Original Article

Assessment of the Living Conditions in a Rural Setting through Cross Sectional Study

Safia Nimrah[1], Shaik Sadiya Rahmath[2], Sai Krishna Madhipati[3], Sultan Rizwan Ahmad[4]

[1]MBBS Final Part-1, Student, Deccan College of Medical Sciences, [2]MBBS Final Part-[1], Student, Deccan College of Medical Sciences, [3]Statistician, Department of Community Medicine, [4]Professor & HOD, Department of Community Medicine, Department of Community Medicine, Deccan College of Medical Sciences, Hyderabad, TS, India.

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Abstract

Background: An important part of a healthy community comprises healthy families. Living conditions play a crucial role in defining the well-being of the family. The quality of housing, access to basic amenities, environmental factors and the overall socio-economic status of the families have a direct impact on the family health.

Methodology: This is a cross sectional study done based on the survey of 200 families based in Hasan Nagar, conducted by the students of Deccan College of Medical Sciences under the guidance of the department of community medicine. The families were surveyed based on a pre-formed questionnaire and the data was analysed using descriptive analysis.

Conclusion: In this study of 200 families, 77% were nuclear families, 69.5% had pucca houses. Majority of the families 26.5% had 5 family members. In 45% of the families overcrowding was present. All of the houses had electricity supply. Separate kitchen was present in 77% of the houses. In 85% of families rice was the staple food. 88.5% used public refuse bins for disposal of solid waste and 96% used sewerage systems for liquid waste disposal. Latrine was present in 94% of the houses.

Key words: Environment, Living condition, Rural Survey

Introduction

A country is made by its geography as well as by its population. Family is the unit of the population. The government of the country takes care of the needs of its population. Population is divided based on geography, those living in the cities and those living in villages. And based on some scale into various levels of socioeconomic status. Although the

Corresponding Author: Shaik Sadiya Rahmath, MBBS Final Part-1, Student, Deccan College of Medical Sciences, Department of Community Medicine, Deccan College of Medical Sciences, Hyderabad, TS, India.

E-mail: sadiyashaik1216@gmail.com

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government tries to take on the population as a whole, some sectors or regions get left out or the efforts are not provided on time. And majority of the time these regions belong to the rural sector. The country of focus in this paper is India, the most populous country of the world. 70% of its population belong to the rural sector. India as a developing country has limited resources and takes enormous measures and coordination to provide the required resources to the needed population at the appropriate time. It is to be noted that the problem of providing the rural sector with resources doesn't rely solely on the government. Their literacy status, their income and their willingness to get help plays a major role.

Community diagnosis is crucial for effective public health planning and ensures that the policies that are formulated are tailored to the specific needs of the community, promoting better health outcomes and overall well-being. Community diagnosis deals with demography and planning, initiating, implementation, monitoring and evaluating various schemes and programs for the betterment of the population. It focuses on finding out the problems in a population and how to tackle them. It relates the health problems with agent, host and environmental factors. It helps the government in prioritizing the problems, locate the weaker population and draft measures to address them. After a program is initiated and implemented, it helps in monitoring its progress and evaluating its effect on the people. It has a role in research of the origin of the problem, its progress, its effect and its causing factors. One factor that came to notice when talking with the residents was overcrowding. With increasing population this factor is increasingly proving itself to be a problem.

This article deals with the various living conditions of the unit of population living in a community and the source of their information. The factors included in the noting of the living conditions of populations were number of living rooms, type of family, latrine, presence of overcrowding, separate kitchen, separate latrine. These could be potential indicators of the developing progress of the locality and could be further compared with previous such data to evaluate the progress of the programmes being executed in the locality for its betterment. This data could be used as the basis to plan the further course of action and the new programmes that need to be introduced in the area.

In this survey, Hasan Nagar a rural area of Hyderabad, Telangana was explored by the professors and students of Deccan College of Medical Sciences with the help of the residents of the area and was compared to the relevant research papers to gauge the living conditions of the residents of the area. Aim of the study was to assess the living and housing conditions of the rural field practice area of Deccan College of Medical Sciences, Hyderabad.

Material & Methods

This is a community-based study, in which 200 families were surveyed in Hasan Nagar a rural area of Hyderabad. A cross sectional survey carried out by MBBS Final year part I students of Deccan College Of Medical Sciences under the guidance of the department of community medicine. The students were trained before the survey and were guided by the RHTC staff. The data collection in the survey was based on the predesigned pretested questionnaire Performa in the personal interviews. Information was collected regarding the housing conditions, usage of mass media, sanitation, waste disposal among various other factors.

