

Original Research Article

A study on the availability and accessibility of healthcare services provided at Mohalla clinics by the slum residents of Delhi

Ridhima Vohra^{1*}, Harshad Thakur²

¹National Health Authority, Ministry of Health and Family Welfare, Government of India, India

²Tata Institute of Social Sciences, Mumbai; NIHF, New Delhi, India

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*Correspondence:

Dr. Ridhima Vohra,

E-mail: vohra_ridhima@yahoo.com

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ABSTRACT

Background: Delhi being the capital of India is overcrowded due to the rapid migration of the people from different parts of the country for the purpose of better employment and education opportunities resulting in development of slums and as a result of lack of proper documentation, lack of awareness intermingled with the other major factors these people suffer a lot and hence to cater to the healthcare needs of these fleeting population the government of NCT of Delhi launched the ambitious project of Mohalla clinics. To explore the availability and accessibility of the various healthcare services provided at Mohalla clinics and to know about the perceptions of the people about the functioning of Mohalla clinics.

Methods: a cross-sectional mixed method study was carried out by taking 15 Mohalla clinics in total from the five districts of Delhi, taking three Mohalla clinics from each district where household survey was done with 225 household heads who have availed services from these clinics

Results: The overall response of the users has been positive with respect to the various healthcare services that are being provided at these clinics.

Conclusions: Mohalla Clinics have been successful in catering to the healthcare needs of the society, however there are few areas of dissatisfaction infrastructure, drug supply, adequate laboratory investigations, water supply, sanitation of the toilets, overall management system etc.

Keywords: Universal Health Coverage, Drug Supply, Infrastructure, Slum residents, Migration

INTRODUCTION

The Indian healthcare industry is one of the fastest growing sectors and it is expected to reach \$280 billion by 2020 (IBEF, 2018). On the contrary the poor population in India does not have access to even the basic healthcare services due to which they suffer and even die from preventable and treatable diseases. However, the barriers are not only limited to the demand side but they are also seen on the supply side as well which is mostly prevalent in the slums of our country. Lack of availability of adequate healthcare services is one of the major causes

for this.¹ Another issue is due to the utilization of the various healthcare services by the urban poor.² It was found that among the poorest 20% of the households only 56% of the diarrhoea among children was treated in the slum compared to 71% of the cases in the rich households.³ It has been found that utilization of healthcare services by the urban poor is seen mostly in the private clinics as compared to the government healthcare facilities.¹ Barriers are long waiting time at the Government hospitals that compelled the slum residents to seek healthcare services from the private practitioners, shortages in the supply of drugs & accessibility for availing treatment at the government healthcare

facilities.¹ In this similar study, the level of dissatisfaction among the patients residing in the urban slums and seeking healthcare services from government facilities was half as compared when seeking healthcare services from the private healthcare facility.

Like most cities in low-income countries, a significant portion of Delhi's population are recent migrants and around 2 million people reside in slums. In order to fill these gaps the government of NCT of Delhi has re-organized the three tier healthcare delivery system to a comprehensive four-tier healthcare delivery system by introducing the concept of neighborhood health clinic in Delhi to reduce the burden on secondary and tertiary level healthcare facilities. The clinics are built in the form of a porta- cabin or rented premises are taken for effective functioning of these clinics. The clinics shall provide the following services; basic medical care services including curative care for common illnesses, all lab investigations are to be carried out by the empanelled laboratory for the clinic, all drugs as per the essential drug list shall be provided free of cost to the patients, preventive services such as antenatal and postnatal care of pregnant women, assessment of nutritional status and counselling and preventive and promotive component of National/State health programmes and health information, education and awareness.

Rationale

Rationale for current study was to reduce the patient overload on the secondary and tertiary healthcare facilities, the Government of NCT of Delhi decided to launch an ambitious healthcare project to provide access to health facilities to the unprivileged population through opening Mohalla clinics. Since not many studies have been carried out with respect to Mohalla clinics as it is a relatively newer concept.

Objectives

Objectives of current study were to explore the availability and accessibility of the various healthcare services provided at Mohalla clinics by the people residing in Delhi slums and to know about the perceptions of the people and the key-informants (community health workers and medical officer) about the functioning of Mohalla clinics and how successful do they cater to the healthcare needs of the people residing in Delhi slums.

