



Health seeking behavior among interstate migrant workers in a northern district of Kerala

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ABSTRACT

Background

Throughout history, people have migrated for better opportunities, impacting political and economic landscapes. Recently, there's been more focus on internal migration challenges, especially in India, where states like Kerala attract many interstates migrant workers. Despite their economic contributions, migrant workers face significant health challenges and limited access to healthcare. This study aims to evaluate the health-seeking behaviour of interstate migrant workers in a northern district of Kerala and identify influencing factors.

Methods

In this cross-sectional study, 400 interstate migrant workers who lived in selected municipalities in the Malappuram district of Kerala were surveyed using a semi-structured interview schedule in the participants native languages with the assistance of an interpreter, with an emphasis on health-seeking behavior, and sociodemographic information. Data analysis utilized descriptive statistics and chi-square tests via SPSS software.

Results

The mean age of participants was 31.3 ±7.7 years. Most preferred was private healthcare (39.8%) and 32% utilized government facilities. 54% are willing to visit a doctor or healthcare facility when ill, 35% use home treatments, 46% practice self-medication when sick. Socio-demographic factors such as age and income significantly influenced health-seeking behaviors, with a preference for modern medicine (88.3%).

Conclusions

The study on interstate migrant workers in Malappuram district, Kerala, reveals crucial insights into their health-seeking behaviors and socio-economic conditions. The study identifies high incidences of inadequate healthcare access and frequent reliance on self-medication and home remedies. The study highlights the impact of sociodemographic determinants on health behaviors and access to care.

Keywords: : Interstate migrant workers, sociodemographic factors, health seeking behavior.

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INTRODUCTION

A large percentage of the global workforce, especially informal workers, faces numerous challenges, including unsafe working conditions and inadequate health protections [1]. In 2019, the ILO estimated there were 169 million international migrant workers, making up 4.9% of the global labour force.[2] Informal workers, who constitute 60% of the global workforce, face significant disadvantages due to weakly enforced labour laws.[3] Many migrate from rural to urban areas for better employment, driven by poverty, illiteracy, and lack of opportunities [4].

In India, migration is widespread. According to the 2011 census, about 41.4 million people migrated interstate. More recent data from the 2020–2021 Periodic Labour Force Survey (PLFS) indicates a national migration rate of 29%, with urban areas experiencing higher rates.[5] Kerala, in particular, has seen a surge in interstate migrants from states like West Bengal, Odisha, and Bihar, primarily seeking employment in construction and other manual labour fields. These jobs are often classified as "3D jobs"—dirty, dangerous, and difficult [6]. Despite their contributions, internal migrants remain largely overlooked in policies and programs.[7]

Migrants face significant health challenges due to hazardous working conditions, limited access to healthcare, and financial barriers. Their vulnerabilities are further heightened by long working hours, language barriers, and lack of awareness about healthcare services.[8] Achieving Sustainable Development Goal 3 (SDG 3), which focuses on ensuring healthy lives for all, requires addressing the specific health needs of migrants. Healthcare-seeking behaviour (HSB) is crucial in this context, as it involves actions taken to address perceived health issues [9]. Public health systems must prioritize providing cost-effective, quality healthcare to meet the needs of migrants and promote their well-being.

Internal migration within India, particularly interstate labour migration, remains understudied

compared to international migration, especially in Kerala,[7] where research primarily focuses on the latter. Challenges like insufficient data hinder comprehensive research on the health, and behaviours of interstate migrants. Addressing these gaps is vital for developing policies that ensure equitable development and better quality of life for migrants. In Kerala, despite a growing migrant population, research on migrant health is scarce. Integrating migrant health needs into state health policies is crucial for improving public health outcomes. This study aims to assess the health-seeking behaviour of interstate migrants in Malappuram district of Kerala and the factors influencing it.

