

A COMPARATIVE STUDY OF GOVERNMENT HEALTH CARE UTILISATION PATTERN AMONG URBAN AND TRIBAL POPULATION, KHAMMAM DISTRICT, ANDHRA PRADESH IN 2010-2011

Community Medicine

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Abstract:

Introduction: Health care Utilisation can be an indirect indicator of the efficiency and effectiveness of health care delivery system of a state. In Andhra Pradesh the primary health was delivered by government through Primary health centers (P.H.C), Urban health centers (U.H.C), Community health centers (C.H.C) etc. But these centers utilisation was not up to the desired levels. It may be because of difference in urban, rural and tribal areas in all aspects such as literacy levels, economic status, earning opportunities, especially life style. Whether this difference leads to variation in health care utilisation pattern? To know this fact, we have taken up a field based, cross sectional, comparative study among Urban and Tribal population of Khammam district, A.P. With the objective to assess the health care utilisation pattern and the factors for under utilisation and to recommend the government about the lacunae found, and to improve the utilisation levels by both the communities.

Results: Government health care utilisation was significantly low in Urban and men with $p < 0.000000$ & $P < 0.0000019$ respectively. There was a gap between two areas ($p < 0.0000001$). Education was inversely proportionate to govt. health care usage. Highest cause of non utilisation of govt. health service was Non availability of the health care provider at the center. Govt. health care utilisers of both areas said that "Committed primary health care staff present in field" and "Committed referral center present nearby" then the usage of govt. service will increase. Misconceptions, Inconvenient service timings, rudeness of service provider, bribe were significantly high among urban non utilisers than rural. And distance of facility from the dwellings and unawareness regarding the services available, no medical tests, no/same drugs etc were some more reasons for non utilisation.

Conclusions: The key inputs to improve the government health care service utilisation were maintaining the regular availability of health care provider at the center and to educate the population for availability of services at the center. With flexible outpatient timings, delivery of prompt referral service, follow-up services can increase the usage of government facilities by both the communities.

Key words: Government, usage, education, health care provider, health center and availability.

Introduction:

Being a Healthy is an individual's fundamental right and to provide the health to the individuals is the responsibility of government apart from basic minimum

needs. India in response to a Alma Ata declaration and slogan health for all by 2000AD has aimed for establishment of Primary health care centers to provide basic health services.¹ Later so many transformations occurred in Indian health

care system. At present primary health care is being provided by Primary health centers(PHC)'s, Regional Family welfare training centers(RFWC) in rural and tribal areas where are in Urban area through Urban health Center(UHC) or Urban health posts(UHC) are delivering the similar services. Other than these government is also providing the health services through 24hours MCH centers, Community health Hospitals(CHC), District, General and teaching (super specialty hospitals) etc. Even though these many hospitals are existing with well equipment and experienced staff the health care service utilisation found to be less in comparison with the private health care utilisation. This made us to take up a study to found out the percentage of the government health care utilisation along with factor finding for the non utilisation.

Aim And Objectives:

- 1). To know the percentage of government health care service utilisation among the urban and tribal population of a Khammam district. Andhra Pradesh.
- 2). To identify the factors for utilisation and non utilisation of the government health care services in same.
- 3). To Make recommendations accordingly.

Material And Methods:

Study Design: Field based Cross sectional comparative study

Study setting: Khammam Urban colonies - 2 and Charla manadal tribal villages – 2

Study sample size: 10% of the selected urban colonies or tribal villages.

Study population: Khammam Urban colonies 2 which were having 840 houses and 1841 families so 10% of it was 184.1, rounded off to 200 houses for easy calculation and Charla mandal tribal villages – 2 which were having 414 houses with 926 families hence 10% of it was 54.3, rounded off to 60 houses. From each house we took information from one individual i.e. Urban – 200 and Tribal population – 60 individuals

Sampling technique: Simple random sampling done by selecting the first house (4th house), and sampling interval

(every 2nd house after the starting house) by dice.

Eligibility criteria: Population 15 or above age group and one respondent from each family with informed consent.

Methodology: We have selected the urban colonies (2/123) urban Khammam and tribal villages (2/32) after numbering them in the municipal corporation and grampanchayath given list respectively by using a dice. Then we marked the numbers on houses starting from one and then we selected randomly the houses for application of a questionnaire for collecting the required information after taking the oral informed consent. If consent was not given we moved to next house. This way we gathered the data and uploaded on epi info 3.64 versions for validation and analysis. The results were interpreted as tables, graphs and percentages. And Chi-Square Statistical test was applied to know the significance of difference between the variables.

