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# **Original Research Article**

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# Doctor shopping behaviour and its determinants among people with chronic diseases in rural Kancheepuram district, Tamil Nadu: a cross-sectional study

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#### **ABSTRACT**

**Background:** Doctor shopping is defined as the practice of patient seeking multiple health care providers without making efforts to coordinate care or informing physicians of the multiple care givers for the same illness or to procure prescription drugs illicitly. This study was planned to explore the doctor shopping behaviour and its determinants among people with chronic diseases in rural Kancheepuram district, Tamil Nadu.

**Methods:** A cross sectional study was conducted among patients of chronic diseases residing in Sembakkam village, Kancheepuram District, Tamil Nadu. Data was collected using a pre-tested semi-structured schedule adopted from Agarwal et al will be used.

**Results:** Prevalence of doctor shopping was found to be 73.7% among the study population which is visiting more than one doctor for the same diagnosis. The main reason given by the participants for consulting more than one doctor was consistence of the symptoms (34%) followed by location of the health facility (15.9%) and non-acceptance of the diagnosis (15.5%).

**Conclusions:** Patient education, good interpersonal communication skills, and health system strengthening measures can increase responsiveness of the community toward the health systems and thereby reduce doctor shopping behaviour.

Keywords: Cross sectional study, Doctor shopping, Rural

# INTRODUCTION

Doctor shopping is defined as the practice of patient seeking multiple health care providers without making efforts to coordinate care or informing physicians of the multiple care givers for the same illness or to procure prescription drugs illicitly. Even though, Consumer Protection act states to sought second opinion as the right of the patient, it often leads to lack of continuum of care and increasing health care cost. Doctor shopping

behaviour ranges from 6.3% to 53% depends upon the definition of doctor shopping and sample of the study. Literature studies have cited physician related factors, illness related factors and psychological factors of the patients as the important predictors of doctor shopping. It often reflects the trust of the patient over the physician. There has been a major metamorphosis in the trust of patients over health care system from blind faith to a calculated and strategic approach over a period of time

because of changing socio-political environment of health care system in India.<sup>3</sup>

Moreover, non-communicable diseases accounts for 53% of burden of disease in India and about 20% of India's population is having at least one chronic disease and over 10% of the population is having more than one chronic diseases. Growing burden of the chronic diseases and lack of adequate trust of patients over health care system has immense effect on the pattern of health seeking behaviour of chronic patients. There is still a paucity of research on the evaluation of doctor shopping behaviour in the context of chronic diseases in India. So, this study is planned to explore the doctor shopping behaviour and its determinants among people with chronic diseases in rural Kancheepuram district, Tamil Nadu.

#### **METHODS**

A cross sectional study was conducted among patients of chronic diseases residing in Sembakkam village, Kancheepuram District, Tamil Nadu. Data was collected using a pre-tested semi-structured schedule adopted from Agarwal S et al was used.<sup>2</sup> It was translated to local language Tamil while interviewing the participants. Details of their socio demographic data was asked in part I of the schedule, part II consist of questions pertaining to their doctor shopping behaviour and part III consist of questions pertaining to factors responsible for doctor shopping behaviour. The data was collected between June and August 2018 among patients with chronic diseases residing in Sembakkam village of Kancheepuram district, Tamil Nadu. Patients with chronic diseases like diabetes mellitus, hypertension, coronary artery diseases, chronic obstructive pulmonary diseases, cancer, stroke, tuberculosis, and other diseases for which they are taking treatment for more than three months and adults of age 18 and above (either male or female) residing in this area was included in the study and Patients who were not willing to participate in the study was excluded from the study. Houses that were locked even after three visits were not included.

Sampling method and sample size- Prevalence of chronic diseases was found to be 20% in the general population of India, as reported by Partnership to Fight Chronic Disease advisory report was used to calculate the required sample size.<sup>4</sup>

N=[ $Z \alpha 2 p \times q$ ]/d2=[ $4 \times 20 \times 80$ ] / (5)2=256, (where  $Z \alpha 2$ =4, p=20, q=80 and d=5% absolute error). Assuming a 5% non-response rate, the final sample size is approximated to 270. List of patients with chronic diseases will be obtained local village health nurse and will be line listed. Sample size of 270 will be chosen using simple random sampling method through random number table.

