International Journal of Community Medicine and Public Health
Prajapati B et al. Int J Community Med Public Health. 2017 Jun;4(6):2052-2055
http://www.ijcmph.com
pISSN 2394-6032 | eISSN 2394-6040

DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20172175

Original Research Article

A study of availability of basic facilities at household level of rural Gujarat, India

Bipin Prajapati*, Kavita Bankar, Jignesh Chauhan

Department of Community Medicine, GMERS Medical College, Himmatnagar, Gujarat, India

Received: 06 April 2017
Accepted: 28 April 2017

***Correspondence:**
Dr. Bipin Prajapati,
E-mail: prajapatibipinj@yahoo.com

ABSTRACT

Background: India, a globally important consumer economy and one of the fastest growing economies in the world. By 2025-26 the number of middle class households in India is likely to more than double from the 2015-16 levels to 113.8 million households or 547 million individuals. The standard of living in India shows large disparity. Objectives: To study the rural household condition regarding social, demographic and housing condition.
Methods: This cross-sectional secondary data analysis study was conducted at RHTC – Hadiyol of GMERS medical college, Himmatnagar, Sabarkantha district, Gujarat during 1st January 2016 to 30th August 2016. Study included 500 household from RHTC with 2250 members of rural area by purposive sampling method.
Results: Almost 93.8% population was residing their own house and 66.2% population have "pucca" house. Mean family size was 4.5 ± 1.5 in rural households. Separate kitchen was present in 54.4% houses.
Conclusions: Study reveals the socio-demographic and housing status difference between urban slum and rural area regarding own house, number of family members, kitchen, latrine, bathroom, and overcrowding, sanitary practices.

Keywords: Housing, Rural, Family size, Type of house

INTRODUCTION

In most of developing countries, lack of data on health status is a big problem.[1] In 2011, less than 22 percent of Indians lived under the global poverty line, nearly a 10 percent reduction from 29.8 percent just two years prior in 2009.[2] Usually health status of poor slums is not sufficiently represented when it compare with urban population.[3] Physical and socio-economical factors are influence the development of a city, town or village.[4] According to National Council of Applied Economical Research (NCAER), by 2025-26 the number of middle class households in India is likely to more than double from the 2015-16 levels to 113.8 million households or 547 million individuals.[5] In India, metro cities, towns and villages are quite different form life style, culture, living status from each other.[4]

Descriptive research in the form of a cross-sectional survey is an appropriate research method to tackle the problem of paucity of data on specific groups 2. It could help in estimating the need for health care in a locality and can thus be quite important in community health and family welfare activities3.[iajt pdf]. Here in, the purpose of study to see the rural household condition regarding social, demographic and housing condition.

METHODS

The survey was carried out in rural health training centre (RHTC) (Hadiyol) which is the field practice area of GMERS Medical College, Himmatnagar. The cross sectional study was carried during 1st January 2016 to 30th September 2016. Study selected 500 houses in RHTC area (total 1078 houses) by simple random technique.

Study selected the houses from the survey register of the facility by computer generated simple random number. Primary data was collected preferably from the head of family (HOF) by pre-design pretested Performa. In the absence of HOF, his or her spouse was selected as informant during data collection.

Data was collected by medical social workers. Training was given before starting study. Pilot study was done before study was started and sample of pilot study was not included in analysis of main sample. Periodic cross checking was done by investigator. Consent was taken from head of family before starting interview of house. Study included the participants who were residing in included area since minimum 10 years and who were ready to give consent. Study was not included migratory population and who denied to giving information. Data entry, cleaning and analysis was done in Microsoft excel 7.

Study variables

Kutcha house

Houses in which both walls and roof are made of materials, which have to be replaced frequently. Walls may be made from any one of the following temporary materials, namely, grass, Unburnt bricks, bamboos, mud, grass, reeds, thatch, plastic /polythene, loosed packed stone, etc.[6]

Pucca house

Houses, the walls and roof of which are made of permanent materials. The material of walls can be anyone from the following, namely, stones (duly packed with lime or cement mortar), G.I/metal/asbestos sheets, burnt bricks, cement bricks, concrete. roof may be made of from any one of the following materials, namely, machine-made tiles, cement tiles, burnt bricks, cement bricks, stone, slate, G.I/metal/asbestos sheets, concrete.[6]

Ventilation

Doors and windows facing each other provide "cross-ventilation". Ventilation is adequate when cross-ventilation is present.[7]

Overcrowding

The degree of overcrowding can best be expressed as the number of persons per room, i.e., number of persons in the household divided by the number of rooms in the dwelling.[7]

Lighting

The room is said to be adequately lighted, when one can read or write in the center of the hall without the help of artificial light during day time.[7]

RESULTS

Table 1 shows that 35.1% population was belonged to 21 to 40 years of age group. According to gender distribution, 48.3% female and 51.6% male were present in the study area. Out of that, 58.8% study population was married. Regarding education status, 11.6% population was illiterate. Almost 9.7% population was unemployed.

