

# Treatment seeking Preferences for their Illness among the Fishermen Community in Ennore Creek

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## Abstract

**Background/Objectives:** Treatment seeking behaviour is of prime importance and plays a pivotal role in the well being of the individual as well as the community. Few studies have addressed the morbidity pattern, treatment seeking preferences of specific diseases but yet there is a dearth of literature in general and more so for fishermen community. The aim of this study is to determine the treatment seeking preferences for their illness among the fishermen residing in Ennore Creek situated on the East coast of India. **Methods/Analysis:** A cross sectional study was done among the fishing community in Ennore Creek which is located at the fringe area of North Chennai of Thiruvallur District, Tamil Nadu, India. The cluster sampling method was adopted and 30 clusters were randomly selected by the probability Proportionate to Size (PPS) method. The structured questionnaire was used to collect information regarding details of the illness, details regarding the treatment and about their treatment seeking preferences. The study population included individuals with illness who are living in the nine fishing wards of Ennore Creek for the last six months. Data entry and analysis was done using Statistical Package for Social Sciences (SPSS) version 15. Descriptive statistics were calculated for the treatment seeking preferences for their illness. **Findings:** Among the 780 study participants who have had illness in the last six months, the proportion of subjects who sought care for their illness was found to be 89.2% among the fishing community from all age groups. In this study among the subjects who sought care from a health care provider, 52% subjects sought care from qualified professionals who practiced modern medical care (allopathic system of medicine) or indigenous system of medicine while 43.2% received care from unqualified practitioner or from unqualified drug store salesman and 4.8% subjects received native treatment from unqualified personnel. **Improvements:** The healthcare system in fishing community encompasses care providers ranging from traditional/folk medicine to modern medical care by qualified professionals and by unqualified personnel from both private and public sectors. The picture of healthcare delivery in this fishermen community is alarming as there seems to be large sector of the population receiving treatment of unqualified personnel who lack formal medical training.

**Keywords:** Ennore Creek, Fishermen Community, Treatment Seeking Preferences

## 1. Introduction

Treatment seeking behaviour is of prime importance and plays a pivotal role in the well being of the individual as well as the community<sup>1</sup>. The process of responding to perceived 'illness' or seeking care involves multiple steps<sup>2</sup>. Treatment choice involves a myriad of factors like the demographic characteristics, social circumstances of

the sick individual, type of illness and perceived severity, pre-existing lay beliefs about illness causation. Every individual differ in their choice of treatment sources depending on the accessibility of the available therapeutic options, their perceived efficacy, availability of the care provider, convenience, accessibility to the health facility, opportunity costs, cost of treatment, quality of services and attitude of the healthcare provider<sup>3,4</sup>. These factors

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affect the patronage and utilisation of health services along with the use of other treatment sources such as community pharmacies, drug peddlers, herbal medicine and religious or spiritual care organizations<sup>5</sup>.

Medical pluralism means the existence of several distinct therapeutic systems in a single cultural setting is an important feature of health care delivery system with wide spectrum of therapeutic choices ranging from self-care to folk and western medicine<sup>6</sup>. The highly pluralistic health care system in India comprises of several kinds of systems within: allopathic, homeopathic, ayurvedic, unani, traditional healers, etc, all of which are significant in their presence<sup>7</sup>. Traditional beliefs, customs, social and cultural norms tend to be intertwined with peculiarities of the illness, patient satisfaction with the treatment: This essentially has a bearing and reflects the complexity of their treatment seeking pattern<sup>8</sup>.

Fishermen are socially, economically, educationally disadvantaged and lack their own financial resources in fulfilling their basic needs<sup>9</sup>. Fishermen community is one occupational group with deep rooted cultural beliefs and mores. They are a special group with unfavourable occupational and personal life styles, habits and are vulnerable for injuries and certain specific diseases<sup>10</sup>. Owing to their cultural beliefs and community norms, the life style of the fishermen community varies immensely: Thus has a bearing on the improper prioritization of health care needs, inappropriate utilization of health care services and hence their treatment seeking preferences.