METHODOLOGY

This cross-sectional study was conducted among interstate migrant workers residing in selected municipalities in Malappuram district of Kerala. The study focused on migrant workers aged 18 and above who had migrated from states outside Kerala and had been residing in Malappuram for at least three months. The study excluded those unwilling to participate. 2 municipalities will be selected randomly from 12 municipalities in Malappuram district. From all the registered migrant workers, 400 participants will be selected by simple random sampling.

Health-seeking behaviour (HSB) refers to actions or inactions taken by individuals who perceive themselves as having a health issue and seek appropriate remedies. It is also known as "illness behaviour" or "sick-term behaviour" and falls under the broader category of health behaviour, which includes efforts to maintain health, prevent illness, and address health deviations. Practice of home remedies, self-medication, and visiting a doctor/hospital when ill are considered as significant indicators of health-seeking behaviours among interstate migrant workers.

Data collection involved a pretested semi-structured interview with the help of a local interpreter who is fluent in local languages. Data entered in MS excel.

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Categorical variables were expressed as proportions and quantitative variables as mean and standard deviation. Categorical variables were analysed using the chi-square test. Analysis of data were done using SPSS software trial Version 26. Ethical clearance was obtained from the IEC, MES Medical College, and informed consent was gathered from participants, ensuring confidentiality and voluntary participation. All study expenses were self-funded by the investigator.

RESULTS

The mean age of the study population is 31.3 ± 7.7 years. Individuals aged 18-25 make up 23.8% of the migrant population. Fifty percent falls within the 26-35 years age group. Out of the 400 study

participants, 370 (92%) of them were male. Hindus make up more than half of survey participants (56%) followed by Muslims (36.5%) and Christians (7.5%). A significant majority of the migrant workers in the study were married (70%), while a smaller proportion, 30%, were unmarried. Thirty five percent of the population had completed middle school education, 15% are illiterate, only 1.75% had completed graduate-level or higher education. The average daily income for interstate migrant workers in the study is 659 Indian rupees, with a standard deviation of 193.9 rupees. Average monthly income of the study population is $\text{Rs.}16017.5 \pm 5384.5$. Half of the participants earn 15,000 rupees or less per month, while the other half earn more than 15,000 rupees month. (**Table 1**).

Table 1: Sociodemographic characteristic of study population

	Variables		Frequency	Percent
1	age group	18-25	95	23.8
		26-35	198	49.5
		36-45	87	21.8
		46-55	20	5.0
2	gender	Male	370	92.5
		Female	30	7.5
3	Religion	Hindu	224	56.0
		Muslim	146	36.5
		Christian	30	7.5
4	Marital status	Married	122	30.5
		Unmarried	278	69.5
5	Educational status	illiterate	60	15.0
		Primary	94	23.5
		Middle	140	35.0
		High school	81	20.3
		Higher Secondary and above	18	4.5
6	Income Group	</=Rs.15000	202	50.5
		>Rs.15000	198	49.5

Important indicators of the health-seeking behaviors of interstate migrant workers include self-medication, using home remedies, and visiting a doctor/hospital when ill. When they were sick, half of

