



Analysis of Perception of Government Run Public Healthcare Set-Ups in a Southern State of India - A Cross - Sectional Questionnaire-Based analysis

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Abstract

Background: Public healthcare set-ups in India face formidable challenges and is lagging far behind from private set-ups. However, in some states, there is a difference. Tamil Nadu, a southern state in India has been christened as the Medical capital of India as it has one of the best healthcare services in India and a very well-established public-health care system. Several studies have outlined the facilities of public-healthcare set-ups in Tamil Nadu as being superior to that found in other states in India but there is no study so far that has captured the perception of people in the state of Tamil Nadu on them. We therefore sought to evaluate the people' perception of public-healthcare set-ups & their level of usage of such facilities in Tamil Nadu.

Methods: The study was a cross-sectional questionnaire-based study that evaluated students of a non-profit educational institute which had representation from all strata of the society. Since their inputs would include their family's experience as well in Focus Group Discussions (FGD), they would serve as an excellent representative of the population of Tamil Nadu. A two-stage systematic random sampling method was used to select the samples. A total of 784 students participated in the survey. Both quantitative (structured questionnaire) and qualitative (FGD & Case studies) tools were used to collect the data from the selected respondents.

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Keywords: Tamil Nadu; Public health care system; Private vs public healthcare facilities; Preference of health care facility; Cross-sectional analysis.

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Results: Result showed that most of the respondents (> 60%) though were hospitalised in private health care-set ups for the previous illnesses, when asked of their preference specifically for each type of health care set ups, choice of private healthcare was only marginally high (74.2%) compared to public health care facilities (68.1%). Further, ease of access to public-health care set-ups was higher than private. Expenditure in private set-ups since is nearly 70% higher than in public health care set-ups, respondents want issues like lower hygiene in public-health care set-ups be rectified enable them use those facilities to the fullest.

Conclusion: There is a felt-need to standardize the entire healthcare system by drastic measures of improvising the existing public healthcare facilities and establishing a system of private-public partnership enabling systematic cross-referrals to take place. This will ensure quality health care be delivered avoiding devastating economic impacts especially for the marginalized, due to healthcare expenses.

Introduction

Healthcare systems in India trace their beginning to the Health Survey and Development Committee, commonly referred to as the 'Bhore Committee Report' 1946 [1]. The recommendation was to have a three-tiered health-care system, place health workers on government payrolls and limit the need for private practitioners [2].

The public health-care infrastructure has been developed as a three-tier system [2] in India

Primary level

- Sub-centers for a population of 5000 people and in hilly/difficult to reach/tribal areas with a population of 3000. The Ministry of Health & Family Welfare of the Federal government of India provides 100% central assistance to all the SCs since April 2002.
- Primary Health Centers (PHC) for a population of 30 000 people and in hilly/difficult to reach/tribal areas with a population of 20 000. It is the first contact point between the village community and the medical officer [2].

Secondary level

- Community health centers (CHC) for a population of 120 000 people and in hilly/difficult to reach/tribal areas with a population of 80 000
- Sub-district hospitals for a higher population number [2].

First referral units (FRU) which is the term for an existing if it is equipped to provide round-the-clock services for emergency obstetric and newborn care. FRU may include district hospital, sub-divisional hospital or CHCs [2].

Tertiary level

This includes Medical colleges and District hospitals which may be both public and private.

As per the data in 2016, there are 722 district hospitals, 4833 CHCs, 24 049 PHCs and 148 366 SCs in the country [2].

Except SCs other public healthcare facilities are established and maintained by the State Governments.

In the case of private healthcare in 1947 the private health sector provided only 5-10 % of total patient care in India. However, today it accounts for 82% of outpatient visits, 58% of inpatient expenditure, and 40% of births in institutions [3].

The reasons for not opting for public hospitals in India according to a recent survey include long queues, poor maintenance, medicines & tests not available and also people's claim that they had had to pay bribes or use influence to jump queues for treatment and for outpatient appointments with senior doctors, and to get clean bed sheets and better food in hospital [3].

Although India is one the fastest growing economies in the world, yet it ranks among the poorest achievers of good health [4]. It is believed that 90% of all health needs can be met at the primary healthcare level. But there is only one primary health centre for every 51,000 people. India has grossly under-invested in primary health care-the area that should matter the most [5].

