PATIENT SATISFACTION AND PERCEPTIONS ABOUT QUALITY OF HEALTHCARE AT A PRIMARY HEALTHCARE CENTRE OF THANJAVUR DISTRICT, TAMIL NADU[1]

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ABSTRACT

Background: Quality of services shows a variation between the patient and the provider. Therefore, it needs to be explored whether the quality can explain the utilization of government healthcare.

Objectives: This paper attempts to assess the utilization of healthcare services and patient satisfaction about PHC of Thanjavur district to observe the variation in the travel pattern with reference to accessibility keeping in view the age and sex wise variation.

Database and design: Interviews were conducted among the patients at each of the service delivery points in the PHC to assess the utilization of services and the satisfaction of clients with the available services.

Results: Most respondents rated the services to be of good quality on various parameters of health delivery. The factors affecting utilization of primary health care services provided by the government were easy accessibility, low cost, less waiting time and presence of health personnel.

Conclusions: Provision of quality primary healthcare services to patients can result in better utilization of services at the primary level, thereby reducing the unnecessary burden of secondary and tertiary level facilities in addition to improving the health status of the community.

Keywords: Primary Healthcare services, Patients satisfaction, Healthcare quality, Accessibility.

1. INTRODUCTION

Quality health care means doing the right thing, at the right time, in the right way, for the right person and having the best possible results. As medical science and technology have advanced, and patients have become more complex, the health care system has not been able to provide consistently high quality care to all. Research on the quality of care shows that the health care system

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falls short in translating knowledge into practice, and applying new technology safely and in a timely manner.

Contemporary developments in social sciences reveal that health is not only a biomedical phenomenon, but one which is influenced by social, psychological, cultural, economic and political factors of the people concerned. In the way of providing primary healthcare services, the Government of India has made impressive growth in establishment of primary healthcare institutions across rural, tribal and hard-to-reach areas. However, shortcomings in the delivery of primary health care services have resulted in lesser utilization rates. All healthcare providers and programmes in our country have crushing emphasis on quantitative aspect of service delivered, which means that, in a quest to chase runaway targets, we neglect the concept of quality of care, which is also a right of patients. Many public and private groups are working to improve and expand health care quality measures. The goal is to make these measures more reliable, uniform, and helpful to consumers in making health care choices.

Improving client perceptions of service quality has become a central concern to health managers, policy makers and researchers in recent years. Consequences of low-perceived quality of care include poor compliance with treatment and advice, failure to pursue follow-up care and dissuading others from seeking care. Perceptions of service quality assume additional importance in Thanjavur district, where the perceived legitimacy of the government may depend partially on its ability to convince the population that it can deliver essential services.

People's perception about quality of care often determines whether they seek and continue to use services. The public health sector is plagued by uneven demand and perceptions of poor quality. The situation is further compounded by lack of drugs, long travel and waiting times. Such failures can play a powerful role in shaping patients negative attitudes and dissatisfaction with health care service providers and health care itself. Studies to assess these parameters are limited for this region; therefore this study was conducted to assess the utilization of health services provided in OPDs in a Primary Healthcare Centre of Thanjavur District and to ascertain the satisfaction of clients with the provided services.

2. HEALTH CARE

Health is the act of taking preventative or necessary medical procedures to improve a person's well being. This may be done with the administering of medicine, surgery or other alterations in person's life style. These services are typically offered through a health care system made up of hospitals and physicians.

3. QUALITY OF HEALTHCARE

Health care quality refers to a level of value of any health care resources as determined by some a measurement. Using data on the availability of inputs from a nationally representative survey of primary health centres, a composite measure of structural quality of care for primary health centre was developed with a view to examine its geographical variation, associations with mortality and healthcare utilisation, and the determinants of better quality, giving particular attention to the role of management.

4. RURAL HEALTHCARE IN THANJAVUR DISTRICT

In the infrastructure of healthcare facilities of Thanjavur, the manpower position is not very satisfactory. We find all the levels of the health institutions lack the availability of the required manpower. While the sub centers and PHCs mainly have insufficient paramedical staff, the Community healthcare centres also have a crunch of specialist doctors. Availability of better physical infrastructure in public health facilities can become more or less ineffective in providing quality health service due to inadequate human resources. In our sample in Thanjavur, we found more people depending upon the public health facilities than on the private health care facilities. Almost 74% people went to public health facilities and only 26% went to the private health care facilities.