Results And Discussion:

In our study the total number of male and female house hold respondents were 160 (61.53%) and 100 (38.47%) respectively. Urban and Tribal male were 120(60%) and 40(66.67%) and urban and tribal female were 80(40%) and 20(33.33%) respectively. And we gathered the information from upper, middle and lower class respondents (20%, 39%, 41% and 9%, 32.67%, 58.33% urban and tribal residents respectively. The illiteracy rate among both the population was 52.52 % which is differing from the national average (67.66%)[1] because our study was done in a small area.

Table no: 1
Distribution of study population according to their option for health care facility

Opted Health facility	Urban	Tribal	Total
Government	60 (30%)	49(81.67%)	109 (41.92%)
Private	129 (64.5%)	7 (11.67%)	136 (52.3%)
Others (Ayush, NGOs and CGHS etc)	11 (5.5%)	4 (6.66%)	15 (5.75%)
Total	200 (100%)	60 (100%)	260 (100%)

$x^2 = 48.5(p<0.0000001)$ S

The present study we found that a significantly high percentage (81.67%) of Tribal population were opting for government health care services than the urban population

(30%) with $p < 0.0000001$. And reverse trend was seen with private health care utilisation. The difference observed in opting government and Private plus other health care system was also significant with $p < 0.0000001$.

**Table no 2:-
Gender wise distribution of study population according to their Yes response on utilisation of Government health care facility**

Gender wise household respondents	Government health care users		Total
	Urban	Tribal	
Male	9 (15%)	29 (59.18%)	38 (34.86%)
Female	51 (85%)	20 (40.83%)	71 (65.14%)
Total	60 (55.04%) (100%)	49(44.96%) (100%)	109(100%) (100%)

$X^2 = 21.28 (p < 0.0000019)$ Significant

We observed that among the total Government health care utilisers about 65.63% and 34.37% of them were of female and male gender respectively. This difference (31.26%) was statistically significant ($p < 0.0000019$). And when we compare with place of residence then we found that significantly high percentage of (19%), of the tribal males were found utilizing Government health services than the urban males with $x^2 62.26 (p < 0.0000001)$

**Table no 3:-
Age wise distribution of study population according to their Yes response on utilisation of Government health care facility**

Age wise household respondents (years)	Government health care users		Total
	Urban	Tribal	
Less than 18	3 (5%)	3 (6.12%)	6 (5.5%)
18- 28	5 (8.33%)	22 (49.89%)	27(24.77%)
28-38	23 (38.33%)	3 (6.12%)	26(23.85%)
38-48	13 (21.67%)	7 (14.28%)	20(18.34%)
48-58	9 (15%)	5 (10.20%)	14(12.84%)
More than 58	7 (11.68%)	9 (22.45%)	16(14.67%)
Total	60 (55.04%) (100%)	49 (44.96%) (100%)	109 (100%) (100%)

In the present study most of the respondents were falling in 28-48 yrs age group in Urban where as in tribal area it was 18-28yrs age group this difference may be due to early marriages and early completion of reproductive life in tribal area than the urban users.

**Table no 4:-
Economic status wise distribution of study population according to their Yes response on utilisation of Government health care facility**

Socioeconomic class of the household respondents	Government health care users		Total
	Urban	Tribal	
Upper class	2 (3.33%)	8 (16.32%)	10 (9.17%)
Middle class	12 (20%)	11 (22.44%)	23 (21.10%)
Lower class	46 (76.67%)	30 (61.22%)	76 (69.72%)
Total	60 (55.04%) (100%)	49(44.96%) (100%)	109(100%) (100%)

$x^2 = 4.328 (p < 0.008)$ Significant

We observed that only 9.17% of upper economic classes were opting for the government health service. The observed difference between upper, middle and lower socioeconomic classes was statistically significant ($p < 0.008$). Present study observed that as economic status is increasing the utilisation percentage was inversely falling 3 times more. It may be because of increased paying capacity or want of quality health care services in tidy and healthy environmental settings.

**Table no 5:-
Literacy wise distribution of study population according to their "Yes" response to question "utilisation of Government health care facility"**

Literacy of the respondents	Government health care users		Total
	Urban	Tribal	
Illiterate,	32(53.33%)	25(51.02%)	57(52.29%)
Primary	16(26.67%)	15(30.61%)	36(33.02%)
SSC and Inter	10(16.67%)	12(24.48%)	22(20.18%)
Degree and above	2(3.33%)	4(8.16%)	4 (3.66%)
Total	60(55.05%) (100%)	49(44.95%) (100%)	109(100%) (100%)

$x^2 = 0.4 (p > 0.5)$ Not significant.

Our study observed that as education increasing the usage of government health care services inversely decreasing in both the population. The observed difference between urban and rural was not significant.

Table no 6:-

Distribution of health care users as per their answer to “presence of committed primary health care staff in the field “ will increases the government health care service users?