Thus literature on treatment seeking preferences acknowledge the existence of pluralistic system of health-care providers and therefore understanding human behaviour is a prerequisite to change behaviour and their health practices<sup>11</sup>. Information on the existing disease pattern and treatment seeking preferences are essential to provide need based health care delivery to any population. Community based study can only reflect the true picture of disease pattern in a given community and throw light on their treatment seeking preferences<sup>12</sup>. Few studies have addressed the morbidity pattern, treatment seeking preferences of specific diseases but yet there is a dearth of literature in general and more so for fishermen community.

## 2. Materials and Methods

This was a population based study among the fishing community in Ennore Creek which is located at the

fringe area of North Chennai of Thiruvallur District, Tamil Nadu. Ethical clearance was obtained from the Institutional Ethics Committee of Sri Ramachandra Medical College and Research Institute (DU) (REF: IEC – NI/08/ Mar/03/13). Ennore Creek has twenty four wards with a total population of 35,646 out of which nine wards belong to the fishing community with a total population of 14,461. There are sixty streets in the nine wards with 3,219 families that belong to fishing community. The population in Ennore Creek is served by a government municipal dispensary, one private nursing home and ten private modern medical care practitioners.

## 3. Inclusion Criteria

Only individuals with illness who are living in the nine fishing wards of Ennore Creek for the last six months and had given the informed consent were included in the study.

## 4. Sampling Method

The cluster sampling method was adopted and 30 clusters were randomly selected by the Probability Proportionate to Size (PPS) method in a manner which has been described below.

## 5. Sample Size

This study is part of a larger study done on the health seeking behaviour among fishermen community and hence sample size was calculated for the same. The prevalence of health seeking behaviour has been assumed to be 50% (as there are no studies done on the health seeking behaviour among the fishermen community), with alpha error of 5%, limit of accuracy of 10% and a design effect of 2, the minimum sample size required for the study was 768. There were sixty streets in the study area and its cumulative population was prepared for selecting 30 clusters by PPS method. The sampling interval was determined by dividing the total cumulative population (14,461) by the total number of clusters (30). The sampling interval obtained was 482. Thirty clusters (streets) were selected by Probability Proportionate to Size (PPS) method and the number of individuals selected in each cluster was 26 and therefore total number of individuals studied was 780.

## 6. Study Tool

A structured questionnaire was developed which was pretested among the fishermen community residing at Thiruvottriyur, Thiruvallur District, Tamil Nadu (not part of actual study area). The structured questionnaire thus developed solicited information on demographic profile of the study subject, details on illness in the last six months, details of the symptoms of the illness, duration of illness, details regarding the treatment (observation of records were made if available) and about their treatment seeking preferences.

## 7. Data Collection

A written informed consent was obtained prior to the interview. Accordingly 780 study subjects were selected based on the presence of atleast one illness during the last six months. If the household had more than one individual with illness, the individual who had the most recent illness (illness in the last six months up to 7 days prior to the visit of the investigator) was selected as the study subject. After selecting the study subject details regarding their illness were enquired. With regard to the illness, if the study subject had suffered from one illness the details about that particular illness was enquired. If the study subject had suffered from more than one illness, the information of the illness that the subject had in the last six months were enumerated. A numerical value was given to the illness that the subjects had suffered on the chronological order. Since one illness was chosen for the study: The illness that corresponded to the last digit of the selected number from the table of random numbers was taken up for the study and the details for that particular illness were enquired. The random selection of illness was adopted to avoid any kind of bias in selection of the illness and also would facilitate to obtain a fair mix of acute and chronic diseases.

After the selection of the illness, details regarding the treatment seeking preference for that particular illness were obtained. The particulars regarding their treatment seeking preferences encompassed of information as to whether the subject sought care for the illness and if they did, the details about the system of medicine, place and type of health care provider they chose to seek care was obtained.

