Section: Community Medicine

Original Research Article

A CROSS-SECTIONAL STUDY ON HEALTH-SEEKING BEHAVIOUR AMONG FISHERMEN COMMUNITY MOTHERS OF UNDER-FIVE CHILDREN ON CHILD CARE IN CHENGALPATTU DISTRICT

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ABSTRACT

Background: The well-being of children is closely linked to the health-seeking behaviour of their parents, particularly mothers. Among marginalized groups, such as fishermen communities living in coastal, remote, and underserved regions, multiple social, economic and cultural barriers hinder timely and appropriate access to healthcare services. Understanding these behaviours is essential to addressing health disparities and improving child health outcomes in such vulnerable populations. The objective is to study the health-seeking behaviour of Fishermen-community mothers of under-five children during acute illness and to identify the factors associated with the health seeking behaviour. **Materials and Methods:** A community based cross sectional study was conducted among 100 Mothers of Under five children in a Fishermen community, Kovalam, Chengalpattu district of Tamil Nadu over a period of 3 months (May 2024 to July 2024). Data were collected using a semi-structured, interviewer-administered questionnaire. Data were analyzed using SPSS v25. **Result:** The mean age of the mothers was 27± 3.3 years. All children had an acute illness in the past 3months, yet only 42% (95% CI: 32.2–52.3) received appropriate and prompt care. The main reasons for delayed care were use of over-the-counter drugs (58.6%), self-medication (27.6%), and home remedies (13.8%). Most respondents (84%) preferred private healthcare facilities. Appropriate and prompt care was significantly associated with child age ≤ 2 years (OR: 2.86, 95% CI: 1.20–6.80), maternal education above high school (OR: 2.55, 95% CI: 1.12–5.79), living in extended families (OR: 2.68, 95% CI: 1.15–6.23) and mother's perception of illness severity (OR: 137, 95% CI: 31–611). **Conclusion:** Appropriate and prompt health-seeking behaviour among fishermen-community mothers was inadequate, with low public health facility use. Interventions to improve maternal awareness, empower decision-making, and strengthen public healthcare utilization are essential to reduce preventable childhood morbidity and mortality.

INTRODUCTION

In 2020, about 5.2 million children under five died globally, mostly from preventable or treatable causes. Among them, 2.4 million were newborns (<28 days), 1.5 million were infants (1–11 months), and 1.3 million were children (1–4 years). Major causes included prematurity, birth complications, pneumonia, diarrhoea, and malaria. These conditions are largely preventable or treatable with timely, affordable health care interventions.[1] According to the SRS 2022 report, the under-five mortality rate in India is 31 per 1,000 live births, while in Tamil Nadu, it is 14 per 1,000 live births.[2] Although the under‑five mortality is on a declining trend, the burden of morbidity remains high. The major childhood illnesses assessed in the National Family Health Survey-5 (NFHS-5) includes diarrhoea, ARI, Malnutrition and anemia. According to NFHS-5, 69% of under-five children in India were taken to a health facility or healthcare provider for treatment of illnesses, showing a 2% decrease compared to the NFHS-4 data. In Tamil Nadu, 63.8% of children with

acute illness were taken to a health facility, showing a 14% decline from 78% in NFHS-4.[3] Despite the increasing focus on public health interventions to promote child health, neglect by caregivers due to poor awareness, false beliefs and perceptions regarding the disease, and lack of empowerment contribute to increased health risks for children. The fishermen community often residing in coastal, remote, and underserved regions faces multiple social, economic, and cultural barriers that restrict timely and appropriate access to healthcare. These challenges significantly affect maternal health-seeking behaviour for child care, as mothers hold a crucial role in the upbringing of children. There is a paucity of studies assessing healthcare-seeking behaviour for child care among the fishermen community in Tamil Nadu. Therefore, this study was planned to explore the health seeking behaviour on child care among fishermen community and aids in development of interventions.

Objectives:

1. To assess the health-seeking behaviour of Fishermen-community mothers of under‑five children during acute illness in Kovalam, Chengalpattu district.
2. To identify the factors associated with their health‑seeking behaviour.

MATERIALS AND METHODS

This was a community based cross sectional study conducted among 100 mothers of children aged less than five years in fishermen community, with a three month recall period, in Kovalam village, Chengalpattu District, Tamil Nadu. Ethical approval for the study was obtained from the Institutional Ethics Committee (IEC), Madras Medical College, Tamil Nadu (No; IEC-MMC/Approval/11062024). The study was carried out from May 2024 to July 2024. The sample size was calculated based on the NFHS-5 survey data,[3] which reported that 67% of under-five children with acute illness were taken to a health facility in rural areas. Considering a relative precision of 15% and a non-response rate of 10%, the required sample size was estimated to be 94. A total of 100 participants were enrolled in the study. The list of under-five children was obtained from the Village Health Nurse (VHN) of the area. A line listing of all children under five years of age was prepared, and the required sample size of 100 was selected by simple random sampling using a computer-generated random number table. Participants were recruited based on the inclusion and exclusion criteria. Informed consent was obtained from the mothers before data collection.

