

## HEALTH SEEKING PATTERN AMONG THE PATIENTS ATTENDING TERTIARY CARE CENTER IN SOUTH INDIA

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Received : 01/01/2023

Received in revised form : 30/01/2023

Accepted : 24/02/2023

### Keywords:

Health seeking pattern, tertiary care centre, referral services, utilization of health services.

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DOI: 10.47009/jamp.2023.5.2.56

Source of Support: Nil,

Conflict of Interest: None declared

Int J Acad Med Pharm  
2023; 5 (2); 268-273



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### Abstract

**Background:** The health seeking behaviour of a community determines how health services are used and in turn health outcomes of the population. Government hospital is preferred by the patients who cannot afford health care costs in other private hospitals. Timely referral and strengthening of health systems will make the expertise available in the really needy patients. To Assess the health seeking pattern among the patients attending Government Medical college hospital, Salem and to determine the percentage of people attending the hospital through referral linkage. **Materials and Methods:** A cross sectional study conducted among patients attending OPD services in medical college hospital, in various departments. Sample size was 270 and data collection was done by 20 trained medical students using semi-structured questionnaire. Analysis was done in Epi-info software version 7.2; categorical values were expressed in proportions. **Result:** Among 270 patients, 140 (51.85%) attended medical college hospital directly for their current illness, remaining 130 (48.15%) previously attended other health care facilities. In this study, majority 63.33% of females were attended medical college hospital. Among 270 patients, only 15.56% was referred from other health care centres. Among referral, 6% were referred from private sectors and 8% from government centers. 6.67% were referred for investigations that were not available in the health centre and 5.93% were referred for intensive treatment with monitoring. Only 2.96% were referred for obtaining drugs that were not available in health centres. **Conclusion:** The study concludes the importance health seeking behaviour and referral services linkage between the peripheral centres and the tertiary care hospitals.

## INTRODUCTION

Health seeking behavior of a community determines how health services are utilized and in turn the health outcomes of populations. Individual/Household, Institutional & System and also Social-cultural factors are the main determinants of Health seeking behavior of patients when they have illness.<sup>[1]</sup>

It is seen that, a Government hospital is preferred by the patients who cannot afford expenses for taking treatment at private hospitals. India has the most extensive infrastructures for Health Care System- a

Three tier hierarchical referral system of Central, Intermediate and Peripheral – for the provision of effective and efficient health services to most of the population.<sup>[2]</sup>

India has following major health care systems.<sup>3</sup>

### 1. Public Health Care

- Primary Health Care: Primary Health Centre and Sub-Centre
- Secondary Health Care: CHC, Non Taluk & Taluk Hospitals, District Head Quarters Hospitals, ESI, CGHS, Defence services, Railways.

- c) Tertiary health care: Speciality Hospitals and Teaching Institution attached Medical College Hospitals.
- 2. Private Sector: Private Hospitals, Nursing homes, Polyclinics, General practitioners.
- 3. Indigenous systems of medicine - Ayurveda, Siddha, Unani, Homoeopathy.
- 4. Voluntary Health Agencies

As a current trend, public health system is integrating the efforts of different parties to develop a comprehensive primary health care system by joining different systems.<sup>[4]</sup> The infrastructure of Primary Health Care is expected to meet over 80 per cent of the health care needs of the rural population and refer the rest to secondary /tertiary health care institutions if needed.<sup>[5]</sup> In the absence of systematic referral system, the follow-up care of patients is sub-optimal and in turn affects or underutilization of public health care system. Most patients directly visit the tertiary care center for minor illness which can be treatable at PHC itself. Strengthening of Primary Health Care at various levels in turn would reduce the overburden of tertiary health care centre and also patient travel time, distance and work loss can be reduced. Shrivastav committee at 1975 recommended that the Primary Health Centers, as well as the Taluk /Tehsil, District, Regional and Medical College Hospitals should each develop live, direct links with community around them and also have functional links with one another within a total referral service complex.<sup>[6]</sup> Timely referral and strengthening of health systems will make expertise available to the really needy patients .This study tries to find out how the referral system is working. Hence this study was conducted to assess the health seeking pattern among the patients attending Government Medical College hospital, Salem and to determine percentage attending the tertiary health centre through referral linkage.

## MATERIALS AND METHODS

This cross-sectional study was carried out among patients attending Medical College hospital, Salem. Average daily medical Out Patient load of the hospital is 2470 patients per day. The study was begun at the beginning of OPD. Every 5th patient coming out of OPD was selected till 270 members were studied at the time of exit from OPD.

Sample size was estimated as 270 using Epi -info version 7.2 based on following: Proportion of patients referred for Tertiary care centre - 20% with 95% confidence interval and absolute precision of 5% with 10% non-response error.<sup>5</sup>

### Inclusion Criteria

Those patients attending as Outpatient of various Departments.