Committed servicing by UHC and PHC staff in the field	Government health care users		Total
	Urban	Tribal	
Yes	36(60%)	41 (83.67%)	77 (70.64%)
No	8(13.33%)	4 (8.16%)	12 (11.01%)
Don't know	16(26.68%)	4 (8.16 %)	20 (18.34%)
Total	60 (55.04%) (100%)	49(44.95%) (100%)	109(100%) (100%)

$x^2 = 6.10(p<0.006)$ Significant

In present study about 70.64% of Urban and Tribal government health care utilisers said that “ if committed primary health care staff present in field” then the usage of the government health care service will also increases because of their continuous motivation, timely referral, and follow up and necessary support in seeking health care at government centers. There was a significant difference between urban and tribal population with $p<0.006$.

Table no 7:-

Distribution of health care users as per their answer to “presence of committed referral service centers nearby” will increases the government health care service users?

Committed referral service centers near by	Government health care users		Total
	Urban	Tribal	
Yes	25 (41.68%)	31 (63.26%)	56 (51.37%)
No	29 (48.33%)	15 (30.61%)	44 (40.36%)
Don't know	6 (10%)	3 (6.12%)	9 (8.27%)
Total	60 (55.04%) (100%)	49(44.95%) (100%)	109 (100%) (100%)

$x^2 = 6.10(p<0.006)$ Significant

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No	29 (48.33%)	15 (30.61%)	44 (40.36%)
Don't know	6 (10%)	3 (6.12%)	9 (8.27%)
Total	60 (55.04%) (100%)	49(44.95%) (100%)	109 (100%) (100%)

$x^2 = 4.2(p<0.02)$ Significant

About 40.36% of the government health care utilisers told that if committed referral center present nearby then the health care seeking in government hospitals will increases because of increased confidence of availability of treatment in there. And there was a significant difference between urban and tribal population ($p<0.02$).

Table no: 8-

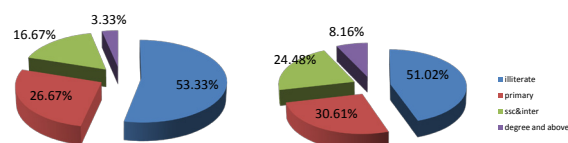
Distribution of study population(non users) according to reason for Yes for not utilizing the Government health care facilities by non utilisers.

Factors for non utilisation of Government health care facilities	Urban (n= 140)	Tribal(n= 11)	Chi square test
Misconceptions regarding the centers	136(97.14%)	8 (72.72%)	5.43(p<0.009) S
Inconvenient service timings	133(95%)	4(36.36%)	10.57(p<0.00057) S
Distance of facility and the dwellings	45 (32.14%)	7(63.63%)	5.7(p<0.008) S
Un awareness regarding the services available	39 (27.85%)	4 (36.36%)	0.06(p>0.5) NS
Non availability Doctors or other service provider	137(97.86%)	10(90.91%)	0.16(p>0.5)N S
Medicines not available / routine medicine	76(54.28)	3(27.27%)	0.76(p>0.5) NS
Investigations not doing	116 (82.85%)	6(54.54%)	3.6 (p>0.5) NS
Rude behaviour of the health care staff	120 (85.71%)	4 (36.36%)	13.72p<0.0001) S
Taking money for the service given	111(79.28%)	4(36.36%)	8.11(p<0.0021) S
Others including multiple answers	49(35%)	10(90.99%)	11.15 (p<0.004) S

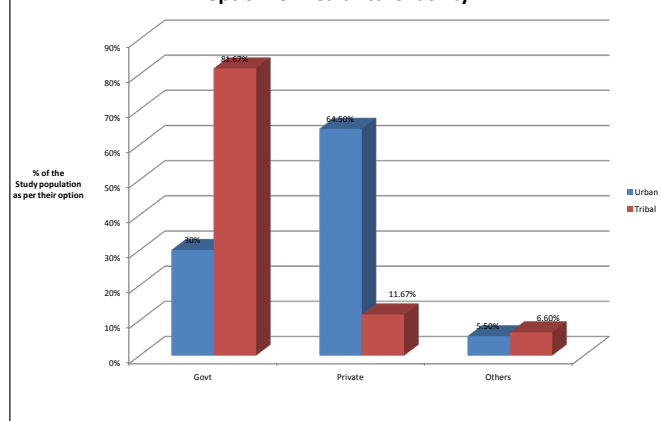
- Others: not satisfied with the past service, long waiting time, no transport facility etc.

