

ORIGINAL ARTICLE**A STUDY ON AVAILABILITY OF BASIC CIVIC FACILITIES IN URBAN SLUM AREA OF BHUJ, GUJARAT, INDIA****Bipin Prajapati¹, Kavita Benker², K N Sonalia³, Nitiben Talsania⁴, Siddharth Mukherjee⁵, K N Trivedi⁶**

¹Assistant Professor, Community medicine department, Gujarat Adani Institute of Medical Sciences, Bhuj ²Tutor, Community medicine department, B. J. Medical College, Ahmedabad, ³Professor, Community Medicine Department, Gujarat Cancer Society (GCS) Medical College, Ahmedabad ⁴Professor, Community medicine department, B. J. Medical College, Ahmedabad ⁵Medical Superintendent, Gujarat Cancer Society (GCS) Medical College, Ahmedabad ⁶Professor, Community medicine department, Gujarat Adani Institute of Medical Sciences, Bhuj

Correspondence:

Dr. Bipin Prajapati,

9, Radhe Bunglows, Opp. Amrut Party Plot,

Modhera road, Mahesana-2, Pin-384002, Gujarat, India

E-mail - prajapatibipinj@yahoo.com or prajapatibipinj@gmail.com Mobile no:9904384100

ABSTRACT:

Background: In cities of India, There is around 50-60% of the population of the urban areas that lives in urban slums where basic facilities such as water, sanitation, health, electricity etc are poor. Disease morbidity and mortality is high due to poverty, poor nutrition and poor education and children living on payments slum are more exposed to drug abuse, child labour and sexual exploitation.

Objective: To study the availability of basic civic facilities in urban slums in bhuj city.

Materials and Methods: A cross sectional study was carried out between January 2011 to June 2011 on randomly selected 109 households at Ramdevnagar (urban slum) area located in the western part of Bhuj. House to house survey was carried out and information was obtained on pre-designed and pre-tested proforma by interviewing the head and or other members of family. Family details, ration card, election card, water, gutterline, waste disposal, electric connection, education, availability of basic health facility were included in the proforma. The data were analyzed in Microsoft Excel.

Results: 50.4% houses are permanent, 73% are having BPL ration card, 5.5% houses are having municipality water line connection, no house is having gutter connection and 58.7% houses are having electricity connection, 60% houses don't have toilet facility, No houses have the facility of dumping solid waste. Lack of basic infrastructure and primary health facilities in this area.

Conclusion: There are infrastructural issues like lack of permanent road, street light, dumping of solid waste, drinking water facility and drainage of waste water facility. Proper implementation of strategy of town planning. Improve the efficiency of public health system in the cities by strengthening, revamping and rationalizing urban primary health structure.

Key words : Drinking water, urban slum, basic facility.

INTRODUCTION

Slums are an urban phenomenon which comes into existence on account of urbanization and industrialization in and around cities thereby attracting in migration of population in countryside. Through slums are rich source of unskilled and semiskilled manpower, they tend

to result in burden on the civic existing amenities. Government agencies and NGO have flung into action and initiated in several measures to improve the plight dwellers and make the slum areas livable for the habitants as of late they are view as effective agents in the process of urban development rather than burden on urban infrastructure. A slum is a compact

settlement with a collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions in that compact area¹. There is around 50-60% of the population of the urban areas that lives in urban slums where basic facilities such as water, sanitation, health, electricity etc are poor. Disease morbidity and mortality is high due to poverty, poor nutrition and poor education and children living on payments slum are more exposed to drug abuse, child labour and sexual exploitation. Urban growth has led to rapid increase in number of urban poor population, many of whom lives in slums and other squatter settlements. Slums are generally dirty and unclean, and have shortage of water supply, inadequate lighting and sanitation facilities. The United Nations has been more concerned with the slums of developing countries. The health hazards of the urban slum dwellers are directly related to poverty and a polluted and stressful environment². They are more prone to communicable diseases and malnutrition and at the same time exposed to greater risk of accidents at work³.