### Exclusion Criteria

Those attending Super Speciality department & Casualty.

## Data Collection

Trained medical students, 20 in number, collected the data using semi-structured questionnaire, translated in local language Tamil. Patients were explained in detail about the benefit and purpose of the study and those who gave verbal consent were interviewed. Confidentiality was assured. Information regarding the following variables were collected; Health seeking pattern for current illness, first contact point, second contact point, third contact point, Type of illness, duration of illness, nearest health centre available and the distance from their residence, Reason for choosing Medical college hospital.

## Data Analysis

The collected data was entered in Microsoft excel worksheet and Analysis was done in Epi-info software version 7.2. All the categorical variables were measured as frequency and percentage.

## RESULTS

In our study, majority of patients (40.74%) attending the OPD services of medical college hospital for their current illness was in the age group of 18-45 years. Among 270 patients in our study only minimal number of graduates (9.26%) attended Medical College Hospital. Almost equal utilization of health services among illiterate & middle to high school educated.

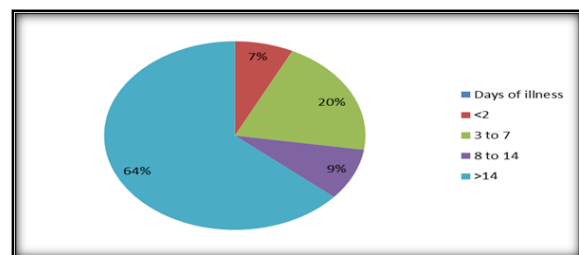


Figure 1: Duration of illness

More than half of the patients attending medical college hospital had duration of illness of more than 14 days. Majority of the patients attended the medical college hospital only after their longer duration illness. In our study 22 children (8.15%) had come for immunization purpose (excluded from Analysis) Fig 1

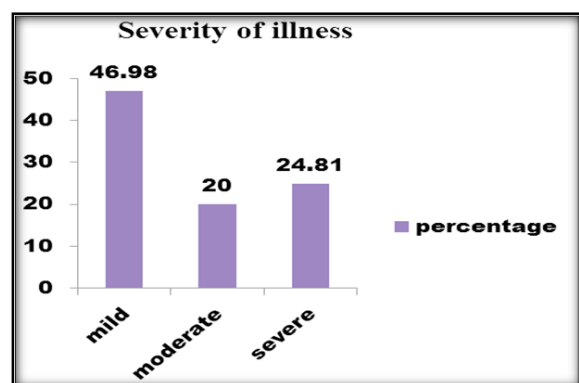
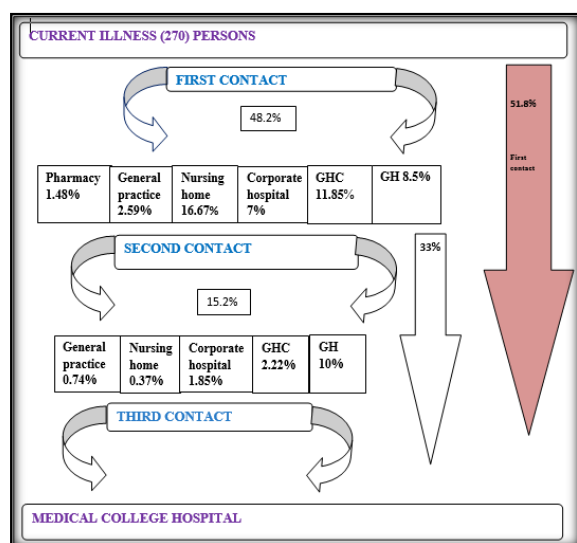


Figure 2: Severity of Illness

Almost half of patients attending medical college hospital had mild illness only and One fifth of (20.00%) had moderate illness. Only one forth (24.81%) had severe illness. Consequently those who really needed tertiary care service had to wait for long time and treatment may get delayed.

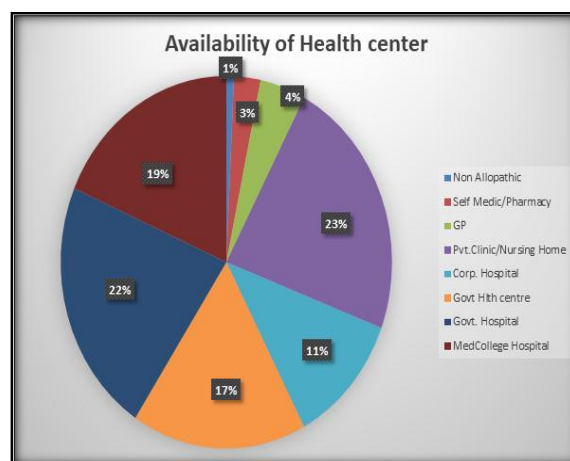


**Figure 3: Health seeking pattern of Current illness among patients attending medical college hospital**

The patients utilized government health centres and hospitals as their first contact directly for their current

illness. Surprisingly only < 2 % acknowledges seeking the Pharmacy for their first contact. By second contact private for profit services comes down to 3% from the 26% at first contact. Almost all the patients reached medical college hospital for their third contact.

