### A STUDY INTO THE ROLE OF MOHALLA CLINICS IN REVOLUTIONIZING PRIMARY HEALTHCARE IN DELHI

MUSKAN SHARMA\* and SIMRAN MAKKAR Ramjas College, University of Delhi

#### Abstract

This paper analyses the role of Aam Aadmi Mohalla Clinics in improving primary healthcare in Delhi and how they cater to the demand of the patients. These clinics provide basic services in underserved areas in a receptive manner and free of cost. This scheme has garnered much recognition worldwide and also by other Indian states that they plan to adopt a similar healthcare structure to improve the health status. Our paper covers the gender disparity prevalent in patients at these clinics and the factors that influence the satisfaction of patients. The paper establishes how these clinics have made primary healthcare affordable by reducing the cost burden on patients. It also lists various ways of improving these clinics.

### **1. INTRODUCTION**

"Healthy citizens are the greatest asset any country can have."

- Winston Churchill

Health is an important factor contributing to the economic progress of any nation. A healthy population lives longer, is more productive and acts as a catalyst in the economic growth. It is also central to the well being and happiness of people and society. Mohalla Clinics is a new concept in primary healthcare system undertaken by the Aam Aadmi Party in Delhi. They provide an assured package of services with the aim of making basic healthcare more accessible. The services provided are free of cost and they make it all affordable by reducing indirect costs like travel since the clinics are set up in residential areas. Over the years, this system has received global recognition. Kofi Annan, former secretary general of UN expressed that the project could be a model for all Indian states "embarking on the universal healthcare journey."

The lack of primary health-care units had led to overcrowding in government hospitals which in turn led to delay in treatment of patients. Mohalla clinics cater to these problems hence ensuring quicker and cost effective treatment. There are currently 158 such clinics in rented premises and porta-cabins that are operational Monday to Friday from 8 am to 2pm. Each clinic has four employees - a doctor, a nurse, a pharmacist and a technician. According to the Aam Aadmi Party website, they provide 109 types of essential medicines, and are equipped to conduct over 200 tests and initial diagnosis. Apart from providing treatment for common illnesses like fever, diarrhoea etc., first aid for injuries and burns, antenatal and postnatal care for pregnant women, are also provided. They also aim to spread preventive education and awareness among the people.

### 2. BACKGROUND

The healthcare system prior to the introduction of Mohalla Clinics, included primary urban health centres (PUHCs) and dispensaries run by the central and state government. These centers were equipped with basic laboratory services and provided services like immunization, reproductive healthcare, general OPDs and referrals. They also carried out outreach programmes in underserved localities in association with other healthcare organizations, particularly concerned with maternal and child health.

<sup>\*</sup> Corresponding author's email address: sharma.muskan2208@gmail.com

However, despite these healthcare centres, there was a lack of availability of primary healthcare since these centres were not uniformly spread across all areas /localities and faced the problem of severe overcrowding as they were significantly understaffed. There was a pressing need to improve the healthcare system and strengthen the primary healthcare as it is one of the basic human needs.

The Government of Delhi in 2015 started the Aam Aadmi Mohalla Clinics (AAMC) with the aim of tackling this problem of overcrowding and understaffing. They reorganised the healthcare system and divided it into four levels which are as follows:

- I. Aam Aadmi Mohalla Clinic for primary health care.
- II. Multi Speciality Poly Clinic for secondary health care in the form of OPD consultation by specialist doctors including diagnostics. (Conversion of dispensaries into polyclinics)
- III. Multi-Speciality Hospital for IPD care (earlier called Secondary Level Hospital)
- IV. Super-Speciality Hospital earlier called Tertiary Level Hospital.

### **3. LITERATURE REVIEW**

The existing literature that we came across, gave Aam Aadmi Mohalla Clinics both criticism and praise. Lahariya (2017) highlighted the importance of these clinics, especially during the months of September- October 2016, when Delhi was facing the outbreak of dengue and chikungunya. As the diseases were widespread, many patients were able to get diagnostic tests at these clinics hence relieving hospitals of excess crowd and dividing the patient crowd. By the end of the year 2016, around 1.5 million patients had been examined at these clinics. However, there has been a delay in setting up of more clinics despite of the great demand by people. Different factors are responsible for this delay, majorly dependent on the administration and selection of location for these clinics and also on the insufficient advance planning of the operations of these clinics. The paper also points out the way these clinics have not been able to become a comprehensive PHC (public health centre) and has mainly focused on "clinical/curative" services. Another study conducted by the Delhi-based think tank, Centre for Civil Society, revealed that 88% of the patients treated at these clinics had an above average level of satisfaction. The empanelling of private labs to provide free tests (for which the government compensates) also helps the patients evade the otherwise high costs of diagnostic tests. Even the government need not incur procurement and maintenance cost of sophisticated equipments (CCS, 2017).

