

Morbidity Pattern, Availability and Utilization of Health Services: A Study among the Male Youth (15–24 Years) Living in the Slums

Abstract

Background: Youth is considered as a healthy period but their health is greatly influenced by the hostile living conditions in the slums. When this is accompanied by poor health infrastructure, health risk escalates multiple times. **Objectives:** The objective was (1) to study the health problems of the male youth living in the slums and (2) to study the availability and utilization of health services for the male youth living in the slums. **Subjects and Methods:** Study design: Cross-sectional study. Study population: Male youth (15–24 years). Study settings: Four urban slums of Amritsar city. Study period: January 1, 2017–December 31, 2017. Sample size: One thousand male youths. Inclusion criteria: Male youth (15–24 years) with consent. Exclusion criteria: Male youth (15–24 years) not given consent, not available at home on the third repeat visit, and mentally unstable or deaf or dumb. **Results:** The morbidity pattern showed that 47.5% suffered from any disease during the past 3 months and 3.3% were hospitalized in the past 1 year. Majority of the cases were due to diseases of the respiratory system and gastrointestinal system. Private health sectors including chemist shops were utilized more in case of both outpatient (88.9%) and inpatient services (57.6%) as compared to public health sector. The private health facilities were within 500 m from majority (89.6%) of households in the slums of Amritsar city. **Conclusions:** Primary health care needs to be strengthened in the slums. Effective and easily accessible health-care services should be provided by the government at the doorsteps of slum households. The Information Education Communication/Behavior Change Communication activities regarding disease prevention should be strengthened to promote and protect good health.

Keywords: Availability and utilization, health problems, health services, male youth, slums

Introduction

Slums are the result of urbanization and industrialization which are likely source for many epidemics. Due to the lack of minimum basic services such as safe drinking water, environmental sanitation, durable housing, and health care, the slum dwellers are at increased risk of diseases such as respiratory tract infections, gastrointestinal infections, and skin infections. Youth is defined as the period between 15 and 24 years of age according to the United Nation and Census of India.^[1,2] Young people are presumed to be healthy, but the vulnerable living conditions of the slums greatly influence their health and create a situation hostile for the maintenance of the good health. Health-care infrastructures such as availability of doctors and health facilities are more concentrated in the developed

areas of the cities. Therefore, accessibility and quality issues of health services in the slums further deteriorate their miserable health conditions. Males are more prone to unhealthy life style diseases as compared to females, and there is a paucity of the studies identifying the general health problems of the male youth living in the slums. Hence, this study provides an overview of the health problems of the male youth and availability and utilization of health services in the slums of Amritsar city.

Subjects and Methods

This was a cross-sectional study undertaken from January 1, 2017, to December 31, 2017, in the urban slums of Amritsar city. According to Master Plan Amritsar (2010–2031) by the Punjab Urban Planning and Development Authority, a municipal corporation has notified 64 slums in the Amritsar city under the Punjab Slum Areas

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(improvement and clearance) Act, 1961 which constitutes 4.26% of the area of the Amritsar city.^[3]

Probability sampling (simple random sampling) was done to select the four slum areas for the study ensuring that each slum of Amritsar city had an equal chance of getting selected in the study. According to the location, all the 64 slums were numbered and divided into 4 sectors (North, South, East, and West). From each sector, one slum was selected randomly by lottery method. Hence, the four urban slums selected for the study were Faizpura (North), Mohkumpura (East), Bangla Basti (South), and Kot Khalsa (West).

Nonprobability sampling (convenience sampling) was done to select the study population living in the slums for interview because the study population was not well defined in the slums to conduct the probability sampling. From the geographical center of each selected slum, a spin-the-pen method was used to select the lane, and the first house on the left side of that lane was selected as the starting point. Further houses were visited along the same side and moving in clockwise direction covering all the sublanes. Two hundred and fifty eligible male youths aged 15–24 years who gave the consent were interviewed from each selected slum, so in total, 1000 eligible respondents were included in the study. Respondents who did not give the consent, those who were not available on three repeat visits, and those who were mentally unstable or deaf or dumb were excluded from the study.

After explaining the purpose of the study, written informed consent was taken from the eligible respondents, and they were interviewed in the vernacular language using pretested semi-structured pro forma. The data thus collected were compiled and analyzed statistically with the help of available software like Microsoft Excel, and ratios and proportions were calculated.

Results

The morbidity pattern of the male young revealed that 47.5% suffered from any disease during the past 3 months and 3.3% were hospitalized in the past 1 year [Table 1]. Among those who were sick but not hospitalized, 47.6% suffered from the diseases of respiratory system, 34.1% had fever, 17.3% suffered from the diseases of gastrointestinal system, 9.1% had skin diseases, 4.8% suffered from headache, 4% felt physical weakness, and 2.3% suffered injuries and road traffic accidents (RTAs).

Regarding hospitalizations, majority were admitted because of gastrointestinal diseases (42.4%) such as typhoid and appendicitis, injuries and RTAs (21.3%), and respiratory diseases (12.1%) such as tuberculosis. Other health problems that led to hospitalization were drug addiction (9%), dengue (6.1), urinary tract diseases (3%) such as renal stones, bleeding disorder (3%) such as hemophilia, and physical weakness (3%) [Table 2].

