RESEARCH PAPER

HEALTHCARE-SEEKING BEHAVIOUR AMONG STREET VENDORS IN URBAN CHENNAI: DETERMINANTS AND BARRIERS

Short title: *Healthcare Seeking in Street Vendors*

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ABSTRACT:
Background:
Street vendors constitute a vulnerable informal workforce with constrained access to formal healthcare. This study evaluated healthcare-seeking behaviour of street vendors in Chennai and its determinants.
Methods:
A community based cross sectional study was conducted among 500 registered vendors in Thiruvanmiyur, Chennai from November to December 2023. Data from participants were obtained through one-to-one interviews using a semi-structured questionnaire after obtaining informed consent. Adjusted Odds Ratios with 95 % Confidence Intervals were reported on multivariable binary logistic regression.
Results:
The study participants had a mean age of 42.15 ± 14.57 years, with 65% males and 35% females. About 51% were self-employed for 5 to 10 years. Health care was sought by 35.10% for musculoskeletal, 25.19% for respiratory and 11.25% for gastrointestinal problems. Among those with musculoskeletal problems, 47.67% sought care from government facilities, while 41.18% with respiratory issues and 44.45% with gastrointestinal problems visited private facilities. In multivariable analysis, vendors aged >40 years had lower odds of seeking healthcare (aOR = 0.42; 95% CI: 0.217–0.815; p = 0.010). Literate vendors had higher odds (aOR = 2.11; 95% CI: 1.157–3.865; p = 0.015), whereas married vendors had lower odds (aOR = 0.21; 95% CI: 0.077–0.578; p = 0.002). No significant association was observed with sex, socioeconomic status and work experience.
Conclusion:
The utilization of healthcare among street vendors was suboptimal mainly due to self-management practices and occupational constraints. Strengthening the available and flexible urban health services is imperative to strengthen the utilization in this under-served population.
Keywords: Street vendors; healthcare-seeking behaviour; healthcare utilisation; barriers; Economic growth.
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INTRODUCTION:

International Labour Organization figures out that almost 60 % of the workforce nationwide are employed in unorganized sector [1]. The bulk of population with low education in India are working in unorganized sector [2]. Healthcare-seeking behaviour among street vendors is shaped by a complex interaction of factors, including accessibility and affordability of healthcare services and sociocultural beliefs particularly among vulnerable populations [3]. It is necessary to improve their working and health conditions in order to achieve the Sustainable Development Goal 8 (Decent Work and Economic Growth) [4].

In India, there is scarce information about health care utilization by street vendors [5]. Enhancing access, planning healthcare services, allocating resources and focusing on tailored interventions depend on understanding health-seeking behaviour. Healthcare utilization in such populations can be better interpreted using Andersen's behavioural model which explains healthcare-seeking behaviour based on predisposing factors, enabling factors and need based factors [6]. Nevertheless, there is still very limited data on these factors among street vendors in metropolitan South India, especially Chennai.

Hence, this study aimed to evaluate how Chennai's street vendors sought health care, focusing on

identifying the determinants influencing health-seeking behaviour.

MATERIALS AND METHODS:

Study Design

Community based cross-sectional study.

Study Area

Thiruvanmiyur, Adyar Zone, Chennai. (Adyar Zone - Zone 13 of Greater Chennai Corporation).

Study Population

A total of 500 vendors were registered in Thiruvanmiyur and complete enumeration was performed.

Inclusion Criteria

- All street vendors in Thiruvanmiyur area of Zone -13 (Adyar Zone) who were registered in the Greater Chennai Corporation for a minimum period of 1 year and provided informed consent.

Exclusion Criteria

- Vendors unwilling to provide consent and those engaged in street vending for less than a year.

Study Period

Data collection was conducted over a 2 months duration (November to December 2023).

