

Health status, status of personal hygiene, causes, and abuse among street children in city Ahmedabad of Gujarat

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ABSTRACT

Background: Street children are the most neglected and vulnerable population group in most of the cities in India and at risk of under nutrition and health problems. **Objectives:** The objectives of this study are to determine the health problems among street children and associated them with other variables, to determine the causes that compelled them to become street children, and to find out types of abuse among street children. **Materials and Methods:** This cross-sectional study was carried out among street children. The sample size was 150 street children aged between 5 and 16 years, residing in Ahmadabad city. The study duration was August to November 2016. Data were collected using a structured questionnaire, and a general examination was done. Nutritional status was assessed. Data analysis was done by Epi-info. **Results:** About 51.33% of respondents were males, and 48.66% were females. 65.33% of children were illiterate. Common diseases were 78.66% skin diseases, 40% respiratory illness, 60.67% pallor, and 66% were malnourished. Association of bathing habit with a respiratory infection and skin disease, body mass index with pallor, and respiratory infection was found to be significant (odds ratio [OR] -1.61-5.03); hand washes and gastrointestinal tract infection were insignificant (OR - 0.81). 32% of street children were abused. The reason for becoming street children was earning income for family/self, i.e., 48.67%. **Conclusion:** This section of society is repeatedly ignored by the state, central government, and universally across the globe which was well evident in this study too. They are vulnerable to almost all disease conditions.

KEY WORDS: Street Children; Health; Abuse

INTRODUCTION


Street children are a vulnerable part of society who lives on the street without any supervision from anyone.^[1,2] Street children desperately need programs and services. Unfortunately, there are very few shelters or outreach programs anywhere in the world. The government needs stronger enforcement measures. Uniform data are not available on street children. Every child has an inherent right to dignity and respect. In

other words, UNICEF defined as street children refer to those below 18 years of age, boys or girls, who are experiencing homeless and primarily live on the streets of the city.^[3]

UNICEF has defined three types of street children.^[4]

- Street living children: Children who ran away from their families and live alone in the streets
- Street working children: Children who spend most of their time on the streets, fending for themselves, but return home on a regular basis^[4]
- Street family children: Children who live on the street with their families.

Globally, around 100-150 million street children are now present on the streets, and this number is further increased, and in India, it is about 8 lakhs.^[1,3,5,6] The existence of street children is very much prevalent in densely populated urban

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hubs of developing or economically unstable regions, such as countries in Africa, Eastern Europe, and Southeast Asia.^[2,5]

They are mostly residing on the street, railway station, bus station, bridges, beneath the flyover, temples, and dargahs. Children's repeatedly get abused, exploited by fellow children, policemen, and other anti-social elements, and they take the full responsibility of caring for themselves and protecting themselves. Street children are dirty, scared, bitter, worn out, and helpless. They are deprived of education, nutrition, and medical care and their basic rights of survival, protection, development and participation. They grow up much too soon and die much too young.^[3] Every street child has a reason for being on the streets. Children leave their homes and come on to the streets because of the interconnection and relationship of three reasons, poverty, family violence, and allure of modernity, which have destabilized the traditional family structures, whose consequence is broken families and child abuse.^[7]

Globally, street children experience poor health because of their lifestyle and often fall sick due to such ailments as malaria-like febrile illnesses, respiratory tract illnesses, gastrointestinal tract illnesses, headaches, renal problems, injuries, dental problems, anemia, skin diseases, human immunodeficiency virus/acquired immunodeficiency syndrome, and malnutrition.^[8,9] Nutritional deficiency is one of the factors that increase the risk of developing infectious diseases to an individual because the body's natural system of immunity has weakened.^[10] Children who are on the streets tend to underutilize the existing health services mainly because their daily struggle focuses on getting food and shelter with concerns about their health being secondary, a situation compounded by limited or lack of access to health facilities.^[11]

OBJECTIVES

The objectives of this study are as follows:

- To determine the health problems among street children and associated them with other variables
- To determine the causes that compelled them to become street children
- To find out types of abuse among street children.

MATERIALS AND METHODS

This was a cross-sectional study done in Ahmedabad city from August 2016 to November 2016. A study conducted in Varanasi around 1246 street children were contacted by volunteer so considering it as a baseline and time as a big constraint, it was decided to take at least 10% of it, so the sample size of 150 was taken aged between 5 and 16 years, residing in Ahmedabad city. The areas were chosen according to preference of these children where they can get maximum number of people to sell their goods or get easy money

by begging, and the study was planned so that we can get maximum number of these children on our scheduled day.

Exclusion Criteria

We could get 178 such children which were later excluded due to age and some children from local chawls were mistaken as street children, so maximum sample on strict inclusion criteria came out to be 150.

Data were collected using a structured questionnaire, general examination was done, and height and weight were recorded. Nutritional status was assessed using body mass index (BMI) Z-score by the WHO guideline. Data analysis was done by Microsoft offices excel, Epi info and statistical test used was odds ratio (OR).

