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### **Original Research Article**

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# A study of common health problems and utilization of healthcare facilities among self-employed street vendors of Chandrapur district of Maharashtra

### Sonu R. Meher<sup>1\*</sup>, Pushkar S. Ghatole<sup>2</sup>

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# \*Correspondence: Dr. Sonu R. Meher,

E-mail: sonu.mehar@yahoo.com

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### **ABSTRACT**

**Background:** In India, more than 90% of the workforce is engaged in the informal sector for their livelihoods. About 2-2.5% of the total urban population is involved in street vending, and out of the total urban population in the informal sector 14% is constituted of street vending. Unlike legalization, economic and working conditions of street vendors, there are little studies conducted to understand the health problems faced by them. Authors sought to study the common health problems and utilization of health care services among street vendors of Chandrapur district.

**Methods:** It was a cross-sectional quantitative study. A total of 200 street vendors were purposively selected from four tehsils of the Chandrapur district and face to face interviews were conducted.

**Results:** The common health problems among street vendors observed under this study were respiratory tract infections (32%), musculoskeletal problems (54.4%), gastrointestinal problems (18%), generalized weakness (12.7%), non-communicable diseases including hypertension, diabetes (26.6%). Among those who had suffered from these health problems, the majority (68%) utilized private healthcare facilities and 21% utilized public healthcare facilities. **Conclusions:** Though street vendors earn on daily basis, they seek healthcare services mostly from the private

**Conclusions:** Though street vendors earn on daily basis, they seek healthcare services mostly from the private providers. This results in out-of-pocket expenditure for them. Therefore, it is essential to improve the overall quality of public healthcare facilities for curtailing the out of pocket expenditure. The study findings can be utilized to draw the attention of policymakers, in strategic planning the health care services for such low-income group.

**Keywords:** Common health problems, Public healthcare facility, Private healthcare facility, Street vendors, Utilization of health care facilities

### INTRODUCTION

The informal sector is one of the larger workforce sectors in India. According to the Annual Employment-Unemployment Survey 2013-14, more than 90% of the workforce is engaged in the informal sector for their livelihoods. The informal sector consists of a wide range

of services. In India, street vending constitutes 14% of total urban informal employment.<sup>2</sup> A street vendor is a broad term used to represent the entire workforce who works on the streets. They sell a diverse variety of goods ranging from non-perishable to perishable goods. The urban poor who find difficulty to engage with the formal sector gets engaged in the informal sector and especially

<sup>&</sup>lt;sup>1</sup>Department of Community Medicine, Mahatma Gandhi Institute of Medical Sciences, Sevagram, Wardha, Maharashtra, India

<sup>&</sup>lt;sup>2</sup>Research and Innovation Hub, Capgemini Technology Services, India Limited, Mumbai, Maharashtra, India

in street vending as it requires less investment and skills.<sup>3</sup> The study on women street vendors done at Johannesburg, South Africa had noted that more than half of the studied women vendors reported work-related health problems like cut, wound, injuries, headache and musculoskeletal problems.<sup>4</sup>

In India, nearly 2-2.5% of the total urban population is involved in street vending. Maharashtra and Delhi are having the largest numbers of street vendors as compared to other states in India. Like other occupations, both men and women are engaged in street vending. But it is hard to estimate the number of women. An attempt was made by the Self-Employed Women's Association (SEWA) in Ahmedabad to count the number of street vendors; it showed that 40% out of total street vendors were women. Studies show 30% of the total population would be women in this sector.3 So far studies majorly focus on the legalization, legal protection, economic and working conditions of street vendors, and the role of local, regional and national publics to maintain street vending as the undisturbed profession. Almost all these studies had been done in the large cities in India such as Mumbai, Delhi and Ahmedabad.<sup>3,5-8</sup>

The study conducted by SNDT Women's University in collaboration with International Labour Organization (ILO) in Mumbai had found that 85% of street vendors were suffering from stress-related diseases which include hypertension, hyperacidity, and migraine. Women in this sector are worse off as no proper public facilities available in such places. This leads to serious health issues.<sup>2,7</sup>

Chandrapur district comes under hot tropical climate, and it is known for extreme weather conditions. Previous studies on street vendors carried out in Chandrapur district had focused on the quality of food products sold by them. There are no studies done to understand health problems faced by street vendors of Chandrapur district, to the best of the researcher's knowledge. This study aims to find the common health problems among the street vendors, study the factors influencing and hindering the utilization of healthcare services.