According to this paper, since the government does not have to pay doctors salaries and their wages are tied to the number of patients they meet, problems such as doctors absenting themselves from work and arriving late do not arise. But a number of problems were faced by patients in regard to these areas as doctors sorted to over invoicing of patients and reduced time per patient, to make more profit. Also, the results of the tests conducted were also questionable as some claimed them to provide wrong reports. Another article by Kuruvilla (2017), critiqued the clinics on multiple fronts starting with how the system of remuneration linked with the number of patients has lead to doctors inflating their bills. He also agreed with the problem of the clinics focussing solely on curative services and not prevention.

### 4. SAMPLE AND SURVEY DESIGN

### 4.1 Methodology

The study is based on primary research conducted in 11 Mohalla Clinics in two different districts (North and West Delhi). Primary data was collected through individual interview with the help of questionnaires. The field survey was divided into phases wherein pilot survey was followed by the main survey. The final questionnaire was prepared after conducting and evaluating the pilot survey which was carried out on a smaller sample size. The main survey was conducted from March to June 2018. Two different samples were constructed; one included the patients' visiting the clinics and the second consisted of people living nearby<sup>1</sup> the clinics. There were separate questionnaires for both samples. The total numbers of patients interviewed in the Mohalla Clinics was 142 and the number of nearby residents interviewed was 49.

### 4.1.1. The Field Areas: North-West Distinction

Our survey included 7 clinics in West Delhi in different localities (Vikas Nagar, Uttam Nagar, Nangloi, Palam, Paschim Vihar) and 4 clinics in North Delhi (Kamla Nagar, Keshavpuram and Wazirpur). We chose these two districts solely because of the density of clinics<sup>2</sup> in West Delhi and North Delhi. It was also more convenient to visit these areas as compared to East Delhi. Moreover, South Delhi has the lowest number of clinics relative to the other districts. The population of West Delhi is ap-

<sup>&</sup>lt;sup>1</sup> The sample of residents nearby was added so as to keep the total sample unbiased and random and to find the proportion of people aware of the clinics and not visiting and the reasons for the same.

<sup>&</sup>lt;sup>2</sup> Source: www.delhi.gov.in (last accessed August 2018)

proximately three times the population of North Delhi.<sup>3</sup> Hence, the proportion of West Delhi clinics in our sample is higher as compared to North. The concentration of clinics is also higher in West Delhi.

### 5. FINDINGS AND ANALYSIS

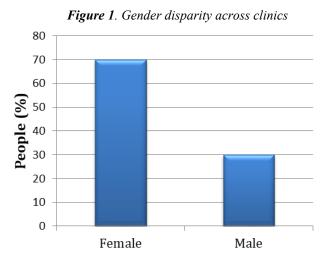
The analysis has been broken down into two parts according to the two different samples that were surveyed. The first sample comprises of people visiting the Mohalla Clinics and the second sample is of people living nearby but not visiting the clinics.

### 5.1 Analysis of Sample 1

### 5.1.1. Gender Disparity

The survey showed that 70% of the patients visiting the clinics were female. Majority of the women who were interviewed were housewives.

This high proportion of non-working women is observed



Source: Author's calculations based on survey data

mainly because of possible loss of wage for the day for employed men/women if they decide to visit a Mohalla Clinic. The clinics' open hours are 8am-2pm, which in effect turn out to be only 9am-1pm because the doctors usually tend to arrive later than 8 am. They also close the entry to new patients around 1 pm. Therefore, the timing till 2 accounts for the time spent by the doctor and staff to do their book entries regarding patients and medicines. This short duration makes it unfeasible for working men to visit the clinic. Therefore, most men prefer private clinics (also applicable to some working women).