RESULTS

A total of 150 street children were interviewed in our study (males - 77 and females - 73) between the age group of 5 and 16 years, and 98 (65.33%) of children were illiterate around 52 (34.67%) of street children were literate. According to the UNICEF guideline of different types of street children, 4% were pure street living children (not having family) and 96% children were living with their family in which 46% of children were working.

In the study majority of children, 118 (78.67%) were suffering from skin problems such as pyoderma, dry skin, furunculosis, dermatitis, and scabies. 91 (60.67%) children had pallor. 60 (40%) had a respiratory infection. 12 (8%) children had gastrointestinal infection. 8 (5.33%) children had visual problems, and 6 (4%) had ear and hearing problems. 26 (17.33%) of children had dental problems. 7 (4.67%) had buccal problems. 51 (34%) children had various addictions. 99 (66%) children were malnourished (Table 1).

Table 1: Health problems among street children (n=150)

Health problems	Frequency (%)
Respiratory infection	60 (40)
Gastrotract infection	12 (8)
Skin problems	118 (78.67)
Dental problems	26 (17.33)
Eye and visual problems	8 (5.33)
Pallor	91 (60.67)
Ear and hearing problems	6 (4)
Buccal problems	7 (4.67)
Renal problems	1 (0.67)
DM	1 (0.67)
General	5 (3.33)
Addictions	51 (34)
Malnourished	99 (66)

DM: Diabetes mellitus

In Table 2, only 22 (14.67%) used to take bath every day, 55 (36.67%) were used to take bath 3 times a week, 70 (46.66%) were used to take bath 1-2 times a week, and 3 (2%) children never took bath. Out of 150 street children, around 43 (28.67%) children had habit of hand wash and 107 (71.33%) children did not practice hand wash before/after taking food/micturition/defecation. Not a single child washed their hair every day. Only 8 (5.33%) used to wash hair 3 times a week, 39 (26%) twice a week, 100 (66.67%) once a week, and 3 (2%) children never washed their hair. 97 (64.67%) children were not wearing shoes, and 53 (35.33%) children wear shoes during daily work or activities. In spite of public toilet facilities, street children 68 (45.33%) still prefer defecating at open places.

Association between various health conditions with practice and behavior of personal hygiene and association between various diseases and prevailing nutritional status were studied. OR was 1.61 for the association between bathing habit and children having respiratory infection. OR was 3.06 for the association between bathing habit and children having skin disease. OR was 0.81 for association between habit of hand wash and gastrointestinal infection. OR was 5.03 for association between children having anemia and BMI. OR was 1.42 for association between children having respiratory infection and BMI (Table 3). The result came out to be significant in all the conditions except hand wash and gastrointestinal infection which was

Table 2: Personal hygiene of street children ($n=150$)

Personal hygiene	Frequency (%)
A. How frequently they take bath?	
Every day	22 (14.67)
3-5 times a week	55 (36.67)
1-3 times a week	70 (46.66)
Never	3 (2)
B. Habit of hand wash	
Yes	43 (28.67)
No	107 (71.33)
C. How frequently they washed their hair?	
Every day	0 (0)
Thrice a week	8 (5.33)
Twice a week	39 (26)
Once a week	100 (66.67)
Never	3 (2)
D. Wear of shoes	
Yes	53 (35.33)
No	97 (64.67)
E. Toilet type they use	
Public toilet	82 (54.66)
Open place	68 (45.33)

probably due to immunity gained by previous infections and bad hygiene.

Table 4 showed that, children when asked about daily abuse, they suffer from family members or other people from the society, around 35 (23.33%) suffered from physical abuse, psychosocial abuse such as harassment by pedestrians and by friends colleagues was 19 (12.67%), and sexual abuse were 2 (1.3%). Frequent reasons that pushed child to the street were earning income for family/self 73 (48.67%), no home 42 (28%), movement with their family 27 (18%), and other reasons were home condition and death/separation of parents.

DISCUSSION

Many health problems were found among studied street children. They were nutritionally poor and having poor personal hygiene. The studied street children were abused, and causes found were earning and other home conditions.

A total of 150 street children were interviewed in our study (males 77 and females 73), i.e., a 50:50 ratio which was surprisingly not found in any other study, other study

Table 3: Association between various disease conditions and prevailing behavior and their current nutritional status

A. Association between bathing habit and children having respiratory infection	OR=1.61 significant
B. Association between bathing habit and children having skin disease	OR=3.06 significant
C. Association between habit of hand wash before/after taking food/micturition/defecation and gastrointestinal infection	OR=0.81 not significant
D. Association between children having pallor and BMI	OR=5.03 significant
E. Association between children having respiratory infection and BMI	OR=1.42 significant

OR: Odds ratio, BMI: Body mass index

Table 4: Types of abuse faced by children and reasons that pushed child to the street

	Frequency (%)
Types of abuse	
Physically	35 (23.33)
Psychological	19 (12.67)
Sexually	2 (1.33)
Reasons	
To gain independence from family	0 (0)
Home demolition	3 (2)
Death/separation of parents	5 (3.33)
No home	42 (28)
Earning income for family/self	73 (48.67)
Movement with family	27 (18)

includes Rafi *et al.*^[12] and Islam *et al.*^[13] where males were predominantly found as respondents.