### **METHODS**

This was a descriptive cross-sectional study. It was conducted in Chandrapur district which is located in the Vidarbha region of Maharashtra during April-May 2015. Maharashtra is situated in the north center of India and is bordered by states of Gujarat, Madhya Pradesh on the Northern side, Chhattisgarh on the Eastern side and Andhra Pradesh, Karnataka and Goa on Southern side. It is surrounded by the Arabian Sea on its western side. Chandrapur district is situated in the Vidarbha region of Maharashtra state sharing its East, West and North borders with other districts of Maharashtra like Gadchiroli, Yavatmal, and Nagpur, Bhandara, Wardha

respectively whereas it shares a southern border with Telangana (Adilabad district) (Figure 1).

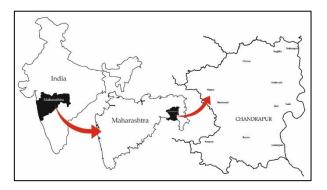


Figure 1: Map of Chandrapur district of Vidarbha region.

As per the aim of the study, only those primarily working as street vendors have been considered for the study. Further, a person who sells perishable goods in the natural market for at least one year, whose main occupation is street vending and who is the breadwinner of the family has been included in this study. Whereas a family member who assists in street vending, and a person who engaged in mobile vending of perishable goods have been excluded from this study.

Active trade unions could give estimated numbers of street vendors but such unions are concentrated mostly in Metro cities. Hence, no exact estimate available on the number of people engaged in a street vending activity. The sample size was calculated by considering the 14% of the population involved in street vending (Women and Men in the Informal Economy: A statistical Picture). The formula used to calculate the sample size is given below  $n=Z^2p(1-p)/d^2$ , where, n: sample size, Z=Z statistics for level of confidence (for 95%, Z value is 1.96), p=expected prevalence or proportion (in proportion of 1; if 14%, p=0.14), d=precision (in proportion of one; if 5%, d=0.05). The sample size of 176.8 was calculated. Therefore, a sample of 50 street vendors in each tehsil namely Bramhapuri, Mul, Nagbhir and Sindewahi was considered appropriate. Finally, a total sample of 200 street vendors was taken in the present study. To ensure fair representation of both the genders engaged in this occupation, equal numbers of male and female respondents were chosen from each of these Tehsils. The respondents were primarily working as street vendors. They were the breadwinners of the family and sold perishable goods in the natural market for at least one year. As vending activity is concentrated in certain geographic locations in these Tehsils, the respondents were approached in these locations. Further, the selection of respondents in these areas was done using purposive sampling. The data was collected by using the quantitative approach. Face to face interview was conducted through a pre-tested structured interview schedule. Primary data from 200 respondents was collected in the month of April-May 2014 by the principal

researcher herself. Data analysis was done using Statistical Package for the Social Sciences (SPSS) software version 20.

### Ethical consideration

This study was a part of the thesis submitted in partial fulfillment of the requirements for the degree of Master's in Health Administration (completed in May 2016) from the Tata Institute of Social Sciences (TISS), Mumbai. The study proposal was presented in front of the Institutional research committee. It was approved by it. Also, informed consent was taken from each participant right at the beginning of the interview.

#### RESULTS

The socio-demographic and economic characteristics of the respondents have been displayed in Table 1. The mean age of street vendors is 41 years (Sd±11 years). The majority (69%) of street vendors are married and out of total female street vendors, 36% are widowed. A total of 19% of street vendors fall into the category of never attended schooling. More than 50% of street vendors (56.5%) belong to OBC (Other Backward Classes) category followed by SC/ST (29%) and NT (18.5%).

Minimal (1%) of the respondents belong to the general category.

Only 26.5% of the respondents mentioned that they are working as street vendors for the last 1-5 years. About 38.5% of respondents have been involved in the street vending activity for more than 21 years. The majority of street vendors reported that they earn up to 300 rupees per day. Nearly 60% of the male street vendors earn around 101-300 rupees per day whereas 59% of female street vendors earn just up to 100 rupees per day. Only 4% of male respondents mentioned that they earn between 301-500 in a day (Table 1).