The families were selected randomly and the information was collected and taken into consideration after taking their consent. The families that were visiting the area were excluded from the study. The study was conducted for over a period of 3 months from July 2022 to September 2022. The data collected was analysed and consolidated using MS Excel. The analysis was done using SPSS version 20. The analysis included frequency and chi square test. The P value < 0.05 was used as statistically significant at 5% level of significance.

Results

In this cross-sectional study, a total of 200 families were surveyed and the majority of them had a family size of 5 [26.5%] [Figure no:2] and most of them being nuclear families [77%] and 23% of them lived in joint families. [Table no-1] Among the total families 139 families [69.5%] lived in a pucca house with the majority having 2 living rooms [37.5%] and most of them owned the house [56.5%] with all of the

families having the supply of electricity. 60.5% of the houses had natural lighting and 39.5% had artificial source. 41.5% of the houses had RCC type of roof and 43% had tin roof. [Table no-1] Overcrowding was absent in most of the families [55%] [Figure no-1] and majority belonging to class IV socio-economic status [Figure: 3].

About 77% of the families had a separate kitchen present and 93.7% of the families used LPG gas as the source of energy while the rest resorted to electricity [3.5%], coal [1%] and firewood [2%]. Latrine was present in 94% of the houses. Liquid waste was disposed of in the sewerage system by the majority of families [96%]. 88.5% of the families used public refuse bins for the disposal of solid waste while the rest threw the waste on open streets [11.5%]. Majority of the families had mixed means of storing water. [Table no:2]

Majority of the families had mixed diets. 96% of the families were non-vegetarians and 4% are vegetarians. Rice was the staple food in 85% of the families. Whereas the others preferred Bajra and Jowar. 74% of the families used television as the source of information. Other most commonly used mass media was Radio [1.5%] and Newspaper [3%] while 21.5% had no mass media present. Overcrowding is present in joint families and lower socioeconomic class. [Table: 3]. We did not get significant association between water supply and type of family and socioeconomic class. [Table: 4]

Discussion

A cross sectional survey has been conducted by MBBS final Part-I students during their clinical posting. The survey covered 200 families in a rural area of Hyderabad. In this most had nuclear families similar to a study conducted by Aravind Gandhi.[1] We found that majority lived in pucca house similar to a study by Suman Chatterjee et al[2] with 9.5% of families living in house with 1 living room which was found to be similar to the study done by Mizba et al. [3] Many of the families lived in houses owned by them which was also found in a study done by Abhishek Gupta et al. [4]

Overcrowding is absent in most families similar to a study done by Ahmed et al. [5] when open space was enquired 57.5% of families had it similar to a study done by Mizba et al.[3] In this study majority belonged to class IV socio-economic status which was found similar to a study in Mumbai.[6] Majority used gas as a source of energy similar to the study of Arvind Gandhi and Abhishek Gupta et al. [1,4] Taking solid waste disposal into account, majority had access to public sewerage system similar to the study done by Mizba et al.[3] This Study found overcrowding commonly present in joint families belong to lower socio economic class which is an important determinant of health.

Table No 1: Housing Conditions

FACTORS	FREQUENCY	PERCENTAGE
Type of house		
Pucca	139	69.5
Katcha	28	14
Mixed	33	16.5
Number of living rooms		
1	19	9.5
2	75	37.5
3	68	34
4	29	14.5
5	8	4
6	1	0.5
Type of roof		
RCC	83	41.5
Asbestos	25	12.5
Tin	86	43
Tiles	3	1.5
Mixed	3	1.5
Open space		
present	115	57.5
absent	85	42.5
Ownership of house		
Own	113	56.5
Rented	87	43.5
Lighting		
Natural	121	60.5
Artificial	79	39.5
Separate kitchen		
Present	154	77
Not Present	46	23

Table No 2: Living Conditions

FACTORS	FREQUENCY	PERCENTAGE
Source of energy		
Fire wood	4	2
Coal	2	1
Gas	187	93.5
Electricity	7	3.5
Storage of drinking water		
Earthen pot	98	49
Plastic pot	24	12
Stainless steel	67	33
others	16	8
Water supply		
Own	128	64
Public	72	36
Source of water		
Tap water	157	78.5
Borewell	42	21
Unprotected water	1	0.5
Liquid waste disposal		
Sewerage system	192	96
Open drain	7	3.5
Kitchen garden	1	0.5
Extra waste disposal		
Sewerage system	197	98.5
Open drain	2	1
Open filled	1	0.5
Latrine		
Present	188	94
Absent	12	6