System of medicine<sup>13,14</sup> includes Allopathy (Modern system of medicine)<sup>15</sup>, Indigenous system of medicine and

Traditional/Native treatment. Indigenous system of medicine includes Ayurveda, Siddha, Unani and Homeopathy. Traditional or Native treatment includes treatment sought from herbalists, spiritual healers, bone setters, snake venom removers and self care<sup>13</sup>. Self care (including self treatment) is any treatment expanding from no medication other than rest to instances when common home remedies (home remedies comprise traditional and modern forms of self-treatment which are commonly available in rural households)<sup>6</sup>, purchasing scheduled drugs without prescriptions, retaining or reusing old medicines, herbal preparations or experimenting with medicines recommended for a relative or a friend are taken without consultation with any health care provider including drug store salesman<sup>13</sup>.

Place of health care provider<sup>14</sup> has been classified as the service providers from the public sector and private sector. Public health sector includes primary health centres, sub centres, community health centres, district hospital/health centre, specialist hospitals and teaching hospitals. Private health sector encompasses of private hospitals, polyclinics, nursing homes and dispensaries, general practitioners and clinics.

Type of health care provider<sup>13,14</sup> are been classified as qualified providers, para-professionals and unqualified providers. Qualified providers are professional allopathic healthcare providers, the registered medical graduates with 5 years of training which includes a year of internship. It also includes Ayurvedic graduates, Unani graduates, Siddha graduates and Homeopathic graduates. Paraprofessionals are semi-qualified healthcare providers comprised of medical assistants, mid-wives, village doctors and community health workers. They have some kind of institutional training of varying length in preventive and basic curative healthcare services<sup>6,13</sup>. Unqualified providers are itinerant and untrained pharmacists, market sellers and road-side quacks<sup>6</sup> are those who do not have any institutional training in diagnosing and treating illnesses but prescribe allopathic medicines<sup>16</sup>. They are also called as popular practitioners who often dispense modern drugs and give injections without biomedical training<sup>15</sup>. There are traditional healers in the private sector (bone setters, village doctors with three months training in diagnosing and treating common ailments mostly from private institutions of dubious quality. Traditional methods include treatment seeking within faith healing and traditional systems of medicine<sup>6</sup>. Drug store salesman (unqualified allopathic) – Despite having no professional training in

addition to dispensing medicine, these drug store salesmen also diagnose, treat illnesses and sell allopathic medicine on demand. These drug retail outlets are mostly unlicensed and unregulated and only few of the salespeople may have 4–6 weeks of certificate course on dispensing drugs<sup>13</sup>.

## 8. Data Compilation and Analysis

Data entry and analysis was done using SPSS version 15. The subjects who sought care from multiple types of care provider, the final type of provider to whom the subjects resorted to was considered for analysis. Descriptive statistics were calculated for the treatment seeking pattern of their illness.

## 9. Results

The study included 780 individuals who were selected based on the history of at least one illness during the last six months. Mean age of the study subjects were 31.8 years, median of 30 years and the age ranged between 3 months to 78 years. It was found that 327 (41.9%) were males while 453 (58.1%) were females.

Among the 780 subjects who had reported to have had illness in the last six months 696 (89.2%; 95% CI from 87%-91.4%) of them sought care while 84 (10.8%; 95% CI from 8%-12.4%) of the study subjects did not seek care<sup>17</sup>. Among the 696 subjects who sought care for their illness, 4 subjects who had suffered from contact dermatitis, firm swelling on the neck, mumps and dark pigmentation around the neck exclusively tried home remedies.

It was found that out of the 780 subjects, 497 of them possessed records regarding their treatment while the remaining 283 subjects (included the 195 subjects who sought treatment, 84 subjects who did not seek treatment and 4 subjects who resorted to home remedies) did not have any records. The subjects who possessed the records, it was found that they had some details regarding their treatment as in a prescription paper or the blister packs of the medicines. Further, it was found that 322 (64.8%) subjects had details regarding their diagnosis while 175 (35.2%) subjects did not have any details about their diagnosis. The diagnosis was made by investigator based on the symptoms described by the study subjects and the medicines taken by them<sup>18</sup>.