Tamil Nadu is the southernmost state in India, when compared to other states in India, has fared better in its health index (NITI Aayog, 2018) [6]. The state is renowned for its low mortality rates, effective healthcare infrastructure and health manpower.

Though health budget for 19 states are higher than Tamil Nadu and 12 states below Tamil Nadu [7], Tamil Nadu is better organized than most other states in public health infrastructure and also the first state to enact a Public Health Act in 1939 [8]. Tamil Nadu is the only state with a distinctive public health cadre in the district level. Tamil Nadu has higher number of private hospitals and clinics compared to other states in India [9], which results in high Out-Of-Pocket (OOP) expenditure. It is estimated that 69 per cent of the total health expenditure of the state is OOP with an expenditure of INR 21,471.15 crores [10]. In Tamil Nadu, National Sample Survey Organisation (NSSO) provided by the Ministry of Statistics and Programme Implementation, Government of India's 67th round (2010-11) and 71st round records 43605 private health enterprises, 29812 private allopathic enterprises consisting of medical and dental hospitals, diagnostic centres/labs and blood bank and 11928 all types of public/government run hospitals during March 2012 correspondingly per 100,000 population [11].

Tamil Nadu has acquired the distinction of having implemented various national and State-level health programmes more effectively than most of the other States [12]. A report [13] contends that Tamil Nadu has 4 doctors for 1,000 patients, which is similar to Norway and Sweden, where it is 4.3 and 4.2 respectively.

Going by this background, we wanted to explore the actual perception of people on the public healthcare system of Tamil Nadu. Therefore we performed this cross-sectional study that attempts to gain a preliminary understanding of the insider's perspective.

Methods

The study population included students from one of the prominent colleges in Chennai (the capital of Tamil Nadu) which is a non-profit organization having several constituent institutes within the campus and has adequate representation from the entire state of Tamil Nadu from all the strata of the society. The institution from where we collected the data for this study, is almost a century old and is always ranked as one of the best in the country in terms of ratings on all parameters for academic excel-

lence by both independent and government ranking agencies. It has an eclectic mix of students representing all parts of the country and all parts of the state as well. Moreover, it caters to all socio-economic categories with a policy of affirmative action for all the marginalised viz. women, differently abled, religious and ethnic minorities, and of course socially under-privileged backward communities. Therefore, this institution of higher learning was, in many ways, a conducive starting point because of its eclectic mix and statistically it adequately represented the demographic composition of the State of Tamil Nadu, serving as a cross sectional sample.

A two-stage systematic random sampling method was used to select the samples for the study. The population of the entire college was approximately 10,000. A total of 1050 students were identified based on a two-stage systematic sampling method, where every 3rd student from the list of students with more than 70 per cent attendance was chosen. All the respondents were informed about the purpose of the research and that strict confidentiality would be maintained with the data that was collected from them. Of the 1050 students identified, 289 were absent on the day of data collection. As a result, 761 students took the survey. Along with them, the study also included 23 students who had taken medical leave for more than 50 hours per semester and who were domiciled in Tamil Nadu. Hence, a total of 784 students participated in the survey. The study also had taken into account the excluding those students who do not want to be a part of the study and whose family members were not domiciles of Tamil Nadu.

Both quantitative (structured questionnaire) and qualitative (Focus Group Discussions (FGD) & Case studies) tools were used to collect the data from the selected respondents. The qualitative methods such as FGD and case studies were used to capture the social dynamics in the everyday life of people's lived experience. It is generally accepted by social scientists that observing the processes involved in social behaviour helps in understanding the health status of people as well. Moreover, qualitative and micro enquiries help to correct, complement and explain the quantitative data [14]. Of the 784 respondents who took the survey, 103 students participated in the focus group discussion. Finally, SPSS was used to analyse the quantitative data. Qualitative data was used to support the quantitative data analysis.

Results

The respondents of the study were both Undergraduate (UG) and Post-Graduate (PG) students (77 & 23 per cent respectively) in the age group of 16-22. The majority (85 per cent) of the respondents were males as the institute where the survey was conducted is a college for men. Most of the respondents of the study (62 per cent) were living with their families in the urban and sub-urban areas of Chennai while the rest hailed from rural areas. They were from different districts of the State and stayed either in the hostels or in their relatives' houses. Though most of the respondents were men (n=665) compared to women (n=119) (Figure 1), it should be noted that there was no statistically significant difference (p>0.05) in the data collected from families, between male and female students (Table 1). Hence, it may be considered that the representation of women though smaller does not contribute to any significant difference to the outcome.