Sample Size

Considering the previous literature on the common health problems among street vendors, the prevalence of musculoskeletal problems was 54.4%, the respiratory problems was 32%, the non-communicable diseases like diabetes and hypertension was 26.6%, gastrointestinal problems was 18% and generalized weakness was 12.7%[7]. The least prevalence of 12% was considered for sample size calculation. Taking prevalence as 12%, with the limit of accuracy as 3% of the anticipated prevalence and with the Zα value of 1.96, the sample size was calculated as 450. However, all the registered vendors were included for the study.

Ethical Committee Approval

Ethical Clearance for the study was obtained from the Institutional Ethics Committee (CSP - MED/ 23/ MAR/85/53).

Data Collection

Before enrolment, participants were informed regarding the objectives and procedures of the study and confidentiality of their identity and responses was assured. Written Informed consent was secured prior to participation. The study participants were questioned on one-to-one basis.

Data Analysis

Data were entered and analyzed using Statistical Package for Social Sciences (SPSS) software. Descriptive statistics was used to summarize baseline characteristics. Associations between the variables were assessed using the Chi-square test. Variables identified as significant were further assessed using multivariable binary logistic regression to determine the independent predictors of healthcare-seeking behaviour. Results are presented as adjusted Odds Ratios (aOR) with 95 % Confidence intervals (CI); $P < 0.05$ was considered statistically significant. Zotero reference management software was used for citing the Vancouver style of references.

RESULTS:

Sociodemographic Characteristics:

The mean age of the participants was 42.15 ± 14.57 years. More than half of the study population (53%) belonged to the 21 to 40 years age category. 325 (65%) and 175 (35%) of the participants were males and females respectively. Regarding the educational status, 19% of the vendors were illiterates and 15% of them had only primary school education. Most of the participants, 395 (79%) were married. Regarding the years of work experience as a street vendor, almost half of the vendors of about 255 (51%) were self-employed as a street vendor for 5 to 10 years. About the working hours, majority of them of about 400 (80%) work for 8 to 12 hours. The detailed description of sociodemographic characteristics of street vendors tabulated in Table 1.

Table 1: Sociodemographic Characteristics:

S. No	Sociodemographic Characteristics	No. of Street Vendors (n=500)	Percentage (%)
1	**Age**		
	21 to 40 years	265	53
	41 to 60 years	165	33
	61 to 80 years	70	14
2	**Sex**		
	Female	175	35
	Male	325	65
3	**Educational Status**		
	Illiterate	95	19
	Primary school	75	15
	Middle school	205	41
	High school	90	18
	Diploma	25	5
	Graduate	10	2
4	**Number of family members**		
	1 to 3	110	22
	4 to 6	365	73
	7 to 9	25	5
5	**Total family income**		
	1001 to 5000	15	3

	5001 to 10000	105	21
	>10000	380	76
6	**Socio economic class**		
	Class 1	430	86
	Class 2	70	14
7	**Marital status**		
	Unmarried	30	6
	Married	395	79
	Divorced/Widowed/Separated	50	10
	Broken Family	25	5
8	**Years of work experience**		
	Less than 5 years	45	9
	5 - 10 years	255	51
	10 - 20 years	145	29
	More than 20 years	55	11
9	**Work timings**		
	Morning to evening	260	52
	Morning (8 am to 2 pm) + Evening (5 pm to 9 pm)	240	48
10	**Working hours**		
	<4 hours	5	1
	4 to 8 hours	75	15
	8 to 12 hours	400	80
	>12 hours	20	4

Healthcare-seeking behaviour:
Healthcare-seeking behaviour was lower across all reported health problems, with comparatively higher utilization for musculoskeletal problems than respiratory and gastrointestinal problems. The proportion of healthcare-seeking behaviour among street vendors is highlighted in Table 2.

