Family health survey: community diagnosis conducted in an urban field practice area of Hyderabad

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DOI: https://doi.org/10.17511/ijphr.2016.i5.05

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Background: In India, routine reporting of health status by the health and social welfare functionaries is suboptimal. Surveys to assess the health status and living conditions of population are essential to monitor the ongoing health problems and initiate appropriate intervention. Through community diagnosis and health survey students are more exposed to various disease patterns in the community, which creates better prospect to practical learning.

Material & Methods: A community diagnosis survey was done in urban field practice area by the department of Community Medicine, Deccan College of Medical Sciences, Hyderabad. A group of 4 students were given 25 families each, for a total of 100 families to survey their health status and socio-demographic factors. Information was collected related to their present health status, socioeconomic status, housing pattern, sanitation measure, and immunization status of under five children etc. Data was analyzed by appropriate tools.

Results: In this survey 96% were Muslim families. Nuclear families were 81%. Majority i.e. 40% of the families belongs to class II and overcrowding was present in 28% of families. In these 100 family total population was 492 individuals. 8% of study population was under five years of age and nearly 4% was geriatric above 60 years of age. Female were more (50.6%) than male (49.4%). Crude literacy rate in study population was 78%. Prevalence of morbidity was 13.4%. Common morbidity was hypertension, diabetes and joints pain. 82% were fully vaccinated, 16% were partially vaccinated and 2% were unvaccinated.

Conclusion: Through family health survey health need of community can be identified and medical students can also be sensitized to function as community physician.

Keywords: Community diagnosis, family survey, Immunization status, Medical students, Morbidity profile
Introduction

Rural areas constitute about 70% of India where facilities for health care are far behind their urban counterpart [1]. Surveys to assess health status and nutritional status of the population are essential to monitor ongoing health problems and nutrition transition and initiate appropriate interventions. In India, routine reporting of nutritional status by the health and social welfare functionaries is suboptimal.

India has therefore invested heavily in periodic surveys to obtain data on health status of people in many rural areas area [2]. Community based learning as against classroom centred lectures provide better opportunity to understand the real world scenario, which Creates better prospect to practical learning. The students are more exposed to various disease presentations in the community, which is rare in hospital based learning [3].

As per Medical Council of India guidelines, health care delivery system is a part of the teaching curriculum covered in theory and also the undergraduate students are supposed to be taken for field visit to get the actual picture of the situation. As a part of the MCI institutional goals the undergraduate students coming out of a medical institute should acquire basic management skills in the area of human resources, materials and resource management related to health care delivery [4].

Community diagnosis is qualitative and quantitative description of health of citizens and factors which influence their health.it identifies problems, proposes area of stimulus and initiates action [5]. Population-based surveys have been used extensively to gather information on fertility, mortality, family planning, maternal and child health, and some other aspects of health, nutrition and health care in India [6].

Community surveys from different regions and various ethnic populations are instrumental to formulate national consensus-driven policies to counteract the rising trend of non-communicable diseases [7]. Community diagnosis is based on collection and interpretation of the relevant data such as a) age and sex distribution b) vital statistics rate and c) incidence and prevalence of disease in the area. The focus is on the identification of basic health needs and health problems of the community [8].

Materials and Methods

A community diagnosis survey was done in G M Nagar which is an urban field practice area of the department of Community Medicine, Deccan College of Medical Sciences, Hyderabad. As part of undergraduate posting in the department of community medicine, a group of 4 students were allotted 25 families each, for a total of 100 families to survey their health status and socio-demographic factors. Survey was done under the supervision of faculty with the help of medico social worker. Students got training before the survey by faculty.

Each student visited 5 families per day hence covered 25 families in 5 days in the month of September 2014. They selected houses randomly. If the selected house was locked than they visited next house and if there were many families in selected house than they selected one family randomly for data collection. Information was collected related to their present health status, socioeconomic status, housing pattern, sanitation measure, and immunization status of under five children etc. Family and individual data were collected separately and were entered in excel and analyzed using frequency and chi square test by SPSS version 16.

Results

We had selected 100 families in this survey. In this survey 96% were Muslim families and 4% were Hindu families. Nuclear families were 81% and 9% were joint families. Mean family size was 4.9 (SD=2.16). Family sizes upto 4 were 53% of families, 36% had family size 5-7 and 11% had family size 8 and more. 15% of families belong to class I socioeconomic status while 40% belongs to class II, 19% class III, 21% class IV and 5% class V. (Table 1). 90% families live in Pacca house with RCC roof. 93% families had separate kitchen. Open space was not present in 89% of families and overcrowding was present in 28% of families. (Table 2).

Food habit was mixed in all families and Rice was staple food in 96% of families. Lighting and electricity was present in all families. All families had TV as mass media communication and only 6 families had radio also. 98 families were using LPG and 2 families were using firewood for cooking. All families were using own tap water. 81 families stored water in stainless steel, 9 in earthen pot and 10 in Plastic pot.
All families disposed solid waste in public refuse bin, liquid waste and excreta in sewerage. In these 100 family total population was 492. Mean age of the population was 26.57 (SD=16.82). 8% of study population was under five years of age and nearly 4% was geriatric above 60 years of age. Female were more 249(50.6%) than male 243(49.4%). 43% of study population was married, 13% unmarried while nearly 7% was widow or divorcee. Crude literacy rate in study population was 78%.