Institution Ethical committee clearance was obtained. Participants were explained about the study and importance of their participation in the study. Those who were willing to take part in the study were included after getting an informed consent.

#### Statistical analysis

The collected data were entered in Microsoft Excel and analyzed using the statistical software SPSS version 21.0 Chi square test was applied for testing difference in proportion and a p value less than 0.05 was considered statistically significant.

### Operational definition

Doctor shopping

For the study purpose doctor shopping is defined as the behavior of visiting more than one doctor for the same disease or diagnosis.

#### **RESULTS**

A total of 270 people participated in the study, out of which majority of the study participant were male (59.6%), more than 30% of the participants were in the age group of 51-60 years. Most of the study participants were Hindus by religion (76.7) followed by Christians and Muslims. 60% of the participants belong to nuclear family and maximum numbers (85.2%) of participants were married at the time of study. Maximum numbers of the study participants were educated up to UG/PG (28.5%) followed by diploma holders (22.2%), more than 20% of the study participants were semiskilled workers followed by skilled workers (13%), about 30% of the participants belongs to upper middle class according to modified BG Prasad classification (Table 1).

Table 1: Socio demographic profile of the study participants (n=270).

Variable	Frequency	%
Sex		
Male	161	59.6
Female	109	40.4
Age group in years		
1-30	51	18.9
31-40	34	12.6
41-50	56	20.7
51-60	84	31.1
Above 61	45	16.7

Continued.

Variable	Frequency	0/0
Religion	- · ·	
Hindu	207	76.7
Muslim	24	8.9
Christian	39	14.4
Type of family		
Nuclear	162	60.0
Joint	21	7.8
Extended nuclear	87	32.2
Marital status		
Single	31	11.5
Married	230	85.2
Separated	2	0.7
Widowed	7	2.6
Education		
No schooling	21	7.8
Less than primary school	41	15.2
Primary school completed	7	2.6
High school completed	19	7.0
Higher secondary completed	38	14.1
Intermediate/diploma	60	22.2
UG/PG	77	28.5
Professional	7	2.6
Occupation		
Professional	7	2.6
Semi-Professional	38	14.1
Skilled	35	13.0
Semi-skilled	55	20.4
Unskilled	25	9.3
Student	21	7.8
Unemployed/house wife	89	33.0
Socio economic status		
Class I	27	10.0
Class II	79	29.3
Class III	56	20.7
Class IV	67	24.8
Class V	41	15.2
CIUDD 1	71	13.2

Table 2: Factors attributing to doctor shopping (n=270).

Variables	Frequency	%
Health insurance		
Yes	85	31.5
No	185	68.5
Attitude of the patient to his/her disease		
Positive	211	78.1
Negative	59	21.9
Types of health facilities sought for the treatment		
Government	61	22.6
Private	108	40.0
Both	101	37.4
Frequency of health check up		
Monthly visit	45	16.7
Once in 3-6 months	165	61.1
More than 6 months once	15	5.6
Irregular in check ups	45	16.7

Continued.