5. SELECTION OF STUDY AREA

Medical geography studies the geographical environment of human society and its influence on health of man. In this direction the present study helps to understand how the socio economic status of healthcare performance of patients is governed by behavior medical factors. Thanjavur District lies on the east of Tamil Nadu. It is situated between 9^0 50'and 11^0 25' of the northern latitude and between 78^0 45'and 79^0 25' of the eastern longitude (Fig.1). It extends to an area of 3411 sq. kms. Geographically Thanjavur is situated in the midway along the course of river Vadavar and Vennar at an altitude of 57 meters above mean sea level. The climate is tropical

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and the district falls under the category of medium and high rainfall region with average rainfall around 1020

mm. Majority of the rain is received through North East Monsoon (October to early December).

Fig.1

6. AIM AND OBJECTIVES

The main objectives of the study to analyze the patient satisfaction and perceptions about quality of healthcare at a Primary healthcare centre of Thanjavur district. An analysis of the utilization of healthcare services and patient satisfaction about PHC of Thanjavur district to observe the variation in the travel pattern with reference to accessibility keeping in view the age and sex wise variation.

7. DATA COLLECTION AND METHODOLOGY

To fulfill the above objectives, the information was collected from both primary and secondary sources. The data area collected through a survey of patients who have utilized the PHCs seeking health care for various types of illnesses. There were totally 560 samples who were interviewed by direct questionnaire method. The Primary data suitable coded were converted in the form of univariate, bivariate and multivariate tables to represent the characteristics in the form of charts and graphs.

8. POPULATION CHARACTERISTICS

Thanjavur district had a total population of 2405890 persons in 2011 provisional census. Spread over an area 3411sq.km. There were about 1182416 men according to 2011 census and 1096638 men in 2001 census marking an increase of 85778 men over the previous census. During 2001 there were about 1119500 women, which increased to 1223474 in 2011 census. The study area has an average population density of about 650 persons per sq.km in 2001 census. It has increased to 705 persons per sq.km in 2011. In 2011 men constitute 49.15 percent of the total population and women 50.85 percent of the total population. The sex ratio was 980 during 2001 and 966 during 2011 as (Table 1).

Literate accounted for 1476256 persons (66.61 percent) in 2001 and increased to persons 74.41 percent in 2011. There were about 814354 males 74.26 percent classed as literate in 2001 and 79.86 percent in 2011 census. There were about 661902 females 59.12 percent classed as literates in 2001. This increased to persons 69.21 percent in 2011 census.

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**Table. 1 Thanjavur District
Population Characteristics – (2001- 2011)**

Characteristics	2001	%	2011	%
Total Population	216138	-	405890	-
Male Population	096638	49.48	182416	49.15
Female Population	119500	50.52	223474	50.85
Rural Population	467577	66.22	554531	64.61
Urban Population	748561	33.78	51359	35.39
Density per sq.km	-	649.70	-	05.33
Sex Ratio	-	979.58	-	66.44
Literates	476256	66.61	790998	74.44
Male Literacy	814354	74.26	44264	79.86
Female Literacy	561902	59.12	46734	59.21

 Source: *Census of Tamilnadu, 2001, 2011*

9. PATIENTS SATISFACTION AND PERCEPTION OF PRIMARY HEALTHCARE CENTRE

9.1 Rural Medical Services

Table. 2 the medical service available in an area is also important for the study on disease related matters. Among the respondents 93% of them were satisfied with medical service available in Thanjavur district and about 6% of them were not satisfied with the facilities available in the study area (Fig.2).

Table.2 Distribution of the Respondents of Rural Medical Services

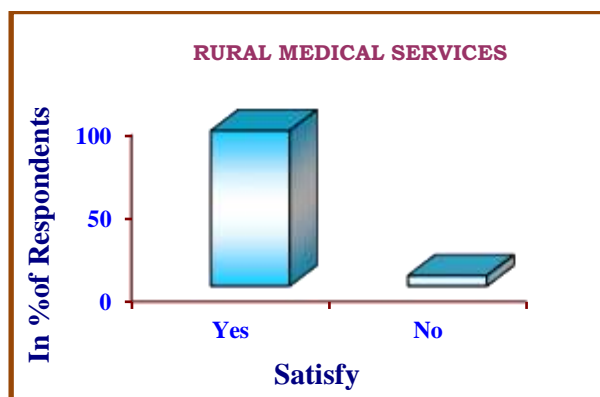| Satisfy	No. of Respondents	Percentage
Yes	524	93.57
No	36	6.43
Total	560	100

Source: Compiled by the author.

