Original Research Article

DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20174260

A study to assess the utilization of health care services among fishermen communities in urban slums of Visakhapatnam city: a cross sectional study

B. V. Ramana¹*, Dasari Gayatri², P. Radha Kumari³

Department of Community Medicine, ¹Rajiv Gandhi Institute of Medical Sciences, Kadapa, Andhra Pradesh, ²Kameneni Institute of Medical Sciences, Narketpally, Nalgonda, Telangana, ³Andhra Medical College, Visakhapatnam, Andhra Pradesh, India

Received: 07 August 2017 **Accepted:** 30 August 2017

*Correspondence: Dr. B. V. Ramana,

E-mail: drramana0705@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under

the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: In spite of an extensive primary health care system exists in India, yet it is inadequate in terms of coverage of the population, especially in rural areas and urban slums, and gross underutilization. Assessment of the utilization of health services is important for the health of a nation.

Methods: A cross sectional study was conducted during October 2012- September 2013 among 215 families residing in Kotha Jalaripeta fishermen community of urban slums of Visakhapatnam city. A semi-structured questionnaire was used to collect data and was analyzed using SPSS 20 and valid inferences were drawn.

Results: Majority (60.9%) of the slum dwellers preferred Government hospitals for adult health problems and (56.3%) for child health problems. Majority (82.4%) of them utilized Government Hospitals for maternal health services and (73.5%) for Inpatient care. Majority (80.9%) of them preferred Anganwadi centers for immunization services. Antenatal care utilization by slum women was found satisfactory.

Conclusions: This study revealed a relatively higher utilization of government health services for different health problems when compared to the other studies regarding various aspects and dimensions of health services. But still health problems exist to a great extent and there is an urgent need to improve health services in urban slums.

Keywords: Urban slums, Utilization of health services, Fisher men community

INTRODUCTION

Health is an essential requisite for good quality life. The health-care services as an outstanding feature in the broader landscape of population health is a subject to be debated, but is widely acknowledged that individuals should be able to obtain health services when illness strikes, and should have access to certain confirmed health-care interventions which can prevent or reduce the risk of disease. India's achievements in the field of health have been less than satisfactory and the disease

burden among the Indian population remains high. Many of these illness and deaths can be prevented and or treated cost—effectively through the primary care services in our health system. Although an extensive primary health care system exists in India, it is inadequate in terms of coverage of the population, especially in rural areas and urban slums, and grossly underutilized because of the dismal quality of health care provided.³

Comparative slum statistics from India revealed that percent of slum dwellers marginally decreased from 24%

(in 2001) to 22% (in 2011), while absolute numbers increased from 52 million to 65 million.4 Urban poor population constitutes nearly a third of India's urban population. An earlier report from UN-HABITAT highlights that the urban poor, especially the slum dwellers in developing countries, is as badly off, if not worse off, than their rural counterparts.⁵ It also provides evidence of "a tale of two cities within one city"-one part of the urban population that has all the benefits of urban living, and the other part, the slums and squatter settlements, where the poor often live under conditions worse than those of their rural counterparts.⁵ Such living conditions also mean that the slum dwellers are likely to die earlier than the rest of the population of the city, and have fewer opportunities to improve their human development parameters.6

The urban health infrastructure in India is neither appropriate nor adequate, and has not really been able to meet the needs of the urban population, especially the poor. Utilization of healthcare services refers to the accessibility and affordability of the household to avail services pertaining to health, particularly the poor household in the urban slums. Health status among urban slum dwellers is worst and far from adequate, due to factors like inadequate availability and accessibility to basic health services. Health indicators in urban slums are below urban average.⁸ Despite the presence of government hospitals and other health care facilities in the urban areas, the slum dwellers have limited access to these facilities. The initiatives to address urban health concerns have been limited and fragmented in the country, and a recent analysis points out clearly that the government has no proper implementation plans for the urban health and lack of evidence-based policies continues to be a main feature of urban health. For any further progress and improvement the country has to analyze its present scenario and adapt accordingly. With this background, the current study was undertaken to understand the access to health services of the urban slum dwellers and link access to their health status amongst fishermen communities residing in urban slums of Vishakhapatnam city.