METHODS

Study design, duration and location

Current study is mixed method in nature and both qualitative as well as quantitative data collection methods have been used. The data collection of the study was done between 1 April, 2018 to 30 May, 2018 in Delhi, India.

Sample size and method of sampling

15 Mohalla clinics were selected by using simple random sampling from five districts of Delhi-north, south, east, west and central and three Mohalla clinics were selected from each district. From every Mohalla, 15 households were selected by purposive sampling where only those households were included who have utilized the healthcare services from Mohalla clinic at-least in the past one month. So, a total of 225 household heads were selected and interviewed. For this part, one key informant in the form of medical officer or community health worker were selected from each Mohalla clinic via purposive sampling and interviewed. So a total of 15 key informant interviews were also taken.

Inclusion criteria

Inclusion criteria for current study were; household heads (irrespective of their sex) and having age greater than 30 years were included, households who have utilized the healthcare services at Mohalla clinic in at least last one month in the past were included, only the doctors working at Mohalla clinics (irrespective of sex) were included and both male and female community health workers of that area were included.

Exclusion criteria

Exclusion criteria for current study were; households who have not utilized the services at Mohalla clinics in at least past one month and household heads having age less than 30 years.

Data collection tools and data analysis

Quantitative: a semi-structured interview schedule used for interviewing the household heads qualitative: a key informant interview schedule was used for the purpose of data collection. It consisted of all open-ended questions. The qualitative data was entered in MS word and was manually processed. The quantitative data was processed using SPSS.

RESULTS

Treatment seeking behavior of slum residents

Awareness about Mohalla clinics: During the study, it was observed that all the slum dwellers were aware about the existence of Mohalla clinics. Utilization pattern: majority of the households (63.1%) visited Mohalla clinics for seeking healthcare services within last seven days of taking the interview.35.1% respondents had visited Mohalla clinic within 7-14 days of giving the interview and the remaining (1.8%) had visited the clinic last time 15-30 days before giving the interview. The frequency of visiting Mohalla clinics was mostly more than twice a month (61.7%) by the members of the households, followed by twice a month visit to Mohalla

clinic (18.7%) by those seeking healthcare treatment for any disease.

Table 1: Awareness about Mohalla clinics amongst slum residents of Delhi.

Type of services provided at Mohalla clinic	N (%)
Diagnosis of illness	217 (96.4)
First aid	46 (20.4)
Immunization services	21 (9.3)
ANC and PNC checkup	22 (9.8)
Treatment of illness	100.0

Majority of the household heads visited Mohalla clinics for seeking treatment for their own illness (66.2%) whereas 33.8% visited Mohalla clinics for seeking treatment for others like; their family members, friends or relatives. 100% of the patients reached the clinic by walking from their home, with an average time to reach being 5 min for 85.3% of patients.

Table 2: Utilization pattern of services at Mohalla clinics amongst slum residents of Delhi (n=225).

Parameters	Yes N (%)	No N (%)
Utilization pattern of services at Mohalla clinic		
Was the disease diagnosed at Mohalla clinic	220 (97.8)	5 (2.2)
Doctor at Mohalla clinic guide you about your illness	190 (84.4)	35 (15.6)
Any difficulties faced while availing treatment at Mohalla clinic	43 (19.1)	182 (80.9)
Any other institute(other than Mohalla clinic) where you are seeking treatment	26 (11.6)	199 (88.4)
Prefer lab facilities at Mohalla clinic over private lab facilities	218 (96.9)	7 (3.1)
Prefer Mohalla clinic for emergency health problems	0	100.0
Motivating factor to seek healthcare at Mohalla clinic		
Proximity from the residence	219 (97.3)	6 (2.7)
Referred by a friend/relative	17 (7.5)	208 (92.5)
Positive experience from the past	52 (23.1)	173 (76.9)
Free treatment services	198 (88.0)	27 (12.0)
Advertisement/hoardings/pamphlets	23 (10.2)	202 (89.8)

The average waiting time to avail services was 0-30 min (75.1%), 31-60 min (9.8%) and more than 1 hour (16%). The difficulties faced while seeking treatment at Mohalla clinic by the slum residents of Delhi were- Too long

waiting time (67.4%), non availability of drugs (6.98%) and improper infrastructure (25.6%).

Table 3: Prevalence of Acute disease amongst slum residents of Delhi.