Among the 692 subjects who sought care from a health care provider it was found that 152 (22%) subjects sought care from qualified professionals from private sector who

provided allopathic system of medical care (modern medical care), 97 (14%) subjects sought care from qualified professionals from the voluntary health association from private sector who provided allopathic system of medical care (modern medical care), 87 (12.5%) subjects sought care from qualified professionals from public sector who provided allopathic system of medical care (modern medical care), 24 (3.5%) subjects sought care from qualified professionals from the private sector who practiced indigenous system of medicine.

Further, it was found that 231 (33.4%) subjects received care from unqualified personnel from private sector and 68 (9.8%) subjects received care from unqualified private drug store salesman while 33 (4.8%) subjects received native treatment from unqualified personnel from the private sector. The details of the treatment seeking preference for their illness among the study subjects are given below in Table 1 and Table 2.

**Table 1.** Details on availing treatment for various types of illness among the subjects (n = 780)

Types of Illness based on system involved	Treatment Taken		Treatment Not Taken		n = 780	(%)
	n = 696	(%)	n = 84	(%)		
Orthopaedic and Musculoskeletal Disorders	95	84.8	17	15.2	112	14.4
Respiratory Illness	103	97.2	3	2.8	106	13.6
Medical Disorders	81	94.1	5	5.8	86	11.0
Gastrointestinal Disorders	76	89.4	9	10.6	85	10.9
Skin Disorders	64	84.2	12	15.8	76	9.7
ENT Disorders	61	93.8	4	6.2	65	8.3
Gynaecological Problems	42	77.8	12	22.2	54	6.9
Surgical Problems	42	82.4	9	17.6	51	6.5
Eye Disorders	26	78.8	7	21.2	33	4.2
Cardiovascular Illness	23	82.1	5	17.9	28	3.6
Central Nervous System Disorders	26	96.3	1	3.7	27	3.5
Maternal and Child Health Care	24	100	0	0	24	3.1
Genitourinary Disorders	20	100	0	0	20	2.6
Medical Emergencies	7	100	0	0	7	0.9
Dental Problems	6	100	0	0	6	0.8



**Table 2.** Types of illness and the treatment seeking pattern among the study subjects (n = 692)

Illness	Qualified Professional				Unqualified Personnel			Total
	Allopathy Public Qualified	Allopathy Private Qualified	Allopathy Private VHA* Qualified	Indigenous Medicine Private Qualified	Allopathy Private Unqualified Drug Store Salesman	Allopathy Private Unqualified Practitioner	Native Treatment Private Unqualified Practitioner	
	87(12.5)	152(22)	97(14)	24(3.5)	68(9.8)	231(33.4)	33(4.8)	692(100)
Respiratory Illness	4(3.9)	28(27.2)	8(7.8)	4(3.9)	5 (4.9)	54(52.4)	0(0)	103(14.9)
Orthopaedic and Musculoskeletal	2(2.1)	8(8.4)	17(17.9)	6(6.3)	33(34.7)	10(10.5)	19(20)	95(13.7)
Medical Disorders	38(48.1)	14(17.7)	10(12.7)	2(2.5)	2(2.6)	11(13.9)	2(2.5)	79(11.2)
Gastrointestinal Disorders	1(1.3)	16(21.1)	11(14.5)	2(2.6)	15(19.7)	21(27.6)	10(13.2)	76(11)
Skin Disorders	0(0)	8(12.9)	3(4.8)	6(9.7)	0(0)	44(71)	1(1.6)	62(9)
ENT Disorders	0(0)	14(23)	9(14.8)	0(0)	6(9.8)	32(52.5)	0(0)	61(8.8)
Gynaecological Problems	4(9.5)	13(31)	3(7.1)	0(0)	2(4.8)	20(47.6)	0(0)	42(6.1)
Surgical Problems	7(16.7)	6(14.3)	9(21.4)	0(0)	0(0)	20(47.6)	0(0)	42(6.1)
Eye Disorders	0(0)	6(23.1)	13(50)	0(0)	3(11.5)	4(15.4)	0(0)	26(3.8)
CNS Disorders	3(11.5)	16(61.5)	4(15.4)	1(3.8)	1(3.8)	0(0)	1(3.8)	26(3.8)
MCH Care	21(87.5)	2(8.3)	0(0)	0(0)	0(0)	1(4.2)	0(0)	24(3.5)
Cardiovascular Illness	7(30.4)	8(34.8)	8(34.8)	0(0)	0(0)	0(0)	0(0)	23(3.3)
Genitourinary Disorders	0(0)	4(20)	0(0)	3(15)	0(0)	13(65)	0(0)	20(2.9)
Medical Emergencies	0(0)	6(85.7)	1(14.3)	0(0)	0(0)	0(0)	0(0)	7(1)
Dental Problems	0(0)	3(50)	1(16.7)	0(0)	1(16.7)	1(16.7)	0(0)	6(0.9)