Table 2: Healthcare-seeking behaviour of the street vendors to the health problems:

S.No	Health Problems	N	Whether sought Health Care Services	
			Yes	No
1	Musculoskeletal	245 (49 %)	86 (35.10 %)	159 (64.90 %)
2	Respiratory	135 (27 %)	34 (25.19 %)	101 (74.81 %)
3	Gastrointestinal	80 (16 %)	9 (11.25 %)	71 (88.75 %)
4	Any one of the problems	345 (69 %)	202 (58.55 %)	143 (41.45 %)

Type of health care facility utilised:
Among those vendors who sought health care for musculoskeletal problems, 47.67% vendors approached government facility. Out of those vendors with respiratory problems, 41.18% sought private health care and among those with gastrointestinal problems, 44.45% of them approached private health care. The complete description of the healthcare-seeking by the vendors for each of their problems is explained in Table 3.

Table 3: Type of health facility approach preferred by the street vendors:

S.No	Health Problems	N	Private Clinic	Government Facility/ Institution	Both Government and Private	Pharmacy	Others
1	Musculo-skeletal	86	21 (24.42 %)	41 (47.67%)	6 (6.98%)	16 (18.60%)	2 (2.33 %)
2	Respiratory	34	14 (41.18 %)	10 (29.41%)	4 (11.77%)	3 (8.82%)	3 (8.82 %)
3	Gastro-intestinal	9	4 (44.45 %)	3 (33.33%)	-	2 (22.22%)	-
4	Any one of the problems	202	63 (31.19 %)	85 (42.08%)	9 (4.45%)	41 (20.30%)	4 (1.98 %)

Barriers to healthcare utilization:
For all the problems, majority of them did not seek health care as they were able to manage on their own. The second reason for not approaching health care being their work. The various barriers for seeking health care depicted in Figure 1.

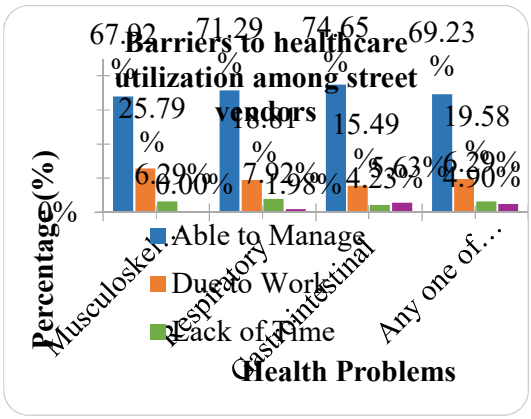

Figure 1: Barriers to healthcare utilization among street vendors

Factors associated with healthcare-seeking behaviour:

To determine the variables related to street vendors healthcare-seeking behaviour, multivariable logistic regression analysis was used. Significant factors included age, marital status and level of education. In comparison to vendors 40 years of age or younger, those who were over 40 had significantly lower likelihoods of seeking medical attention (aOR = 0.42; 95% CI: 0.217–0.815; p = 0.010). Unlike illiterate vendors, literate vendors were more likely to seek medical attention (aOR = 2.12; 95% CI: 1.157–3.865; p = 0.015). On looking about the marital status, married vendors were significantly less likely to seek medical attention (aOR = 0.21; 95% CI: 0.077–0.578; p = 0.002). Healthcare-seeking behaviour was not substantially associated with sex, socioeconomic class and years of work experience. The sociodemographic variables associated with healthcare-seeking behaviour is highlighted in Table 4.