Data was collected through house-to-house visits using an interview method with a pre-designed, pre-tested, semi-structured questionnaire based on the conceptual framework for health-seeking behaviour for childhood illness (Modified Andersen and Newman Model).[4] The questionnaire included domains on predisposing factors, enabling factors, need factors, and healthcare utilization. All questions were explained in the local language (Tamil) after establishing rapport with the participants.

Inclusion Criteria:

- Mothers of children below five years of age
- Mothers who gave written informed consent
- Mothers who had been residing in the study area for a minimum of one year

Exclusion Criteria:

- Mothers of under-five children with chronic illnesses
- Households that remained locked after 2 visits on 2 different occasions.

Statistical analysis: The data were entered into MS Excel and analyzed using IBM SPSS version 25. The prevalence of appropriate and prompt health care was expressed as a proportion. Descriptive statistics were represented as frequencies and percentages. The Chi-square test was applied to determine statistical significance between health seeking behaviour and associated factors, with a p-value of <0.05 considered statistically significant. Odds ratios were calculated to assess the strength of association between health-seeking behaviour and its associated factors.

Operational definitions: Healthcare-seeking Practice: Any activity undertaken by individuals who perceive themselves or their children to have a health problem for the purpose of finding a remedy. This is based on the recognition of symptoms, which are interpreted by individuals who then proceed to address the problems.[5]

Appropriate and prompt care: It was defined as seeking treatment from trained personnel or at a health facility within 24 hours of onset of symptoms.[6]

Acute Diarrheal Disease (ADD): It is defined as the passage of three or more loose or liquid stools per day (or more frequent passage than is normal for the individual.[7]

Acute Respiratory Illness (ARI): Child who had any of the symptoms of blocked or runny nose, cough, difficulty in breathing or fast breathing in the previous 3months.[7]

RESULTS

All the respondents were mothers with mean age of 26.7 years with standard deviation of ± 3.3. The majority (67%) were aged between 19 and 27 years. Most of the respondents (98%) were homemakers. About 79% belonged to the middle class (Class III) according to the Modified B.G. Prasad Socioeconomic Status Scale, 2024.[8] Nearly 58% of the respondents living in extended families. [Table. 1]

Child characteristics: A majority (68%) of the children were above two years of age, and 51% were female. All children were immunized up to date from ICDS centers. [Table 2]

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Table 1: Socio-demographic characteristics of the respondents

Characteristics	Category	Frequency (%)
Mother's age	19-27 years	67 (67%)
	28-37 years	33 (33%)
Mother's Education	High school and below	49 (49%)
	Above High school	51 (51%)
Mother's Working status	Home Maker	98 (98%)
	Working	2 (2%)
Father's education	High school and below	55 (55%)
	Above High school	45 (45%)
Type of family	Nuclear	42 (42%)
	Extended	58 (58%)
Socioeconomic status (Modified BG Prasad scale 2024)	Middle Class (III)	79 (79%)
	Upper Middle Class (II)	21 (21%)

Table 2: Child characteristics

Characteristics	Category	Frequency (%)
Child Age	2 years and below	32(32%)
	Above 2 years	68(68%)
Child sex	Male	49(49%)
	Female	51(51%)
Order of birth	First order	40(40%)
	Second order and above	60(60%)
ICDS utilization	Immunisation	100 (100%)
	Complementary food	22(22%)
	Preschool education	21(21%)
	Treatment of acute illnesses	1(1%)

All children experienced an acute illness in the past three months. The majority (84%) sought treatment from private healthcare facilities. Among the respondents, 44% perceived their child's illness as severe [Table 3].

Table 3: Details of the health care sought for acute illness

Characteristics	Category	Frequency (%)
Acute Illness in the last 3 months	Yes	100 (100%)
Type of health facility utilized	Public	16 (16%)
	Private	84 (84%0
Distance of health facility	>5km	39 (39%)
	<5km	61 (61%)
Mother's Perception about severity of illness	Severe	44 (44%)
	Not severe	56 (56%)

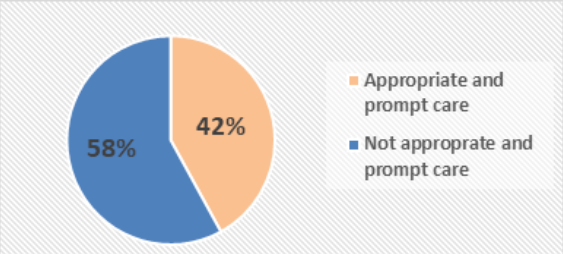

Figure 1: Appropriate and Prompt care (n-100)