### Common health problems among street vendors

In this study, a health problem is a condition or a state of physically ill where medical attention is needed. It is experienced by the respondents. So, the symptoms, as well as the diseases, are considered as health problems. For this study, the researcher considered the recall of one year period for all types of symptoms and diseases except for minor communicable symptoms/diseases such as acute respiratory infections, fever, gastrointestinal infections; a recall of one month period was considered appropriate.

Table 1: Socio-demographic and economic characteristics by gender among self-employed street vendors in Chandrapur District of Maharashtra, (n=200).

Socio-demographic	Categories	Male		Female	:	Total
characteristics		N	%	N	%	N (%)
Age (mean age 41.11 years and SD 11.12 years)	20-30	33	73	12	27	45 (22.5)
	31-40	30	47	34	53	64 (32)
	41-50	21	38	34	62	55 (27.5)
	51 and above	16	44	20	56	36 (18)
Marital status	Unmarried	21	81	5	19	26 (13)
	Married	79	57	59	43	138 (69)
	Widowed/Divorced	0	0	36	100	36 (18)
<b>Educational level</b>	Attended schooling	89	55	73	45	162 (81)
	Never attended schooling	11	29	27	71	38 (19)
Caste category	General	2	100	0	0	2(1)
	OBC	59	52	54	48	113 (56.5)
	SC/ST	30	52	28	48	58 (29)
	NT	9	33	18	67	27 (18.5)
Working as a street vendor	1- 5 years	24	56	19	44	43 (26.5)
	6-10 years	18	53	16	47	34 (17)
since (mean working years	11-15 years	17	61	11	39	28 (14)
17. 30 years and SD 11.92	16-20 years	13	46	15	54	28 (14)
years)	21 years and above	28	42	39	58	67 (38.5)
Daily income	≤Rs. 100	49	41	71	59	120 (60)
	Rs. 101-300	43	60	29	40	72 (36)
	Rs. 301- 500	8	100	0	0	8 (4)
Total		100	50	100	50	200

Approximately 63% (n =126, N =200) of street vendors reported that they suffered from health problems during the one year before the survey, out of which 56.3% (n=71, N=126) were females and 43.6% (n=55, N=126) were males. No statistical significance found for association between health problems and sex (chi<sup>2</sup> = 5.491 and p-value =0.19) (Figure 2 and 3).

In this study, 'n' is used to indicate the numerator and 'N' is used for indicating the denominator in the result section.

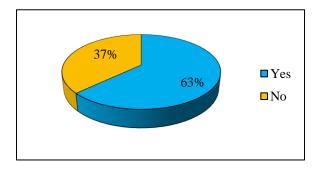


Figure 2: Proportion of the health problems reported by street vendors in the last one year.

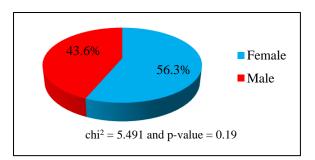


Figure 3: Gender wise proportion of the health problems reported by street vendors.

When the educational status of the respondents was dichotomized as schooling and no schooling and the relation between it and common health problems was analyzed, it has found that around 76. 3% (n=29, N= 38) who had not gone to school and nearly 59.8% (n=97, N=162) those who had gone to school had suffered from the health problem in the last one year. Strikingly, there is no association between education status and health problems among street vendors (chi² = 3.569 and p-value =0.059).

Table 2 showed that about 39.6% (n=50, N=126) respondents mentioned that they had suffered from communicable diseases in the last one year period, out of which major infections including typhoid, jaundice, urinary tract infections, and fever together contributes to 44% followed by acute respiratory tract infections 32% and gastro-intestinal infections 18%.

Out of a total of 126 respondents who reported having health problems in the last one year, 62.6% (n=79) respondents reported that they were suffering from non-communicable diseases. Out of which musculoskeletal diseases contribute to 54.4% (n=43, N=79) followed by hypertension and diabetes which together contribute to 26.6% (n=21, N=79) and generalized weakness 12.7% (n=10, N=79), last but not least, 3.8% (n=3, N=79) respondents suffered from injuries at work-place (Table 2).

Table 2: Common health problems among street vendors.