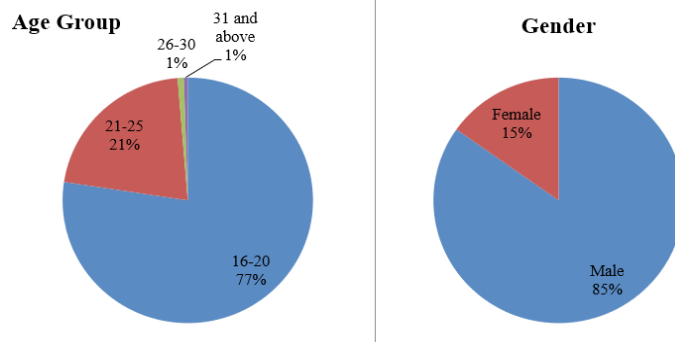


Figure 1: Age Group and Gender of the 784 students participated in the survey which shows that number of males were significantly more than females and majority of the respondents are in the age group of 16-20 years.

Table 1: Health seeking behaviour of families between male and female students.

| | Male (n=665) | Female (n=119) | p-value |
|---|--------------|----------------|---------|
| Does your family go for regular health check-ups? | 31% | 37% | 0.549 |
| Health Facility preference | | | |
| PHC | 91% | 91% | 0.951 |
| Private clinic | 87% | 90% | 0.391 |
| Private Hospital | 92% | 92% | 0.293 |
| Alternative Medicines | 63% | 62% | 0.164 |
| Traditional methods | 58% | 54% | 0.697 |
| Charitable Trust | 46% | 45% | 0.092 |

Figure 2 describes the access to healthcare facilities which shows that public healthcare facilities are the most easily available for access based on proximity also reiterating the fact that public healthcare infrastructure is well developed in Tamil Nadu.

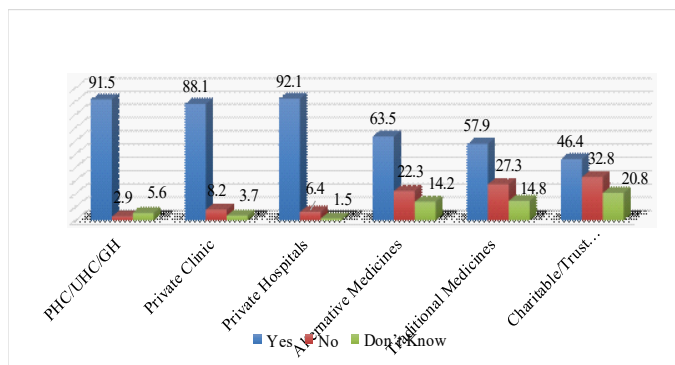


Figure 2: Response on access to healthcare facilities showing that public healthcare facilities are the most easily available for access.

The results showed that 81% of the respondents were hospitalized for various illnesses in private Hospitals, 16.3 percent in public healthcare facilities and only 2.3 per cent in Charitable/Trust run hospitals.

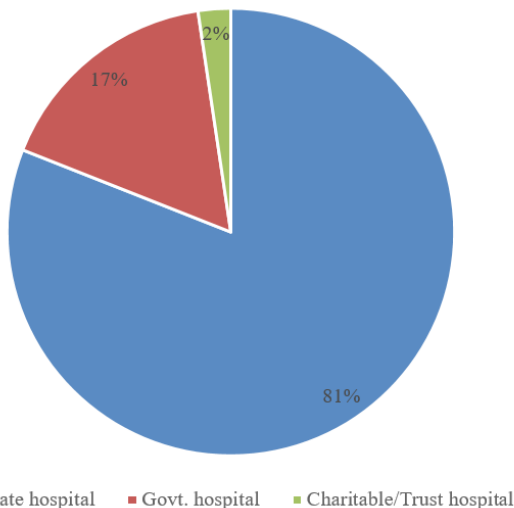


Figure 3: Facility type where respondents were hospitalized for previous illnesses.