The first common cause in tribal and urban population for non utilisation was non availability of the doctor or health service provider at the center in both the areas (90.91% and 97.86%) respectively. It was due to vacant post or due to non committed service provider. Second common cause was misconception on government health care system in two areas (97.14% and 72.72%) respectively. Misconceptions, Inconvenient service timings, rudeness of service provider, bribe were significantly high among Urban non utilisers than rural non utilisers.

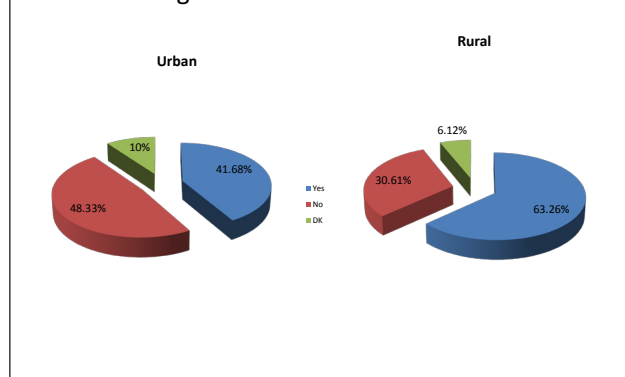
Distribution of government health care users as per their literacy status

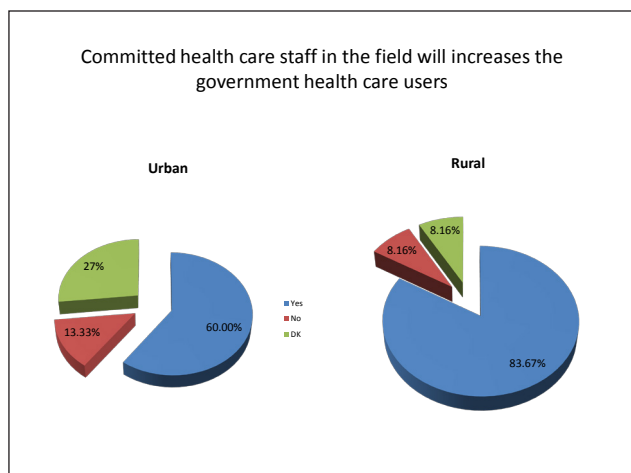


Distribution of study population according to their option for health care facility



Committed referral center near by will increases the government health care users





Conclusion:

1. Government health care service utilisation was significantly low in Urban subjects with $p < 0.0000001$.
2. Most of the government health care users of urban area were falling in 28-48 yrs age group and in tribal area it was 18-28 yrs age group. .
3. There was a significant gap ($P < 0.0000019$) between male and female subjects of both the areas and between tribal men and urban men in government health care service utilisation with $p < 0.0000001$.
4. This observed gap between upper and other Socio-economic classes was significant ($p < 0.008$). It may be because of increased paying capacity or want of quality health care services in tidy and healthy environmental settings by upper class.
5. Our study observed that as education increasing the usage of government health care services inversely decreasing in both the population. It may be because of increased knowledge of government sponsor health care providing schemes in corporate hospitals.
6. About 70.64% of total govt. health care utilisers said that “if committed primary health care staff present in field” and about 40.64% said that “if committed referral center present nearby” then the usage of govt. service will also increase because of increased confidence of the public for continuous motivation, referral and treatment. The difference between both the groups was significant with

($p < 0.006$) and ($p < 0.002$) respectively.

7. First highest cause for non utilisation of govt. health service was non availability of health care provider at the center in both the areas. It was due to vacant post or due to non committed service provider. Second highest cause was misconception on government health care system among urban and tribal.
8. Misconceptions, Inconvenient service timings, rudeness of service provider, bribe were significantly high among Urban non utilisers than rural non utilisers.
9. Distance of health facility from the user dwellings and an awareness regarding the services available at center, no medical tests being done, no drugs etc were some more reasons for non utilisation.

Recommendations:

1. Remodeling of Urban health care system with extensive field care set up and service delivery to improve the Govt. health care service seeking behaviour of the urban population.
2. Re - enforcing the male sensitisation educational approach and male targeted health care service approach we can improve government health service utilisation by the men.
3. Outsourcing of sanitation work can keep hospitals clean including washrooms.
4. Provision of uninterrupted supply of water, current and well maintained paying rooms and premises can attract the upper socio economic and highly educated population towards govt. health care services.
5. Filling up the vacant posts and maintain the doctor-patient and Nurse-patient ratio, to improve the regular availability of the health care providers at health centers.
6. We must plan to start OPD at 6am for those who leave home early for wages or other reasons and we should extend the up to 8pm for those who come home late in the evening.

7. Improving the transport facilities where health centers are away from the users.
8. Use of various communication methods to spread the knowledge of amiability of health care services availability at hospital to alleviate the unawareness, misconceptions among the public.

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