Number of doctors consulted since the time of diagnosis   71	Variables	Frequency	%			
1         71         26.3           2         78         28.9           3         86         31.9           4         24         8.9           >4         11         4.1           Simultaneous consultation with more than one physician           Yes         12         4.4           No         31         11.5           NA         227         84.1           Reasons*           Inconvenient consultation hours         9.0         2.92           Long waiting hours         2.0         0.65           Location of the health facility         49         15.91           Lack of better communication         7         2.27           Persistence of symptoms         105.0         34.09           Worsening of the symptoms         5         1.62           Non acceptance of the diagnosis         48.0         15.58           Non acceptance of the treatment         5.0         1.62           Lack of trust over doctors         1.0         0.32           Lack of trust over doctors         1.0         0.32           Lack of variability of regular physicians         4.0         1.30           Prescription of	* v					
3         86         31.9           4         24         8.9           >4         11         4.1           Simultaneous consultation with more than one physician           Yes         12         4.4           No         31         11.5           NA         227         84.1           Reasons*           Inconvenient consultation hours         9.0         2.92           Long waiting hours         2.0         0.65           Location of the health facility         49         15.91           Lack of better communication         7         2.27           Persistence of symptoms         105.0         34.09           Worsening of the symptoms         5         1.62           Non acceptance of the diagnosis         48.0         15.58           Non acceptance of the treatment         5.0         1.62           Lack of trust over doctors         1.0         0.32           Lack of trust over doctors         1.0         0.32           Lack of availability of regular physicians         4.0         1.30           Prescription of costly drugs         2.0         0.65           Other reasons         71.0         23.05      <	ĕ	71	26.3			
4       24       8.9         >4       11       4.1         Simultaneous consultation with more than one physician         Yes       12       4.4         No       31       11.5         NA       227       84.1         Reasons*         Inconvenient consultation hours       9.0       2.92         Log waiting hours       2.0       0.65         Location of the health facility       49       15.91         Lack of better communication       7       2.27         Persistence of symptoms       105.0       34.09         Worsening of the symptoms       5       1.62         Non acceptance of the diagnosis       48.0       15.58         Non acceptance of the treatment       5.0       1.62         Lack of trust over doctors       1.0       0.32         Lack of trust over doctors       1.0       0.32         Lack of varialability of regular physicians       4.0       1.30         Prescription of costly drugs       2.0       0.65         Other reasons       71.0       23.05         Choice of the physician depends on	2	78	28.9			
No	3	86	31.9			
Simultaneous consultation with more than one physician   Yes	4	24	8.9			
Yes         12         4.4           No         31         11.5           NA         227         84.1           Reasons*         Inconvenient consultation hours         9.0         2.92           Long waiting hours         2.0         0.65           Location of the health facility         49         15.91           Lack of better communication         7         2.27           Persistence of symptoms         105.0         34.09           Worsening of the symptoms         5         1.62           Non acceptance of the diagnosis         48.0         15.58           Non acceptance of the treatment         5.0         1.62           Lack of trust over doctors         1.0         0.32           Lack of availability of regular physicians         4.0         1.30           Prescription of costly drugs         2.0         0.65           Other reasons         71.0         23.05           Choice of the physician depends on	>4	11	4.1			
Yes         12         4.4           No         31         11.5           NA         227         84.1           Reasons*         Inconvenient consultation hours         9.0         2.92           Long waiting hours         2.0         0.65           Location of the health facility         49         15.91           Lack of better communication         7         2.27           Persistence of symptoms         105.0         34.09           Worsening of the symptoms         5         1.62           Non acceptance of the diagnosis         48.0         15.58           Non acceptance of the treatment         5.0         1.62           Lack of trust over doctors         1.0         0.32           Lack of availability of regular physicians         4.0         1.30           Prescription of costly drugs         2.0         0.65           Other reasons         71.0         23.05           Choice of the physician depends on	Simultaneous consultation with more than one physician					
NA         227         84.1           Reasons*            Inconvenient consultation hours         9.0         2.92           Long waiting hours         2.0         0.65           Location of the health facility         49         15.91           Lack of better communication         7         2.27           Persistence of symptoms         105.0         34.09           Worsening of the symptoms         5         1.62           Non acceptance of the diagnosis         48.0         15.58           Non acceptance of the treatment         5.0         1.62           Lack of trust over doctors         1.0         0.32           Lack of availability of regular physicians         4.0         1.30           Prescription of costly drugs         2.0         0.65           Other reasons         71.0         23.05           Choice of the physician depends on         37         9.32           Consultation fee         37         9.32           Holding of post graduate degree in that specialty         85         21.41           Word of mouth referral by neighbours         126         31.74           Better infrastructure of the hospital         2         3.79           Location of heal		12	4.4			