\*VHA – Voluntary Health Association

## 10. Discussion

This study was done among the fishermen community and the study population included subjects from all age groups with all types of illness. As this is a part of large study on health seeking behaviour, illness was used only as a reference point for eliciting the treatment seeking preferences with respect to the particular condition.

In this study it was found that among the 692 subjects who sought care from a healthcare provider, 336 (48.5%) subjects sought care from qualified professionals who provided modern medical care (allopathic system of medicine), 24 (3.5%) subjects sought care from qualified professionals who practiced indigenous system of medicine. while 299 (43.2%) received care from unqualified practitioner or from unqualified drug store salesman and 33 (4.8%) subjects received native treatment from unqualified personnel.

In a study by Niraula et al for childhood illness in hilly regions of Nepal it was found that treatment for illness is sought only after home remedies have failed and a large proportion of the population (42%) do not visit modern health facilities and instead seek the help of traditional healers<sup>19</sup>. Another study documenting health seeking behaviour in a hill village reports that 69% of households sought health care when an illness occurred and 26% of them visited traditional healers exclusively while only 19% first visited formal health care institutions<sup>20</sup>. In a study in Western Nepal it was found that medical shop and traditional healers were common sources of medicines. Traditional healers accounted for 28% of the visits to health practitioners<sup>21</sup>. In another study it was found that taking drugs by medical stores without prescription being the most preferred modality of treating the children<sup>22</sup>.

Grace M Mbagaya et al observed that 32.4% mothers purchased and administered drugs for their sick children

without seeking medical attention<sup>23</sup>. Chandrashekhar T Sreeramareddy et al in their study, interviewed 292 mothers and found that 135(46.2%) of the subjects sought treatment from pharmacies, 77(26.4%) of them sought care from allopathic medical practitioners while 26(8.9%) children received traditional/home remedies and 8(2.7%) of them did not seek care<sup>24</sup>. This finding is in concordance with the fact most often the marginalized community seems to receive care predominantly from the traditional healers or from unqualified practitioner/drugstore personnel.

Orthopaedic and musculoskeletal disorders were predominant in 112 (14.4%) subjects<sup>18</sup> and among those who sought care, 33 (34.7%) subjects sought care from unqualified drug store salesman in the private sector while 19 (20%) subjects received native treatment from unqualified personnel in the private sector and 17 (17.9%) sought care from qualified professionals from private voluntary health association who provided modern medical care. It should be admitted that the general belief in the fishermen community is to receive native treatment (bone setters) for fractures, dislocations and spine injuries. It was opined by the participants that aches and pains have become part of their life and they attribute it to their strenuous work, indiscriminate working hours and strain on the skeletal system to balance on the moving boat and to their vulnerable lifestyles. However they also consider it to be a trivial ailment to affect their livelihood and hence resort to purchase over the counter medications from the drug store salesman and seek immediate relief.