Health problem categorization	Sub categorization of health problems	N	%
Communicable diseases	ARIs	16	32
	Major infections	22	44
	Gastro intestinal infections	9	18
	Skin diseases	3	6
	Total respondents reported communicable diseases as health problem	50	100
Non- communicable	Musculoskeletal diseases	43	54.4
	Hypertension and Diabetes	21	26.6
	Generalized weakness	10	12.7
	Injuries at work place	3	3.8
	Total respondents reported non- communicable diseases as health problem	79	100

# Utilization of health care facility for common health problems by street vendors

The majority of the respondents (68%, n=86, N=126) who were having health problems had visited the private health care facility and only 21% (n=27, N=126) had visited public health care facility.

There were 8% (n=10, N=126) of the respondents who had visited both types of health care facilities for availing health care services. There are 2% (n=3, N=126) of the respondents who hadn't visited any type of health care facility for seeking health care services. No statistical significance was found for association between sex and type of health facility utilized (Table 3).

### Factors affecting the preference of the health facility

Approximately 94.2% (n=81, N=86) of the respondents who had visited a private health care facility had visited it as they get quick relief and fewer side effects of the health care services provided to them. Also, 93% (n=80, N=86) of the respondents mentioned that they visit private health care facilities as they found a good attitude of service providers over there, they face fewer side effects of the care provided to them. Around 90.7% (n=78, N=86) respondents reported that they go to a private health care facility as they get quality care and 84.9% (n=73, N=86) visit it because of the specialty of doctor. Closeness of health care facility, less waiting time, suitable timings and less cost of care are secondary for choosing the private health care facility. Less than half proportion of respondents 40.7% (n=35, N=86) mentioned that they visit private health care facility as it is closed to them; around 53.5% (n=46, N=86) of the respondents visit this facility as they found timings of private facility suitable for them and 32.6% (n=28, N=86) mentioned that the waiting time is less in a private health care facility. In contrast, 90.6% (n=25, N=27) respondents mentioned that they visit a public healthcare facility as it has less cost of care. Statistical significance has been found for association between type of facility utilized and preference factors including closeness  $(Chi^2=15.653, p=0.001)$ , suitable timings  $(Chi^2=16.816,$ p=0.001), less cost of care (Chi<sup>2</sup>=14.981, p=0.002), quick-relief (Chi<sup>2</sup>=12.481, p=0.006), fewer side effect (Chi<sup>2</sup>=17.375, p=0.001) and good attitude of the service providers (Chi<sup>2</sup>=9.303, p=0.026) (Table 4).

Table 3: Utilization of health care facility for common health problems by street vendors.

Utilization of health care facility	Male (%)	Female (%)	Total (%) (n=126)
Public health facility	11 (20)	16 (23)	27 (21)
Private health facility	38 (69)	48 (68)	86 (68)
Both public and private health facility	04 (7)	06 (8)	10 (8)
None	02 (4)	01(1)	03 (2)
Total	55 (100)	71 (100)	126 (100)

# Factors contributing to the under-utilization of public healthcare facility

A total of 110 respondents did not visit a public healthcare facility during the last year. Figure 4 showed that more than 90% of the respondents mentioned that they do not utilize the public health care facility as they find the poor quality of care over there (96.4%), as the OPD timings are not suitable to them (95.5%), as the quality of medicine is poor (93.6%), as it is situated away

from their workplace and or residence place (92.7%) and due to long waiting lines (90%).

Table 4: Factors affecting the preference for the health facility.

Preference factors	Public health care facility (%)	Private health care facility (%)	P value	Chi <sup>2</sup>
Closeness	11.1	40.7	0.001	15.653
Suitable timings	14.8	53.5	0.001	16.816
Less waiting time	7.4	32.6	0.7	7.07
Less cost of care	92.6	59.3	0.002	14.981
speciality of doctor	70.4	84.9	0.409	2.891
Quality care	74.1	90.7	0.064	7.255
Quick relief	74.1	94.2	0.006	12.481
Fewer side effect	70.4	93.0	0.001	17.375
Good attitude	74.1	93.0	0.026	9.303
Total number of respondents	100.0 (N=27)	100.0 (N=86)		

About 85.5% of respondents mentioned that they did not visit the facility because of the unavailability of medicines and 76.4% mentioned the reason as the unavailability of the doctors (Figure 4).