Fig.2

9.2 Visits to Healthcare Centre

The visit by the rural population to healthcare centre is analyzed in table 95 percent of the people in the rural area visited PHC's (Table. 3) and those who visited government hospital is 3 percent. People visiting private health facility is only 0.54 percent (Fig.3).

Table.3 Distribution of the Respondents of Visit of Healthcare Centre

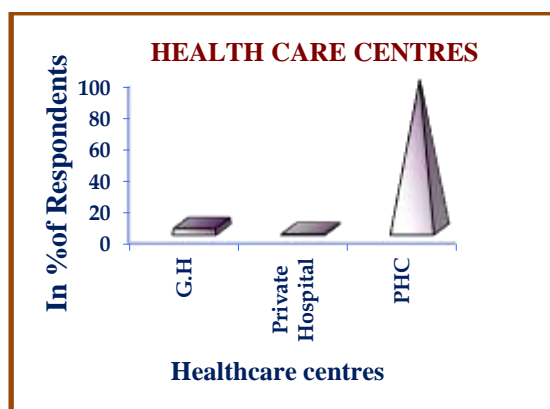| Health centre	No. of Respondents	Percentage
G.H	22	3.93
Private Hospital	3	0.54
PHC	535	95.54
Total	560	100

Source: Compiled by the author.

Fig.3

9.3 Cost of Treatment

In the sample survey, (Table. 4) about 15 percent of the respondents spend less than 100 Rupees for their treatment and 27 percent of the respondents (Table no.4) spent Rs.100 – 150 for the treatment. Likewise 16 percent of the respondents spend Rs.150 – 300 and 3 percent of the people spend more than 300 rupees. 39 percent did not spend any money for treatment (Fig.4).

Table.4 Distribution of the Respondents of Cost of Treatment

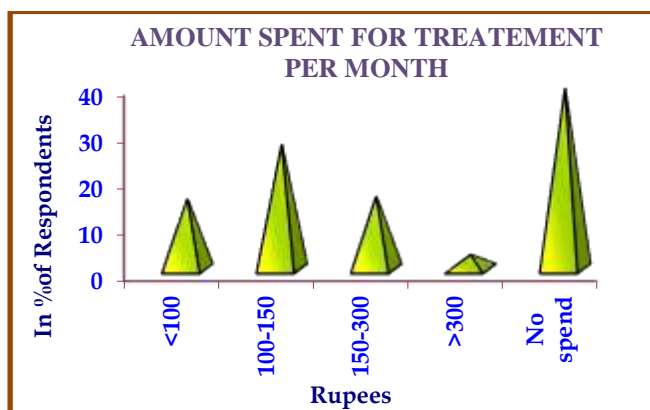| Amount (Rs.)	No. of Respondents	Percentage
<100	85	15
100-150	151	27
150-300	88	16
>300	17	3
Not spend	219	39
Total	560	100

Source: Compiled by the author.

Fig .4

9.4 Treatment Preferred

The type of treatment that people choose is analyzed in table. 5 About 91.96 percent of the respondents avail non medicine treatment and 6 percent of the respondents follow Siddha treatment (Table.5). 0.18 percent of the respondents follow Homeopathic and Ayurvedha treatment 1.25 percent of the respondents follow Traditional treatment (Fig. 5). In all blocks the two main systems of treatment is Allopathy and Siddha. Once in a week Homeopathy and Ayurvedha system of treatments are given. In some PHC naturopathy is also practiced.

Table.5 Distribution of the Respondents on Treatment Preferred

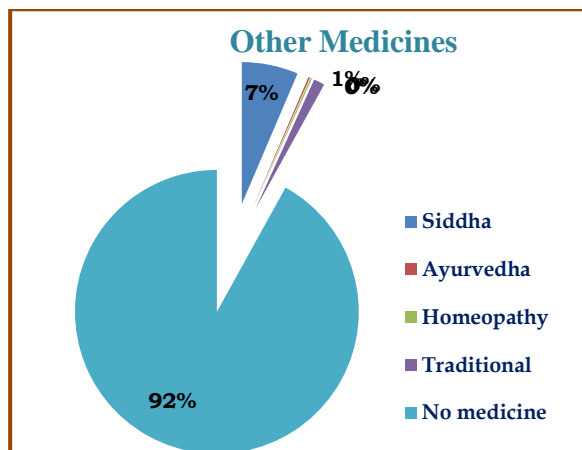| Other medicine	No. of Respondents	Percentage
Siddha	36	6.43
Ayurvedha	1	0.18
Homeopathy	1	0.18
Traditional	7	1.25
No medicine	515	91.96
Total	560	100

Source: Compiled by the author.