METHODS

Study design

A community based cross sectional study was conducted during October 2012 - September 2013 among fishermen communities residing in urban slums of Visakhapatnam. The sample size for this cross sectional study was calculated to be 215, using the formula 4pq/L2, considering the prevalence of utilization of health care services in Visakhapatnam district (65%) in the study, "Health of the East Coast population of India" 2011, with the allowable error (L) of 10%. An interview schedule was prepared keeping in view the objectives of this study including questions on socio-demographic variables and utilization of health services. The proforma was pilot tested on 20 slum-households by interviewing head of the households. To know the information regarding the

utilization of antenatal services, Family planning services and child health services the spouse was interviewed and modified where necessary. The study protocol was approved by the institutional ethics committee of the institute. The purpose of the study was explained and consent was obtained.

Inclusion criteria

The households who were permanent residents of the slum were included in the study.

Exclusion criteria

Visitors and non-respondents were excluded.

Socio-demographic characteristics include information regarding educational status of head of the family and their spouse, type of family and socio-economic status of the family. Specific information about utilization of health services regarding provision of services at doorsteps and frequency of provision by health workers and reasons for preferring type of health facility. The data thus collected was coded and entered on a Microsoft excel sheet and analyzed using SPSS 20. Results are presented in the form of tables and percentages. Chi square was applied for the analysis.

RESULTS

The socio-demographic characteristics of the respondents are depicted in Table 1. Most of the studied participants were illiterate 110 (51.2%). Among literates, about 60 (27.9%) had their High school and above education, 31 (14.4%) had primary education and 14 (6.5%) had middle school education. Regarding their spouse educational status, majority of them 158 (73.5%) were illiterates while 10 (12.5%) had primary education. As per Kuppuswamy's socio-economic status scale, majority, 196 (91.2%) were belonging to upper lower class, while only 19 (9.8%) belongs to lower middle. The majority of respondents of the study population, 161 (74.9%) were belonged to nuclear families and 32 (14.9%) were from joint families. Only 22 (10.4%) belonged to the three generation family.

Figure 1 presents the utilization of health services by the respondents. Majority of the respondents 125 (58.1%) utilizing health services from the Govt. Hospital and among the rest 76 (35.3%) of them preferred private clinics, 6 (2.8%) preferred both Government & private clinics, 5 (2.3%) preferred Nursing homes, 2 (0.9%) preferred others port and railway Hospitals (others). Regarding the provision of health services about 186 (86.5%) told that health services were provided at doorsteps and only few 29 (13.9%) told that were not provided at doorsteps. Door step health services were provided mainly (85%) by health workers, while only (0.9%) were provided by Anganwadi workers and the majority (63.3%) of the frequency of the health visits by service providers was monthly.

Table 1: Socio- demographic characteristics of the respondents.

Variables		Number	Percentage (%)
	Illiterate	110	51.2
	Primary school	31	14.4
Educational status of	Middle school	14	6.5
head of family	High school	46	21.4
	Intermediate	8	3.7
	Graduate	6	2.8
	Illiterate	158	73.5
	Primary school	20	9.3
Educational status	Middle school	8	3.7
of the spouse	High school	23	10.7
	Intermediate	3	1.4
	Graduate	3	1.4
	Lower	0	0
	Upper lower	196	91.2
Socio-economic status	Lower middle	19	8.8
	Upper middle	0	0
	Upper	0	0
	Nuclear	161	74.9
Type of family	Joint	32	14.9
	Three-generation	22	10.2
Total		215	100

250 215 200 150 125 100% 100 76 58.1 % 353% 50 6 5 2 2.8 % 2.3 % 0.9% 0.5% Govt/ Private Private clinics Total Govt. hospital Nursing homes Others (ports/Rly) Private clinics/Nursing clinics ■Frequency ■Percentage

Figure 1: Type of health facility utilization.