In the last two decades, India's population has increased by 2.25%, but the urban population has increased by 3.8%⁴. An estimated 30% of the population in 12 major cities of India lives in slums and the proportion of slum dwellers and squatters have been continuously increasing. Therefore, the sanitary conditions and housing conditions of slum dwellers are deteriorating day-by-day, This calls for an urgent need for evolving a rational policy on urban resettlement⁵.

As per Census 2011- urban population 35.7 crore in 2011 and 43.2 crore in 2021. National Family Health Survey -3 revealed that Households with access to piped water supply at home are 13%, Public tap and hand pump for drinking water are 72.4%, Using a sanitary facility for the dispose of excreta are 40.5%, School attendance 6-17 years male- 67.3 %, School attendance 6-17 years female- 61.4 %, Women age 15-49 yrs with no education - 60.9 %⁶. Under Millennium development goals (MDG) all people of the country have access to safe drinking water and improved sanitation.

OBJECTIVE

To study the of availability of basic civic facilities in urban slums in bhuj city.

MATERIALS AND METHODS

A cross sectional study was carried out in January 2011 to June 2011 at Ramdevnagar urban slum area located in the western part of ward-1. This area is well connected with Kodki road and Bhuj city, Gujarat. The area was randomly selected for ease of study. House to house survey was carried out and information was obtained on pre-designed and pre-tested proforma by interviewing the head and or other members of family. Family details, ration card, election card, water, gutterline, waste disposal, electric connection, education, basic health facility these information were collected in the proforma. Out of 113 households, 109 households were included in the study (4 households were not available/ not cooperating). The data were analyzed in Microsoft Excel.

RESULTS

Total area of Ramdevnagar is 1.83 hector. Population density is 285 per hector which is very less in comparison to other city areas.

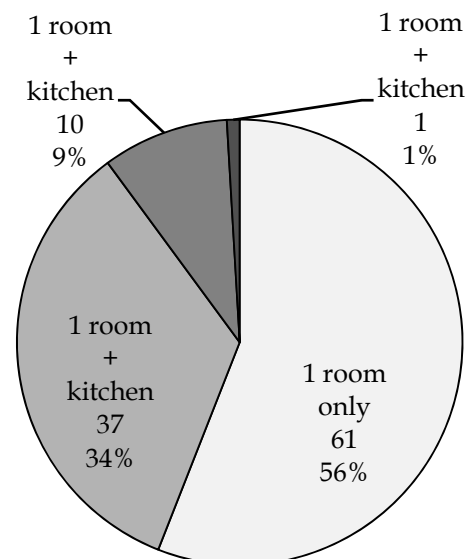


Fig 1: Distribution of households according to number of rooms

Out of 523 population of 109 households, 50.4% houses are permanent. These permanent houses are made of concrete blocks and cement,

remaining (49.6%) houses are temporary, these houses are hut type made up of plastic sheets (Figure-2).

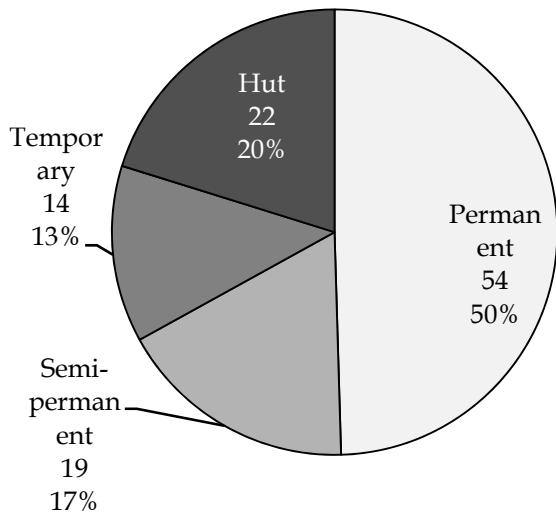


Fig 2: Distribution of households according to housing condition

Most of the people need permanent house and most of the families reside in 1 room house which is not enough for family size of 5 persons. Infrastructural facility is the main problem of Ramdevnagar. Very few families are having municipal water line connection (5.5 %) and even though the main gutter line passes nearby this area, no house is having gutter connection and 58.7% houses are having electricity connection. There is no facility for dumping solid waste. Road condition is also not much good. Inner roads of this area are taken care by local people.