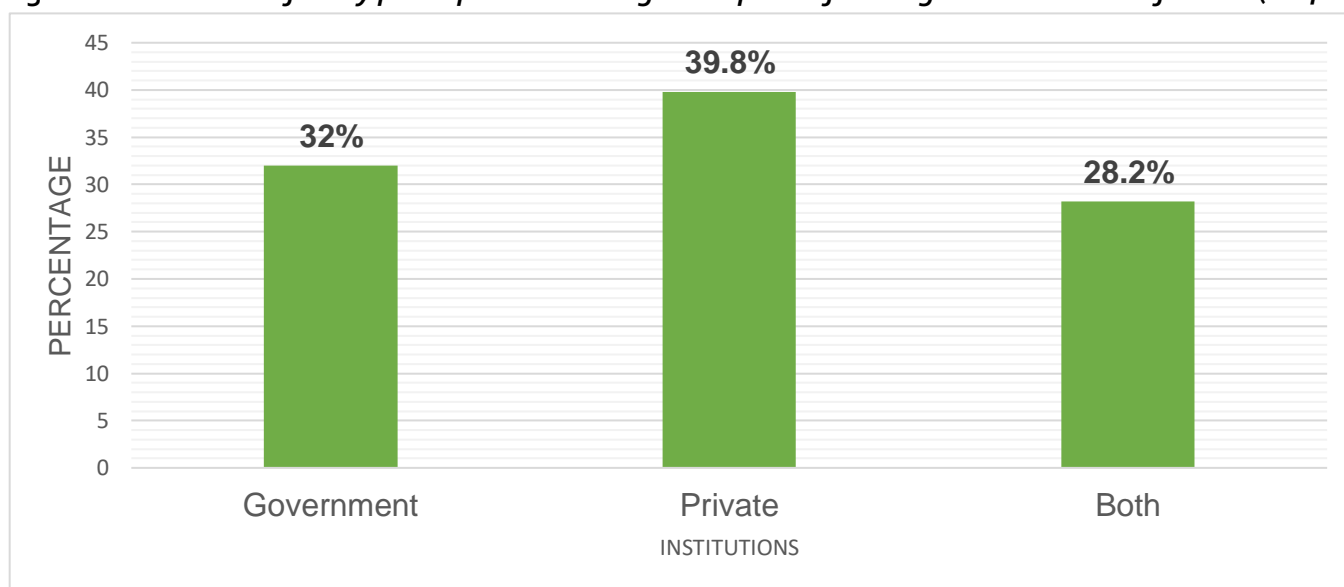
the study participants (54%) stated they would be visiting doctor or hospital. Among the 400 interstate migrants 46% reported self-medicating and 35% reported using home remedies. (**Table 2**).

Table No:2. Health seeking behavioural characteristics of the study population (N=400)

SL No	Variables		Frequency (N=400)	Percentage (%)
1	Practicing Self Medication	Yes	186	46.5
		No	214	53.5
2	Practice of Home Remedy	Yes	140	35
		No	260	65
3	Practice of Visiting any doctor/health facility	Yes	217	54.2
		No	183	45.8

39.8% of interstate migrant workers prefer to seek treatment at private healthcare facilities during illnesses. Close behind, 32% choose government health facilities. Additionally, 28.2% of migrant

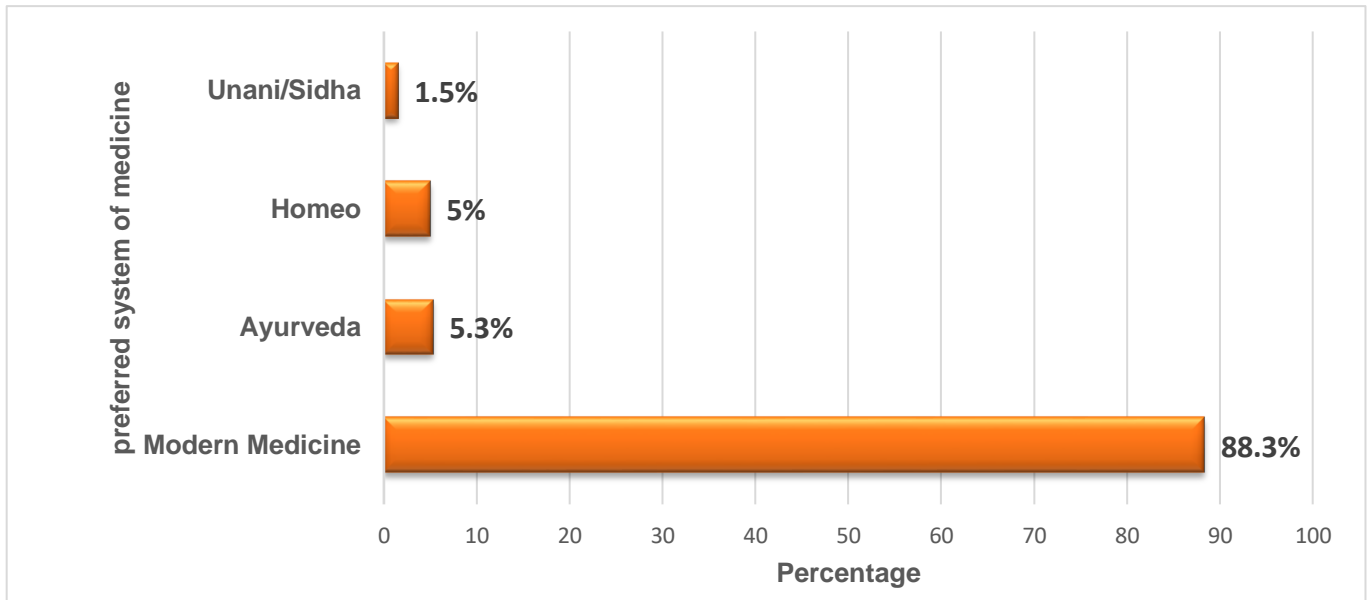
workers utilize both government and private healthcare options, reflecting a diverse approach to addressing their health needs. (Figure 1).