Table 1: Distribution according to the morbidity in the past 3 months and hospitalization in the past 1 year among the study population

	Frequency (%)	
	Morbidity in the past 3 months	Hospitalized in the past 1 year
Yes	475 (47.5)	33 (3.3)
No	525 (52.5)	967 (96.7)
Total	1000 (100)	1000 (100)

Health-seeking behavior of the young respondents revealed that 92.8% of those who had health problems in the past 3 months had sought care from some source of health care and 7.2% did not seek any health care at all [Table 3]. Private health-care providers (59.6%) were the main source of health care which includes private clinics (39.9%), registered medical practitioners (17%), and private hospitals (2.7%). About 29.3% had utilized private chemist shops/drug stores and only 8.4% had sought health care from government health facilities which include government hospital (5.4%) and government dispensary (3%). A minor proportion of male youths (2.7%) had gone to faith healers and used home remedies for their health problems. For inpatient care also, private health facilities (57.6%) were preferred over government health facilities (42.4%), but there was much larger use of government health facilities in hospitalization cases as compared to outpatient cases [Table 4].

Table 5 describes the various reasons which determined the utilization of health services by the young respondents living in the slums. It was observed that distance was the most important factor for the utilization of any health-care facility as more than half (55.3%) had utilized particular health facility because of its nearness; the second reason was effectiveness of health services because more than quarter (28.6%) preferred those health facilities from where their illness/sickness was easily relieved; the financial reasons were also among the top three factors because 15.4% of respondents had utilized health facilities due to low cost of treatment and some had utilized the health facilities based on the preferences by the other family members (10%) and the community (6.1%). Few other reasons include severity of illness (5%) and awareness about the health facility as some respondents did not know about the location of government facility (3.4%) and availability of medicines (0.2%).

Regarding the availability of health services, the private health facilities were within 500 m from the majority of households (89.6%), one-fourth (24.3%) were between 100 and 300 m, and 3.8% were within 100 m. The distance of 10.4% households was between 500 m and 1000 m [Table 6].

Table 2: Share of different health problems to morbidity and hospitalization

Types of health problems	Frequency (%)	
	Morbidity in the past 3 months (n=475)*	Hospitalization in the past 1 year (n=33)
Diseases of the respiratory system	226 (47.6)	4 (12.1)
Fever	162 (34.1)	-
Diseases of the gastrointestinal system	82 (17.3)	14 (42.4)
Diseases of the skin	43 (9.1)	-
Headache	23 (4.8)	-
Physical weakness	19 (4)	1 (3)
Injuries and RTA	11 (2.3)	7 (21.3)
Drug addiction	-	3 (9)
Others	36 (7.6)	4 (12.2)

*Multiple health problems. RTA: Road traffic accident

Table 3: Distribution according to the health-seeking behavior for the ailments in the past 3 months

Sought health care	Frequency (%)
Yes	441 (92.8)
No	34 (7.2)
Total	475 (100)

Table 4: Distribution of the respondents according to the source of health care for outpatient and inpatient care

Sources of health care	Frequency (%)	
	Outpatient services	Inpatient services
Private health-care providers	263 (59.6)	19 (57.6)
Private chemist shop	129 (29.3)	-
Government health-care providers	37 (8.4)	14 (42.4)
Others	12 (2.7)	-
Total	441 (100)	33 (100)

Table 5: Reasons according to the respondents for seeking health-care from particular health-care facility (n=441)

Reasons for seeking health care*	Frequency (%)
Nearby	244 (55.3)
Effective health services	126 (28.6)
Low cost	68 (15.4)
Family preference	44 (10)
Community preference	27 (6.1)
Others	41 (9.3)

*Multiple responses

Table 6: Distribution according to the distance of their households from the nearest private health facility

Distance (m)	Frequency (%)	Cumulative percentage
<100	38 (3.8)	3.8
100-300	243 (24.3)	28.1
300-500	615 (61.5)	89.6
500-700	60 (6)	95.6
700-1000	44 (4.4)	100
Total	1000 (100)	100

Discussion

Although youth is presumed to be a healthy period, apparently free from the diseases, those living in the slums suffered from the greater risk of diseases, most probably due to miserable living conditions, unhygienic and insanitary surroundings, overcrowding, and lack of adequate garbage and sewage disposal system.

In the present study, a large proportion (47.5%) of young males living in the slums suffered from health problems. Majority of the health problems were due to communicable diseases such as respiratory tract infections and gastrointestinal infections. Most of the surveys were covered in the autumn and winter period which might to some extent explain the higher morbidity due to respiratory tract diseases (47.6%), but gastrointestinal infections being more severe have the highest share among the hospitalizations (42.4%), emphasizing the importance and need of food hygiene, sanitation, safe water, and toilets in the slum areas. The second most common reason for hospitalization was injuries and RTAs (21.3%) as youth is a period of considerable risk-taking attitude, and ill-judged risk-taking can have serious and lifelong consequences that can endanger the health. The government should take robust steps to strictly enforce the road traffic safety rules to reduce the RTAs among the youth. In addition, provision of the safe and smooth roads, appropriate lightening, and water drainage system should be the priority of the local government.

