



Gastrointestinal Disorders amongst Children in Urban Slums of Lucknow

KEYWORDS

Health, Gastro-intestinal Disorders, Children, Slums, Diarrhoea, Hepatomegaly

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ABSTRACT *Introduction: The urban population is rapidly expanding because of large-scale migration to cities for a possible better life. The cities and towns are also expanding but the sheer volume of people compromises the ability of the city to meet their basic needs. A large proportion of this migrating population ends up residing in slums in inhuman conditions. As a result, urban poverty and hunger are increasing in many developing countries.*

Aims and Objectives: To Study the various Gastrointestinal disorders amongst children in Urban slums of Lucknow and various factors affecting them.

Materials and Methods: A cross sectional study carried out amongst children of 5-15 years of age group in urban slums of Lucknow. . Over all 256 families could be studied. In these families a total of 524 children were studied who belong to the age group between 5-14 years. Two different types of schedules-family interview schedule and Individual Interview schedule were used after pre-testing. Data was collected by door-to-door home visit. The information so collected was analyzed and tabulated using SPSS 17.0 Version.

Results: In present study a total of 524 children were studied. Present study showed that 11.25% children of slum areas were suffering from gastrointestinal disorders. Diarrhea was present in 5.6 % children. In present study It was found that 83 children (15.8%) out of 524 showed infestation with round worm, 11.8% with Amebiasis , 9.7% showed hookworm infestation and 6.3% had giardiasis. Out of major illnesses detected at the time of examination nutritional deficiencies contributed to 18.1%, diseases of respiratory tract 16.98% and diseases of G. I. tract 11.25%.

Conclusion: This study demonstrated a continuing high burden of childhood illnesses among urban slum dwellers in northern India. The high percentages of Gastrointestinal Disorders and parasitic infestations shows the poor personal hygiene and poor sanitation and water supply of the urban slums. Attention therefore directed towards improving the water supply and sanitation and sanitary conditions in general as well as health education of both children and adults.

Introduction:

The urban population is rapidly expanding because of large-scale migration to cities for a possible better life. The cities and towns are also expanding but the sheer volume of people compromises the ability of the city to meet their basic needs. A large proportion of this migrating population ends up residing in slums in inhuman conditions. As a result, urban poverty and hunger are increasing in many developing countries.

School age children (5-15 years) have not received as much attention from health providers/planners as the under fives. In an international workshop at Kentucky, USA in 1994, it was agreed that there was a dearth of information on the health status of school age children from developing countries particularly at the community level ⁽¹⁾: In India, several studies have been carried out on the health status of school age children. These have largely been quantitative and the reported morbidity included malnutrition (10.0-98.0%), dental ailments (4.0-70.0%), worm infestation (2.0-30.0%), skin diseases (5.0-10.0%), eye diseases (4.0-8.0%), and anemia (4.0-15.0%) (2-10). However, data on the community's perception about these morbidities are inadequate. It is now being increasingly recognized that proper understanding of the community's view point of any health problem contributes significantly towards formulating and implementing strategies that improve their health. Therefore, qualitative research methods, which bring out the community's perception of any issue, should form an integral part of investigation of morbidity.⁽²⁾

There are about 6.3 lakh schools in India, both primary and upper primary, with 128.3 million children in primary schools and about 50 million in upper primary schools.⁽³⁾ But it is also a fact that only 8% of the schools have sanitation facilities in

school premises, only 44% have water supply facilities, 19% have urinals and 8% have lavatory facilities. For girls, barely 19% have separate urinals; and 4% separate lavatory facility.⁽⁴⁾ The consequences of the given situation are obvious. Diarrhoea takes a heavy toll. Typhoid, dysentery, gastroenteritis, hepatitis-A, intestinal worms and malaria continue to kill, debilitate and contribute to the high rates of malnutrition among young children in the country. Intestinal parasites are among the most common infections in school-age children in developing countries. As a result of this morbidity, they are at risk of detrimental effects like poor cognitive performance and physical growth.⁽⁵⁾ Majority of these diseases are largely preventable by promotion of hygienic practices among school children through proper health education by the teachers, who are the first contacts.

Intestinal parasitic infections are widely prevalent in many developing countries including India. Most of the population chronically affected with intestinal parasites live in the developing countries¹. These are particularly important in the adolescence as they cause or aggravate malnutrition including iron-deficiency anaemia.