Table 1: Distribution of households according to availability of Drinking water facility (n=120)

Source of Drinking Water	Number of Household (%)
In-home	6 (5.00)
Neighbor House bore well	50 (41.67)
Dunky/ Hand pump	2 (1.67)
From other area	8 (6.67)
Municipality Tanker	2 (1.67)
Private Tanker	1 (0.83)
Public Stand	49 (40.83)
Public well	1 (0.83)

Access to drinking water is a major problem in this area. Only 5.5% families are having municipal water connection. From remaining families, 55.5% families get drinking water from neighbouring families who have access to water connection (Table 1). 40% families get drinking water from private tankers by nagarpalika. Daily 1 tanker is arranged/ ordered which provides drinking water to the families of this area. Majority families (60%) don't have toilet facility and go in open air defecation, 8% families share the toilet facilities with neighbour houses. Only 35(32%) families have toilet facility in house. Similarly 75% families don't have bathroom facility and bath in open. While only 8(7%) families share bathroom facility, 19(17%) families have bathroom in house. 16% families have soak pit, 84% families do not have any facility for removal of waste water (Figure - 3). So the polluted water is thrown in open area which leads to increase of contamination and spread of diseases. No houses have the facility of dumping solid waste. All families are dumping their solid waste on roads, which leads to increase in diseases and illness in the area.

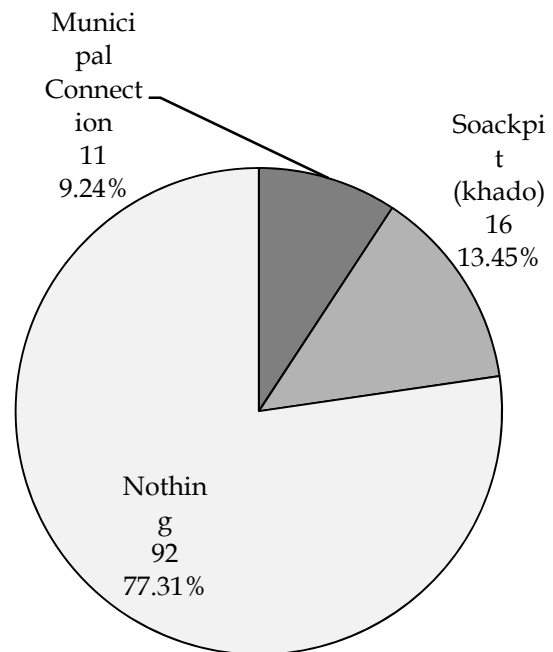


Fig 3: Distribution of households according to availability of Drainage facility

According to age wise distribution- 18 to 59 year old people are 48% (22.9% female, 25.1% male), under five Children are 18.1% (9.9% female, 8.2% male), 6 to 17 year old

children/youth are 30.8% (15.7% female, 15.1% male), above 60 years of age group are 3.5% (1% female, 2.5% male). According to sex wise-50.4% were male and 49.6% were female. Sex ratio is 981 females per 1000 males. All are hindus family in studied area.

Out of 523 people, 229 (43.7%) are married, 282 (53.9%) are unmarried, 4 (0.7%) are widow and 6 (1.1%) are widower, 1 (0.1%) divorced and 1 (0.1%) separated. According to type of family, 86 (78.8%) families are nuclear, while 20 (18.3%) are joint families and 3 (2.7%) are extended families (**Figure - 4**). According to presence of ration cards, 73% are having BPL ration card while 13% are having APL ration card and 14% do not have ration cards. Information of voting list, 64% families have their names in voting list, 36% families do not have all family members names in voting list.

According to educational level, 69% educated population. Out of these, 18% of total population gained primary education, while 28% gained secondary education. There are more people illiterate in the age group of 25 to 59. The main reason for the low rate of education is getting engaged with labour work at an early age. Children above 15 years get occupied in labour work to help in their family economic condition and thereby their name removed from school register.