When choice of each type of facility was enquired, choice of private healthcare was only marginally high (74.2%) compared to public health care facilities (68.1%). Reasons to prefer government hospitals are provided in Table 2. People in fact equated public health care facilities on par with the private or even better than private in terms of competency of doctors, which was captured in the FGD but the issues existing in public health care facilities were also pointed out (Table 3).

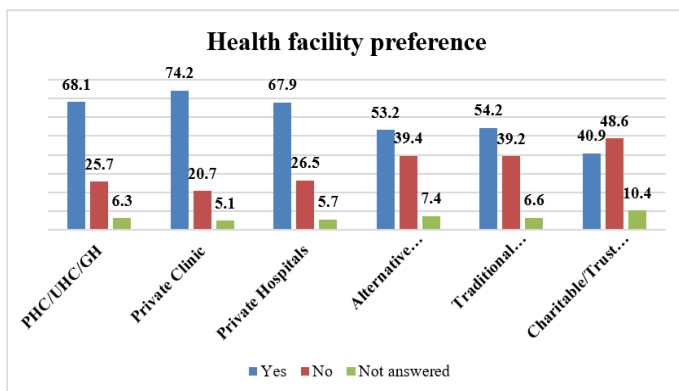


Figure 4: Preference of each type of health facility with choice of private healthcare was only marginally high compared to public health care facilities.

Table 2: Reasons to choose public health care facilities.

| | |
|----|--|
| 1. | Presence of very competent senior doctors |
| 2. | It costs less. |
| 3. | If the patient knows the doctors personally then they access public healthcare facilities as they expect them to be treated better |
| 4. | Certain super-specialty departments are found only in government hospitals. |
| 5. | Patients with chronic diseases prefer public healthcare facilities to avoid escalation of cost. |
| 6. | A more entrenched and sophisticated corruption exists in private hospitals, where the treatment is made expensive. |
| 7. | When there is an epidemic, people visit public healthcare facilities, since supplies are initially available only at government hospitals. |

Table 3: Reasons to not choose public health care facilities.

| | |
|----|---|
| 1. | They are unhygienic and filthy. |
| 2. | Doctors are unprofessional and rude. |
| 3. | The staff and rude and even abuse the patients. |
| 4. | There is a social stigma attached, among the middle class, in using public healthcare facilities |
| 5. | There is rampant corruption at all levels, especially at lower levels. |
| 6. | Vaccines, medicines, and materials are sold in the black market and are not used for the patients |

In terms of surgical treatment, there was an equal per cent of preference of public and private hospitals for small intestine surgery. With the rest of the types of surgeries, despite the higher preference for private hospitals, there is at least one third preference of government hospitals for Adenoid removal, Brain surgery, Breast surgery/biopsy, Colon/large intestine/intestinal Bypass/Bariatric and Heart valve replacement surgeries.

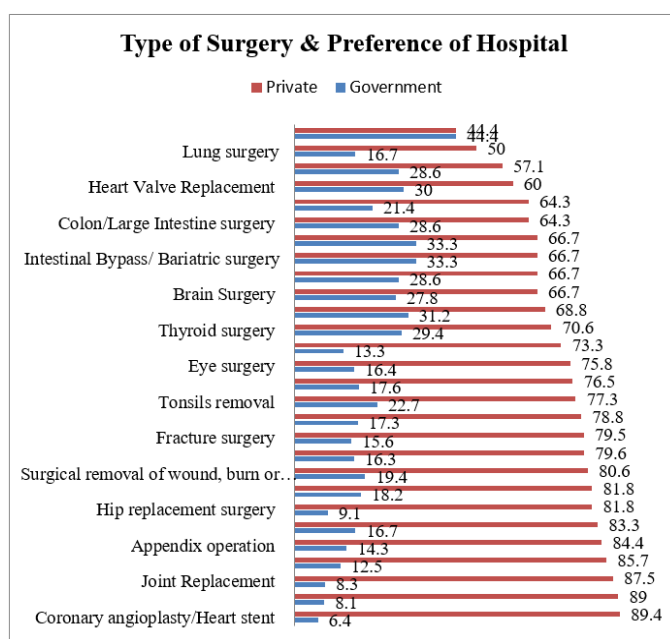


Figure 5: Type of Surgery & Preference of Hospital showing equal per cent of preference of public and private hospitals for small intestine surgery and at least one third preference for other types of surgeries.