Fig.5

9.5 Satisfaction of Medical Services

The medical services available in an area and satisfaction of the services are analyzed in table.6 Among the respondents 50.54 percent of them are satisfied (Table. 6) with medical service available in Thanjavur district in block wise PHCs and about 48 percent of them said that it is good and 0.36 percent of people are highly satisfied in the rural medical services and those not satisfied covered 0.89 percent (Fig.6).

Table.6 Distribution of the Respondents about Satisfaction of Medical Services

Treatment	No. of Respondents	Percentage
Satisfied	283	50.54
Highly satisfied	2	0.36
Good	270	48.21
Not satisfied	5	0.89
Total	560	100

Source: Compiled by the author

Fig.6

10. TRANSPORT FACILITIES ON HEALTH CARE SYSTEMS

10.1 Transport Facilities

Table.7 reveals that there are considerable differences in the movement pattern among the different groups. The transport facilities available to hospitals are a major determinant according to the analysis. About 95 percent of the respondents have Accessibility to Health care centres and 4 percent (Table no.7) of them have no Accessibility because the locations of the PHCs are far away from their residence (Fig.7).

Table.7 Distribution of Respondents Transport Facilities

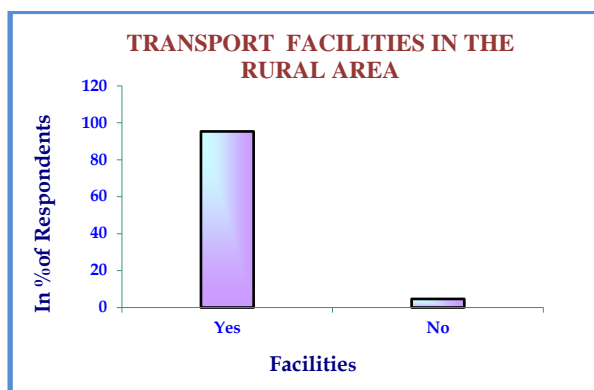| Facility	No. of Respondents	Percentage
Yes	534	95.36
No	26	4.64
Total	560	100

Source: Compiled by the author.

Fig.7

10.2 Availability of Public Transport

Table.8 shows the availability of public transport to the respondents is analyzed. Most frequent service is available to 45 percent of the respondents and somewhat frequent service to 43 percent of the respondents in the rural areas. Infrequent transport services were available for 8 percent of the respondents. No public transport was available for 2 percent of the respondents in Thanjavur district (Fig.8).

Table.8 Distribution of the Respondents on Availability of Public Transport

Public Transport	No. of Respondents	Percentage
Most Frequent	255	45.54
Somewhat Frequent	242	43.21
Infrequent	50	8.93
Not at all	13	2.32
Total	560	100

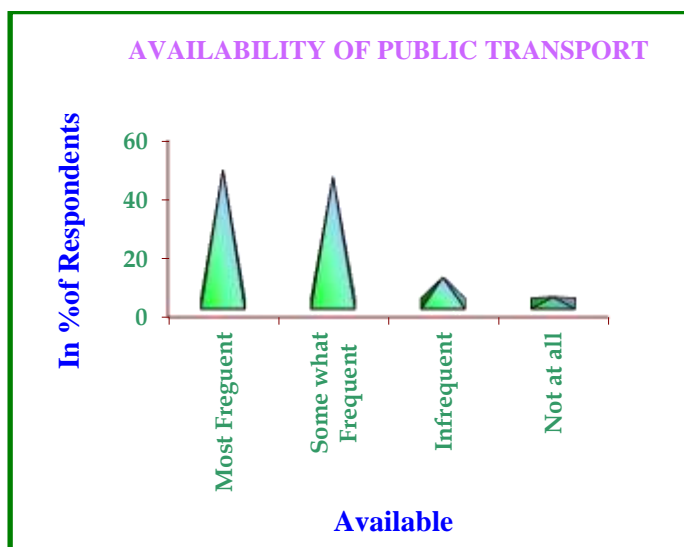*Source: Compiled by the author.*

Fig. 8

10.3 Distance of Health Care Centre

Table.9 the distance between the residence and health centre is an important aspect in the planning of health care. About 41% of the respondents have less than 2 Km of distance between PHC and their residence and 30% of the respondents are more than 2 - 4 Km away from the Health centre. Likewise 14% of the respondent are 4 – 6 Km away from the Health centre and 13% of the respondents are 6 Km away from the Primary Health Centre (Fig.9).