Reasons*         Inconvenient consultation hours         9.0         2.92           Long waiting hours         2.0         0.65           Location of the health facility         49         15.91           Lack of better communication         7         2.27           Persistence of symptoms         105.0         34.09           Worsening of the symptoms         5         1.62           Non acceptance of the diagnosis         48.0         15.58           Non acceptance of the treatment         5.0         1.62           Lack of trust over doctors         1.0         0.32           Lack of availability of regular physicians         4.0         1.30           Prescription of costly drugs         2.0         0.65           Other reasons         71.0         23.05           Choice of the physician depends on	No	31	11.5			
Inconvenient consultation hours   9.0   2.92     Long waiting hours   2.0   0.65     Location of the health facility   49   15.91     Lack of better communication   7   2.27     Persistence of symptoms   105.0   34.09     Worsening of the symptoms   5   1.62     Non acceptance of the diagnosis   48.0   15.58     Non acceptance of the treatment   5.0   1.62     Lack of trust over doctors   1.0   0.32     Lack of availability of regular physicians   4.0   1.30     Prescription of costly drugs   2.0   0.65     Other reasons   71.0   23.05     Choice of the physician depends on     Consultation fee   37   9.32     Holding of post graduate degree in that specialty   85   21.41     Word of mouth referral by neighbours   126   31.74     Better infrastructure of the hospital   5   1.26     Advertisement of the hospital   23   5.79     Location of health facility   103   25.94     Number of patients visiting the hospital   18   4.53     Satisfaction with the current treating physician   117   43.3     Settle facility   49   18.1     Still not satisfied   2   0.7	NA	227	84.1			
Long waiting hours         2.0         0.65           Location of the health facility         49         15.91           Lack of better communication         7         2.27           Persistence of symptoms         105.0         34.09           Worsening of the symptoms         5         1.62           Non acceptance of the diagnosis         48.0         15.58           Non acceptance of the treatment         5.0         1.62           Lack of trust over doctors         1.0         0.32           Lack of availability of regular physicians         4.0         1.30           Prescription of costly drugs         2.0         0.65           Other reasons         71.0         23.05           Choice of the physician depends on         Tonsultation fee         37         9.32           Holding of post graduate degree in that specialty         85         21.41           Word of mouth referral by neighbours         126         31.74           Better infrastructure of the hospital         5         1.26           Advertisement of the hospital         23         5.79           Location of health facility         103         25.94           Number of patients visiting the hospital         18         4.53           S	Reasons*					
Location of the health facility	Inconvenient consultation hours	9.0	2.92			
Lack of better communication         7         2.27           Persistence of symptoms         105.0         34.09           Worsening of the symptoms         5         1.62           Non acceptance of the diagnosis         48.0         15.58           Non acceptance of the treatment         5.0         1.62           Lack of trust over doctors         1.0         0.32           Lack of availability of regular physicians         4.0         1.30           Prescription of costly drugs         2.0         0.65           Other reasons         71.0         23.05           Choice of the physician depends on	Long waiting hours	2.0	0.65			
Persistence of symptoms         105.0         34.09           Worsening of the symptoms         5         1.62           Non acceptance of the diagnosis         48.0         15.58           Non acceptance of the treatment         5.0         1.62           Lack of trust over doctors         1.0         0.32           Lack of availability of regular physicians         4.0         1.30           Prescription of costly drugs         2.0         0.65           Other reasons         71.0         23.05           Choice of the physician depends on         37         9.32           Consultation fee         37         9.32           Holding of post graduate degree in that specialty         85         21.41           Word of mouth referral by neighbours         126         31.74           Better infrastructure of the hospital         5         1.26           Advertisement of the hospital         23         5.79           Location of health facility         103         25.94           Number of patients visiting the hospital         18         4.53           Satisfaction with the current treating physician         75         27.8           Partial satisfaction         117         43.3           Yet to decide on the satisfa	Location of the health facility	49	15.91			