The timings of the clinic also overlap with school timings. Therefore, unsurprisingly only 2-3 children were encountered during the course of the survey (across all clinics). They were accompanied by their mothers and that also adds to the proportion of women. The inability to bring their children for a check-up owing to the timings was a problem conveyed by many parents.

### 5.1.2. Distance from Clinics

It was found that 68% of the patients (from the entire sample) live less than a km away from the clinic. This was an expected finding since the concept behind initiating AAMCs was to provide primary health-care very close to people's residence. It indicates that they have been able to fulfil their aim of convenient access to primary care.

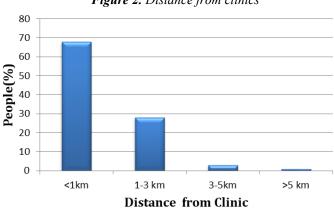
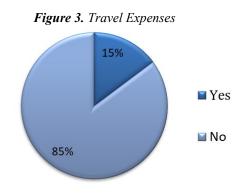


Figure 2. Distance from clinics

Source: Author's calculations based on survey data

### 5.1.3. Travel Expenses

Approximately 86% of the patients surveyed do not incur any travel costs and commute to the clinic on foot. This clearly represents that the reduction in distance between residence and clinics has led to a decrease in the cost of travelling to far off clinics for people.



Source: Author's calculations based on survey data

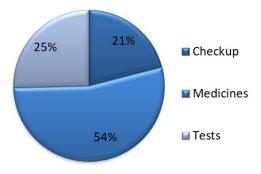
### 5.1.4. Purpose of Visits

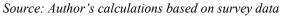
When organising the difference in the number of people visiting to get check-up or tests or merely coming to pick up their medicines, our survey established that nearly 54%

<sup>&</sup>lt;sup>3</sup> Source: https://www.census2011.co.in/census/state/districtlist/delhi.html (last accessed August 2018)

of the patients visited the clinic just to take medicines. The analysis of this particular variable was important to find if the clinics were acting as a simple dispensary rather than healthcare centre.

#### Figure 4. Purpose of visits by patients





### Why do we see this articular proportion?

- I. Medicines provided at Mohalla Clinics are completely free. This implies that people who earlier might have waited a few days to visit a doctor/chemist and buy costly medicines may now simply visit the clinic at the first sign of sickness. This improves the standard of health of the people who otherwise find it hard to afford expensive healthcare.
- II. Time spent per patient is low in these clinics majorly because of two reasons: a) Crowded clinics- When the doctors are attending to a big crowd of patients, the time per patient is reduced and patients could not classify it as getting a proper check up but only a prescription of medicines. The doctors were done with each patient in 5-7 minutes (including registration); b) Ill-informed patients- Most patients visiting these clinics are not well informed about medical complexities. Hence, the doctors might not find it fruitful to explain the sickness/medicines in detail to the patients and rather prefer to move on to the next patient.
- III. Patients suffering from a chronic or prolonged disease already possess a subscription of medicines provided to them by the polyclinic/hospital. So they can simply visit a Mohalla Clinic to pick up their medicines, if those medicines are dispensed by the clinic.
- IV. A number of patients who are diagnosed at the polyclinics/hospitals are referred to the AAMCs for basic tests and medicines (ex: blood test, thyroid and other common tests). This also results in a lower count of check-ups since the patient has already been checked by the doctor at a polyclinic and the relevant test has been prescribed. The AAMC only needs to carry out the test. Also, According to NSSO data for the year

2014<sup>4</sup>, out of the total medical expenditure, around 72% in rural and 68% in urban areas was made for purchasing 'medicine' for non- hospitalised treatment. Along with this, the data collected from our survey revealed that people's private expenditure varied from one locality to another. In some areas people incurred expenditure ranging from 100-500 rupees, and in more well off localities this range was around 500-1000 rupees. Since medicine comprises of a very high proportion of expenditure incurred and the survey shows that most patients come to collect their medicines alone which are completely free at the AAMC, it should lead to a contraction in the healthcare expenditure.

### 5.1.5. Waiting Time

Waiting time was found to be an important determinant for a lot of people visiting these clinics. It acts as a discouraging factor to some people residing nearby, and it also indicates lower efficiency in functioning.