Table.9 Distribution of the Respondents on Distance of Health Care Centre

Distance	No. of Respondents	Percentage
<2	235	41.96
2 – 4	168	30.00
4 – 6	83	14.82
>6	74	13.22
Total	560	100

Source: Compiled by the author.
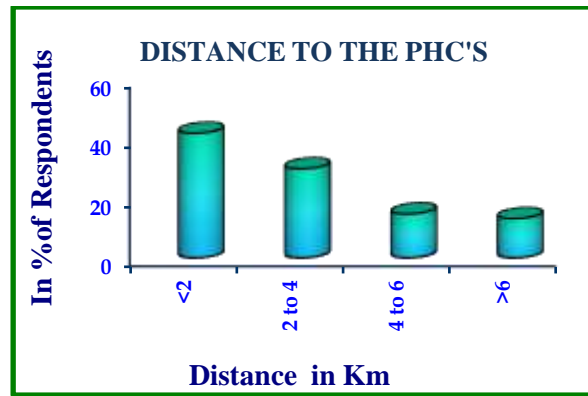
Fig. 9

10.4 Mode of Transportation

Table.10 clearly shows that the socio-economic status of the people by the mode of transportation. Public conveyance is preferred by about 37 percent of the respondents. 33 percent go on foot. 20 percent in the rural areas use bicycle. Two wheeler users are 6 percent (Fig.10).

Table.10 Distribution of the Respondents on Mode of Transportation

Mode	No. of Respondents	Percentage
Walk	187	33.39
Cycle	113	20.18
Auto	13	2.32
Two wheeler	35	6.25
Bus	212	37.86
Total	560	100

Source: Compiled by the author.

Fig.10

10.5 Accessibility of Location of Healthcare Centre

The accessibility of health facility is analyzed in (Table no 11), 36 percent of the respondents have very high accessibility to the Healt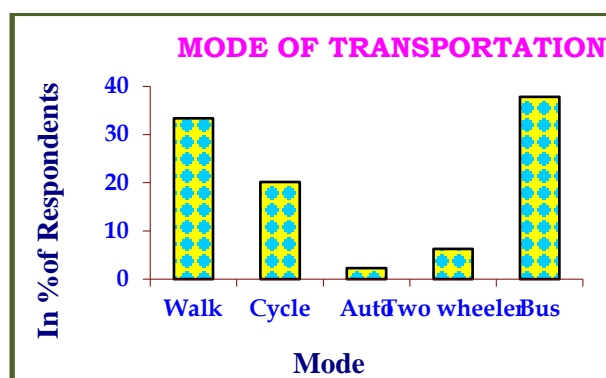h facility and 59 percent of them have somewhat accessible and for the remaining 4 percent it is just accessible and it is not accessible for 1 percent of the respondents (Fig.11).

Table.11 Distribution of the Respondents on Location of Healthcare Centre

Location	No. of Respondents	Percentage
High Access	205	36
Somewhat Access	329	59
Accessible	21	4
Not Accessible	5	1
Total	560	100

Source: Compiled by the author.
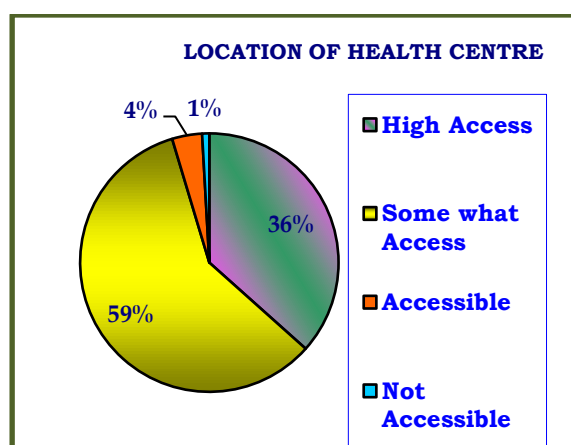
Fig. 11

11. SPATIAL DISTRIBUTION OF PRIMARY HEALTH CARE SYSTEM

The rural character is highly dominant in almost all the blocks except those blocks having a high proportion of population living in the large and medium sized urban centres. (Fig.12) There are 58 primary health centres in the district as on 2001 (at present in 2011 there are about 61 PHC's). Each Primary healthcare centre on an average has between 14 to 18 Health Sub Centres (HSC). There are totally 310 health Sub Centres spread over the district providing health services to 589 villages. PHC is served by health manpower of two doctors, one doctor in general health side and one lady doctor on family