There were 22% illiterates and it was more among female 27% compare to male 17%. Majority of population was educated upto primary and middle class 37% and high school 23%. In this study 16.5% population were unemployed, 18% were unskilled worker while only 7 % were skilled workers. Among female 43% were house wife and only 2 % were skilled worker and among male 5% were businessman. (Table 3).Prevalence of morbidity was 13.4% that means 66 (13%) people had some diseases.

Common morbidity was hypertension, diabetes and joints pain and there were 3 pregnant ladies. In this study we found that male were more healthy (89%) than female (83%). 16% of female had some disease compare to 10% of male. (Table 4). According to age group morbidity is common among older age group of more than 60 years(73%) and from 45 to 60 years (47%).(Table 5). There were 43 children of under five years of age, among them 82% were fully vaccinated, 16% were partially vaccinated and 2% were unvaccinated.

### Table-1: Socio Economic Characteristics of Families (n=100)

| Religion | Frequency (%) |
|----------|---------------|
| Muslims  | 96            |
| Hindu    | 4             |

### Table-2: Housing conditions of families (n=100)

| Type of House | Frequency (%) |
|---------------|---------------|
| Pacca         | 90            |
| Mixed         | 10            |
| Type of Roof  | Frequency (%) |
| RCC           | 90            |
| Asbestos      | 3             |
| Tin           | 7             |
| Number of Rooms | Frequency (%) |
| 1             | 23            |
| 2             | 45            |
| 3             | 24            |
| 4             | 5             |
| 5             | 3             |
| Open Space    | Frequency (%) |
| Yes           | 11            |
| No            | 89            |
| Separate Kitchen | Frequency (%) |
| Yes           | 93            |
| No            | 7             |
| Overcrowding  | Frequency (%) |
| Yes           | 28            |
| No            | 72            |

### Table-3: Socio-economic characteristics of study population (n=492)

| Variables          | Categories | Male | Female | Total |
|--------------------|------------|------|--------|-------|
|                    |            | Frequency | % | Frequency | % | Frequency | % |
| Age group (P=0.33) | < 5        | 23   | 9.5   | 20     | 8     | 43       | 8.7 |
|                    | 5-15       | 48   | 19.8  | 49     | 19.7  | 97       | 19.7 |
|                    | 15-25      | 67   | 26.7  | 76     | 30.5  | 143      | 29.1 |
|                    | 25-45      | 77   | 31.7  | 67     | 26.9  | 144      | 29.3 |
|                    | 45-60      | 23   | 9.6   | 23     | 9.2   | 46       | 9.3 |
|                    | >60        | 5    | 2.1   | 14     | 5.6   | 19       | 3.9 |
| Marital status (p<0.001) | Married | 107  | 44    | 105    | 42.2  | 212      | 43.1 |
|                    | Unmarried  | 34   | 14    | 32     | 12.9  | 66       | 13.4 |
|                    | Widow/divorce | 5    | 1.2   | 31     | 12.4  | 34       | 6.9 |
### Table-4: Health Status of study population according to age

| Age Group | Healthy | Diseased | Total |
|-----------|---------|----------|-------|
| < 5       | 41 (95.3%) | 2 (4.7%) | 43 (100%) |
| 5-15      | 97 (100%) | 0 (0%)    | 97 (100%) |
| 15-25     | 137 (95.8%) | 6 (4.2%) | 143 (100%) |
| 25-45     | 122 (84.7%) | 22 (15.3%) | 144 (100%) |
| 45-60     | 24 (52.2%) | 22 (47.8%) | 46 (100%) |
| >60       | 5 (26.3%) | 14 (73.7%) | 19 (100%) |
| Total     | 426 (86.6%) | 66 (13.4%) | 492 (100%) |

Chi-Square=135, df=5, p<0.00

### Table-5: Health status of study population according to sex

| Sex     | Healthy | Diseased | Total |
|---------|---------|----------|-------|
| Male    | 218 (89.7%) | 25 (10.3%) | 243 (100%) |
| Female  | 208 (83.5%) | 41 (16.5%) | 249 (100%) |
| Total   | 426 (86.6%) | 66 (13.4%) | 492 (100%) |

Chi-Square=4, df=1, P=0.04

## Discussion and Conclusion

This was a study conducted by 4 medical students of Deccan College of Medical Sciences, Hyderabad. Each student surveyed 25 families each totalling 100 families altogether. In the given study the total female population was 50.6% and total male population was 49.4% which was similar to a study conducted by Bhargava [9]. Age group of <5 years was 8.7 % and between 5-15 years was 19.7% hence total of age group <15 years was 28.4%.

Similar data was given by National Family Health Survey -4[10]. In this study we found that about 16% of study population were unemployed which was similar to a household study conducted by Ravi pachori [11]. Nearly 24% were educated up to high school. This was similar to the finding of a study conducted in Pune [12].

Around 15% of families belonged to socio economic class 1 which was similar to the finding of a study conducted in Mangalore, Karnataka [13]. We found that about 81% of the families were nuclear family which was similar to findings of a study conducted in Lucknow [14]. Nearly 19% of the people were unskilled workers. Similar findings were presented in a study conducted by Kulkarni SV [15].

About 82% of the children under the age of 5 years were fully vaccinated which was similar to the finding of a study conducted in miraj [16] and 16% of the total children were partially vaccinated which was similar to the findings of a study conducted in Thane district, Maharashtra [17] and 2% of the children were unvaccinated which was similar to a study conducted in Mumbai [18].

In this study we found that about 74% of people aged > 60 years had some diseases which included hypertension, joint pain (arthritis) and diabetes. Similar findings were reported in a study conducted in Tamil Nadu [19].
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