Figure 1: Distribution of study participants according to the place of seeking care at the time of illness (N=400)

The Study revealed that a significant proportion of the participants (88.3%) favoured modern medicine as their primary choice of treatment. Following modern medicine, 5.3% opted for ayurveda, while a

smaller proportion preferred homeopathy (5%). Additionally, only a very few (1.5%) of participants followed the Unani/siddha system of medicine (Figure 2).

Figure No 2: Preferred system of medicine among study population



The study highlights that sociodemographic factors like age, marital status, education, and income significantly influence healthcare-seeking behaviour. As age increases, the tendency to visit a doctor or health facility also rises, with 70% of those aged 46-55 seeking care ($p=0.006$). Married individuals show a higher propensity to seek medical attention compared to unmarried individuals ($p=0.005$). Interestingly, those with lower

educational levels are more likely to visit healthcare facilities than those with higher education. Furthermore, 60% of high-income individuals regularly seek healthcare, compared to lower-income groups, with a statistically significant difference. However, gender and religion do not show a significant association with healthcare-seeking behaviour. (Table 3).

Table No 3: Association between sociodemographic factors and practice of visiting a doctor / health facility when the person was ill.

SN	Sociodemographic factors	Practice of visiting doctors / health facility		Chi square value	P value
		Yes	No		
1	Age groups				
	18-25	41(43.2%)	54(56.8%)	12.35	0.006
	26-35	104(52.5%)	94(47.5%)		
	36-45	58(66.7%)	29(33.3%)		
	46-55	14(70%)	6(30%)		
2	Gender				
	Male	202(54.6%)	168(45.4%)	0.236	0.627
	Female	15(50%)	15(50%)		
3	Religion				
	Hindu	119 (53.1%)	105 (46.9%)	0.53	0.76
	Muslim	80 (54.8%)	66 (45.2%)		
	Christian	18 (60%)	12 (40%)		
4	Marital status				
	Single	53(43.4%)	69(56.6%)	8.26	0.005

5	Married	164(59%)	114(41%)	21.46	0.001
	Educational status				
	Illiterate	30(50%)	30(50%)		
	Primary	52(55.3%)	42(44.7)		
	Middle	92(65.7%)	48(34.3%)		
6	High school	38(46.9)	43(53.1)	6.38	0.012
	Higher secondary & above	5(20%)	20(80%)		
	Income level				
	Low(<Rs.15000)	97 (48)	105 (52)		
	High (>Rs.15000)	120 (60.6)	78 (39.4)		

The study reveals that sociodemographic factors such as age, marital status, and income significantly influence self-medication practices. Over 65% of individuals aged 18-25 and 46-55 abstain from self-medication, while 60% of those aged 36-45 resort to purchasing medicines without prescriptions ($p=0.001$). Unmarried individuals are more likely to avoid self-medication than married ones ($p=0.019$).