Table 2 describes the reasons for preference of health facility for health problems. A maximum (60.9%) of the study participants utilized Government hospitals while (39.1%) utilized private hospitals for adult health problems. Regarding reasons for opting the Government health services were free availability of drugs (50.69%) and satisfactory hospital treatment (9.30%). The main reasons for opting the private hospitals was satisfactory hospitals treatment (35.34%). With regard to child health problems the main reason for preferring the Government hospitals were free availability of drugs (45.11%),

satisfactory hospital treatment 10.23%, while preferring the private hospitals were satisfactory hospital treatment (33.02%), less waiting time(6.04%) and free drugs (4.18%). Majority (73.5%) of the study population utilized Government hospitals, 26.5% utilized private hospitals for inpatient care and is found to the statistically significant (p<0.05). The main reasons for preferring Government hospitals were free availability of drugs (67.44%), while the main reasons for preferring private hospitals were satisfactory hospital treatment (25.11%). In the present study 98.1% of the population utilized Government facilities and only (1.9%) utilized private

hospitals for immunization services. Regarding service uptake a total of 174 (80.9%) were utilizing the services from Anganwadi center, 7.0% of them preferred Urban

Health Centre and only few (0.5%) from PHC for immunization of the children.

Table 2: Reasons for preferring type of health facility for health problems.

Problem	Facility	Satisfactory hospital treatment	Free drugs	Less waiting time	Less cost	No other choice/ Pleasant behavior of staff	Number	Percentage (%)
Adult health	Govt	20	109	1	1	0	131	60.9
problem	Private	76	1	6	0	1	84	39.1
problem	Total	96	110	7	1	1	215	100
Child boolsh	Govt	22	97	0	2	0	121	56.3
Child health	Private	71	9	13	0	1	94	43.7
problem	Total	93	106	13	2	1	215	100
	Govt	5	204	0	1	1	211	98.1
Immunization	Private	3	1	0	0	0	4	1.9
	Total	8	205	0	1	1	215	100
In-patient care	Govt	11	145	0	2	0	158	73.5
	Private	54	3	0	0	0	57	26.5
	Total	65	148	0	2	0	215	100

Table 3: Correlation of type of health facility preferred for health problem with education level of household.

Health problem	Type of facility	Illiterate	primary	Middle school	High school	Interm ediate	Graduate	Total	Chi- square
4 7 7/	Govt.	70	15	10	30	3	3	131	5 527
Adult health	Private	40	16	4	16	5	3	84	5.537 (> 0.05)
neaith	Total	110	31	14	46	8	6	215	(>0.03)
Chala	Govt.	61	17	10	28	2	3	121	5.02
Child health	Private	49	14	4	18	6	3	94	5.03 (>0.05)
пеанн	Total	110	31	14	46	8	6	215	
	Govt.	91	22	12	37	6	2	170	25.613 (<0.05)
Maternal	Private	6	7	2	9	2	3	29	
health	Home	11	1	0	0	0	1	13	
	Total	108	30	14	46	8	6	212	
Inpatient care	Govt.	82	21	11	34	5	5	158	1.07 (>0.05)
	Private	30	8	3	12	3	1	57	
	Total	110	29	14	46	8	6	215	

Table 4: Correlation of type health facility preferred for health problem with type of family.

