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Socio-Demographic and Housing Condition Urban Slum and Rural Households, Gujarat, India

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ABSTRACT

Background: 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.

Objectives: To study the difference between urban slum and rural area regarding social, demographic and housing condition.

Materials and Methods: This cross-sectional secondary data analysis study was conducted at RHTC – Hadiyol and UHTC - Himmatnagar 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 and 500 households from UHTC with 2418 members of urban slum area by purposive sampling method.

Results: Almost 93.8% rural & 86.4% urban slum population was residing their own house and 66.2% rural & 53.2% urban slum population have "pucca" house. Mean family size was 4.5 ± 1.5 in rural and 4.8 ± 1.7 in urban slum households. Separate kitchen was present in 54.4% rural & 30.4% urban slum houses.

Conclusion: Study reveal the socio-demographic and housing status difference between urban slum & rural area regarding own house, number of family members, kitchen, latrine, bathroom, overcrowding, sanitary practices.

Keywords: Housing, Rural, Urban slum, Family Size, Type of House

INTRODUCTION

Physical and socio-economical factors are influence the development of a city, town or village[1]. In India, metro cities, towns and villages are quite different form life style, culture, living status from each other. Perhaps no other country in the world has such a large diversity of religious, caste, ethnic, and linguistic identities as it is found in India[2]. To study of family health, mortality, fertility, and nuptiality, age and sex are basic demographic characteristics which have an important role in the study.[3]

India, a globally important consumer economy and one of the fastest growing economies in the world, with growth rate of 7.6% in 2015[4]. According to Deutsche Bank Research the estimates are nearly 300 million people for all Middle Class[4]. If current trends continue, India's share of world Gross Domestic Product (GDP) will significantly increase from 7.3 in 2016 to 8.5 percent of the world share by 2020[5]. 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.[6]

Regional inequality between Village and city is continuously growing in recent year. In Urban slum area, residents have more incomes; their children have good attendance in school; better access to medical care. Growing disparity between urban slum-rural areas in India is big challenge for social,

cultural and economical stability.[2,7] Herein, the purpose of study to see the difference between urban slum and rural area regarding social, demographic and housing condition.

MATERIALS AND METHODS

The survey was carried out in rural health training centre (RHTC) (Hadiyol) and urban slum health training centre (UHTC) which is the two field practice area of GMERS Medical College, Himmatnagar. The cross sectional study was carried during First January 2016 to 30 September 2016. Study selected 500 houses in UHTC (total houses 1256) and 500 houses in RHTC area (total 1078 houses) by simple random technique. Study selected the houses from the survey register of both the facility by computer generated simple random number. Primary data was collected preferably from the head of family (HOF) by predesign 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.[8]

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.[8]

Ventilation: Doors and windows facing each other provide "cross-ventilation". Ventilation is adequate when cross-ventilation is present. [9]

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.[9]

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.[9]

RESULTS

Table 1 shows that 35.1% rural and 34.5% urban slum slum population was belonged to 21 to 40 years of age group and difference was statistically significant ($p<0.05$). According to gender distribution, 48.3% & 48.7% female & 51.6% & 51.3% male were present in rural & urban slum area respectively but difference was statistically not significant ($p>0.05$). Out of that, 58.8% & 49.3% study population was married in rural and urban slum area respectively ($p<0.05$). Regarding education status, 11.6% rural and 22.0% urban slum population was illiterate but difference was statistically significant ($p<0.05$). Almost 9.7% rural and 15.1% urban slum population was unemployed and difference was statistically significant ($p<0.05$).