Worsening of the symptoms         5         1.62           Non acceptance of the diagnosis         48.0         15.58           Non acceptance of the treatment         5.0         1.62           Lack of trust over doctors         1.0         0.32           Lack of availability of regular physicians         4.0         1.30           Prescription of costly drugs         2.0         0.65           Other reasons         71.0         23.05           Choice of the physician depends on         37         9.32           Consultation fee         37         9.32           Holding of post graduate degree in that specialty         85         21.41           Word of mouth referral by neighbours         126         31.74           Better infrastructure of the hospital         5         1.26           Advertisement of the hospital         23         5.79           Location of health facility         103         25.94           Number of patients visiting the hospital         18         4.53           Satisfaction with the current treating physician         75         27.8           Fully satisfied         75         27.8           Partial satisfaction         117         43.3           Yet to decide on the satisfaction level<	Lack of better communication	7	2.27			
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Lack of trust over doctors       1.0       0.32         Lack of availability of regular physicians       4.0       1.30         Prescription of costly drugs       2.0       0.65         Other reasons       71.0       23.05         Choice of the physician depends on       Consultation fee       37       9.32         Holding of post graduate degree in that specialty       85       21.41         Word of mouth referral by neighbours       126       31.74         Better infrastructure of the hospital       5       1.26         Advertisement of the hospital       23       5.79         Location of health facility       103       25.94         Number of patients visiting the hospital       18       4.53         Satisfaction with the current treating physician       75       27.8         Partial satisfaction       117       43.3         Yet to decide on the satisfaction level       27       10.0         Can't say       49       18.1         Still not satisfied       2       0.7	Non acceptance of the diagnosis	48.0	15.58			
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Prescription of costly drugs         2.0         0.65           Other reasons         71.0         23.05           Choice of the physician depends on	Lack of trust over doctors	1.0	0.32			
Other reasons         71.0         23.05           Choice of the physician depends on         37         9.32           Consultation fee         37         9.32           Holding of post graduate degree in that specialty         85         21.41           Word of mouth referral by neighbours         126         31.74           Better infrastructure of the hospital         5         1.26           Advertisement of the hospital         23         5.79           Location of health facility         103         25.94           Number of patients visiting the hospital         18         4.53           Satisfaction with the current treating physician         75         27.8           Partial satisfaction         117         43.3           Yet to decide on the satisfaction level         27         10.0           Can't say         49         18.1           Still not satisfied         2         0.7	Lack of availability of regular physicians	4.0	1.30			
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Holding of post graduate degree in that specialty  Word of mouth referral by neighbours  126 31.74  Better infrastructure of the hospital 5 1.26  Advertisement of the hospital 23 5.79  Location of health facility 103 25.94  Number of patients visiting the hospital 18 4.53  Satisfaction with the current treating physician  Fully satisfied 75 27.8  Partial satisfaction 117 43.3  Yet to decide on the satisfaction level 27 10.0  Can't say 49 18.1  Still not satisfied 2 0.7	Choice of the physician depends on					
Word of mouth referral by neighbours       126       31.74         Better infrastructure of the hospital       5       1.26         Advertisement of the hospital       23       5.79         Location of health facility       103       25.94         Number of patients visiting the hospital       18       4.53         Satisfaction with the current treating physician         Fully satisfied       75       27.8         Partial satisfaction       117       43.3         Yet to decide on the satisfaction level       27       10.0         Can't say       49       18.1         Still not satisfied       2       0.7	Consultation fee	37	9.32			
Better infrastructure of the hospital       5       1.26         Advertisement of the hospital       23       5.79         Location of health facility       103       25.94         Number of patients visiting the hospital       18       4.53         Satisfaction with the current treating physician       Fully satisfied       75       27.8         Partial satisfaction       117       43.3         Yet to decide on the satisfaction level       27       10.0         Can't say       49       18.1         Still not satisfied       2       0.7	Holding of post graduate degree in that specialty	85	21.41			
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Satisfaction with the current treating physician           Fully satisfied         75         27.8           Partial satisfaction         117         43.3           Yet to decide on the satisfaction level         27         10.0           Can't say         49         18.1           Still not satisfied         2         0.7		103	25.94			
Fully satisfied       75       27.8         Partial satisfaction       117       43.3         Yet to decide on the satisfaction level       27       10.0         Can't say       49       18.1         Still not satisfied       2       0.7	Number of patients visiting the hospital	18	4.53			
Partial satisfaction         117         43.3           Yet to decide on the satisfaction level         27         10.0           Can't say         49         18.1           Still not satisfied         2         0.7						
Yet to decide on the satisfaction level2710.0Can't say4918.1Still not satisfied20.7						
Can't say       49       18.1         Still not satisfied       2       0.7						
Still not satisfied 2 0.7						
		2	0.7			