Lack of basic amenities like safe drinking water, proper housing, drainage and excreta disposal make this population vulnerable to infections which further compromises the nutrition of those living in the slums. It is projected that more than half of the Indian population will live in urban areas by 2020 and nearly one third of this urban population will be of slum dwellers^(6,7).

Aims and Objectives: To Study the various Gastrointestinal disorders amongst children in Urban slums of Lucknow and various factors affecting them.

Materials and Methods: A cross sectional study carried out amongst children of 5-15 years of age group in urban slums of Lucknow. There are approximately 530 slums in Lucknow city of these two were chosen at random which were representative of the slum population. One Mewa Nursery situated in Trans Gomti Area and the other Bevindriya Tola situated in Gomti area. Out of a total of 367 families residing in these slums, 136 were in the former slum and 231 were in the latter. Over all 256 families could be studied. In these families a total of 524 children were studied who belong to the age group between 5-14 years. The family was the unit of sampling. Two different types of schedules-family interview schedule and Individual Interview schedule were used after pre-testing. Data was collected by door-to-door home visit. The information so collected was analyzed and tabulated using SPSS 17.0 Version.

Results: In present study a total of 524 children were studied. In this study only those children were included in whom there was a gastrointestinal problem or any other problem related with gastrointestinal tract. Percentages were calculated from total of 524 children.

Present study showed that 11.25% children of slum areas were suffering from gastrointestinal disorders. Diarrhea was present in 5.6 % children. We also observed that 3.05% children had hepatomegaly and splenic enlargement was seen in 0.38% children (Table: 1)

In present study It was found that 83 children (15.8%) out of 524 showed infestation with round worm, 11.8% with Amebiasis , 9.7% showed hookworm infestation and 6.3% had giardiasis.(Table 2)Out of major illnesses detected at the time of examination nutritional deficiencies contributed to 18.1%, diseases of respiratory tract 16.98% and diseases of G. I. tract 11.25% (Table: 3)

Discussion: In present study It was found that 83 children(15.8%) out of 524 showed infestation with round worm, 11.8% with Amebiasis , 9.7% showed hookworm infestation and 6.3% had giardiasis.In another study in urban slums of Karachi⁽⁸⁾ the prevalence of Intestinal Parasitic Infections was estimated to be 52.8% and such high prevalence has been consistently reported by a number of studies conducted in similar populations⁽⁹⁻¹³⁾.In the study in urban slums of Karachi⁽⁸⁾ , the intestinal parasites namely *Giardia lamblia*, *Ascaris lumbricoides*, *Blastocystis hominis*, *Hymenolepis nana*, *Endolimax nana*, *Entamoeba coli* and *Iodoamoeba butschlii* were identified from the stool samples. No hookworm was identified in our study which is consistent with results obtained in studies⁽⁹⁾,⁽¹⁴⁾ conducted in urban localities.

In present study out of major illnesses detected at the time of examination nutritional deficiencies contributed to 18.1%, diseases of respiratory tract 16.98% and diseases of G. I. tract 11.25%. Similarly in a study in Respiratory and diarrheal diseases are two major causes of morbidity and mortality among children residing in the urban slums of India^[15,16] and other developing countries^[17,18] . In our study, respiratory and gastrointestinal illnesses together accounted for 87% of all childhood morbidities.

Conclusion: This study demonstrated a continuing high burden of childhood illnesses among urban slum dwellers in northern India. The high percentages of Gastrointestinal Disorders and parasitic infestations shows the poor personal hygiene and poor sanitation and water supply of the urban slums. Attention therefore directed towards improving the water supply and sanitation and sanitary conditions in general as well as health education of both children and adults.

Table 1: Distribution of various GIT Disorders (N= 524)

Disorders	No.	Percentage(%)
Diseases of GI tract	59	11.25
Diarrhoea	27	5.60
Stomatitis	14	2.70
Liver Enlargement	16	3.75
Splenomegaly	2	0.38

Table 2: Distribution of Parasitic infestation among slum Children (N= 524)

Parasitic infestation	No. of Children	Percentage(%)
Ascariasis	83	15.8
Ancylostomiasis	51	9.7
Amoebiasis	62	11.8
Giardiasis	33	6.3
Others	11	2.1

Table 3: Prevalence of various Morbidities among Slum children (N= 524)

Morbidity	No. of Children	Percentage
Nutritional deficiencies	95	18.1%
Diseases of GI tract	59	11.25%
Diseases of Respiratory Tract	89	16.98%

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