Table 1: Socio-demographic information of study participants

Variable	Rural (N=2250)	Urban slum (N=2418)	P value
Age (in year)			
1 to 20	673 (29.8)	1052 (43.5)	<0.0001*
21 to 40	790 (35.1)	835 (34.5)	
41 to 60	532 (23.8)	405 (16.8)	
More than 60	255 (11.3)	126 (5.2)	
Mean Age ± SD	33.4 ± 20.2	26.0 ± 17.8	<0.0001**
Gender			
Female	1086 (48.3)	1178 (48.7)	0.82*
Male	1160 (51.6)	1240 (51.3)	
Marital Status	**(n=1796)**	**(n=1899)**	
Married	1323 (58.8)	1191 (49.3)	<0.0001*
Unmarried	473 (41.2)	708 (50.7)	
Education	**(n=2179)**	**(n=2313)**	
Illiterate	253 (11.6)	508 (22.0)	<0.0001*
Primary	636 (29.2)	1034 (44.7)	
Secondary	990 (45.4)	699 (30.2)	
Graduation & above	300 (13.8)	72 (3.1)	
Occupation			
Unemployed	218 (9.7)	365 (15.1)	<0.0001*
Government Service	40 (1.8)	20 (0.8)	
Self-employed	473 (21.0)	868 (35.9)	
Agriculture	313 (13.9)	0 (0.0)	
Student/Housewife	1206 (53.6)	1165 (48.2)	

Figure in bracket indicate percentage; *Chi-square Test; **t-test

Table 2 shows that 93.8% rural & 86.4% urban slum population was residing their own house ($p<0.05$) and 66.2% rural & 53.2% urban slum population

have "pucca" house and difference was statistically significant (p<0.05). Study observed that 21.6% of rural and 29.0% of urban slum households have more than 5 members and difference was statistically significant (p<0.05).

Table 2: Housing condition of study participants

Variable	Rural (N=500)	Urban slum (N=500)	P value
House			
Own	469 (93.8)	432 (86.4)	<0.001*
Rented	31 (6.2)	68 (13.6)	
Number of Family Members			
One	13 (2.6)	8 (1.6)	<0.01*
Two	25 (5.0)	32 (6.4)	
Three	58 (11.4)	43 (8.6)	
Four	206 (41.2)	171 (34.2)	
Five	92 (18.2)	101 (20.2)	
More than five	106 (21.6)	145 (29.0)	
Mean family members ± SD	4.5 ± 1.5	4.8 ± 1.7	<0.0001**
Type of House			
Kuchcha	76 (15.2)	13 (2.6)	<0.0001*
Semipucca	93 (18.6)	221 (44.2)	
Pucca	331 (66.2)	266 (53.2)	
Overcrowding	169 (33.8)	177 (35.4)	0.64*
Adequate Ventilation	343 (68.6)	407 (81.4)	<0.0001*
Adequate Lighting	361 (72.2)	379 (75.8)	0.22*
Separate Kitchen	272 (54.4)	152 (30.4)	<0.001*
Water Supply			
Private Tap	496 (99.2)	284 (56.8)	<0.0001*
Public Tap	4 (0.8)	216 (43.2)	
Fuel			
Chula	137 (27.4)	141 (28.2)	<0.0001*
Gas	304 (60.8)	168 (33.6)	
Primus (stove)	59 (11.8)	191 (38.2)	
Nuisance of Fly & Cockroach	459 (91.8)	299 (59.8)	<0.0001*
Bathing Facility			
Separate Bathroom	444 (88.8)	308 (61.6)	<0.0001*
Common	7 (1.4)	10 (2.0)	
Open Space	49 (9.8)	182 (36.4)	
Latrine			
Separate	443 (88.6)	238 (47.6)	<0.0001*
Common	7 (1.4)	128 (25.6)	
Open Space	50 (10.0)	134 (26.8)	
Disposal of waste water			
Kuchcha drainage	6 (1.2)	1 (0.2)	<0.0001*
Pucca drainage	299 (59.8)	92 (18.4)	
Soak pit	10 (2.0)	0 (0.0)	
Open	185 (37.0)	407 (81.4)	
Satisfactory Cleanliness of Room	434 (86.8)	267 (53.4)	<0.0001*
Satisfactory Sanitation around house	436 (87.2)	162 (32.4)	<0.0001*
Breeding Place found	110 (22.0)	486 (97.2)	<0.0001*
Presence of Domestic Animal	256 (51.2)	63 (12.6)	<0.0001*