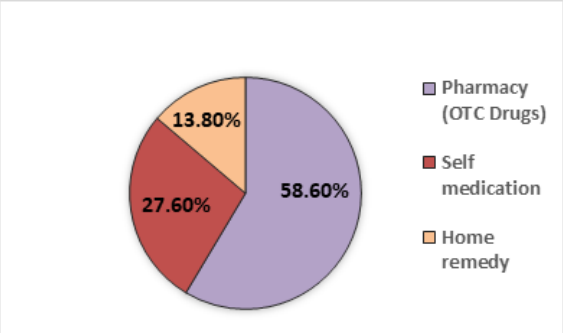

Figure 2: Types of care provided before seeking Health care (n- 58)

Among the respondents 42% (95% CI- 32.2%-52.3%) of them sought appropriate and prompt care during an acute illness in their children. Among the remaining 58 respondent's majority (58.6%) of them got medicines from pharmacy as over the counter drugs, 27.6% gave self-medications and 13.8% used home remedies. [Figure 1 &2]

Among the 58 respondents who did not seek appropriate and prompt care, the most common reasons were illness was not perceived as severe (74.1%), Nobody to accompany them (19%) and High cost of healthcare (7%) [Figure 3].

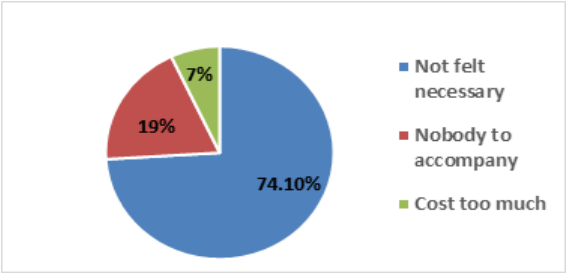

Figure 3: Reason for not seeking Appropriate and Prompt care(n-58)

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Based on univariate analysis, prompt and appropriate health-seeking behaviour was significantly higher among mothers of children aged ≤2 years, mothers with education above high school, those living in extended families, and those who perceived the illness as severe. These associations were statistically significant. Mothers age and child sex was not significantly associated with the health seeking behaviour [Table 4].

Table 4: Association between predisposing & need factors of Health seeking behaviour and Prompt and Appropriate care

Associated Factors	Category	Prompt and Appropriate care		Chi-Square (p value)	Unadjusted Odd's Ratio (95%CI)
		Yes	No		
Child Age	2years and below	19 (59.4%)	13(40.6%)	5.832 (0.016*)	2.860 (1.203-6.799)
	Above 2years	23 (33.8%)	45 (66.2%)		
Child Sex	Male	22(44.9%)	27(55.1%)	0.331 (0.565)	1.1263 (0.57-2.798)
	Female	20(39.2%)	31(60.8%)		
Mother's age	27years and below	30 (44.8%)	37 (55.2%)	0.642 (0.423)	1.416 (0.602 -3.344)
	Above 27 years	12 (36.4%)	21 (63.6%)		
Mother's Education	Above High school	27 (52.9%)	24(47.1%)	5.115 (0.024*)	2.550 (1.124-5.786)
	High school and below	15 (30.6%)	34 (69.4%)		
Family type	Extended	30 (51.7%)	28(48.3%)	5.360 (0.021*)	2.679 (1.151-6.233)
	Nuclear	12(28.6%)	30(71.4%)		
Mother's Perception about severity of illness	Severe	39 (88.6%)	5 (11.4%)	70.11(<0.001*)	137 (31-611)
	Not severe	3 (5.4%)	53(94.6%)		

*Statistically significant p value <0.05

DISCUSSION

This community-based cross-sectional study assessed the health-seeking behaviour of mothers of under-five children in the fishermen community of Kovalam, Chengalpattu district. The study found that only 42% of mothers sought appropriate and prompt healthcare for acute childhood illnesses. This proportion is considerably lower than the national average of 68.9% and Tamil Nadu's average of 64%, as reported in the NFHS-5 report.[3] This gap indicates that despite Tamil Nadu's relatively strong state-level health indicators, certain marginalized communities, such as fishermen, continue to face barriers to timely healthcare access. Comparable findings have been reported in studies from other underserved settings 50.6% in the slums of Dibrugarh town, Assam,[9] and in urban slums of Chennai 46.1%.[10]

In contrast, earlier studies in fishing communities have reported much higher prevalence. Research conducted Pondicherry (2004),[11] and in Kancheepuram district (2014),[12] found that all children with acute illness were taken to a health facility. Similarly, other studies from different parts of India have reported a higher prevalence of appropriate health-seeking behaviour 92.6% in Karnataka,[13] 79.23% in Odisha [6] and 78.9% in Gujarat.[14] These variations may be attributable to differences in socio-cultural context, accessibility of healthcare services, maternal education levels, and perceptions regarding illness severity.