In our study states that maximum utilization of private hospital among patients for their illness. It may be due to availability of private hospital at any time of the day. They may be thought that all the facilities are available in private sector and there is no need of long waiting period.



**Figure 4 Availability of nearby health centre**

**Table 1: Demographic characteristics of patients attending medical college hospital.**

Variables	Frequency (N)	Percentage (%)	95%confidence interval
<b>Gender</b>			
Male	99	36.67	30.9 to 42.72
Female	171	63.33	57.28 to 69.09
<b>Age (years)</b>			
< 5	51	18.89	14.40 to 24.08
5-18	14	5.19	2.86to 8.55
18-45	110	40.74	34.83 to 46.88
45-60	61	22.59	17.74 to 28.05
>60	34	12.59	8.88to 17.15
<b>Education</b>			
Illiterate	70	25.93	20.80 to 31.59
Primary school	35	12.96	9.2 to17.56
Middle school	65	24.07	19.10 to 29.63
High &Higher Secondary	75	27.78	22.52 to 33.53
Graduate	25	9.26	6.08 to 13.36

**Table 2: Distribution of association between Demographic Factors and Management of current illness first contact point as medical college hospital**

Factors	Management of current illness 1st contact medical college hospital N (%)		P-value
	Yes	No	
<b>Age group</b>			
< 5	42(82.35)	9 (17.65)	0.000*
5-18	9(64.29)	5(35.71)	
18-45	43(39.09)	67(60.91)	
45-60	29(47.54)	32(52.46)	
>60	17(50)	17(50)	
<b>Gender</b>			
Male	55(55.6)	44(44.44)	0.354
Female	85(49.71)	86(50.29)	
<b>Education</b>			
Illiterate	41(58.57)	29(41.43)	0.023*
Till 5th standard	13(37.14)	22(62.86)	
6th to 8th standard	38(58.46)	27(41.54)	

9th to 12th	41(54.67)	34(45.33)	
Graduate	7(28)	18(72)	

### Availability of health centre

Among 270 patients even though 2 patients have non-allopathic care available nearby their residence, they were not utilizing that service. It may be healthy practices among the patients. Among the study population, 22.96% of patients having private clinics near their residence, and also 22.22% having government hospital, there is availability of government health centre and hospital near by residence equal to private facility. Even though there is 39% availability of government health centre and hospital near by residence they were not utilized (only 20% used them as 1<sup>st</sup> contact) properly. Eighteen percent (18.52%) of patients living near medical college hospital may be reason for a large percentage attending medical college hospital for current illness even though it may be treated in primary health centre and hospitals.

**Table 3: Distance of Health centre from the Residence**

Distance (km)	Frequency (N)	Percentage %	95% Confidence interval
<1	77	28.52	23.21 to 34.31
1-2	65	24.07	19.10 to 29.63
2-4	49	18.15	13.74 to 23.27
>.4	79	29.26	23.9 to 35.08

Only one third of patients had the nearest health centre more than 4 kilo meter distance from their residence. In such patients accessibility of health centre is difficult and may increase the utilization of self-medication. [Table 3]

**Table 4: Distribution of Travel time for attending Tertiary care hospital among the patients**

Timing (Hours)	Frequency (N)	Percentage (%)	95% Confidence Interval
<1/2	83	30.74	25.29 to 36.62
1/2 to 1	121	44.81	38.78 to 50.96
1 to 2	51	18.89	14.40 to 24.08
>2	15	5.56	3.14 to 9.00

Almost 75% of the patients have travel time less than 1 hour to medical college hospital. Very few patients only travelling > 2hrs . Availability of tertiary care centre within one hour of travel may increases the utilization of this service for their current illness even though other government health centre were available nearby their residence. [Table 4]

**Table 5: Various reasons for choice of medical college Hospital among the patients**

Reasons	Frequency (N)	Percentage (%)	95% Confidence interval
Referred	42	15.56	11.45 to 20.44
Easy Accessibility	58	21.48	16.73 to 26.87
Familiar with system	36	13.33	9.52 to 17.98
Familiar with doctors	13	4.81	2.59 to 8.9
All facilities at one place	33	12.22	8.56 to 16.73
Superior health care	51	18.89	14.40 to 24.08
Lack of facility at near by centre	12	4.44	2.32 to 7.63
No satisfaction at nearby centre	6	2.22	0.82 to 4.77
No cure till now	13	4.81	2.59 to 8.09
Miscellaneous	6	2.22	0.82 to 4.77

