Pattern Of Morbidity And Health Seeking Behavior In A Slum Area Of Ahmedabad City in India
T Puwar, B Kumpavat, K Trivedi

Citation
T Puwar, B Kumpavat, K Trivedi. Pattern Of Morbidity And Health Seeking Behavior In A Slum Area Of Ahmedabad City in India. The Internet Journal of Health. 2008 Volume 9 Number 2.

Abstract
Research Question: What is the morbidity pattern and Health seeking behaviour in a slum area of Ahmedabad city? Study design: Cross sectional study Setting and participants: The present study was conducted amongst 112 families of a slum area with total population of 685, in West Zone of Ahmedabad city, India. Results: There were 64 episodes of acute illness treated as out patient, in the 15 days recall period. 87% of total episodes were treated at private source. 14 episodes of untreated illnesses were reported. Total 27 episodes of hospitalization were reported in recall period of one year. Out of this 33.3 % were due to surgical cases and 25.95 were due to infectious diseases. 66.6% received treatment at the general hospitals. Total 31 episodes of chronic illnesses were reported in recall period of one year. Irregularity of treatment was the important aspect of chronic illnesses. Antenatal care was mainly received from general hospitals. All deliveries occurred at hospitals. Conclusion: It can be concluded that for acute non-hospitalized episodes people heavily depends on the private sector and for hospitalization and maternity related health care they still depend on public sector.

INTRODUCTION
Information on the existing morbidity pattern and health seeking behaviour is essential to provide need-based health care delivery to any population. This information is rarely available. Mainly hospital data are available for morbidity pattern. Community based study can only reflect the true picture of morbidity pattern in given community and what are their preferences in seeking health.

Episodes of illnesses are reported to be higher for poor people due to their living conditions and nutritional status. The high incidence of morbidity cuts their household budget both ways i.e. not only they have to spend large amount of resources on medical care but are also unable to earn during this period. One possible consequences of this could be pushing these families into a zone of permanent poverty.

It is widely known that in India compared to the public sector, the private sector is predominant in its share of qualified practitioners as well hospitals. An estimated 85% of doctors and 65% of hospitals operate in the private sector. The private sector provides 79 percent of outpatient care for those below the poverty line, much of which is of low quality and provided by untrained practitioners.

27.78% of India’s population live in urban areas. Out of which 40,297,341 people lives in slum areas across 607 towns of the country. In Gujarat State about 12% population lives in slum area. Till now not much is known about health seeking behaviour and morbidity patterns of urban slums. With above information the study was aimed to know the morbidity pattern and health seeking behaviour in a slum area of city.

METHODOLOGY
Study design: Cross Sectional Study.

Study Area: The study was carried out in a randomly selected slum area of West Zone of Ahmedabad city of the Gujarat State, Western India. There are 2400 slums in the city and 40% of its population lives in the slums. Total 685 people of 112 households living in a slum area were interviewed for the study.

Study Period: Data were collected from January 2002 to February 2002.

Ethical consideration: Informed consent was obtained from all the participants of the study.

STUDY MATERIAL AND METHOD
A pre-designed, pre-tested proforma were used for family
study and collecting information regarding morbidity and health seeking behaviour in household survey.

1. Questionnaire for person hospitalized during last one year (From Feb. 2001 to January 2002)
2. Questionnaire for illnesses treated without hospitalization and untreated illnesses (recall period one week)
3. Questionnaire for chronic illnesses (Includes newly diagnosed in 3 months and also suffering from illness since long)
4. Questionnaire for immunization
5. Questionnaire for Maternal Health

Data analysis and Interpretation: Data were tabulated and analyzed using EPI 6.04 software.

Limitation of the study: Seasonal variation was not taken into the consideration

RESULTS AND DISCUSSION

SOCIO-DEMOGRAPHIC PROFILE

Total population covered under the study was 685 persons. Out of which 316 (46%) were females and 369(54%) were males. About 57% of population was in reproductive age group. About 14% of population was under 6 years of age. Overall literacy rate was 76.4%. The female literacy rate was 62.9% and male literacy rate was 88.7%

MAINLY THE CASUAL DAILY WAGED LABOURERS INHABITED SLUM

61.6% houses were not having adequate ventilation and 65.2% houses were not having adequate light. 7.1% houses were devoid of electricity connection. 46% houses had their own toilets and the rest use municipal common toilets. All houses were connected with municipal underground sewerage line. Only 58% of houses had closed bathing facility, rest used open space for bathing. This is important aspect as it affects the personal hygiene especially of females.

MORBIDITY PATTERN OF HOUSEHOLDS

Details of illness episodes for each of the family members were collected using the different recall periods. The recall period for Acute Illnesses treated without hospitalization (as out patient) was 15 days, for hospitalization, chronic illnesses and maternity it was one-year period.

Table- I Types of morbidities reported

<table>
<thead>
<tr>
<th>Type of Ailment</th>
<th>No.</th>
<th>Per 1000 persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Treated as out patient (15 days)</td>
<td>64</td>
<td>93.8</td>
</tr>
<tr>
<td>Did not seek treatment (15 days)</td>
<td>14</td>
<td>20.4</td>
</tr>
<tr>
<td>Hospitalization (One year)</td>
<td>27</td>
<td>39.4</td>
</tr>
<tr>
<td>Chronic illness (One year)</td>
<td>31</td>
<td>45.2</td>
</tr>
</tbody>
</table>

It gives the prevalence of morbidity for a selected community.