A higher percentage of lower-income individuals (60.4%) engage in self-medication compared to higher-income groups ($p=0.005$). No significant associations were found between self-medication practices and gender, religion, or educational status, although notable differences in habits exist within these categories (**Table 4**)

Table No 4: Association between sociodemographic factors and practice of self-medication

SNo	Sociodemographic factors	Practice of self-medication		Chi square	P value
		Yes	No		
1	Age groups			15.85	0.001
	18-25	31(32.6)	64(67.4%)		
	26-35	95(48%)	103(52%)		
	36-45	53(60.9%)	34(39.1%)		
	46-55	7(35%)	13(65%)		
2	Gender			1.34	0.246
	Male	169(45.7)	201(54.3)		
	Female	17(56.7)	13(43.3)	2.7	0.248
3	Religion				
	Hindu	96(42.9)	128(57.1)	5.4	0.019
	Muslim	74(50.7)	72(49.3)		
	Christian	16(53.3)	14(46.7%)		
4	Marital status			7.6	0.105
	Single	46(37.7)	76(62.3)		
	Married	140(50.4)	138(49.6)		
5	Educational status			7.8	0.005
	Illiterate	25(41.7)	35(50.3)		
	Primary	48(51.1)	46(48.9)		
	Middle	73(52.1)	67(47.9)		
	High school	33(40.7)	48(59.3)		
6	Higher secondary & above	7(28)	18(72)		
	Income level				
	Low	80(39.6)	122(60.4)		
	High	106(53.5)	92(46.5)		

The analysis reveals that religion is the only sociodemographic factor significantly associated with the use of home remedies during illness, with 42.5% of Muslims practicing them. Age, gender, marital status, education, and income do not show statistically significant associations with home remedy use. However, trends indicate that younger individuals (18-25) are more inclined to use home

remedies (32.6%), while older groups (46-55) report lower engagement (20%). Among males, 66% use home remedies, while 50% of females do the same. Educational attainment and income level also show no significant correlation, though those with primary education are more likely to use home remedies. (Table 5)

Table No 5: Association between sociodemographic factors and practice of home remedy among study population

SN	Sociodemographic factors	Practice of Home remedy		Chi square	P value
		Yes	No		
1	Age groups				
	18-25	31(32.6)	64(67.4%)	2.7	0.437
	26-35	74(37.4)	124(62.6)		
	36-45	31(35.6)	56(64.4)		
	46-55	4(20)	16(80)		
2	Gender			3.205	0.07
	Male	125(33.8)	245(66.2)		
	Female	15(50)	15(50)		
3	Religion			5.87	0.04
	Hindu	70(31.3)	154(68.8)		
	Muslim	62(42.5)	84(57.5)		
	Christian	8(26.7)	22(73.2)		
4	Marital status			1.14	0.285
	Single	38(31.1)	84(68.9)		
	Married	102(36.7)	176(65.3)		
5	Educational status			7.6	0.105
	Illiterate	25(41.7)	35(59.3)		
	Primary	48(51.1)	46(48.9)		
	Middle	73(52.1)	67(47.9)		
	High school	33(40.7)	48(59.3)		
	Higher secondary & above	7(28)	18(72)		
6	Income level			0.233	0.630
	Low	73(36.1)	129(63.9)		
	High	67(33.8)	131(66.2)		

DISCUSSION

This study on interstate migrant workers in the urban area of Malappuram district of Kerala aimed to assess health-seeking behaviour and to determine factors influencing it. The study was conducted with 400 interstate migrant workers in the Malappuram district of Kerala. Among the respondents, men comprised the vast majority (92%). This finding is consistent with several other

studies that have also shown a predominance of males among interstate migrants.^[10] In our research, only 8% of the participants were female. Recruiting female participants for this type of study proved challenging, likely due to reasons similar to those identified by Saikia et al., where the study exclusively included male participants.^[11] Thiru Kumaran et al.'s survey found that a relatively high

proportion (46%) of interstate migrants were unmarried, with the majority (68%) aged between 16 and 30.^[12] Our research shows that 30% of our study group were unmarried, and half were between the ages of 26 and 35. This discrepancy may be attributed to the high unemployment rate in their home regions. Additionally, only 15% of participants in our study were illiterate, while 23.5% had completed middle school or higher education. This rate of illiteracy is notably lower than what is reported by UNESCO.^[13]