Table 1: Socio-demographic information of study participants.

Variable	Rural (N=2250) (%)
Age (in year)	
1 to 20	673 (29.8)
21 to 40	790 (35.1)
41 to 60	532 (23.8)
More than 60	255 (11.3)
Mean Age ± SD	33.4 ± 20.2
Gender	
Female	1086 (48.3)
Male	1160 (51.6)
Marital Status	(n=1796)
Married	1323 (58.8)
Unmarried	473 (41.2)
Education	(n=2179)
Illiterate	253 (11.6)
Primary	636 (29.2)
Secondary	990 (45.4)
Graduation and above	300 (13.8)
Occupation	
Unemployed	218 (9.7)
Government Service	40 (1.8)
Self-employed	473 (21.0)
Agriculture	313 (13.9)
Student/Housewife	1206 (53.6)

Table 2: Housing condition of study participants.

Variable	Rural (N=500) (%)
House	
Own	469 (93.8)
Rented	31 (6.2)
Number of Family Members in Family	
One	13 (2.6)
Two	25 (5.0)
Three	58 (11.4)
Four	206 (41.2)
Five	92 (18.2)
More than five	106 (21.6)
Mean no. of family members ± SD	4.5 ± 1.5

Type of House	
Kuchcha	76 (15.2)
Semipucca	93 (18.6)
Pucca	331 (66.2)
Overcrowding	
Present	169 (33.8)
Absent	331 (66.2)
Ventilation	
Adequate	343 (68.6)
Not adequate	157 (31.4)
Lighting	
Adequate	361 (72.2)
Not adequate	139 (27.8)
Kitchen	
Separate	272 (54.4)
Not Separate	228 (45.6)
Water Supply	
Private Tap	496 (99.2)
Public Tap	4 (0.8)
Fuel	
Chula	137 (27.4)
Gas	304 (60.8)
Primus (stove)	59 (11.8)
Fly and Cockroach Nuisance	
Present	459 (91.8)
Absent	41 (8.2)
Bathing Facility	
Separate Bathroom	444 (88.8)
Common	7 (1.4)
Open Space	49 (9.8)
Latrine	
Separate	443 (88.6)
Common	7 (1.4)
Open Space	50 (10.0)
Disposal of waste water	
Kuchcha drainage	6 (1.2)
Pucca drainage	299 (59.8)
Soak pit	10 (2.0)
Open	185 (37.0)
Cleanliness of Room	
Satisfactory	434 (86.8)
Unsatisfactory	66 (13.2)
Sanitation around house	
Satisfactory	436 (87.2)
Unsatisfactory	64 (12.8)
Breeding Place	
Seen	110 (22.0)
Not seen	390 (78.0)
Domestic Animal	
Present	256 (51.2)
Not Present	244(48.8)

Table 2 shows that 93.8% population was residing their own house and 66.2% population have “pucca” house. Study observed that 21.6% households have more than 5 members. Mean family size was 4.5 ± 1.5 in study households. Overcrowding was present in 33.8% houses and ventilation was ‘not adequate’ in 31.4% houses. Lightning was ‘not adequate’ in 27.8% houses. Separate kitchen was present in 54.4% houses and facility of private tap was available in 99.2% houses. Almost 60.8% houses have facility of Gas in their kitchen, 88.8% houses have separate bathroom, 88.6% houses have separate latrine in study area. Around 59.8% houses have facility of pucca drainage and 51.2% houses have domestic animal in rural.