Health problem	Type of facility	Nuclear family	Joint family	Three generation	Total	Chi-square value
	Govt.	95	20	16	131	0.62
Adult health	Private	66	12	6	84	0.63 (>0.05)
	Total	161	32	22	215	(>0.03)
	Govt.	93	15	13	121	1 265
Child health	Private	68	17	9	94	1.365 (>0.05)
	Total	161	32	22	215	(>0.03)
	Govt.	126	26	18	170	
Maternal	Private	19	6	4	29	5.7
health	Home	13	0	0	13	(>0.05)
	Total	158	32	22	212	
Innotiont	Govt.	123	19	16	158	2.15
Inpatient care	Private	38	13	6	57	2.15 (>0.05)
	Total	161	32	22	215	(>0.03)

Health problem	Type of facility	=1589</th <th>1590- 4726</th> <th>4727- 7877</th> <th>7878- 11816</th> <th>11817- 15753</th> <th>15754- 31506</th> <th>Total</th> <th>Chi- square</th>	1590- 4726	4727- 7877	7878- 11816	11817- 15753	15754- 31506	Total	Chi- square
A 7 14	Govt.	5	76	42	5	2	0	131	T 66
Adult	Private	2	42	28	8	4	1	84	5.66 (>0.05)
health	Total	7	118	70	13	6	1	215	(>0.03)
CI II	Govt.	6	67	41	5	2	0	121	6.87 (>0.05)
Child	Private	1	51	29	8	4	1	94	
health	Total	7	118	70	13	6	1	215	(>0.03)
	Govt.	4	96	55	9	5	1	170	25.4 (<0.05)
Maternal	Private	0	11	13	4	1	0	29	
health	Home	3	8	2	0	0	0	13	
	Total	7	115	70	13	6	1	212	
Inpatient care	Govt.	10	85	52	7	3	1	158	4.9 (> 0.05)
	Private	1	30	17	6	3	0	57	
	Total	11	115	69	13	6	1	215	

Table 5: Correlation of type of health facility preferred for health problem with family income per month.

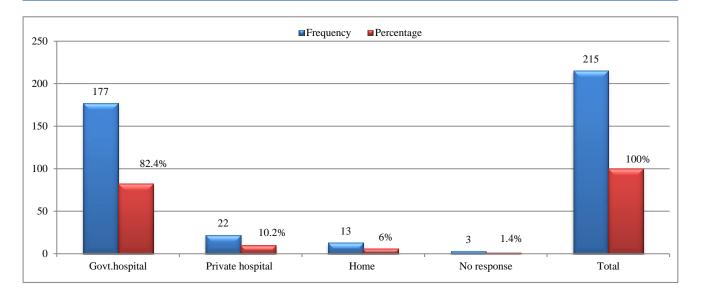


Figure 2: Healthy facility utilized for maternal health.

Figure 2 represents the utilization of maternal health services. It was found that majority (82.4%) of them utilized Government hospitals, 10.2% of them utilized private hospitals, 6% preferred home and 1.4% of them were not responded for antenatal care and delivery.

Tables 3-5 reflect the significance of association between base-line characteristics and type of health facility preferred for health problems. It was observed that there was significant association between education of the head of the household and health facility preferred for maternal health. While there was no significant association between education of the head of the family and health facility preferred for other Adult, child, and Inpatient health problems. Similar finding were found that except for maternal health there was no significant association between family income and health facility preferred for other health problems. In contrast to above findings there was no significant association between the type of family

and health facility preferred for any health problem including maternal health.

DISCUSSION

Utilization of public health services is an important factor in the effectiveness of national health care and achievement of Health for All. The present study showed the utilization of public health services was high in the study area than private health facilities when compared to other studies. The current study revealed that majority (58.1%) of them utilized Government Hospital and among the rest, 35.3% of them preferred private clinics, and was found to be statistically significant. A study conducted in urban slum of Delhi found (48%) of households utilized health services from public sources exclusively and another study in urban slums of Kolkata revealed that only (26%) of the slum dwellers utilized public facility. ^{10,11}

Results from our study showed that around 86.5% have said that health services were provided at doorsteps, and was found to be statistically significant. These findings were not in consistent with the study conducted by Sharath found that door step health services were not provided to them as opined by majority (70.04%) of people and (29.96%) persons said that health services were provided at door steps. ¹² Door step health services were provided mainly (85%) by health workers, and the majority (63.3%) of the frequency of the health visits by service providers was monthly.