Table 4: Multivariable logistic regression analysis of factors associated with healthcare-seeking behaviour among street vendors:

S. no	Variable	Category	Adjusted Odds Ratio (aOR)	95 % CI	p-Value
1	Age	≤ 40 years > 40 years	1 (Ref) 0.42	- 0.217– 0.815	- 0.010
2	Sex	Female Male	1 (Ref) 1.28	- 0.853– 1.930	- 0.231
3	Education	Illiterate Literate	1 (Ref) 2.12	- 1.157– 3.865	- 0.015
4	Socio-economic class	Middle and lower class Upper class	1 (Ref) 1.36	- 0.767– 2.427	- 0.290
5	Marital Status	Unmarried Married	1 (Ref) 0.21	- 0.077– 0.578	- 0.002
6	Work Experience	≤ 10 years >10 years	1 (Ref) 0.87	- 0.428– 1.779	- 0.707

DISCUSSION:

Street vendors typically work in the unorganized sector and deal with a number of problems such as long working hours, poor housing circumstances, restricted access to healthcare and lack of formal employment benefits. Many street vendors self-medicate, seek treatment from unofficial health practitioners (such as traditional healers), or use over-the-counter medications as part of their health-seeking practices. Financial limitations, lack of time, or ignorance of the services that are available may cause some people to postpone seeking professional healthcare.

Background characteristics:

In the present study, the age of the vendors varied between 21 and 79 years, with a mean age of 42.15 years. About 53% of vendors were in the 21 to 40 years age group. About 65% were male vendors and only 35% were females. Regarding the educational status, 19% of the vendors were illiterates and 15% of them had only primary school education. A majority of the vendors in this study were married (79%). 86% of the vendors belonged to Class 1(Upper class) according to Modified B. G. Prasad classification (modified for the year 2022).

The years of work experience vary among vendors. About 51 % of the vendors in this study had work experience of 5 to 10 years. About 80% of the vendors worked for 8 to 12 hours a day.

Proportion of street vendors seeking health care:

Based on the current study results, out of 245 vendors with musculoskeletal problems, only 86 (35.10%) sought medical care. Out of 135 vendors with respiratory problems, only 34 (25.19%) sought medical attention. Similarly for the gastrointestinal

problems among 80 vendors, majority of about 71 (88.75%) vendors have not sought medical care.

A comparable study done by Adei et al in 2022 in Ghana, reported that workers requiring over one hour to obtain medical care were more likely to adopt positive health-seeking behaviours than those who spent less than an hour. Further, the number of dependents was also found to be a significant determinant in the healthcare utilization [8].

Preference of health care facility by the street vendors:

Among those 86 vendors who sought health care for musculoskeletal problems, majority of them of 41 (47.67%) approached government institution. Out of those 34 vendors who sought medical attention for respiratory problems, most of them of about 14 (41.18%) visited private clinic. Among 9 vendors who sought health care for gastrointestinal problems, 4 (44.45%) vendors sought medical attention from private clinic followed by 3 (33.33%) vendors from government institution.

A similar study by Stuti Singh et al at New Delhi in 2020 revealed that 41.3% of the vendors sought health care from government hospitals. 28.7% of the vendors sought medical treatment from private clinic and 28% of them sought health care from a nearby clinic [9].

In another similar study by Archana et al. (2023) in Bengaluru, 71.3 % vendors preferred over-the-counter medicines over formal health care services. Around one-fourth (27.2%) of full-time vendors relied entirely on public healthcare facilities. The key determinants of healthcare utilization as reported by vendors include time availability after work, after closing their sale for the day, illness severity, convenience of work hours, and the necessity of taking time off from work [5].

Meher et al in 2020 performed a study on self-employed street vendors of Maharashtra to know the common health problems and their health care utilization and found that majority of the respondents of about 68 % visited private health care facility and only 21 % visited government facilities. Approximately 8 % visited both sectors and 2 % did not seek care from any of the health care provider. Majority of about 94.2 % of the participants visited private health care facility for quick relief. Less cost of care was the most preference factor for visiting public health care facility by 92.6 % of the respondents [7].

Findings from a study conducted at Dhaka city of Bangladesh by Uddin et al at 2009 reported that a considerable proportion of individuals did not seek healthcare during illness, including 45% of females and 37% of males. Among the dwellers who sought care, 55% of women and 67% of men obtained medications from local drug vendors or nearby pharmacies. Their study also highlighted sub-optimal maternal health practices as nearly one-fifth of deliveries occured on the streets, most deliveries being assisted by non-qualified individuals including relatives and neighbours and a small proportion were managed by women themselves. In addition, participants using family planning methods mainly depended on mobile clinics, pharmacies and public health facilities for related services [10].