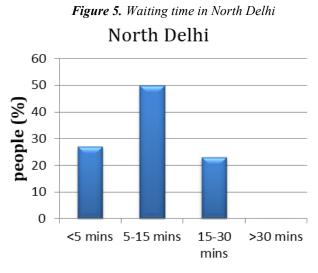
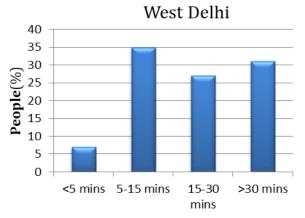


Figure 6. Waiting time in West Delhi



Source: Author's calculations based on survey data.

<sup>&</sup>lt;sup>4</sup> Source: http://mospi.nic.in/sites/default/files/publication\_reports/nss\_rep574.pdf (last accessed August 2018)

There is a big contrast between the waiting time in clinics in the North and West. While 74% of people in north had to wait for less than 15 mins for their turn, the West Delhi clinics had a big proportion (58%) of waiting time exceeding 30 mins. In three of the clinics this time of 30 mins also stretched upto 1 hour.

### Why is there a stark difference between the two districts?

Firstly, the population density of West Delhi is approximately thrice than that of North Delhi, which is a major factor contributing towards the higher crowd in the clinics in west. Secondly, there is a lack of appropriate system in the clinics which leads to inefficiency and indiscipline. With the exception of one, all clinics had no token/parchi system. This when coupled with a big crowd leads to people cutting lines and standing outside doctor's doors. This ultimately stretches the waiting time further. Moreover, clinic timings of 6 hours (which are in effect 4 as stated earlier) are quite inadequate to cater to the observed excess demand in West Delhi. Also, there is an absence of operating hours in the evening.

### 5.1.6. Three Major Factors Affecting the Satisfaction Level of Patients

In order to assess the satisfaction level of patients, three variables were taken into consideration: communication with doctor, availability of medicines, and the test procedure.

#### **Communication with Doctor**

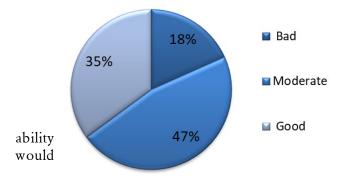
The term "communication with doctor" represents the patients' view of how well the doctor converses with them, attends to their illness, and explains the curative or preventive steps to be taken. This variable is an important determinant of the satisfaction level of a patient as the doctor's attention is of utmost significance to any patient. Hence, good communication should have a positive relationship with the satisfaction level of patients.

As seen in the figures 7, communication with doctor is ranked between good to moderate for 82% of the patients out of the entire sample, with the patients not content with the doctor being a very low proportion. This should drive up the average satisfaction level of patients.

#### **Availability of Medicines**

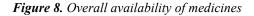
As discussed earlier, majority of patients are visiting these clinics with the purpose of collecting medicines. Unavail-

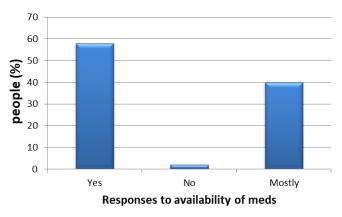
Figure 7. Ranking of communication for the entire sample



Source: Author's calculations based on survey data

lead them to purchase medicines from outside, in turn adding to their expenses. Therefore, the availability of these medicines would be positively affecting the satisfaction level of the patients. As the data indicates, the respondents who could not procure their medicines formed only 2% of the total sample. This should imply an increase in overall satisfaction of patients.





Source: Author's calculations based on survey data

### The Procedure for Carrying Out Tests

The test procedure prevailing in these clinics is as follows:

Patients are prescribed a test and given a particular date, which is generally the next day, to submit their sample (the patients already having a prescription for a test from a different health centre can also avail the same facility).

Patients then submit their sample on either the second day, or whichever date is provided to them.

The arrival of test results is not uniform across the clinics. Some clinics may deliver the results on the 4th day, while some others take longer. This implies at least 3 days in total for the test. This process is deemed lengthy by a number of patients, who conveyed that in order to collect their test reports, they have to go to the clinic everyday to ask for their reports. This results in foregoing work to visit the clinic due to the overlap of timings and hence pushes some patients towards a private facility.

However, a decent proportion of interviewees were still happy given that the tests, which are expensive otherwise, are free of cost at these clinics.