Table No 3: Overcrowding Cross tabulation

		overcrowding		Chi square	P-Value
		Not present	Present		
Socio Economic Status	> 4520	46	19	12.018	0.017
	2260-4519	52	51		
	1356-2259	7	10		
	679-1355	5	9		
	<678	0	1		
Type of family	Nuclear	90	64	3.204	0.05
	Joint	20	26		

Table No 4: Water supply Cross tabulation

		water supply		Chi square	P-Value
		Own	Public		
Type of family	Nuclear	94	60	2.548	0.076
	Joint	34	12		
Socio Economic Status	> 4520	42	23	2.127	0.712
	2260-4519	67	36		
	1356-2259	11	6		
	679-1355	8	6		
	<678	0	1		

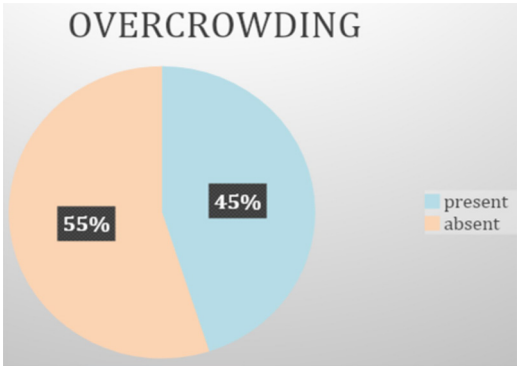

Figure No 1: Pie Chart Showing Overcrowding

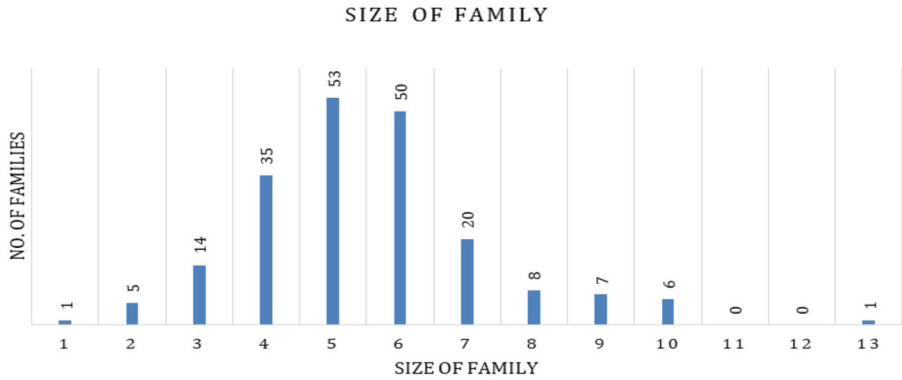

Figure No 2: Size of family

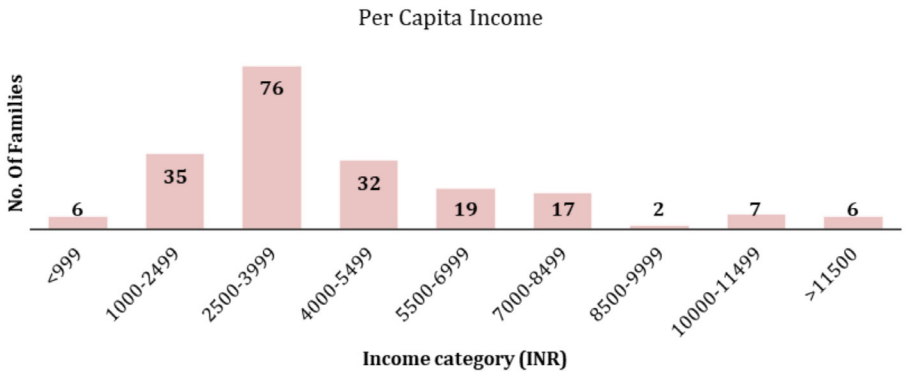

Figure No 3: Per Capita Income

Conclusion

Promoting the wellbeing of the families by ensuring proper living conditions, environmental conditions and housing conditions ensures not only the welfare of the overall community but also prevents many communicable and non-communicable diseases.

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