In the present study, maternal education was significantly associated with health-seeking behaviour, with mothers educated above high school being 2.55 times more likely to seek prompt and appropriate care. Education may improve mothers' health literacy, ability to recognize danger signs, and confidence in navigating the healthcare system. Educated mothers may also be more empowered to make independent healthcare decisions and to challenge cultural norms that delay care. Similar associations have been reported in Assam,[9] and Odisha.[6] In contrast studies done in Pondicherry,[11] Kancheepuram,[12] and Chennai,[10] found no such association between mothers' education and health seeking behaviour.

Prompt and Appropriate health seeking behaviour among mother's is 2.8 times higher when child age is ≤ 2years. Younger children may be perceived as more vulnerable and requiring immediate attention, prompting quicker action by mothers. Similar results were reported by study done in Malawi,[15] showed children with less than 2 years had prompt health care compare to older children. In contrast studies done in fishing communities Pondicherry,[11] and Kancheepuram district,[12] found no association between child age and health seeking behaviour.

No significant association was found between the sex of the child and health-seeking behaviour in this study. This suggests that in this fishermen community, gender-based discrimination in healthcare utilization may be minimal, possibly due to better gender equality awareness in Tamil Nadu. Similar results have been reported from studies done in Pondicherry,[11] Kancheepuram,[12] and Karnataka.[13] In contrast studies done in Ghana,[16] sub-Saharan Africa,[17] and Gujarat,[14] showed male children had prompt and appropriate care compared to female child.

Family structure showed a significant association with health-seeking behaviour, as children from extended families were 2.6 times more likely to receive timely and appropriate care. In extended families, the availability of multiple caregivers, shared resources, and collective decision-making often promote early care-seeking. In contrast, nuclear

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families may face delays in accessing healthcare due to limited support and competing domestic responsibilities. In this study Mothers who perceived the illness as severe were more likely to seek prompt and appropriate care. This is consistent with studies that highlight caregivers' perception of illness severity as a primary determinant of care-seeking. [6,18] This suggests that even when services are available, underestimation of illness severity can delay or prevent appropriate care.

The main reasons for not seeking timely and appropriate care were the perception that treatment was unnecessary (74.1%), lack of someone to accompany the mother to a health facility (19%), and high treatment costs (7%). Similar findings were reported in a study from Assam,[9] where ignorance, distance to hospitals, and unaffordable treatment were major barriers to healthcare-seeking. Study done in Ethiopia,[18] found that major reasons for not seeking health care was Illness was not serious, lack of money and did not see any benefit in treatment. Addressing these barriers requires enhancing awareness about danger signs and promoting shared caregiving responsibilities in households.

In the present study, a majority of mothers (84%) reported utilizing private healthcare facilities for managing acute childhood illnesses. Similar patterns were observed in earlier studies conducted among fishermen communities in Kancheepuram,[12] where 81.15% of respondents preferred private facilities, and in Pondicherry,[10] it was 65%. This preference for private care may be attributed to accessibility, shorter waiting times, and flexible consultation hours, despite higher costs.

All children in this study were fully immunized for their age through the ICDS centres, which is higher than the national average of 76.4% and Tamil Nadu's average of 89.2% reported in NFHS-5.[3] It also surpasses the 94.23% coverage documented in the 2014 study conducted in Kancheepuram district among fishermen community.[12] The high immunization rate in the current study may be attributed to sustained outreach efforts by Anganwadi workers, the strong presence of primary healthcare services in the community, and regular immunization awareness activities targeting mothers.

CONCLUSION

This study highlights important gaps in appropriate and prompt health-seeking behaviour among mothers of under-five children in the fishermen community of Kovalam, Chengalpattu district despite the community achieving 100% immunization coverage. Only 42% of mothers sought timely and appropriate care for acute childhood illnesses, a rate substantially lower than state and national averages. Maternal education, younger child age, extended family structure, and perception of illness severity were significant determinants of appropriate care-seeking, indicating the role of both socio-demographic and illness perception influencing health seeking behaviour. Strengthening community-based health education, improving access to affordable healthcare, and addressing socio-cultural barriers are essential to enhance timely care-seeking and to reduce preventable childhood morbidity and mortality. Utilization of public health facility was less among the mothers. Hence, steps can be taken to sensitize the mothers about the services available in the public health care facility.

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