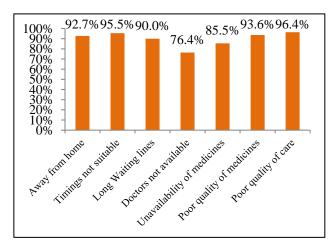


Figure 4: Factors contributing to the under-utilization of public healthcare facility.

### Attitude towards public health facility

The perception of street vendors towards public healthcare facilities was found to be not good. Out of 200 respondents, about half of the respondents (51.5%)

reported that they found it as not good. Further, around 31.5% mentioned as average, 16.5% mentioned at good and only 0.5% mentioned it as very good (Figure 5).

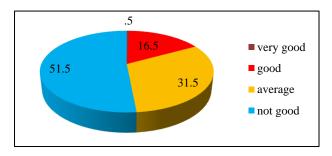


Figure 5: Attitude towards public health facility.

### **DISCUSSION**

The study intends to explore the common health problems among the self-employed street vendors, and the health practices in terms of utilization of health care services and factors affecting the preference for the healthcare services. The health status of street vendors is found to be poor. Previous studies also show that the working condition of street vendors is not favorable for health. They use to work in all weather conditions like during hot summer, cold winter and during rainy season alongside the streets.11 They lift heavy weights while opening and closing the shop daily and they work for a long time. They start their routine from early morning and end their day nearly at midnight. They don't have any safety measures or first aid available at the workplace.<sup>2-4,14</sup> All these factors affect the health of the street vendors. The other factors like education, income and availability of basic facilities like water and sanitation at residence and determine health workplaces the οf  $individual.^{6,7,11,12,14}\\$ 

The current study also show that more than 80% of street vendors are literate. But the literacy level among females is lower than that of the males. Only 45% of the female respondents were literate compared to 55% male respondents. Likewise, a study done in Mumbai found that the literacy level among street vendors was found to be low, less than quarter population was having the primary level of education and only one percent of the population had attained schooling up to the higher grades that came to Mumbai in search of formal labor. The literacy level in females was lower than that in the males.<sup>7</sup> Unlike these study findings, the study based in Nigeria found that the majority of street vendors had attained the schooling up to secondary and post-secondary grades. 13 We found that street vendors who had not attended the school at all and who had attended schooling, both groups had more or less equally suffered from health problems in the last year.

Also, few studies in India reported that more than a quarter of the female street vendors are widowed and trying to support their family through this occupation and some of them are the only earning member in the family.<sup>7</sup> This is following our study finding that 36% of female street vendors are widowed.

In India, studies found that the average daily income of street vendors is up to 90-100 Indian rupees per day and even lower than that for women and a quarter of their income is taken by the local public as a tax. 11 The income level of women is lower than that of the men as the time and capital spent by them in vending activities is lower than men. Women had to do household activities along with street vending activities. The average daily income earns by street vendors in Mumbai is 125-500 rupees. The income generation depends upon the nature and volume of the goods, location of vending. The study found that most of the female vendors engaged in selling the vegetables.<sup>7</sup> Like the above study findings, this study has also found that the majority of street vendors receive very less earning at the end of the day. The study revealed that 96% of male and 100% of female street vendors had daily earnings in between 101 to 300 Indian rupees only. Street vendors have an income which is merely touching the per capita income of 212 Indian rupees per day. 15

Studies showed that almost all street vendors do not have access to safe drinking water and public toilet facilities at the workplace. Street vendors face extreme weather conditions, long working hours, pollution from vehicles, dust from the road, these lead into various health issues among them such as respiratory disorders, headache, musculoskeletal disorders, sleep disturbance. Women in this sector have to face again worse condition as there is no availability of toilets in working spaces which lead to urinary problems which may sometime result in kidney disorders too.<sup>2,3,7</sup>