A study conducted by Prasad and Singh in the slum of Mumbai city observed that around half (49.7%) of the slum dwellers suffered from any disease and 5.4% were hospitalized in the past 6 months. The majority suffered from viral fever (48.3%), diseases of the gastrointestinal tract (25.1%), malaria (16.7%), asthma (3.8%), jaundice (4.1%), and others (9%).^[4]

Gupta and Guin studied the health status and access to health services in the slums of four cities. They observed that the percentage of hospitalization was only 2%, and the most common reasons were diarrhea, stomachache, and fever.^[5]

Another study conducted in the slums of Dhaka city showed that 49.65% of slum dwellers were sick during the preceding 21 days, and the common illnesses were respiratory diseases (25%), digestive tract diseases (22.6%), severe pain (15.3%) and eye problems (8.3%).^[6] Similar morbidity pattern was also observed in the slums of Belgaum city, Karnataka.^[7]

Regarding the health-seeking behavior, in the present study, majority (92.8%) of the respondents had sought health care when they had illness. In spite of the costlier health services, private health sector was utilized more as compared to the public health sector for both outpatient and inpatient health services. Public health facilities were utilized more in case of inpatient services (42.4%) as compared to outpatient services (8.4%). On asking the reasons for utilizing particular health facility, nearness and easy access, effective health services, and low cost of health care were among the top three reasons which determine the health-seeking behavior of the respondents. Similar reasons were reported by the studies conducted in the slums of Delhi and Dhaka.^[8,9]

A report by the International Institute for Population Sciences (2010) revealed that majority (95%) of the male youth who experienced symptoms such as high-grade fever and three-fourth of the male youth who suffered from physical injuries sought help from the health facilities. Two-third had sought treatment from private health facilities, one-fourth from government health facilities, and 1 in 10 from traditional health-care providers.^[10]

Similar results were observed by Prasad and Singh, Gupta and Guin, and Akhter *et al.* which showed that more than 90% had sought care when they suffered from any disease.^[5,4,9]

Akhter *et al.* observed that pharmacist/drug store (69.5%) was the main source of health care of the slum people. About 32.8% of them received care from modern health facilities, of which only 13.9% have sought health care from public health facilities.^[9]

Gupta and Guin showed that most (80%) of them had preferred private health facilities over government health facilities (17%). The division between public and private hospitals was roughly equal, indicating a much larger use of public hospitals in hospitalization cases, compared to outpatient department cases.^[5]

In both the above studies, nearness of the health facility from the residence is the most important reason for choosing the health-care providers. In the latter study, more than one-fourth (28%) of the patients from the slums of Ludhiana considered proximity to doctor's office or health center as factors other than a good doctor that influenced the choice for selecting a particular doctor.^[5,9]

Banerjee *et al.*, Kumar and Mishra, and Naydenova *et al.* also revealed the similar results that private health sector

was the preferred source of health care as compared to government health sector in the slums of Delhi, Varanasi, and Mumbai, respectively.^[11-13]

Regarding the availability of the health services, in the present study, it was observed that private health facilities were at the doorsteps of the slum households as compared to public health facilities. Private health facilities were within a half kilometer from the majority of the households (89.6%), and the distance of the nearest Urban Primary Health Centre was between 1.5 and 2 km or more in the selected four slums of Amritsar which is in contrary to the National Urban Health Mission guidelines, which states that there should be urban primary health center within the 500 m of the slum area.^[14] Moreover, the private health facilities remained open till late in the evening hours, and the respondents could consult them even after their work in case of illness.

According to a report of the Technical Resource Group (2014), vulnerable groups in the many cities such as Kolkata, Bhubaneswar, Guwahati, and Ahmedabad mentioned that public health facilities were too far away and sometimes they were referred to the medical college for the treatment.^[15]

In the study by Gupta and Guin, 62% of the people reported private health facilities to be within 2 km from their residence. Furthermore, a majority of the individuals could walk to the facility, indicating their relative accessibility.^[5]

Conclusions

Youth is an age of good health, and this crucial period lies between childhood's dependence and adulthood's independence. To produce the stronger and healthier young generation, there is a need to address their health status and health needs. Despite the presence of government health facilities, the youth living in slums still prefer easily accessible nearby private health facilities for their illness. Accessibility and quality issues of public health facilities in the urban areas need to be addressed, and attention should be focused on the health-seeking behavior of the youth, especially living in the high-risk slum areas.

Recommendations

- To provide the effective and easily accessible health-care services in the slums, there is a need to strengthen the primary health care by the government at the doorsteps of the slum households
- In the slums, the Information Education Communication/ Behavior Change Communication activities should be strengthened to increase the awareness regarding the prevention of various diseases prevalent in the slums, hygiene and sanitation, and importance of healthy and balanced diet in order to promote and protect good health of young generation.

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Conflicts of interest

There are no conflicts of interest.

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