ACUTE ILLNESSES: (TREATED AS OUT PATIENT OR NOT TREATED)

There were total 78 episodes of acute illnesses reported in the study area. Out of which 17.9% episodes were not treated. No. of episodes were more in females (67%) than in males. This difference is statistically significant (chi-square value – 12.59 p< 0.001). As per diagnosis 45.3% of episodes were of Cough (Respiratory Tract Infection), followed by 23.4% episodes were of Fever and 7.8% episodes were of other communicable diseases like Measles, Chicken pox and typhoid. The total burden of communicable diseases was found to be 76.6% (total 49 episodes) on the community.

ACUTE ILLNESSES: (TREATED AS HOSPITALIZATION)

The average age of patients hospitalized was 26.6 years. The average duration of stay for hospitalization was 9.3 days. 33.3% episodes of hospitalization were due to surgical cause, followed by 25.9% for infectious diseases like Hepatitis and Typhoid. 18.5% cases were of Malaria and 7.4% cases were of accidents or injuries. 70.4% patients had case papers while only 29.6% of them had bills. 96.3% patients were admitted in general wards.
CHRONIC ILLNESSES:
For chronic illnesses all episodes observed during survey was taken in the study. The prevalence of chronic morbidity per 1000 person was 45.2 (53.8 for Females & 38.0 for Males). The prevalence per 1000 persons in age above 65 was 200 and in age group 46-64 it was 78.6. Which shows higher prevalence in that age group. The average age was 41.3 years.

Prevalence of Hypertension per 1000 person was 10.2 and of Tuberculosis was 7.2 per 1000 persons. 9.9% cases were of Thyroid disorders, 9.9% of Psychiatric illnesses, 6.6% cases were of Rheumatic Heart Diseases and 3.3% cases were of Coronary Heart Disease.

Average duration of treatment was 6 years. For Tuberculosis it was 7 months and for Hypertension it was 45 months.

HEALTH SEEKING BEHAVIOUR FOR DIFFERENT MORBIDITIES:

Figure 3
Table-III- Source of treatment for various type of morbidities (in percentage)

<table>
<thead>
<tr>
<th>Type of ailment</th>
<th>Government Sector</th>
<th>Private Sector</th>
<th>Not for profit health care organizations (NGO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Treated as out patient (15 days)</td>
<td>11</td>
<td>87</td>
<td>2</td>
</tr>
<tr>
<td>Hospitalization (One year)</td>
<td>67</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>Chronic Illness (One year)</td>
<td>42</td>
<td>38</td>
<td>20</td>
</tr>
</tbody>
</table>

It is evident from the table-III that community depends heavily upon private practitioner for the acute illnesses treated as out patient. It was the found that no male sufferer has gone to public facility for treatment of acute illnesses treated as out patient. People also avoided going to Public facility because of long queue and loss of time due to the same.

The average duration of acute illness episodes treated as out patient can be considered as an indicator of the seriousness of illness. However, a prompt treatment can moderate the duration. In this study average duration of illness was 3 days. 80% of patients have sought treatment without delay and others have delay of average 1 day.

Table-II shows very high no. of hospitalization in the study area particularly in males. Since Hospitalization involves high expenditure and complete disturbance of family routine generally, women avoid getting admitted in hospitals. This may be true for the study area too.

Table-III also shows that for hospitalization, main source was public hospitals (18 out of 27). The most important reason for seeking treatment at public hospital was free and or inexpensive treatment. Trust hospitals and Private hospitals do have their share as per two factors namely closeness and good reputation in the community. 42% were taking treatment from the public hospitals, 38% from the private health providers and 10% were taking no treatment at all.

Three out of Five Tuberculosis patients were on Revised National Tuberculosis Control Program (RNTCP) while 2 were on treatment from private providers.

51% patients of chronic illnesses were found to be on irregular treatment and the major reasons were ignorance and affordability. Out of 7 Hypertension patients 4 were on irregular treatment while 1 out of 5 Tuberculosis patient were on irregular treatment.

MATERNITY RELATED HEALTH-SEEKING BEHAVIOUR
There were total 19 births in one year in the study area. Data for antenatal care and births were recorded from all. Four Antenatal women were also interviewed. Out of four, one was not registered. Average registration time was 4 months of amenorrhea. 81.8% were registered at the General Hospital and rest 18.2% were registered with the private Hospitals. Average no. of visit to the source was five. Only 50% of antenatal women registered with the Public hospital received free medicine. Tetanus Toxoid coverage was 100% for these women.

All deliveries were hospital deliveries. All births were also registered births. 88.9% deliveries took place at the General hospital. Average duration of stay was 4 days and average distance of source was 3 kilometers.

CONCLUSION
Study shows preference for private sector as source of treatment for acute episodes of illnesses for slum communities also. Out of total, 67% episodes of acute illness occurred among females. 76.6% of episodes were due to communicable diseases. Out of total episodes of hospitalization 33.3 % were due to surgical cases and 25.9% were due to infectious diseases. General Hospitals were main source of treatment for episodes of hospitalization.
Irregularity of treatment was the important aspect of chronic illnesses. For maternity care also public sector hospitals were preferred by the community.

References
2. Draft national health policy 2001, Available from URL: http://mohfw.nic.in
Author Information

Tapasvi I. Puwar, M.D. (Preventive and Social Medicine), MPH Candidate
Program Associate Center for Management of Health Services Indian Institute of Management, Ahmedabad Vastrapur, Ahmedabad-380 015

Bhavna Kumpavat, M.D. (Preventive and Social Medicine)
Junior Lecturer, Department of Preventive and Social Medicine Smt. N.H.L. Municipal Medical College, Ahmedabad- 380 006, Gujarat, India

Kartik N. Trivedi, M.D. (Preventive and Social Medicine)
Professor and Head, Department of Preventive and Social Medicine Smt. N.H.L. Municipal Medical College, Ahmedabad-380 006, Gujarat, India