In our study the majority (60.9%) of the slum dwellers preferred Government hospitals for adult health problems and (56.3%) of them preferred Government hospitals for child health problems. The main reason for preferring government hospital for adult health facility was free availability of drugs (50.69%) and satisfactory hospital treatment (9.30%). Whereas in a study conducted by Taleb et al observed that patients availed government hospitals for their treatment due to its free of cost and easy access. Regarding child health, main reasons for opting Government Hospitals were free availability of drugs (45.11%) and satisfactory hospital treatment (10.23%).

It was found in the present study that there were 68 children up to 10 years, all of them were completely immunized of which, (98.1%) of the population utilized Government facilities and only (1.9%) utilized private hospitals for immunization services. Study findings revealed that majority (80.9%) of population preferred Anganwadi center, (7.0%) of them preferred Urban Health Centre and only 0.5% preferred PHC for immunization of the children. A study conducted by Singh et al revealed that most of the women availed BCG/polio doses for their children from Anganwadi centers of their respective villages.¹⁴ Free availability of drugs and vaccines, satisfactory hospital treatment were the main reasons for choosing the health facilities for these services. A similar study conducted by Saharth reported that main reasons for opting immunization facility were free availability of vaccines 32.40%, waiting time is less (24.73%), unable to go to others (21.60%), pleasant behavior of staff (24.73%).¹²

In the present study it was found that majority (73.5%) of the slum population utilized Government hospitals, (26.5%) utilized private hospitals for inpatient care and was found to the statistically significant $(p \le 0.05)$. The main reasons for preferring Government hospitals were free availability of drugs (67.44%), satisfactory hospital treatment (5.11%). Reasons for preferring private hospital were satisfactory hospital treatment (25.11%), free availability of drugs (1.39%). Results from the study conducted by Chabbra et al revealed that poor people preferred to go to tertiary health care institution because of economic reasons. ¹⁵

Regarding utilization of maternal health services in the present study it was found that majority 82.4% of them utilized Government hospitals, 10.2% of them utilized private hospitals, 6% preferred home and 1.4% of them were not responded for antenatal care and delivery. These findings were not inconsistent with the study conducted by Gupta et al found that 83% of mothers had 89 presented for antenatal checkup primarily to government facilities and 46% deliveries which occurred at home, 34% were in government hospitals or clinic and 15% occurred in private facilities. 16 The main reason for preferring the Government hospitals was free availability of drugs 72.09%, private hospitals was satisfactory hospital treatment 8.37% and preferring home deliveries were no choice because of work 4.65%, less cost 1.39%. Where as in a study conducted by Sarath reported that the main reasons for opting the facility were satisfactory hospital treatment 37.97%, cost is less 24.73%, free availability of drugs 16.72% and waiting time is less 13.93%.12

It has been observed that there is significant association between education of the head of the house hold and health facility preferred for maternal health and were in consistent with the study conducted by Sarath. 12 While there is no significant association between education of the head of the family and health facility preferred for other Adult, child, and Inpatient health problems. In contrast to above findings there is no significant association between the type of family and health facility preferred for any health problem. Similar finding were found that except for maternal health there is no significant association between family income and health facility preferred for other health problems. A study conducted by Chattopadhyay et al found that the antenatal care and safe delivery practices among lower income groups are significantly worse than those of middle and higher income groups. 17

In order to meet the changing needs of fishermen communities in the urban slums over their life cycle, there is an urgent need to provide them with knowledge about availability of health services and to improve the existing health services. A strong commitment is required from field workers as the majority were obtained services from them and managers at all levels to promote health services in urban slums and motivate the respondents to accept them. In addition, quality services to provide the same should be available.

Limitations

The study was conducted in urban slums only. It would be better if it had been compared with utilization of health care services in rural areas also. However due to time constraint, transport problem and finances to do the study were limitations. And also very few studies were done especially in fisher men communities it was difficult to get base-line data.