Morbidity pattern for acute disease	No	Yes
Suffered from any disease in the past 15 days N (%)	727 (78.9)	195(20.1)
Type of acute ailment		N (%)
Upper respiratory tract infection		66 (33.8)
Gastro-intestinal tract infection		27 (13.8)
Skin infection		46 (23.6)
Fever		48 (24.6)
Urinary tract infection		5 (2.6)
Chickenpox		3 (1.6)
Total		195 (100)

Table 4: Prevalence of chronic disease amongst slum residents of Delhi.

Morbidity pattern for chronic disease	No	Yes
Suffered from any disease in the past 1 year	774 (83.9)	148(16.1)
Type of chronic ailment		N (%)
Diabetes		50 (33.8)
Hypertension		56 (37.8)
Gall stone		6 (4.05)
Arthritis		15 (10.1)
Thyroid		25 (16.9)
Migraine		3 (2.0)
Epilepsy		1 (0.7)
Total		148

Maternal healthcare: Mohalla clinics will provide preventive services in the form of ANC and PNC care for females (as per the guidelines of government of NCT of Delhi), but however during the study it was found that not even a single household was aware of the fact that maternal services are being provided at Mohalla clinics, that led to the poor utilization of these services. Morbidity pattern and treatment seeking behavior; The understanding of the type of morbidity pattern is an important factor to understand holistically the treatment seeking behavior of any population. The various healthcare facilities visited in order to seek healthcare services were-majority of the patients (97.5%) visited Mohalla clinics for seeking treatment for their acute disease followed by 2% who visited a private clinic for seeking treatment for acute disease and 0.5% who went to government hospital for seeking healthcare treatment. Majority of the patients did not bear any cost on consultation (97.9%), investigation (98.9%), drugs (98.9%) & transportation (99.5%). Out of the various healthcare facilities visited in order to seek healthcare services -majority of the patients (85.8%) visited Mohalla clinics for seeking treatment for their chronic disease

followed by 9.4% who visited a private clinic for seeking treatment for chronic disease and 4.8% who went to government hospital for seeking the healthcare treatment.

Table 5: Cost of availing treatment by slum residents of Delhi.

Parameters	N (%)
Consultation fee for seeking treatment for chronic disease (Rs/month)	
50-200	2 (14.3)
201-350	5 (35.7)
350-500	3 (21.4)
501-650	2 (14.3)
651-800	2 (14.3)
Investigation cost for seeking treatment for chronic disease (Rs/month)	
50-150	5 (35.8)
151-250	4 (28.6)
251-350	2 (14.3)
351-450	1 (7.1)
451-600	1 (7.1)
>600	1 (7.1)
Medicinal cost for seeking treatment for chronic disease (Rs/month)	
50-250	3 (21.4)
251-500	3 (21.4)
501-750	4 (28.6)
751-1000	1 (7.1)
>1000	3 (21.5)
Total (N=14)	100.0
Transportation cost for seeking treatment for chronic disease (Rs/month)	
10-50	4 (57.1)
51-90	1 (14.3)
91-130	2 (28.6)
>130	0 (0)
Total (N=7)	100

Perception of the respondents regarding Mohalla clinics

The views and perceptions of the household respondents have been quantified and analyzed to frame a picture of the functioning of Mohalla clinics at present in the eyes of the slum dwellers utilizing the services from these clinics. Perception of people plays a very crucial role in utilization of the various healthcare services that are provided at any healthcare facility.

Perception of the Medical officers regarding Mohalla clinics

The knowledge regarding the views and perceptions of the providers is extremely important to know of how efficiently the facility is working in terms of the delivery of healthcare services.

Table 6: Perception of slum residents regarding Mohalla clinic (n=225).

Perception of slum residents regarding Mohalla clinic	Yes	No
Healthcare services provided at other clinics are better than Mohalla clinics	44 (19.6)	181 (80.4)
Attitude and Sincerity of Doctor is satisfactory	199 (88.4)	26 (11.6)
Sitting arrangement at the clinic is satisfactory or not	156 (69.3)	69 (30.7)
Drug supply is prompt at Mohalla clinics	202 (89.8)	23 (10.2)
Satisfaction with the quality of drugs supplied at Mohalla clinics	211 (93.8)	14 (6.2)
Visit Mohalla clinic if it is shifted to a far off place from the residence	3 (1.3)	222 (98.7)
Prefer Mohalla clinic in the future for seeking healthcare	200 (88.9)	25 (11.1)
Recommend Mohalla clinic to others	194 (86.2)	31 (13.8)

