulated using different methods, such as IDI and informal group discussion with the street dwellers and KIIs with the service providers and policymakers to ensure its reliability and validity. Since it covered a limited number of spots for recruiting study participants due to constraints in time and resources, results may not be generalisable for all street dwellers of Dhaka City or other metropolitan areas.

Comparison with similar studies

The destitute conditions of the street dwellers found in this study are pretty much similar to what has been observed earlier in Bangladesh^{7 8 13} and also in India.¹⁴ The illness profile and relevant healthcare-seeking behaviour of the street dwellers observed in this study have not changed over the years.^{7 8} Rather it mirrored that of the other underprivileged groups of people in Bangladesh, for example, sustaining injury and trauma from harassment by the law-enforcing agencies and political hoodlums especially by the male street dwellers.^{8 15} Health was found to be of lesser priority to these people compared with other necessities such as food, similar to what was observed among the homeless people living in the UK.¹⁶

Visiting retail drug shops as the first stop for seeking healthcare services is quite common among the underprivileged people in Bangladesh like India^{8 17-19} and has not changed over time despite enormous expansion of health facilities in the country over the years. It works as a 'quick fix' for not-so-severe illnesses in the absence of a formal system of healthcare services for them and saves opportunity cost for daily earning.¹⁸ This is in contrast to what was found in a study where the homeless people faced difficulties like waiting in a long queue with prescription to receive medicines from a community pharmacy.²⁰

Formal facilities were visited by these people mostly when drug shop treatment failed to cure the illness or the illness became worse or the illness was serious, including injuries, as also observed elsewhere.²¹ Besides, they were reluctant to visit formal public sector facilities (which are supposedly to be 'free' for all) due to a perceived lack of responsiveness of the system and the providers, and the NGOs are also no exception.²² However, this behaviour interfered with getting essential and strategic pregnancy and delivery care also for the street-dwelling women, which needs urgent attention from policy and practice. The scenario is far better now in high-income countries like the UK where homeless people are provided services by specialist PHC, which is found to be highly satisfying to them.³

Implications for clinicians and policymakers

Providing services for the vulnerable population, including healthcare services, is not easy as it depends



on, among others, society and the state's attitude to them.²³ The current urban PHC facilities in the urban areas of Bangladesh under the Ministry of Local Government aim to provide services free of cost to the poor with explicit focus on the slum population. However, there is little thinking about the specific needs and priorities of the urban marginalised populations such as the street-dwellers. For services to be accessible and useful to them, the time of service delivery should be suited to their daily life-style (eg, providing services in the evening), and also, treatment from a qualified provider for serious illnesses and injuries as opposed to that from the lay drug shop attendants.²⁴ A customised intervention targeted to them should think of providing services at their door steps through mobile health clinics and providing some kind of prioritised access to formal health facilities for them (eg, health card) and others. For example, in a twice daily to explore alternatives for this population, a pilot project in Dhaka City tested two models of satellite and static clinics run by the paramedics in evening to serve the street dwellers, and the latter model was preferred by them.¹³ Besides, both type of clinics developed strong reference linkage to higher level health facilities. Acceptability also increased the use of these clinics by the target population and points to its sustainability in the future, if scaled up. Besides, compassion and responsiveness on the parts of the healthcare providers and support staff (eg, lab technicians, medicine dispenser and gatekeeper of the health facilities) are essential for assuring these people access healthcare services as and when needed.

Unanswered questions and future research

Since the study is done on a non-random sample from Dhaka City only, questions remain whether this picture is true for such people in different cities and towns, for example, illness profile and healthcare-seeking behaviour, which are known to differ from place to place. This may begin with a scoping review of the different small-scale intervention undertaken in different areas and context and feed a national representative survey. Thus, for a representative data on this and other marginalised groups in the urban context (eg, commercial sex workers (CSWs), the sewerage and garbage cleaners who are categorised as 'untouchables'), a countrywide quantitative survey backed up by qualitative data (in subsamples, to explore the context) is needed urgently to translate the rhetoric 'leave no one behind' into practical action. This will help in accommodating the diversities in needs and priorities of these people from various urban areas of the country while designing interventions for them and fine tuning these interventions as feasible.

Recommendations

Based on our study findings, some recommendations to improve the current situation are made: (1) mobile clinics to provide essential services (including pregnancy and reproductive healthcare services) at their doorsteps, (2) prioritised access to services in the formal

health facilities, (3) free or nominal consultation fees to ensure access, (4) services provided at a time and place of their convenience, and (5) medicines and diagnostics provided free of cost. To supplement and complement the government services, some of the small-scale interventions implemented by the NGOs and others may be critically reviewed, and the successful ones may be considered for scale-up.

CONCLUSIONS

Current organisation of urban public healthcare services lags far behind concerning outreach to the extremely vulnerable population like street dwellers. What they need is explicitly targeting with customised package of services at a time and place convenient to them, with minimum or no cost implications. We hope that these findings will serve this purpose and help policymakers and practitioners to design such services, and embed these into the mainstream urban health systems in the spirit of universal health coverage.

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Contributors SMA, SNBKT, NN conceptualised and designed the study. SNBKT and RH collected field data and carried out the analysis. SNBKT drafted the manuscript. SMA reviewed and edited the drafted manuscript for intellectual inputs. SNBKT, SMA, NN, NI and MMI thoroughly reviewed the manuscript and contributed substantially for necessary revision. SNBKT and SMA again reviewed the manuscript and prepared for final submission. All authors approved the final manuscript for submission.

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Ethics approval Ethical approval for this study was obtained from the institutional review board of BRAC James P Grant School of Public Health, BRAC University, Dhaka, Bangladesh (protocol number 2019-001-IR). Since the largely illiterate/semiliterate community in Bangladesh is mostly sceptical of signing any written document for historical reasons, we opted for informed verbal consent from the respondents before commencing the interview. In this process, the contents of the consent were read to the respondent with necessary explanation in the presence of a literate witness. When the interviewer was satisfied that the respondent understood it, including its implications, and had agreed to participate, only then the interview would begin. The consent form was preserved with the ID of the respondent and a note that verbal consent was taken in the presence of a literate witness. Consent from the key informant interview respondents (service providers and policymakers) both verbal and written was taken and preserved. The anonymity of the respondents was maintained at all stages of data management and analysis. Data were used for research purpose only. We strictly followed all ethical principles for anonymity, doing no harm to participants, maintaining the confidentiality of the data and using the data for research purpose only.

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