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planning in Primary healthcare centres. Besides the detailed manpower structure involving paramedical and non paramedical staff, the health sub centre is administrated mainly by trained multipurpose workers. Hence, it is clearly seen that Primary healthcare centre is a multipurpose unit rendering a major part of its services to outpatient care.
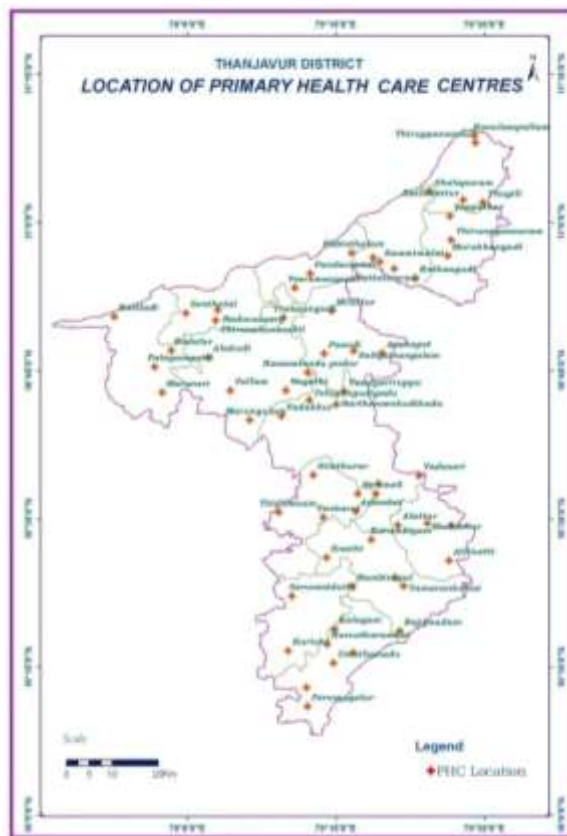
Fig.12

Table.12   Sex Wise Variation in the Travel Pattern of Primary Healthcare Centres

S.no.	Name of the PHC	Travel Behaviour of Males			Travel Behaviour of Females		
		Minimum	Maximum	Mean	Minimum	Maximum	Mean
1	**NADUCAUVERY**	0.60	5.49	3.35	0.88	4.15	2.96
2	THIRUVALAMBOZHIL	0.76	3.56	2.54	1.00	1.21	1.61
3	SENTHALAI	0.80	4.04	2.82	0.73	4.98	3.22
4	**KABISTHALAM**	0.90	4.87	3.34	0.70	2.10	1.75
5	PANDARAVADAI	0.60	3.91	2.56	0.53	4.62	2.84
6	VEERAMANGUDI	0.80	2.93	2.27	0.46	2.32	1.62

7	**PATTESWARAM**	1.63	3.36	3.31	0.41	3.69	2.26
8	CHOLAPURAM	0.56	1.47	1.30	0.66	1.00	1.16
9	S.P.KOIL	1.60	5.62	4.41	0.67	1.37	1.36
10	SWAMIMALAI	0.66	2.10	1.71	0.80	1.20	1.40
11	KOTHANGUDI	2.83	3.97	4.82	1.16	3.09	2.71
12	**KONULLAMPALLAM**	2.00	3.18	3.59	0.42	1.13	0.99
13	KEELAKATTUR	1.73	9.17	6.32	0.52	2.55	1.80
14	THUGILI	0.90	1.87	1.84	0.51	1.10	1.06
15	THIRUPPANANDAL	1.79	5.00	4.29	0.31	1.24	0.93
16	**MELLATTUR**	1.26	2.21	2.37	0.62	2.25	1.75
17	SALIYAMANGALAM	0.76	2.66	2.09	0.57	2.30	1.72
18	AMMAPETTAI	0.55	5.20	3.15	0.74	2.67	2.08
19	POONDI	0.41	5.25	3.04	0.89	3.27	2.53
20	**ALATHUR**	0.86	4.67	3.20	0.53	1.09	1.08
21	PERIYAKOTTAI	0.35	1.09	0.90	0.32	1.83	1.24
22	ATHIVETTI	0.62	2.43	1.84	0.63	4.35	2.81
23	MADUKKUR	0.64	4.36	2.82	0.47	1.95	1.45
24	**MURUKKANGUDI**	1.07	5.39	3.77	0.89	4.15	2.97
25	THIRUNAGESWARAM	0.74	2.92	2.20	0.71	2.19	1.81
26	VEPPATHUR	0.86	4.96	3.34	0.70	3.18	2.29
27	**THONDARANPATTU**	0.01	5.13	2.58	1.51	3.68	3.35
28	VADASERI	1.08	4.22	3.19	0.83	6.14	3.90
29	PAPANADU	1.30	3.40	3.00	0.93	1.19	1.53