Yet another thing which was inferred from the FGD was that, only a small portion of the people (13%) claimed that they have enough money to go to private hospitals. This reveals that the affordability of the people of private healthcare is actually low. Further, more than 80 % across rural and urban areas have claimed that private hospitals are very expensive and the fear of medical exploitation as the most predominant reasons for not willing to go for private hospitals for treatment. Only 50% of the respondents informed that they were able to mobilize funds for the treatments like surgeries from their savings. 26.3% have sold and pledged jewellery for getting debts. 4.9% sold their property. The remaining 35.6% borrowed money from banks and money lenders.

Another finding was that the preference of private hospitals for child birth was high among people from different strata of the society but among specifically for sub-altern communities 42.5 per cent preferred public healthcare facilities again pointing out to the affordability factor.

FGD revealed that there were many instances, when patients with medical emergencies were taken to nearby private clinics but proper treatment could not be given. Then the patients were taken to public healthcare facilities where the doctors were highly competent and could save the patient. In the FGD the respondents mainly said that public healthcare facilities if could be modified to overcome the issues plaguing them, their choice will definitely be public healthcare set-ups and not private. Respondents also informed about non-availability of a single system to regulate public and private health care set-ups in which the patient can be provided with adequate option to choose the facility of choice mainly by ease of access rather than looking into factors such as quality of treatment, maintenance of the facility and affordability.

Discussion

Tamil Nadu has been a forerunner in medical and paramedical education, training and healthcare services, with the first medical institution in the whole country “The Government General Hospital” started as a British hospital to treat sick soldiers by the British East India Company in 1664 [15]. The Madras Medical College was established in 1835 making it the third oldest medical college in India. It is interesting to note that Madras Medical College website had the ‘first X-ray outfit obtained for the general hospital in the year 1900 a mere five years after the discovery of X-rays, the first in South East Asia [16]. In the recent years, Tamil Nadu has been producing the highest number of doctors in the country [17].

Tamil Nadu, especially Chennai, is considered the medical hub of India as most of the best healthcare facilities are located in this city and doctors hailing from and educated in Tamil Nadu have built some of the greatest hospitals and healthcare facilities in different fields of medicine such as cardiology, ophthalmology, oncology, orthopaedics etc., within and outside India [18].

Public health infrastructure is well advanced in Tamil Nadu. The state has 12 teaching hospitals, 26 District Headquarters hospital, 162 Taluk Hospital, 11 Mobile Medical Units, 1409 Primary Health Centers [19] with a bed strength of 32409 under the Director of Medical Education (DME), 25722 beds under the Director of Medical and Rural and Preventive Medicine (DM &RHS), 17058 beds under the Director of Public Health and Preventive Medicine (DPH) in public sectors [8] with a population to bed ratio of 1: 1089 Beds [20].

The study results showed that though prior hospitalization was mainly in private healthcare set-ups, validating the reports from literature that In Tamil nearly 45 per cent of population gets private treatment for their ailments. Still, the new information obtained from the results of the present study is that when asked specifically about choice of each type of health care facility, the choice of public health care systems was only slightly low than private health care set-ups and for surgeries, people preferred public-health care set-ups as much as they would for private set-ups due to the high competency of doctors in public health care set-ups and the affordability of public-health care set-ups. In the public hospital the average medical expense for hospitalization is approximately less than 10 USD to a maximum of 200 USD while in private hospitals it is 1000 to 7000 USD. The expenditure through private hospitalisation is 73 times higher than the expenditure incurred in the public hospital [21]. Additionally, FGD revealed the issues which have to be corrected in public healthcare set-ups and the respondents want those to

be rectified enable public-healthcare set-ups be actually used by the people to its fullest capacity.

The analysis also calls for setting up of more private-public partnerships and formation of a system to manage and regulate patient flow to both public and private health care set-ups based on ease of access and availability of treatment rather than affordability and quality.

Conclusion

Tamil Nadu has got one of the best health-care systems in the country. Majority of the people use private-health care facilities for hospitalization but are mindful of the facilities available at public-health care set-ups in Tamil Nadu and would like to select such facilities, if they can be improved to provide quality and hygienic care. There is a felt need to standardize the system and warrant, through an efficient and standardized process flow, that these health-care centres, both government and private, are run efficiently & in collaboration to provide affordable and quality health care to all.

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