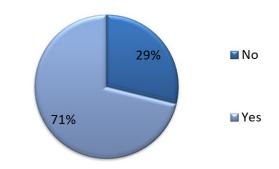


Figure 8. Response to if it takes more than one day for the tests

Source: Author's calculations based on survey data

### 5.1.7. Other Push & Pull Factors<sup>5</sup>

Pull factors	Push factors	
1. Distance convenience for patients	1. Inconvenient timings of clinics	
2. No/ negligible travel expenses	2. Excess patient crowd	
3. Free medicines	3. Inefficient system of tests	
4. Expensive treatment in private clinics	4. Lack of hygiene in and around the clinics	
5. Too much waiting time spent in hospitals	5. No discipline regarding queues of patients	
	6. Rude and undisciplined attendants	
	7. No prenatal/antenatal care,	
	8. No female doctor	
	9. Questionable quality of expensive medicines such as an asthma inhaler	
	10. Wastage of common medicines	
	11. Small rented accommodations that lead to cramped space, especially in West Delhi.	

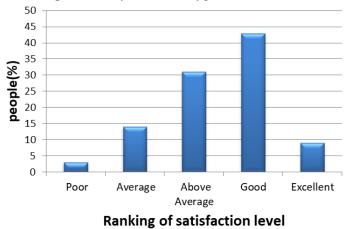
Table 1:	Pull and Push	Factors
----------	---------------	---------

Source: Author's observation

<sup>&</sup>lt;sup>5</sup> Disclaimer: push and pull factors include various observations of the authors alone.

### 5.1.8. Satisfaction Level of patients

Figure 9. Satisfaction level of pateints across all clinics



Source: Author's calculations based on survey data

The patients who ranked their satisfaction level "above average" are around 83% of the entire sample. This is a very high percentage depicting that the patients visiting these clinics are quite happy with the facilities. The three variables explained before, in addition with the other pull factors in table1 help in understanding the high satisfaction of the respondents. This brings up an important question:

# Why the high number of push factors has not significantly brought down the satisfaction level?

As these clinics are set up in the underserved parts of Delhi including slums and JJ clusters, people belonging to these localities generally do not have a lot of options apart from government institutions or local "nukkad" doctors. Hence, in our opinion, they may be unaware of the quality of services, infrastructure, and cleanliness etc. that a clinic should possess. Plus, the demand for healthcare is high in such areas due to the dense population and additional sanitation problems pertaining to them. This excessive demand is being met by Mohalla Clinics. This could be a plausible reason explaining why the push factors specified in table 1 are not greatly affecting their satisfaction.

### 5.2 Analysis of Sample 2

Out of people interviewed nearby, 71% are aware of Mohalla Clinic. The rest 29% are unaware of its existence. Out of the people aware, 77% do not visit the clinic.

### Why a high proportion does not visit the Mohalla Clinic?

I. Majority of people interviewed reported that they

were habitual to their regular/family doctor and did not want to switch to a new different doctor.

- II. People have a mindset that private centres are superior to government facilities with better doctors and attendance. So if they can afford private, they do not want to try out the AAMC.
- III. Some people mentioned that they suffer from a chronic illness and their requirements were fulfilled by their current healthcare centre
- IV. Over crowded nature of AAMCs is a major discouragement for the nearby residents .
- V. People distrust government facilities and question the quality of the services provided. They, therefore, do not visit the clinic.
- VI. Dispensary/ Government Hospital and other government healthcare centres have the same crowd, but given that they provide more facilities, they are preferred in place of AAMCs.
- VII.Clinic timings do not suit a majority of people.

## 6. HOW CAN MOHALLA CLINICS BE STRENGTHENED?

- Female patients have expressed the requirement of a female doctor, if not a gynaecologist, as they would be more comfortable in talking to a woman. Also, the proportion of women is high in the clinic's patient base. Hence, there should be more female doctors appointed.
- Most of the rented accommodations were two room sets which failed to accommodate the excessive crowd in most clinics. The queues of patients extended till outside the clinics. There is a clear need for either an improvement in infrastructure or increasing the concentration of clinics in the localities.
- To tackle the loss of wages during the day incurred by the working class, evening operating hours of the clinic should be introduced.
- A system of monitoring the doctors, staff and the services provided should be put in place as to avoid wastage of resources and ensure professional behaviour. Parchi or token system should be started to ensure discipline among the patients waiting in queues.
- Ensuring cleanliness in and around the clinics and installing dustbins for patients to dispose bandages is an important step to make the clinics better.
- Some patients need to find public washrooms to give their stool tests, and some tend to vomit right outside the clinic. Hence, the facility of a washroom for pa-

patients is very essential.