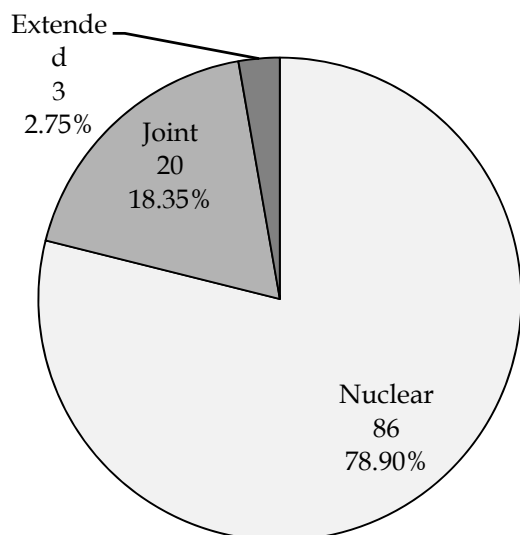


Fig 4: Distribution of households according to Type of family

We noticed that lack of basic infrastructure and primary health facilities in this area. During ill

period, nearly 94% families take health services from govt. hospital, 5% families can afford the private medical services, and only 1% families take benefit of camps organized by Charitable Trusts. 12% families are covered under private or Government insurance policies, 88% families are not having insurance. while 96 (88%) families do not have bank accounts. So that 96 families do not have any type of savings in bank and are not accessing benefits of bank services.

According to occupational status, 46% population is non working like - Students, aged people, and disabled. Remaining 49% working population, most of them are associated with daily labour and 5% population do their own occupation (private and government). Females are more occupied in handicraft and housekeeping work. The average per family income of this area is Rs.3000 per month. The main reason for this is that the people are daily wage earners and have no permanent occupation. This income pattern restricts the expenditure pattern in other activities. That is why they are not able to fulfill their basic needs.

DISCUSSION:

In present study, 49.6% houses are temporary which are hut type made up of plastic sheets. 5.5% families are having municipal water connection, no house is having gutter connection, 58.7% houses are having electricity connection and 60% don't have toilet facility and go in open air defecation. Our findings are compare with summary report of national sample survey report, 65th round (41.7% semi pukka and 8.4% of slums were having katcha structure, 96.5% of slums, the major source of drinking water was either tap or hand pump, 62.8% are having toilet facility, underground sewerage existed in only about 23% slums, 47.6% houses are having electricity connection⁴. Here sex ratio is 981 females per 1000 males. Negative sex ratio is a feature of current scenario in major part of india. As per census 2011, 918 and 940 females per 1000 males in gujarat and india. Our findings are compare with study by Marimuthu P et al had reported sex ratio at 789 per 1000 males in Delhi slums⁷.

CONCLUSION AND RECOMMENDATION

Even if slums are unauthorized settlements on public land, local government should provide

facility of public latrines, total elimination of dry latrines and manual scavenging, low cost on site sanitation in unsewered parts of cities, improve technology to reuse recycled waste, involve NGO, Private sector and community for prevention of water and land pollution. Through National urban slum development programme - Upgradation of urban slums by providing physical amenities like water supply, storm water drains, community bath, widening and pavement of existing lanes, sewer drains, community latrines and street light etc and Provision of community infrastructure and social amenities such as preschool education, non formal education, immunization, primary health care, reproductive and child health. Strengthening of health education and family planning services are required for control of population explosion.

ACKNOWLEDGEMENT

We are thankful to social worker, health staff (Anganwadi workers and USHA workers) of

urban slum area of bhuj city for their help during data collection and the people of this area who had shared their valuable experiences and spent precious time.

REFERENCES

1. Directorate of economics & statistics (national sample survey 65th round July 2008-July 2009) government of India, website-<http://des.delhi.gov.in>
2. Schmid CF. Urban crime areas, Part II. *Am Soc Rev* 1966; 25:655-78.
3. Narain I, Mathur PC. Urban development and revitalization of local government institution. *Indian J Public Admin* 1984; 30:4.
4. CBHI, Health Statistics of India, DGHS, MOHFW, GOI, New Delhi: 1985.
5. Davis K. The urbanization of the human population. *Scientific American*; Vol. 223. 1965.
6. National Family Health Survey, Delhi, Population research centre and international institute for Population sciences, Bombay. 1995.
7. Marimuthu P, Meitei MH, Sharma B. General morbidity prevalence in the Delhi slums India. *Indian J Community Medicine* 2010; 35:198-9.