<sup>\*</sup>Multiple response question.

In this study, 78% of the study participants had positive attitude towards their disease, private health facility is the most preferred health facility for their illness (40%). Regarding the frequency of health check up 61% of the participants does health check up every 3-6 months,

A total 73.7% of the participants consulted more than one doctor at the time of diagnosis out of which 4.4% was simultaneous consultation with two doctors (Table 2).

The main reason given by the participants for consulting more than one doctor was consistence of the symptoms (34%) followed by location of the health facility (15.9%) and non-acceptance of the diagnosis (15.5%) and regarding the choice of physician, word of mouth (31.7%) was the major reason for the participants to choose a doctor followed by the location of the health facility

(26%). And only 27.8% of the study participants were fully satisfied by the current treating physician (Table 2).

In this study the prevalence of doctor shopping is found to be 73.7%, and this practice is more among males compared to female, participants in the age group of 51-60 years and people living in nuclear family. From the results it is found that the participants who are diploma or degree holder practice doctor shopping more compared to other. The association between the gender, age, religion, marital status, occupation and doctor shopping were found to be statistically significant (Table 3).

The practice of doctor shopping was found to be more among the participants who have a positive attitude towards their diseases, those who are using both government and private health facility and those who does a health check up every 3-6 months. The association

between doctor shopping and duration of chronic diseases, type of health facility visited and frequency of

the health checkup were found to be statistically significant (Table 4).

Table 3: Association between doctor shopping and socio demographic profile of the study participants (n=270).

Variable		Doctor s	Doctor shopping		Chi-square value
variable		Yes	No	Total	(p value)
Sex	Male	53	108	161	0.026 (0.002)
SEX	Female	18	91	109	9.026 (0.003)
	21-30	3	48	51	
	31-40	4	30	34	
Age	41-50	20	36	56	23.879 (0.000)
	51-60	28	56	84	
	Above 61	16	29	45	_
	Hindu	56	151	207	
Religion	Muslim	2	22	24	5.331 (0.062)
	Christian	13	26	39	
	Nuclear	42	120	162	
Type of family	Joint	7	14	21	0.594 (0.743)
	Extended nuclear	22	65	87	
	Single	0	31	31	
	Currently married	70	160	230	45.050 (0.000)
Marital status	Separated	0	2	2	17.973 (0.000)
	Widowed	1	6	7	
	No schooling	8	13	21	
	Less than primary school	11	30	41	
	Primary school completed	2	5	7	_
T 1	High school completed	4	15	19	5 220 (0 624)
Education	Higher secondary completed	11	27	38	5.239 (0.634)
	Intermediate/diploma	19	41	60	
	UG/PG	15	62	77	_
	Professional	1	6	7	
	Professional	1	6	7	
	Semi-professional	13	25	38	
	Skilled	10	25	35	<del>_</del>
Occupation	Semi-skilled	18	37	55	14.543 (0.020)
	Unskilled	9	16	25	
	Student	0	21	21	
	Unemployed/ house wife	20	69	89	
	Class I	8	19	27	
Dom conito	Class II	16	63	79	
Per capita income	Class III	17	39	56	2.273 (0.686)
meome	Class IV	19	48	67	
	Class V	11	30	41	

Table 4: Association between doctor shopping and other attributing factors (n=270).

Variable		Doctor sl	Doctor shopping		Chi-square value
Variable		Yes	No	Total	(p value)
<b>Duration of chronic</b>	Less than 2	105	23	128	10.519
Disease in years	3 to 4	65	34	99	
	5 to 6	15	10	25	(0.013)
	Above 6	14	4	18	
Attitude of the patients	Positive	159	52	211	1.359 (0.244)
	Negative	40	19	59	
Family h/o similar complaints	Yes	17	15	32	7.022 (0.005)
	No	182	56	238	7.932 (0.005)

Continued.