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30	TELUGANKUDIKADU	0.86	3.46	2.59	0.55	1.36	1.23
31	VADAKKUR	0.53	4.18	2.62	0.90	1.55	1.68
32	VANDAYARIRRUPPU	1.39	3.33	3.06	1.11	3.10	2.66
33	NORTH.VENKADU	0.20	1.27	0.84	0.78	6.50	4.03
34	**ALAGINAYAKIPURAM**	1.12	4.07	3.16	0.61	5.25	3.24
35	PERUMAGALUR	0.54	5.49	3.29	0.66	1.85	1.59
36	KURUVIKARAMBAI	1.99	5.51	4.75	0.90	1.51	1.66
37	UMATHANADU	0.56	3.38	2.25	0.77	3.14	2.34
38	**SERUVAVIDUTHY**	0.60	5.68	3.44	0.58	2.97	2.07
39	KURICHI	2.46	5.00	4.96	0.98	3.17	2.57
40	KALAGAM	1.33	6.58	4.62	0.71	3.44	2.43
41	**THIRUVONAM**	0.41	8.17	4.50	0.56	1.89	1.51
42	SILATHURAR	0.72	5.65	3.55	0.86	2.89	2.31
43	ADHAMBAI	0.71	3.93	2.68	0.52	0.94	0.99
44	VENKARAI	0.69	8.15	4.77	0.96	3.15	2.54
45	NEMMELI	1.68	3.35	3.36	0.79	1.30	1.44
46	**BUDALUR**	1.36	3.89	3.31	0.60	2.07	1.64
47	PALAYAPATTI	0.89	2.94	2.36	0.94	2.14	2.01
48	KOVILADI	0.80	5.70	3.65	0.80	5.35	3.48
49	MARANERI	1.04	3.08	2.58	0.80	2.81	2.21
50	**VALLAM**	1.18	6.57	4.47	0.95	1.27	1.59
51	NAGATHI	2.03	2.57	3.32	0.42	1.62	1.23
52	K.PUDUR	0.74	1.98	1.73	0.63	1.31	1.29

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53	MARUNGULAM	1.61	6.48	4.85	0.81	4.08	2.85
54	ALAKUDI	1.20	2.32	2.36	0.74	1.11	1.30
55	THENNANKUDI	0.86	4.33	3.03	0.96	1.91	1.92
56	**THAMARANKOTTAI**	0.76	2.13	1.83	0.68	2.04	1.70
57	NATTUSALAI	0.61	4.30	2.76	0.88	6.53	4.15
58	RAJAMADAM	2.20	4.96	4.68	0.83	3.07	2.37
59	ENATHI	3.49	5.00	5.99	0.85	5.88	3.79
60	NAMBIVAYAL	1.72	3.50	3.47	0.43	4.18	2.52
61	KARAMBAYAM	1.38	4.90	3.83	0.66	5.57	3.45
	Sum of the value X =	**54.59**	**214.96**	**62.07**	**36.32**	**141.21**	**06.93**
	Average Value $\overline{X}$ =	**0.89**	**3.50**	**2.66**	**0.60**	**2.31**	**1.75**

Source: Compiled by the Author.