This study shows that 32% (N=50) suffered from respiratory tract infection and it can be related with daily exposure to street dust and pollution and about 54.4% (N=79) had musculoskeletal problems which may be caused due to daily lifting of heavy loads while opening and closing the shop.<sup>3,4,7</sup> Street vendors are not provided with the designated place for street vending and they are always under the stress of eviction by the local authorities. Such kind of stress is mentioned by almost all the interviewed street vendors. This can be the major cause of hypertension and diabetes among them.<sup>3,7</sup> In our study, hypertension and diabetes together contributed to 26.6% (N=79). Similarly, a study conducted by SNDT in collaboration with ILO in Mumbai had found that 85% of street vendors were suffering from stress-related diseases like hypertension, hyperacidity, migraine.<sup>3,7</sup> The nature of the work include either continuous sitting or standing without much physical activity for long hours, this leads to gastrointestinal problems like indigestion, acidity, piles, etc. which contributed to 18% (N=50).3,7 Also, continuous sitting or standing in hot weather conditions leads to weakness and giddiness among street vendors (12.7%, N=79). Health problems like typhoid, jaundice, skin problems are associated with the living condition of

the street vendors. As there is no proper facility of safe drinking water and public toilet at the workplaces the health problems such as urinary tract infection, found among them.<sup>3,7</sup> Such major infections contribute to 44% (N=50) in the current study.

A study conducted in Nigeria on Occupational health and safety for informal sector workers talked about the injuries caused by road traffic accidents in street traders. Though street vendors are blamed as the cause of congestion and accident, they are more vulnerable to accidents while working as street vendors. Twenty four percent street vendors noted that they suffered from the injury while trading. <sup>13</sup>

The utilization of health care services among street vendors for the current health problem and the health problems in the last one year period is found to be good. Almost 98% of street vendors who were having health problems in the last year had sought the healthcare services from either healthcare facility. But the livelihood is dependent on the daily earning which force them to go to daily work even during the illness period. This tendency of not taking proper treatment for health problems that demand medical attention and continuing with the daily street vending work by neglecting the health problems may worsen the health status of the street vendors.

The utilization of the health care service also depends upon the availability and physical accessibility of health care services. All four Tehsils under the study had the public as well as private health care facilities available. Also, all the tehsils under the study had Allopathic health care services available within five km of area. Only two tehsils had Ayurvedic and Homeopathic health systems available within five km of area.

Despite the availability of the public healthcare facilities in all the four tehsils, only 21% of street vendors utilized them. It is evident from the study that the utilization of private healthcare facilities is higher than that of the public healthcare facilities in case of all kinds of health problems. In contrast, about 68% of them utilized private health care facilities. Similarly, other studies done in Uganda and India show that the larger proportion of people belonging to low-income groups mostly utilize private healthcare services.<sup>16,17</sup>

The most common factors determining the preference for the particular healthcare facilities are a specialty of the care provider, quick relief, less/no side effects, good attitude of service providers, quality of care followed by relatively less cost of care, suitable timings, and the distance of healthcare facilities form the residence or workplace and good attitude of the health care providers. Despite incurring the heavy expenditure in private health care facilities, street vendors prefer to go to private health care facilities. In India, other studies showed that, though the utilization of private healthcare services incurs a cost, low-income groups utilize health care from them. 17,18

It has been found that the cost of the treatment was the influencing factor for most of street vendors for utilization of the public healthcare facilities. More than 90% of street vendors who had visited the public health facilities were due to the low cost of care they received over there.

The study showed that the major factors creating a barrier in the utilization of public health care facilities are poor quality of care, unsuitable timings of health care provision, poor quality, and unavailability of medicines and the distance of the public health care facilities from the workplace and or residence place. Most of street vendors perceived that in public health care facilities they receive the same kind of treatment regime for any kind of health problem, unlike private health care facilities. Also, factors like long waiting times, unavailability of the medicines and doctors acted as barriers in the utilization of public health care facilities by most of the street vendors. Other studies also reported that poor quality of care, unavailability of medicines, and rude behavior of the health personnel at public healthcare facility as the barrier in utilizing the services. 16,17

So, there is the need to address the issue of unavailability of the medicine, and the lack of a proper number of health personnel in public health care facilities. In the given context of the health and wellness center, it could be a good policy initiative if implemented at the ground level as proposed in the policy.

### Limitation

This study captured only the Vidarbha region of Maharashtra. Also, respondents self-reported about their health problems may not have been exact due to recall bias. This may lead to under-reporting of health problems. The factors influencing and hindering the use of healthcare facilities had been analyzed from the beneficiaries' perspectives only. Exploring the factors influencing the use of public health services from providers' perspectives is not the scope of this study. However, considering the lack of study in this area, it might provide insight into the health issues of street vendors to the researchers and policymakers.