In the present study, 106 (13.6%) subjects suffered from respiratory illness<sup>18</sup> and among those who sought care, half of them about 54 (52.4%) subjects sought care from unqualified practitioners in the private sector while (27.2%) subjects sought care from qualified professionals who provided modern medical care in the private sector and only a small fraction of 4 (3.9%) subjects sought care from qualified professionals who provided modern medical care in the public sector. In a study done by Neetu et al it was found that 88 (46%) children were treated by allopathic doctors like paediatrician or general physician in government or private settings while 62(32.4%) children were treated by traditional healers, 19 (10%) children by pharmacists, 11 (5.7%) children by home remedies and 9 (4.7%) children were treated by alternative system of medicine<sup>25</sup>. M Rahman et al in his work has described that for respiratory problems 70.5% of the respondents

took treatment from qualified allopaths while 13.6% took the service from unqualified allopaths and further found that the highest portion of respondents went to qualified doctors' private chamber (31.8%)<sup>12</sup>.

This discrepancy in proportion of subjects utilizing the services from qualified professionals between the present study and reference study is probably because the study population in the reference study were only children and the study population in the present study encompassed individuals from all age groups.

Systemic medical disorders was found in 86 (11%) subjects<sup>18</sup> : Among the 81 (94.1%) subjects who sought care, 2 subjects resorted to home remedies and hence 79 subjects sought care from a health care provider. It was found that 38 (48.1%) subjects sought care from the qualified professionals from the public sector who provided modern medical care, 14 (17.7%) subjects sought care from qualified professionals from the private sector who provided modern medical care while 11 (13.9%) subjects received care from private unqualified practitioners. It is interesting to note that out of 41 subjects who presented with non-communicable diseases<sup>18</sup>, 38 participants sought care from the qualified professionals from the public sector who provided modern medical care. It was opined by the study subjects that owing to the chronic nature of the disease requiring long term medications the preferred to seek care from public sector due to the provision of free medicines.

Gastrointestinal disorders were reported by 85 subjects<sup>18</sup>: Among the subjects who received care for their illness, 36 (47.4%) sought care from private unqualified practitioners and drug store salesman while 27 (35.6%) subjects sought care from qualified professionals from the private sector who provided modern medical care. Sudharsanam et al in their study showed 100% of the study subjects sought allopathic care and among them 65% of them sought care from private practitioners<sup>26</sup>. In another study in Kolkata, 60% subjects went for allopathic system and 35% for private care for diarrheal episodes for children<sup>27</sup>. This discrepancy is because of the fact that the study population in both the reference studies included children while the present study included individuals of all age groups.

It is important to note that the participants with skin diseases and ENT disorders sought care predominantly from unqualified practitioners and unqualified drug store salesman while subjects with eye disorders sought care from qualified professionals from the private sector in

voluntary health association. Upon interaction with the community it was understood that the predominance of seeking care from voluntary health association for eye disorders in this community was attributed to the existence of free camps for cataract surgeries.

Maternal and child health services (antenatal care, postnatal care and immunization) were utilized by all the 24 (3.1%) subjects<sup>18</sup>. It is remarkable to note that 21 (87.5%) subjects sought care from qualified professionals from the public sector. It was admitted by the community that it was due to the incentives that are offered in the public sector.

## 11. Conclusion

Understanding the treatment seeking preferences of a community for their illness is complex yet vital as it largely displays the felt needs and awareness generated in the individual as well as the community.

The existence of pluralistic healthcare delivery system was found to be an important feature in this fishermen community. The healthcare system in this community encompasses care providers ranging from traditional/folk medicine to modern medical care by qualified professionals and by unqualified personnel from both private and public sectors. The picture of healthcare delivery in this fishermen community is alarming as there seems to be large sector of the population receiving treatment of unqualified personnel who lack formal medical training. Although the study population included all age groups, stratification of illness between age groups was not done and hence considered as the limitation of this study.

Planning for provision of healthcare services depends on the health needs, the treatment seeking preferences of the population. The information on the customs, cultural mores, habits, beliefs and superstitions that determine their treatment seeking pattern is the need of the hour for it has important policy implications in health system development. Therefore, it is mandatory for policy makers to emphasize a responsible, productive and competent healthcare workforce as an essential prerequisite for effective and favorable health outcomes<sup>30</sup>.

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## 13. Financial or other Competing Interests

None.

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