Tune et al at 2020 found that retail drug shops were the predominant first choice of treatment among majority of street dwellers (87 %) in Dhaka City, Bangladesh. This preference was largely attributed to the convenient location, lower opportunity cost and prompt service delivery. Their study further suggested that this trend may be driven by the ease of obtaining medicines without prescriptions, clinical history or physical examination [11].

The healthcare-seeking behaviour can vary based on several factors such as socio-economic status of the vendors, their cultural beliefs, easy access and availability from their residence and awareness about health issues.

Barriers in seeking health care among street vendors:

There can be many reasons among street vendors for not taking treatment for their health problems which includes self-management of symptoms, work related constraints, lack of time and financial limitations. In our study, majority of them (69.23 %) did not seek health care for any one of their problems as they were able to manage on their own. The second reason for not approaching health care being their work among 19.58 % of the vendors. Other reasons being lack of time and non-affordability among 6.29 % and 4.90 % of the vendors respectively for any one of their health problems.

Similarly, Uddin et al reported barriers for healthcare utilization among street-dwellers in Dhaka, Bangladesh at 2009. Both men and women reported economic hardship as the most important barrier for not accessing healthcare, whereas many men perceived medical care to be non-essential. Additional barriers mentioned were lack of awareness regarding the location of the healthcare facilities, absence of guidance to seek healthcare and unsatisfactory attitudes of service providers. The reasons provided by pregnant women for non-utilization of antenatal services includes failure to recognize the need, poor awareness or idea regarding the centres providing antenatal care services, financial constraints, absence of encouragement to seek antenatal care and inadequate support from the husbands. [10].

Association of socio demographic variables with the healthcare-seeking behaviour of street vendors for any one of their health problems:

Multivariable logistic regression analysis identified age, education and marital status as significant determinants of healthcare-seeking behaviour. Vendors over 40 years had lower odds of seeking

healthcare compared to those under 40 years (aOR: 0.42; 95% CI: 0.217–0.815; p = 0.010). This could be attributed to their higher dependence on the daily income, prioritization of work over health and a tendency towards self-management as well. Literate vendors had higher odds of seeking healthcare when compared to illiterate vendors (aOR: 2.11; 95% CI: 1.157–3.865; p = 0.015), probably due to their greater health awareness and access to information. Married vendors were less likely to seek healthcare which could be possibly due to competing family responsibilities and financial limitations (aOR: 0.21; 95% CI: 0.077–0.578; p = 0.002).

The findings did not reveal any statistically significant association between healthcare-seeking behaviour and variables such as sex, socioeconomic status and work experience. Similarly, gender did not show significant relationship with type of health facility in a study done at Maharashtra (2020) by Meher et al [7].

Andersen's behavioural model can be used to understand our study results , where significant predisposing factors for healthcare-seeking behaviour includes age and education, while enabling factors such as socio-economic status and work related characteristics were not significant [6].

Uddin et al at in 2009 found out by the regression analysis that the currently-married female street-dwellers in Bangladesh demonstrated higher utilization of healthcare services compared than women who were abandoned, divorced or widowed. The authors observed that healthcare-seeking behaviour among females did not show any significant relationship with factors such as age, occupation or family size [10].

In a comparable context, Supriya S et al reported that among street vendors in Marthwada, Maharashtra, age showed a significant association with choice of health care facility. Vendors aged 36 to 45 years were more likely to seek healthcare from government facilities (p – 0.014). Similarly, monthly income also revealed a significant association with healthcare utilization, as vendors earning between Rs. 6,000 to 15,000 showing a greater preference for government hospitals (p – 0.004) [12].