### **CONCLUSION**

The most common diseases found among street vendors were respiratory tract infections, musculoskeletal problems, hypertension, and diabetes. These diseases are mostly related to their occupation. Most of street vendors were preferred private health care. Though they had preferred the private health care facilities, some street vendors utilized the public health care facilities in the past year. The important facilitating factor for utilizing public health care services was the low cost of treatment. And

those who had not utilized the public health care services in past one year, the major factors causing barriers were poor quality of care, unsuitable timings, poor quality and unavailability of medicines and unavailability of doctors. With the low daily earnings, street vendors incur out of pocket expenditures when they visit a private healthcare facility. So it is important to improve the overall quality of healthcare at a public facility. The study findings can be utilized for further evidence generation and to draw the attention of policymakers, in strategic planning of the health care services for low-income groups.

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### **REFERENCES**

- Ministry of labour and employment. Report on employment-unemployment survey. Available at: https://labour.gov.in/sites/default/files/Report%20% 20Vol%201%20final\_0.pdf. Accessed on 28 January 2016.
- 2. International labour organization. Women and men in the informal economy: a statistical picture. Second Edition, 2013. Available at: https://www.ilo.org/wcmsp5/groups/public/dgreport s/stat/documents/publication/wcms\_234413.pdf. Accessed on 14 August 2019.
- 3. Bhowmik S. Legal protection for street vendors. Economic Political Weekly. 2010;45(51):12-5.
- 4. Pick WM, Ross MH, Dada Y. The reproductive and occupational health of women street vendors in Johannesburg, South Africa. Social Sci Med. 2002;54(2):193-204.
- 5. Adhikari D. Income generation in informal sector: a case study of the street vendors of Kathmandy metropolitan City. Economic J Develop. 2011;14(12):1-14.
- Centre for Urban Equity. Vendors and informal sector a case-study of street vendors of Surat City, 2011. Available at: https://cept.ac.in/UserFiles/ File/CUE/Working%20Papers/Revised%20New/15 CUEWP15\_Vendors%20and%20Informal%20Secto

- r%20-%20A%20Case-Study% 20of% 20Street% 20Vendors%20of%20Surat%20City.pdf. Accessed on 19 January 2016.
- 7. Saha D. Working life of street vendors in Mumbai. Indian J Labour Econom. 2011;54(2):301-25.
- 8. Mathur N. The street vendors bill opportunities and challenges. Economic Polit Weekly. 2014;49(10):22-5.
- 9. Sharma P. Bacteriological analysis of street vended fruit juices available in Vidarbha. Int J Current Microbiol Applied Sci. 2013;2(5):178-83.
- Wadhai V, Khobragade K. Evaluation of microbiological safety of indian chutneys: a case study of Chandrapur City, India. Science Res Reporter. 2012;2(1):56-8.
- 11. Bhowmik S. Street vendors in Asia: a review. Economic Polit Weekly. 2005;12:2257-64.
- 12. Jhabvala R. Roles and perceptions, 2000. Available at https://www.india-seminar.com/2000/491/491% 20r.%20 jhabvala. htm. Accessed on 15 February 2016.
- Ogunrinola I, Fadayomi T, Amoo E, Sodipe O. Occupational health and safety for informal sector workers: the case of street traders in Nigeria. Int Academy African Business Develop. 2012;15;186-228.
- 14. Chattopadhyay O. Safety and health of urban informal sector workers. Indian J Community Med. 2005;30(2):46-8.
- 15. Ministry of Statistics and Programme Implementation. Available at: https:// pib. gov. in/newsite/ printrelease. aspx? relid=145814. Accessed on 8 April 2020.
- 16. Bakeera S, Wamala S, Galea S, State A, Peterson S, Pariya G. Community perceptions and factors influencing utilization of health services in Uganda. Int J Equity Health. 2009;8(1):25.
- 17. Kumar C, Prakash R. Public-private dichotomy in utilization of health care services in India. J Sustainable Develop. 2011;5(1):25-52.
- 18. Sreeramareddy C, Sathyanarayana T, Kumar H. Utilization of health care services for childhood morbidity and associated factors in India: a national cross-sectional household survey. PLoS One 2012;7(12):44-9.

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