Variable		Doctor shopping		Total	Chi-square value
variable		Yes	No	Total	(p value)
	Government	17	44	61	
Type of health facility	Private	83	25	108	100.154 (0.000)
	Both	99	2	101	
	Monthly visit	39	6	45	
Frequency of the health check	Once in 3-6 months	119	46	165	8.350 (0.037)
up	More than 6 months	13	2	15	8.550 (0.057)
	Irregular check-up	28	17	45	
Simultaneous consultation	Yes	24	8	32	0.021 (0.525)
with more than one physician	No	175	63	238	0.031 (0.525)
	Fully satisfied	41	34	75	
	Partial satisfaction	25	92	117	
Satisfaction with the current treating physician	Yet decide on the satisfaction level	1	26	27	46.922 (0.000)
	Can't say	4	45	49	
	Still not satisfied	0	2	2	
Discussion of previous	Yes	54	199	253	
consultation with current physician	No	17	0	17	50.850 (0.000)

#### DISCUSSION

Not many studies on doctor shopping was done in this region of the country, this study found the prevalence of doctor shopping to be 73.7% among the rural population of Kancheepuram district which is consulting more than one doctor for the same diagnosis on their own accord without any doctor's referral. This is one of the few studies which assessed doctor shopping in this region of the country. This was not in concordance to a review which states that the rate of doctor - shopping for general conditions in other countries varies from 6.3 % to 56%. the difference is mainly because in other studies consulting two or three doctors was considered as doctor shopping but in this study patients visiting more than one doctor is considered as doctor shopping. Because of no improvement in symptoms, the doctor shoppers either tend to seek the advice of their family members, friends, and relatives or on their own accord look for alternative physicians.

Out of the patients who were doctor shopping 17 patients are consulting the government physicians while 83 patients are availing private facilities and 99 are availing both government and private facility at present. Change in their treatment facility was mainly due to consistence of the symptoms followed by location of the health facility and non-acceptance of the diagnosis. According to the available literature, there is a change in treatment seeking behavior for a number of reasons like persistence of symptoms, lack of understanding of the diagnosis or the treatment, and/or no improvement in the illness, extended waiting times, inconvenient office hours or locations, undesirable attitude of the physician and insufficient time for communication between the doctor and the patient. In this regard, Yeung et al, determined that extended waiting times contributed to doctor shopping among patients in a Hong Kong community medicine clinic.<sup>5</sup> Feroni et al, reported that physician attitude, particularly being stringent, stern, or strict, as a factor in doctor shopping among French patients in buprenorphine maintenance programs.<sup>6</sup> In another study, the most striking characteristics of doctor-shopping patients were chronicity of illness (p<0.005), inability to understand doctor's explanations (p<0.005), and high general health questionnaire scores (p<0.05).<sup>7</sup>

There is a need for good interpersonal communication skills between the doctor and the patient. Spending of appropriate amount of time for consultation by the physician and education on importance of continuity of care will result in better understanding of the disease condition by the patients. Economic factors in doctor shopping behavior can be addressed by health system measures like strengthening the chronic disease clinics, especially in government hospitals. Implementing a proper referral system with efficient data exchange could also strengthen their care delivery. Seeking multiple physicians leads to poor continuity of care and adds excess costs to health care systems. This can lead to increase trust of the community in government facilities and quality of care received. This can reduce out of pocket expenditures due to chronic diseases as well. The response from the participants might be biased as the study was conducted by a medical professional and smaller sample size were couple of limitations of the study.

#### **CONCLUSION**

This study shows the prevalence of doctor shopping to be 74% in rural area of Kancheepuram district and this change in consultation was mainly due to consistence of the symptoms followed by location of the health facility

and non-acceptance of the diagnosis. Patient education, good interpersonal communication skills, and health system strengthening measures by inversing the quality and quantity of the health centers at rural areas can increase responsiveness of the community toward the health systems and thereby reduce doctor shopping behaviour. Doctor shopping is a worldwide phenomenon that concerns both health care providers and its users. It is therefore in the best interests of all parties to have a deeper understanding of this phenomenon and formulate solutions to address the problem.

#### Recommendations

Keeping in mind the high prevalence of Doctor Shopping, the whole community of this specific population patient education, good interpersonal communication skills, and health system strengthening measures can increase responsiveness of the community toward the health systems and thereby reduce doctor shopping behaviour. Since location of the health facility was one of the reasons for doctor shopping, adequate health services should be provided for the population.

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