Figure in bracket indicate percentage;*Chi-square Test, **t-test

Mean family size was 4.5 ± 1.5 in rural and 4.8 ± 1.7 in urban slum households and difference was statistically significant (p<0.05). Overcrowding was present in 33.8% rural & 35.4% urban slum houses but difference was statistically not significant (p>0.05) and ventilation was 'not adequate' in 31.4% rural & 18.6% urban slum houses and difference was statistically significant (p<0.05). Lightning was 'not adequate' in 27.8% rural & 24.2% urban slum houses and difference was statistically significant (p<0.05). Separate kitchen was present in 54.4% rural & 30.4% urban slum houses and difference was statistically significant (p<0.05) and facility of private tap was available in 99.2% rural & 56.8% urban slum houses and difference was statistically significant (p<0.05). Almost 60.8% & 33.6% houses have facility of Gas in their kitchen and difference was statistically significant (p<0.05), 88.8% & 61.6% houses have separate bathroom and difference was statistically significant (p<0.05), 88.6% & 47.6% houses have separate latrine in rural and urban slum area respectively and difference was statistically significant (p<0.05). Around 59.8% & 18.4% houses have facility of pucca drainage and 51.2% & 12.6% houses have domestic animal in rural & urban slum area respectively and difference was statistically significant (p<0.05).

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".[9]

Mean age of population was observed more in rural than urban slum population, it may be due to environmental pollution, urbanization, life style factors present more among urban slum area. Study observed that illiterate population was present more in urban slum area (21.0%) which is similar to study done in Sikkim[1], where illiterate rate was 24.75% and according to census 2011[10] data where illiteracy rate in Sabarkantha was 24.20%. Almost 21.0% rural & 40.0% urban slum population was self-employed which was quite different from study done by Nazym Shedenova[11] where self employed population was 79.3% in rural & 81.7% in urban slum area.

In present study, 93.8% rural & 86.4% urban slum population have their own house. According to census 2011[12], 94.7% rural & 69.2% urban slum and in census 2001[13], 94.4% rural & 66.8% urban slum population have their own house. This difference between urban slum and rural population is due to migration from rural to urban. According to study done in city Vellor[14] and NFHS – III report[15], these results were 63.4% & 78.2% in urban slum area respectively. Almost 21.6% rural & 29.0% urban slum

households have more than 5 family members which is less than the results of census 2001[13] & 2011[12] where 41.8% rural & 33.7% urban slum and 34.1% rural & 26.0% urban slum households have >5 family members respectively. Overcrowding was present more in urban slum houses than rural area but this difference was statistically not significant.

Study observed that 66.2% rural & 53.2% urban slum households was pucca house and 15.2% rural & 2.6% urban slum households was kuchcha house. According to census 2001[11] & 2011[12], 27.7% & 20.0% rural and 7.0% & 4.6% urban slum households was kuchcha respectively and 11.0% & 18.3% rural and 42.4% & 51.9% urban slum households was pucca house. According to study done in city Vellor[14] and NFHS – III report[15], 56.9% & 66.0% pucca and 11.3% & 9.6% kuchcha households was present in urban slum area respectively. In present study, 99.2% rural and 56.8% urban slum houses have private tap facility which is not similar with results of census 2011 where 30.8% rural and 70.6% urban slum houses have private tap.

Study observed that 45.6% rural and 69.6% urban slum houses have separate kitchen which is almost similar with results of census 2011[13] where 53.0% rural and 79.0% urban slum houses have separate kitchen. Around 27.4% rural and 28.2% urban slum houses using LPG gas in present study which is not similar results of census 2011[12] where 12.0% rural and 66.0% urban slum houses using LPG gas. Study done in Vellor[14] and report of NFHS – III[15] said observed that 45.9% & 46.9% urban slum houses using LPG gas respectively. Study observed that 88.8% rural and 61.6% urban slum houses have separate bathroom which is not similar with results of census 2011[12] where 45.0% rural and 87.0% urban slum houses have separate bathroom. Study observed that 88.6% rural and 47.6% urban slum houses have separate kitchen which is not similar with results of census 2011[12] where 31.0% rural and 81.0% urban slum houses have separate kitchen.

CONCLUSION

Study found major difference in the socio-demographic and housing status in between urban slum & rural population regarding own house, number of family members, kitchen, latrine, bathroom, overcrowding, sanitary practices etc. Urban slumization, life style, environmental pollution, job stress, nuclear family, population explosion, construction, availability of educational & health facilities, economical status, occupation, government policies etc. factors play major role in social, demographic, physical and cultural difference between urban slum & rural area.

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