DISCUSSION

"Housing", in the modern concept includes not only the 'physical structure' providing shelter, but also the immediate surroundings, and the related community services and facilities. It has become part of the concept of "human settlement”.[6]

Study observed that illiterate population was present more in study area (11.6%) which is similar to study done in Sikkim, where illiterate rate was 24.75% and according to census 2011 data where illiteracy rate in Sabarkantha was 24.20%.[4,7] Almost 21.0% population was self-employed which was quite different from study done by Nazym Shedenova where self-employed population was 79.3% in rural area.[8]

In present study, 93.8% population has their own house. According to census 2011, 94.7% rural and in census 2001, 94.4% rural population has their own house.[9,10] According to study done in city Vellor and NFHS – III report, these results were 63.4% and 78.2% regarding own house.[11,12] Almost 21.6% households have more than 5 family members which is less than the results of census 2001 and 2011 where 41.8% and 34.1% rural households have >5 family members respectively.[9,10]

Study observed that 66.2% households was pucca house and 15.2% households was kuchcha house. According to census 2001 and 2011, 27.7% and 20.0% rural households were kuchcha respectively and 11.0% and 18.3% rural households were pucca house.[9,10] According to study done in city Vellor and NFHS – III report, 56.9% and 66.0% pucca and 11.3% and 9.6% kuchcha households was present in study area respectively.[11,14] In present study, 99.2% houses have private tap facility which is not similar with results of census 2011 where 30.8% rural houses have private tap.

Study observed that 45.6% houses have separate kitchen which is almost similar with results of census 2011 where 53.0% houses have separate kitchen.[9] Around 27.4% houses using LPG gas in present study which is not similar results of census 2011 where 12.0% rural houses using LPG gas.[9] Study done in Vellor and report of NFHS – III said observed that 45.9% and 46.9% houses using LPG gas respectively.[11,12] Study observed that

88.8% houses have separate bathroom which is not similar with results of census 2011 where 45.0% rural houses have separate bathroom.[11] Study observed that 88.6% houses have separate kitchen which is not similar with results of census 2011 where 31.0% rural houses have separate kitchen.[9]

CONCLUSION

Compared to urban areas, rural areas suffer more from the concentration of deprivation. With incomes generally lower than the urban areas and seasonal unemployment, many households find it difficult to gain ownership of homes. Rural housing has been compassed both in larger policy discussions as well as within the argument on rural housing has been marginalized both in wider rural issues. Housing is requiring for the well-being and social security of rural households. This has implications for social sustainability of rural communities and is causing increased polarization as younger people migrate to the urban areas in search of jobs leaving behind their old folk.

ACKNOWLEDGEMENTS

We would like to thank Dean, Smt. Kashibai Navale Medical College and General Hospital, Narhe, Pune.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Boerma JT, Sommerfelt E. Demographic and health surveys (DHS): contributions and limitations. World Health Statistics Quarterly. 1993;46:222-5.
2. Devadasan N. India data. Available at: http://data.worldbank.org/country/india. Accessed on 6 January 2017.
3. Mony PK, Verghese L, Bhattacharji S, George A, Thoppuram P, Mathai M. Demography, Environmental Status and Maternal Health Care in Slums of Vellore. Indian J Community Med. 2006;31(4):11–4.
4. Urban Development and Housing Department. Annual plan 2002-2003. Government of Sikkim. 2003. Available at: http://www.neportal.org/northeastfiles/Sikkim/Planning/02_03/chapXXX.asp Accessed on 10 December 2016.
5. EconomicTimes. India's middle class population to touch 267 million in 5 yrs. The Economic Times. 2011. Available at: http://articles.economictimes.indiatimes.com/2011-02-06/news/28424975_1_middle-class-households-applied-economic-research Accessed on 6 January 2017.
6. Park K. Park's textbook of preventive and social medicine. Jabalpur: Banarsidas Bhanot Publishers; 2011.
7. Jhalawar District Population Census 2011, Rajasthan literacy sex ratio and density. 2011. Available at: http://www.census2011.co.in/census/district/454-jhalawar.html Accessed on 6 January 2017.
8. Shedenova N, Beimisheva A. Social and Economic Status of Urban slum and Rural Households in Kazakhstan. Procedia Soc Behav Sci. 2013;82:585–91.
9. Ministry of home affairs. Census of India Website : Office of the Registrar General andamp; Census Commissioner, India. 2011: 22-23.
10. Welcome To Census India : Census 2011. Available at: http://www.censusindia.gov.in/2011common/census _2011.html Accessed on 2 January 2017.
11. International Institute for Population Sciences and Macro International. National Family Health Survey (NFHS-3). 2007;1:56.

Cite this article as: Prajapati B, Bankar K, Chauhan J. A study of availability of basic facilities at household level of rural Gujarat, India. Int J Community Med Public Health 2017;4:2052-5.