Among 270 patients attending medical college hospital, only 42 patients (15.56%) were referred from other health care facilities. In bottom-up approach, all patients should be initially treated in the Primary & Secondary Centre. On referral basis only they should approach tertiary care centre. Eighty-five percentages had attended the hospital directly without referral. Among those, 21.48% had easy accessibility to medical college hospital. Some patients (18.89%) thought that in medical college hospital only 'superior health care' was available. Only 5% had visited medical college hospital without referral when they had no cure in other health care facilities. Because of these reasons, Staffs working in the tertiary care centre were overburdened with case overload. This in turn may lead to decreased care of really needy patients. Most of the patients were not aware of the services provided at the primary care level through the public health centres.

**Table 6: Referred from other health care system facilities to the tertiary health care institute**

Referred from	Frequency(N)	Percentage (%)	95%confidence interval
Non- Allopathic	0	0	0
Pharmacy	1	0.37	0.01 to 2.05
General practice	2	0.74	0.09 to 2.65
Private clinic/nursing home	13	4.81	2.59 to 8.09
Corporate hospital	2	0.74	0.09 to 2.65

Government health centre	7	2.59	1.05 to 5.27
Government Hospital	16	5.93	3.42 to 9.45
Medical college hospital	1	0.37	0.01 to 2.05

Among 15% who were referred, nearly 6% were referred from private sectors and 8% from Government health centre, Only one person had been referred from another medical college hospital. No one utilized the Non-Allopathic services, none referred from Non-Allopathic care.

**Table 7: Distribution of patients based on purpose of referral from other health centre**

Referred for	Frequency (N)	Percentage (%)	95% confidence interval
Drugs	8	2.96	1.29 to 5.75
Investigations	18	6.67	4.00 to 10.33
Intensive treatment with monitoring	16	5.93	3.42 to 9.45

Among 15.56% of referred cases, 6.67% mainly referred for investigations that are not available in the health centre. Among referral patients 5.93% who had severe illness referred for intensive treatment with monitoring. Only (2.96%) were referred for obtaining drugs that were not available at health centres.

## DISCUSSION

Health seeking behaviour towards medical college hospital was more among females (63.33%) than Males (36.67%) for their current illness. Thambi P.N et al, said in his study more females had utilized tertiary health care centre than males.<sup>7</sup> Ramesh Chand Chauhan et al, said in their study one third of patients utilizing health care were illiterate.<sup>8</sup> In Hana Hasan Webair study, educational status among care givers of children plays a significant role in health care utilization.<sup>[9]</sup> In Kalpita Shringarpure et al study 48.3% of patients had come for treatment of minor complaints while 51.7% came to the health care facility for chronic illness.<sup>[5]</sup> The aim of National health policy 2002 was, decentralization of the health services in order to reduce the burden so that tertiary care centre mainly focus on the treatment of complicated & referred cases.<sup>[10]</sup> Under-utilization of the health services in public sector has been almost a universal phenomenon in developing countries.<sup>5</sup> But there is no significant difference between genders regarding the treatment at medical college hospital.<sup>[9]</sup> David Musoke et al study in Uganda states that 50.13% of patients first prefer private practitioner, when they had illness.<sup>[11]</sup> Gogfrey Bigogo et al, state in their study that utilization of health care system decreased with increased distance of health care facility from their residence was significantly associated.<sup>[12]</sup> Kalpita Shringarpure et al said that in their study 19.7% of patients were referred<sup>5</sup> and in our study among 270 patients attending medical college hospital, only 42 patients (15.56%) were referred from other health care facilities. In our study among 270 patients attending medical college hospital majority were females. Among the study population, 51.85 % had directly come to Medical college hospital, 48.15% had visited after 1<sup>st</sup> and 2<sup>nd</sup> contact point at various health care facilities including public and private. In this study 15.56% of

patients only were referred from other health care facilities, others had attended medical college hospital for various reasons. Among referral nearly 6% were referred from private sectors and 8% from government centres. Among 15.56% of referred cases, 6.67% were mainly referred for investigations that were not available in the health centre and 5.93% were referred for intensive treatment with monitoring and only 2.96% were referred for obtaining drugs that were not available in health centres.

## CONCLUSION

In our study even though the free of cost availability and accessibility of government tertiary care institute, maximum utilization of private hospital among patients for their illness was more than the government institutes. This may be due to more availability of private hospital numbers at any time of the day. They may be thought that all the facilities are available in private sector and there is no need of long waiting period.

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