CONCLUSION:

This study contributes to the limited evidence on the healthcare-seeking behaviour among street vendors in Chennai and identifies key determinants influencing healthcare utilization. Overall, healthcare-seeking among street vendors was suboptimal, with significant reliance on self-management, reflecting occupational constraints and limited access to formal services. Vendors aged more than 40 years and married vendors were less likely to seek health care, whereas literate vendors were more likely to utilize health care services. The results reflect health-care disparities faced by informal workers, underscoring the relevance of SDG 10: Reduced Inequalities. Addressing occupational barriers and strengthening accessible healthcare services are crucial to enhance utilization among street vendors.

REFERENCES:

1. Informal economy | International Labour Organization [Internet]. 2024 [cited 2026 Apr 28]. Available from: https://www.ilo.org/topics-and-sectors/informal-economy
2. Socio-Economic and Health Conditions of Street Vendors in Kozhikode. Vol. 2. 2021;2(10).
3. Kabir A, Karim MN, Billah B. Self-reported health complaints and healthcare-seeking behaviour among adult people in rural Bangladesh: results from a cross-sectional study [Internet]. 2025 Feb 1. doi:10.1136/bmjopen-2024-086324
4. Transforming our world: the 2030 Agenda for Sustainable Development | Department of Economic and Social Affairs [Internet]. [cited 2026 Apr 29]. Available from: https://sdgs.un.org/2030agenda
5. S A, K T, M S, Hariba S. Study on utilization of healthcare and social security schemes among street vendors in an urban area of Bengaluru. Natl J Physiol Pharm Pharmacol. 2023;(0):1. doi:10.5455/njppp.2023.13.05281202304072023
6. Andersen RM. Revisiting the Behavioral Model and Access to Medical Care: Does it Matter? Journal of Health and Social Behavior. 1995;36(1):1–10. doi:10.2307/2137284
7. Meher SR, Ghatole PS. A study of common health problems and utilization of healthcare facilities among self-employed street vendors of Chandrapur district of Maharashtra. International Journal Of Community Medicine And Public Health. 2020 Jun 26;7(7):2782–9. doi:10.18203/2394-6040.ijcmph20203015
8. Adei D, Mensah AA, Agyemang-Duah W, Aboagye-Gyasi L. Factors associated with health-seeking behaviour among informal sector workers in the Kumasi metropolis of Ghana. Cogent Public Health. 2022 Dec 31;9(1):2103932. doi:10.1080/27707571.2022.2103932
9. Deb R, Singh S, Quazi M, Kaur H, Sanatombi N, Vipul, et al. A Study of the Socio-Demographic Profile and Health Seeking Behaviour of the Vegetable Vendors, New Delhi. International Journal of Healthcare Education & Medical Informatics (ISSN: 2455-9199). 2020 Nov 19;7(1 & 2):1 & 2.
10. Uddin MJ, Koehlmoos TL, Ashraf A, Khan AI, Saha NC, Hossain M. Health needs and health-care-seeking behaviour of street-dwellers in Dhaka, Bangladesh. Health Policy and

Planning. 2009 Sep 1;24(5):385–94. doi:10.1093/heapol/czp022

11. Tune SNBK, Hoque R, Naher N, Islam N, Mazedul Islam Md, Ahmed SM. Health, illness and healthcare-seeking behaviour of the street dwellers of Dhaka City, Bangladesh: qualitative exploratory study. BMJ Open. 2020 Oct 7;10(10):e035663. doi:10.1136/bmjopen-2019-035663 PubMed PMID: 33033009; PubMed Central PMCID: PMC7542956.
12. Supriya S, Khadilkar HA, Chavan BB, Nemivant K, Gaikwad AV, Gosavi SV. A Cross Sectional Study of Health Seeking Behaviour and Morbidity Profile Among Street Vendors in Urban Area of Marthwada. Vol. 18. 2024;18(6).