Utilization of healthcare services provided by Mohalla clinics

During the study, it was found that most of the medical officers said that though Mohalla clinic is a newer concept but its popularity has been breakthrough in such a short period of time. "Mohalla clinics have proved out to be very effective in the provision of healthcare services specially to the people of lower socio-economic status, however many services still remain under-utilized like-laboratory services, first aid services and radiological services" (A 35 years old, male medical officer, Mohalla clinic). The various factors that affect the utilization of services being provide by any healthcare facility are- cost of availing the treatment, proximity of the healthcare facility from the residence, reputation of the doctor serving at these clinics, the list of healthcare services being provided, behaviour of the staff, waiting time at the healthcare facility and cost of seeking the treatment.

Public health needs assessment

"Patients visiting the Mohalla clinic mainly want availability of the medicines and less waiting time for seeking the treatment as their utmost priority". (A 38

years old female medical officer, Mohalla clinic). “Awareness regarding the various services is less among the people seeking healthcare and it is an important public health need that should be met effectively by means of health education”. (A 36 years old female medical officer, Mohalla clinic).

Table 7: Perception of slum residents regarding Mohalla clinic.

Parameters	N (%)
Positive aspects of mohalla clinic compared to other healthcare facilities.	
Free treatment	4 (1.8)
Proximity from the residence	225 (100.0)
Waiting time is less	89 (39.5)
Doctor is sincere and has a positive attitude	187 (83.1)
Suggestions to improve services provided by mohalla clinic	
Infrastructure to be improved	45 (20.0)
Waiting time should be reduced	39 (17.3)
Staff behavior should be modified	54 (24.0)
Doctor should be more regular and guide properly	38 (16.9)
Public convenience should be available	50 (22.2)
First aid facilities should be available	98 (43.6)
Medicine supply should be prompt	5 (2.2)
Investigations should be done properly and on time delivery of reports	68 (30.2)
Timings should be increased upto 4pm	52 (23.1)
Scoring of mohalla clinic by the household respondents	
Very poor-1	0 (0)
Poor-2	6 (2.7)
Average-3	50 (22.2)
Good-4	19 (8.4)
Very good-5	150 (66.7)

“I don’t feel that these clinics are sufficient to cater to the healthcare needs of the community as lack of diagnostic facilities and manpower shortage is a big problem, sometimes I have to do the work of both doctor as well as the pharmacist”. (A 35 years old male medical officer, Mohalla clinic). “Health education during schooling can act as a significant step towards improving the behavior of the community with respect to the various healthcare problems and so modifying the public health in a positive way”. (25 years old male medical officer, Mohalla clinic). Challenges and difficulties faced by doctors working at Mohalla clinics. During the study it was found that the challenges faced by the doctors working at Mohalla clinics are workplace challenges in the form of-drug supply. “There is problem with respect to shortage of drugs at Mohalla clinics specially those of thyroid, skin diseases due to which certain patients have stopped visiting” (A 36 years old female medical officer, Mohalla clinic).

Poor infrastructure

“The washroom is a major challenge, the hygiene is not maintained and water supply is a major issue, as a result I tend to avoid using the washrooms”. (A 36 years old female medical officer, Mohalla clinic). “water shortage is a major problem, there has been no water supply since a month and we are buying it here on our own but we are not paid for it”. (A 25 years old male Medical officer, Mohalla clinic). Along with this, the vending machine for dispensing medicines was available at only one Mohalla clinic and other Mohalla clinics were having no vending machines, also the electronic tablets for entering the patient details was not available at certain clinics.

Staff shortage

Only a handful of doctors were satisfied with the present staff in their facility. “The pharmacist is not appointed and the helper is on leave for some days, I have to work as a doctor as well as dispense the medicines”. (A 32 years old male medical officer, Mohalla clinic).

Security issues

This was a problem at almost all the Mohalla clinics where the lack of security posed to be a huge challenge for the doctors. “One day when I came to Mohalla clinic the glass door was broken, TV and my sphygmomanometer were stolen”. (A 25 years old male medical officer, Mohalla clinic). “Lack of Security is a great challenge for us; sometimes the patients quarrel with us and it gets difficult to control them without adequate security in place”. (A 38 years old female medical officer, Mohalla clinic).