Men traveled a longer distance than women were shown in Table 12 and Fig. 13. All the blocks experienced minimum travel except one or two. Peravorani (3.3) and Thiruvidaimaruthur (2.8), which fall below the average mean distance indicate the men travel pattern is confined to shorter distance. In the case of women the minimum average distance traveled is 0.60 Km as against 0.89 Km in the case of men. The mean distance traveled to avail the health facility is 2 Km whereas in the case of females it is 1.75 Km.
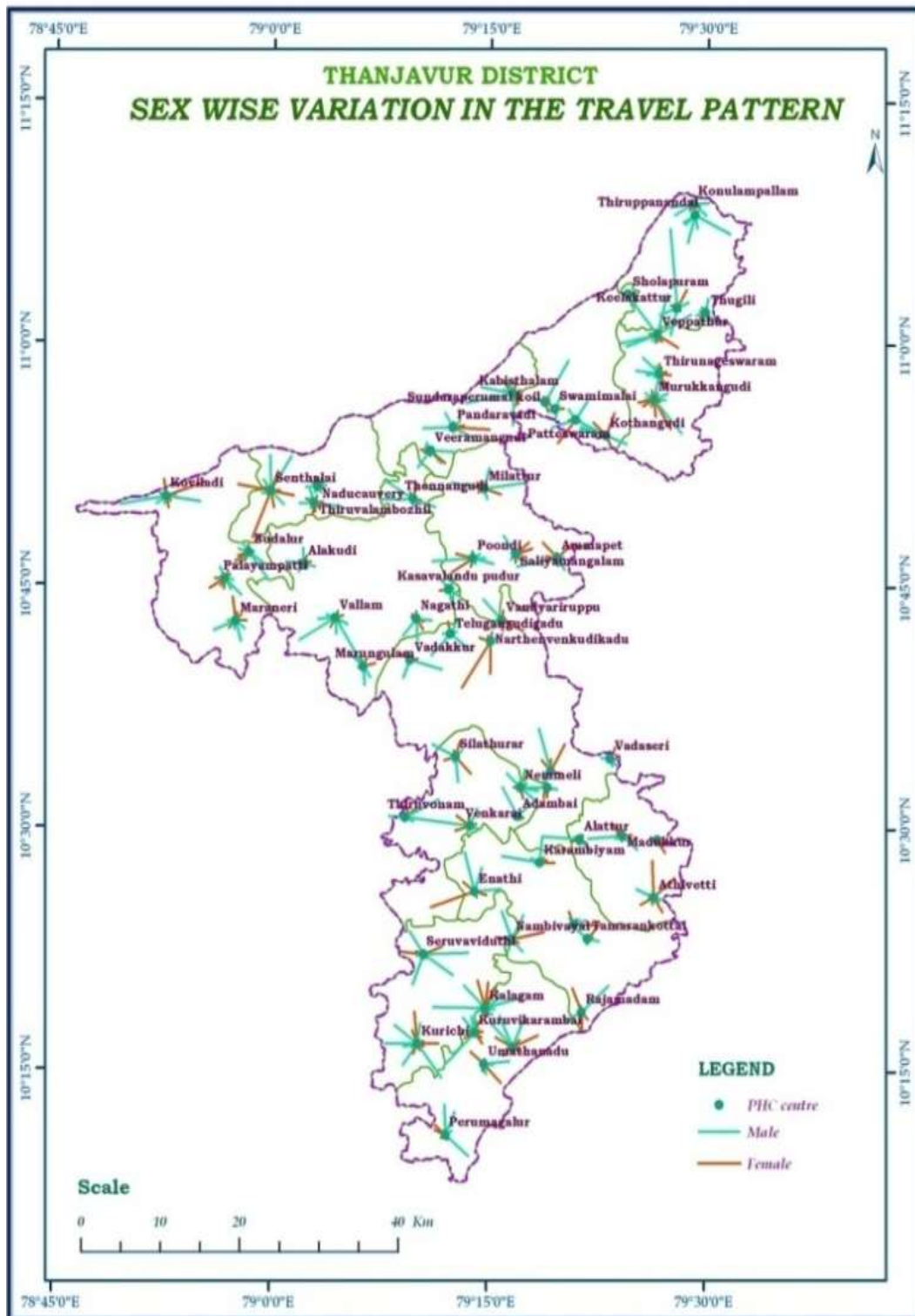
Fig. 13

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12. RESULTS AND DISCUSSION

Most clients in this study showed dissatisfaction with drug availability. Similar perception of clients about improvement in the system of drug supply and for increased working hour's i.e. 24 hours service was also reported from Thanjavur district. A study conducted at district level reported that a low percentage of respondents received free medicine from the sub health centres. Hence patient satisfaction observed in the present study cannot be extrapolated to all regions of the district. The study concludes that if health services are available to people within close reach, are inexpensive and provide comprehensive care for the family group under one roof health seekers would prefer to utilize services at the primary level rather than opting for going to higher facilities.

Minimizing negative perceptions of health services, reinforcing favorable perceptions and engaging non-users of services may lead to increased utilization of health services in Afghanistan, contribute to the stability of the government and advance its efforts to rebuild the health system.

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Conflict of interest: None

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