Our study provides valuable insights into the health-seeking behaviour of interstate migrants in the Malappuram district of Kerala. A nuanced approach to healthcare utilization is revealed by our study's findings, which show that 39.8% of interstate migrant workers prefer private healthcare facilities during illness, compared to 32% who choose government health facilities and 28.2% who use both types of facilities. The preference for private healthcare may be fuelled by factors such as perceived quality of care, shorter wait times, or more personalized services, as supported by prior study by Reddy KS et al^[14] and Thiru Kumaran et al^[12] The fact that 28.2% of migrant workers use both government and private healthcare options demonstrates a diverse approach to managing their health needs; this dual utilization may be driven by the need to balance affordability with the quality and timeliness of care.

Half of the study participants (54%) expressed a willingness to visit a doctor or other healthcare facility when ill. This finding is indicative of a readiness to seek formal medical care, which is crucial for managing health conditions effectively. The willingness to seek professional help aligns with study by Sreejini et al ^[15] indicating that access to quality healthcare services is a key determinant of health outcomes among migrant populations. In contrast, 35% of participants in our study reported following home treatments, and 46% practiced self-medication when they were sick. The high prevalence of these practices underscores the role of informal healthcare approaches among migrant workers. Home remedies and self-medication can be

driven by several factors, including the immediate availability of treatments, perceived effectiveness, and cost considerations. Comparable to our study, a study by Sitara et al.^[7] found that 34% of interstate migrants working in the construction site in Calicut practice self-medication. Similarly, a study by Shwetha et al. found that 59% of them prioritized using a home remedy for their illness, which is a significantly higher percentage than our study.^[16]

Our study reveals the clear preferences among interstate migrant workers in Kerala regarding their choice of medical treatment. A significant majority (88.3%) of participants preferred modern medicine as their primary choice for treatment, while alternative systems such as Ayurveda, homeopathy, and Unani/Siddha were less favoured. This preference is consistent with global trends where modern medicine is often perceived as the most effective and scientifically validated approach to treating health conditions.^[17]

This study finds that individuals with lower educational levels (illiterate, primary education, middle school) are more likely to visit healthcare facilities compared to those with higher education (high school, higher secondary, and above). This finding is also statistically significant and may reflect barriers faced by individuals with higher education, such as underestimating health issues or a tendency to self-manage conditions. Alternatively, individuals with lower educational levels may have more immediate access to healthcare services due to limited access to alternative health resources or a greater reliance on formal healthcare providers, which is consistent with the study by Williams et al. (2019), people with higher education often exhibit greater confidence in self-managing health conditions, potentially leading to delays in seeking formal healthcare services.^[18]

According to our research, more than half of people in the 18–25 and 46–55 age groups refrain from using self-medication. This finding is statistically significant and points to age-related variations in self-medication habits. Due to inexperience or medical concerns requiring medical attention, both

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younger and older persons may be more cautious when it comes to self-medication. By comparison, in a study of Udupi migrants by Sushma Dayanand Kotian et al., only 16% and 10% of the younger and older age groups abstained from self-medication.^[19] This study offers critical insights into how sociodemographic factors influence healthcare-seeking behaviours among interstate migrants. Key findings reveal that age, marital status, education

level, income, and cultural factors significantly impact the likelihood of seeking formal medical care, self-medication practices, and the use of home remedies. Conversely, financial constraints and educational background play a role in self-medication practices, with lower-income individuals and those with less education more likely to resort to self-medication.

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