- Complaint boxes should be installed as mentioned by the website so that patients can express any grievances.
- Postnatal and antenatal care for pregnant women as said by their website is not provided in any clinic and it would be a major benefit for the women living nearby these clinics if it were.
- These clinics can be used to spread awareness regarding sanitation and personal hygiene to the patients and promote prevention more than cure.
- The only information about the addresses of the clinics is available online or through word of mouth. Since most people don't have access to internet, there should be more effort towards increasing awareness of the existence of these clinics.

### 7. CONCLUSION

Our findings depict that Mohalla Clinics have been a great success in Delhi and have been able to meet their aims to a large extent. The high level of satisfaction and analysis of various pull factors bolsters this initiative of the government and the expansion of this scheme would certainly benefit the community and help uplift the health status of people. The clinics provide all facilities completely free of cost, and travel expenses are negligible. This also brings down the cost burden of healthcare, which is otherwise quite high and distressing for the actual poor. However, looking at the bigger picture they lack some important features which could improve the condition and functioning of these clinics. By incorporating changes such as evening operating hours, more hygienic surroundings, washroom facility, better infrastructure, they could attract a larger patient base. People who currently do not visit the clinic for reasons that are stated by the respondents of sample 2 or other push factors, may be willing to visit if such changes were made. Given the high proportion of women visiting these clinics that require the appointment of more female doctors, it validates how Mohalla Clinics could make themselves better by catering to the needs of such women and employing not only female doctors, but also gynaecologists. Their website also claims that the clinics provide prenatal and antenatal care for pregnant women. However, our survey reveals that no such facility is available. Appointing a gynaecologist, for specific days of the week, could go a long way in improving the health of all women in these localities.

Mohalla Clinics appeal to most people because of the negligible cost of healthcare and an increase in the number of such clinics would make primary healthcare more accessible hence benefitting the underserved population who otherwise find it hard to afford healthcare.

### ACKNOWLEDGEMENT

The data for this paper is collected under the project titled, "A Study into the Role of Mohalla Clinics in Revolutionizing Primary Healthcare in Delhi" was supervised by Dr. Sonia Goel and Dr. Apoorva Gupta. The research leading to these results has received funding from the Department of Economics, Ramjas College in the year 2017-18 for which we are highly grateful. We would also like to thank all our teachers for their invaluable suggestions through every step.

### REFERENCES

1. NSSO Data (2014) – Health in India, NSS 71st round, Government of India, Ministry of Statistics and Programme Implementation, Nayionl Sample Survey Office. Website: http://mospi.nic.in/sites/default/files/publication\_reports/ nss\_rep574.pdf (last accessed October 2018)

2. Lahariya, Chandrakant. "Mohalla Clinics of Delhi, India: Could these become platform to strengthen primary healthcare?." Journal of family medicine and primary care 6, no. 1 (2017)

3. Bhandari, Aditya, Ishan Bhardwaj, and Sunidhi Sawhney. "Quality and Accessibility of Government Hospitals and Mohalla Clinics." DELHI CITIZENS': 94.

4. Kuruvilla, Benny. "Against the grain: New pathways for essential services in India." Reclaiming Public Services (2017)

5. Delhi Human Development Report(2013)

http://www.delhi.gov.in/wps/wcm/connect/cea5b0004110b01d9849f9136af5079a/04+chap+04.pdf? MOD=AJPERES&lmod=277504148&CACHEID=cea5b0004110b01d9849f9136af5079a (last accessed November 2018)

6. Delhi Government website – http://www.delhi.gov.in/wps/wcm/connect/doit\_health/Health/Home/Directorate+Gen eral+of+Health+Services/Aam+Aadmi+Mohalla+Clinics (last accessed October 2018) 2018)

• Aam Aadmi Mohalla Clinic Website -https://aamaadmiparty.org/aap-government- healthcare-facilities-guide/ (last accessed October 2018)