Children from age group of 5 to 16 years were interviewed in the present study, and 65.33% of children were illiterate; around 34.67% of street children were literate which is in accordance with the study done in Varanasi by Srivastava and Shareef^[14] in which age group of <5 years of age to 18 was included and literacy rate was found to be 32%.

In our study majority of children, 78.67% were suffering from various skin problems which can be well seen in other study done in Khammam city of Andhra Pradesh where skin infections were found in 56.66% of street children.^[15]

Many health-related problems were found in studied street children most commonly 60.67% had pallor and 40% had respiratory infection followed by others. Various other studies done in India by Berad *et al.*, in Khammam City of Andhra Pradesh,^[15] in Jammu,^[16] and the study in other countries such as Kenya,^[17] Nepal,^[9] and Awassa (Southern Ethiopia)^[18] have given slightly different prevalence rate of respiratory disease and condition such as anemia which can be because of different geographical condition and availability of health services. Our study shows that around 34% of children were using tobacco products such as gutkha, cigarettes, and bidi, which is well evident in other study done in Dharan (Nepal) by Thapa *et al.*^[9]

Our study shows a prevalence of 66% of malnourished street children according to BMI Z score. Similar results were also found in the study done in Nairobi (Kenya) where 56.6% of street children were malnourished,^[19] in Eldoret, Kenya, where 41.9% of street children were underweight, and 33.5% of street children were stunted,^[17] in Filipino street children where 30% of street children were malnourished,^[20] and in Zamboanga city where 35-40% of street children were malnourished.^[21]

Overall, the practice regarding personal hygiene among the street children in the present study was poor. In spite of public toilet facilities, 45.33% of street children still prefer defecating in open places, contrary to the result given by the World Bank which shows only 7.5% of people defecate in open place.^[22] One study done in Matazu (Nigeria) in which 11.4% of street children defecate in open places.^[23]

Association between various health conditions with practice and behavior of personal hygiene and association between various diseases and prevailing nutritional status were studied. Association between bathing habit and respiratory infection, skin disease, anemia and BMI, and respiratory infection and BMI came out to be significant in all the conditions except hand wash and gastrointestinal infection which was probably due to immunity gained by previous infections and bad hygiene. A study done in Kenya (Nairobi) by Kwamboka

et al. had also given similar results where children <10 years of age suffered from various health problems with OR - 17.71.^[19]

In the present study, around 23.33% suffered from physical abuse, harassment by pedestrians and by friends colleagues was 12.67%, and sexual abuse was 1.3% which was in accordance to other studies done in Varanasi by Srivastava and Shareef^[14] showed physical abuse 78%, emotional abuse 66%, sexual abuse 15%, forced to do unlawful activities, forced to indulge in trafficking of drugs/liquor, and child neglect 32% was observed. A cross-sectional study done in Udaipur by Singh *et al.*^[24] showed that 30% of children were abused.

There were various reasons which let street children to work or pushed to the street, and majority in our study, 48.67% did it to earn for family/self, 28% of children were homeless, 18% of children became street child due to movement with their family, 3.33% of children were in street due to death/separation of parents, and 2% of children were on street due to home demolition. In Awassa, Southern Ethiopia, a study done by Sorsa *et al.* showed that 58% of children were homeless.^[18]

Strength

Our sample size was good. Health was associated with BMI and personal hygiene.

Limitation

Time was a constraint. We did not use any invasive diagnostic procedure to know about exact situation of their health condition. We did not have any monetary funding from any agency.

Recommendations

Government as well as independent agencies should initiate a drive to enroll those children. More research work and studies of this nature should be done so that government can be sensitized with these kinds of untouched issues. Proper shelter as well as medical care should be given. Periodical examination for assessing health status of street children and shifting them in care home, etc., should be done. Every child's right should be protected through article 24 which prohibits employment of children below the age of 14 in factories, article 39 prevents abuse of children of tender age, and article 45 provides for free and compulsory education for all children until they complete the age of 14 years. Reason for begging and working along the polluted street should be analyzed, and proper remedial measure should be taken. Creating job opportunities for family and providing support to those children by integrated effort of the ministry of social justice and empowerment and child labor and employment

can be one way out. Anti-beggary legislation should be enforced, and at the same time, the focus should be more on rehabilitation of those children.

CONCLUSION

This section of society, i.e., street children and homeless people was repeatedly ignored by the state, central government, and universally across the globe which was well evident in the present study too. They are vulnerable to almost all disease conditions and were suffering from various disease conditions mentioned above in results. The nutritional status of the children studied was generally poor as many of them were dependent on begging for money and food. The prevalence of anemia was high among street children.

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