Perception of community workers regarding Mohalla clinics

Satisfaction regarding Mohalla clinics: It was found during the course of the study that all the community health workers were highly satisfied with the way the clinic is functioning at present. “The Mohalla clinics have opened new doors for the community members to seek treatment for the basic services for which initially they had to travel to the far off healthcare facilities and the services provided here are at par with the services provided at the dispensary before”. (A 34 years old female ANM worker, Mohalla clinic).

Attitude among the community members regarding Mohalla clinics

During the study the community health workers were also asked about the attitude of the community towards the Mohalla clinics and it was found that all the community health workers gave a positive response with respect to the functioning of these clinics. “I’ve been working here since the clinic opened. The utilization of the services provided at Mohalla clinics have improved to a great

extent, huge chunk of people come to seek healthcare services here and till date all of them are highly satisfied with the services”

Challenges faced by the community health workers

Drug supply; the commonest response was drug shortage. Most common was the slow supply from backend. “ANC services, drugs as well as immunization services are not currently provided here, if it is done then it will help to improve the healthcare overall delivery system at Mohalla clinics”. (45 years old female ANM worker, Mohalla clinic).

Security issues

The flat LED television installed at the facility was stolen and it is difficult for us to work here and keep a track of everything especially when the patient load is high without any security at place. (A 29 years old female ANM worker, Mohalla clinic).

DISCUSSION

A study on the accessibility and spatial coverage of the population by a PHC showed that the healthcare facility covered only 26.6% of the total population which is very much less as compared to Mohalla clinic that covers all the population in its catchment area & these clinics examined 1.5 million patients by the end of 2016, means less than an year of beginning of these healthcare facilities.^{4,5} Another study reported that 9.9% of the respondents reported unmet healthcare needs due to lack of money as well as time which is not the case with Mohalla clinics as they provide doorstep services to the population.⁶ Too much time at particular healthcare facility tends to stop people from utilizing the various healthcare services provided by any healthcare facility.⁷ In a study conducted on the morbidity and the utilization of the healthcare services among the urban poor of Delhi and Chennai it was found that 40.2% and 20.5% of the poor population did not access the medical healthcare services due to financial constraints and 11% and 6% of the population did not access the healthcare services being provided due to long waiting time.⁸

In our study it was found that 88.4% of the patients were satisfied with the sincerity and the attitude of the doctor which was similar in the study conducted at Burkina Faso.⁹ In a previous study conducted on Mohalla clinics, it was found that the patients were satisfied with the kind of services being provided at these clinics & it was found that the various suggestions given by the patients and staff included –better infrastructure, prompt supply of drugs, weekly specialized services, the problem of drug supply being interrupted, poor infrastructure including no supply of electricity and water and services like ANC and PNC care, immunization to be started at the various other Mohalla clinics too which are also found in the current study which was also found in this study.¹⁰ The

implementation component of the various national health programmes was not available at Mohalla clinics.¹¹ Out of the 212 tests that are shown to be available at Mohalla clinics approximately 50 tests are not done, poor infrastructure with no proper waiting area, lack of adequate human resources at Mohalla clinics & overcrowding of patients based on the location of the Mohalla clinics results in lack of quality time spent by each doctor, it was found that the doctor was able to give only 1 minute or less to a patient, in a case study where six Mohalla clinics were compared it was found that disparity exists within the Mohalla clinics with respect to the delivery of various healthcare services.^{12,13}

Limitations

Limitations for current study were; due to issues related to the permissions from the Government and constraints of time only 15 Mohalla clinics could be selected for data collection. Some doctors cannot be interviewed due to lack of permission & due to the nature of the topic, some doctors and some community health workers were afraid to speak up, they feared if they spoke something against the Government and it might get published, affecting the quality of data in some interviews.

CONCLUSION

Mohalla clinics have gained popularity by working really well in the delivery of the healthcare services, certain areas of improvement found need to be addressed. Community outreach activities should be conducted at these clinics to improve the health promotion and health seeking behavior of those in the catchment area. The major positive elements of these neighborhood clinics are close proximity & less waiting time for seeking the healthcare services compared to that of the other healthcare facilities. Hence, it is imperative to address the various gaps requiring interventions to achieve universal health coverage across Nation.

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