CONCLUSION

This study revealed a relatively higher utilization of government health services for different health problems when compared to the other studies regarding various aspects and dimensions of health services amongst the fishermen communities in urban slums. Antenatal care utilization by slum women was found satisfactory. But still health problems exist to a great extent and there is an urgent need to improve health services in urban slums. Increasing awareness of proper usage of available health services and family planning methods through IEC activities, improve the literacy status of the slum people by increasing school enrolments in their area and strengthening of the present public health infrastructure by providing adequate manpower and provision of effective drugs are corner stone for promoting better health and achieving reduction of health problems and can be accomplished by adequate health education and counseling by the health workers.

Funding: No funding sources Conflict of interest: None declared

Ethical approval: The study was approved by the

Institutional Ethics Committee

REFERENCES

- 1. Calhoun C, Rojek C, Turner BS. The SAGE Handbook of Sociology. London: SAGE Publications; 2006: 1.
- Judith K. Health-Care Utilization and Barriers to Health Care. Handbook of Social Studies in Health and Medicine. 1st ed. London: SAGE Publications; 1999: 1.
- 3. Bajpai N, Goyal S. Primary Health Care in India: Coverage and Quality Issues. Columbia: Working Papers Series. 2004.
- 4. The Registrar General and Census Commissioner (Government of India) Primary Census Abstract for Slum. Office of the Registrar General & Census Commissioner, New Delhi. 2013.
- 5. United Nations Human Settlements Programme (UN-HABITAT). State of the World's Cities Report 2006/7. UN-HABITAT and Earthscan, Nairobi and London; 2006.
- 6. Moreno EL, Warah R. Urban and Slum Trends in the 21st Century. UN Chronicle. 2006;43:24-9.

- 7. Agarwal S, Satyavada A, Kaushik S, Kumar R. Urbanization, Urban Poverty and Health of the Urban Poor: Status, Challenges and the Way Forward. Demography India, 2007;36:121-34.
- 8. Agarwal S, Sangar K. Need for dedicated focus on urban health within National Rural Health Mission. Indian J Public Health. 2005;49(3):141-51.
- 9. Gupta I, Mondal S. Urban Health in India: Who Is Responsible? Int J Health Plann Mgmt. 2015;30:192–203.
- 10. Agarwal OP, Kumar R, Gupta A, Tiwari RS. Utilization of antenatal care services in peri-urban area of East Delhi. Indian J Community Med. 1997;22(1):29-32.
- 11. Biswas R, Biswas AB, Chatterjee S, Chowdhury G, Bhandari A. Study of the health status of an urban slum community at Calcutta. Indian J Community Med. 1991;16(3):126-9.
- 12. Sharath. Study of Availability and Utilization of health care services in urban slums of Belgaum city, A cross sectional study, 2006.
- 13. Taleb A, Uddin S. Location and utilization pattern of health care facilities, A case study of Chandpur Sadar Pourashava. ASA University review. 2012;6(2):271-85.
- 14. Singh D, Ramachandran M, Nair P. Nutritional and health status of fishing communities in the Uttan-Gorai area with special emphasis on women. Institute for Community Organization Research. Mumbai, 2011: 1-47.
- 15. Chabbra, Saraf. Reasons why reproductive health care seekers sought admission to tertiary level health care facilities in rural central India. Health Population Perspective Issues. 1997;20(2):80-8.
- Gupta. Referral services in urban health care delivery system. Reliance publishing House, New Delhi, 1993:152.
- 17. Chattopadhyay A, Roy TK, Yelamanchili V. Are urban poor doing better than their counter part in India, A study of fertility, family planning and health. Demography India. 2005;34(2):299-312.

Cite this article as: Ramana BV, Gayatri D, Kumari PR. A study to assess the utilization of health care services among fishermen communities in urban slums of Visakhapatnam city: a cross sectional study. Int J Community Med Public Health 2017;4:3835-41.