Access, utilization, perceived quality, and satisfaction with health services at Mohalla (Community) Clinics of Delhi, India

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Abstract

The first Mohalla or Community Clinic was set up in July 2015 in Delhi, India. Four hundred and eighty such clinics were set up in Delhi, since then. This review was conducted to synthesize evidence on access, utilization, functioning, and performance of Mohalla Clinics. A desk review of secondary data from published research papers and reports was conducted initially from February–May 2020 and updated in August 2020. Eleven studies were included in the final analysis. Studies have documented that more than half to two-thirds of beneficiaries at these clinics were women, elderly, poor, and with school education up to primary level. One-third to two-thirds of all beneficiaries had come to the government primary care facility for the first time. A majority who attended clinics lived within 10 min of walking distances. There was high rate of satisfaction (around 90%) with overall services, doctor-patient interaction time and the people were willing to return for future health needs. Most beneficiaries received consultations, medicines, and diagnostics at no cost. A few challenges such as dispensing of medicines for shorter duration, lack of awareness about the exact location of the clinics, and services available among target beneficiaries, and the incomplete records maintenance and reporting system at facilities were identified. Mohalla Clinics of Delhi ensured continuity of primary care and laboratory services during COVID-19 pandemic in 2020. In summary, Mohalla Clinics have made primary care accessible and affordable to under-served population (thus, addressed inequities) and brought attention of policy makers on strengthening and investing on health services. The external evaluations and assessments on the performance of these clinics, with robust methodology are needed. The services through these clinics should be expanded to deliver comprehensive package of primary healthcare with inclusion of preventive, promotive, community outreach, and other public health services.

Keywords: Community clinics, COVID-19, Health services, India, Mohalla Clinics, primary health care, universal health coverage

Introduction

The state government Delhi, India had launched Mohalla or Community Clinics “to provide quality primary healthcare services accessible within the communities at their doorstep” and “to reduce the over-crowding of people seeking treatment for common illnesses at hospitals.” The first Mohalla Clinic was launched in July 2015. Four and half years later, by February 2020, a total of 480 clinics were functional across Delhi, India.

The details on these clinics and concept behind have already been published in peer reviewed journals in the past. By early 2020, more than a dozen Indian states or cities had either started or were planning to set up community clinics. Yet, much of the public and policy discourse on setting up community clinics is based upon perception and popularity of the clinics, rather than the research and documented evidence. These decisions...
have also been influenced by media reports, high profile visits of experts and politicians. The research evidence generated on access to services, the pattern of utilization of services, details on beneficiaries attending the clinics, perceived quality of health services and health seeking behavior could be useful for suitable modification of existing facilities and for designing of new facilities by Indian states. Therefore, this review was conducted to synthesize evidence on access, utilization, functioning, and performance of community (Mohalla) clinics of Delhi, India and to assess whether these are fulfilling the stated objectives/purpose to set up these clinics.

Materials and Methods

Desk review of secondary data from published research and reports was conducted in February–May 2020. The research papers and reports, based upon primary data, published between July 2015 and May 2020 were included. A combination of key words “Mohalla Clinics,” “Community Clinics,” Delhi, India and Neighborhood clinics were used for conducting the searches on PubMed, EmBase, and Google scholar and other internet sources. Research article published in peer reviewed journals and reports available at the official websites or any other official sources were included. The unpublished research work was excluded from the analysis. The full text of articles identified were collected, read, and information extracted in excel sheet, which were used to develop tables and boxes, and then interpreted. The literature review was updated in August 2020. This was a secondary analysis based upon desk-review and was exempted from the need for approval by an institutional ethics committee.

Results

A total of 11 published research articles and reports, based upon inclusion criteria, were identified and included in the analysis. Four were published as research articles in peer-reviewed journals.[10–13] Five studies based upon primary data collection were published as part of reports including a qualitative case study on Mohalla Clinics.[14–18] The summary reports of two population-based surveys, which focused on health and Mohalla clinics, were also included.[19,20] [Table 1].

There were many common findings in the studies and surveys included in this review.[10–24] Mohalla clinics are very popular, catering to nearly 10–20% of the total outpatient attendance at government healthcare facilities. The clinics have increased accessibility and affordability to outpatient services to target beneficiary and most received services at zero cost or at far lower cost than the other healthcare facilities where the beneficiaries attended similar services. The time taken to be attended by doctor had also reduced drastically from up to a few hours to less than 30 min. The cost of transportation had reduced in majority of cases as these clinics were in walking distance. The studies have documented that a majority of beneficiaries were elderly and children, women, those who otherwise did not have access to health services. For example, a study[17] found 65% of patient surveyed at Mohalla clinics were female. It was found that most patient received the free medicines and diagnostics. There was high level of satisfaction among beneficiaries across all studies, which went up to 97%. Another study found that 85% of those attending Mohalla clinics gave satisfaction rate average or above; which was far higher than 55% for hospitals sample. Nearly two-third of all responded rated these clinics 5 out of five[7] [Table 2]. These or similar findings have been reported from other studies included in this paper.[10–13,17]

One of the key findings from various studies identified as part of this research was that presence of a few other clinics in vicinity gave beneficiaries a choice to select a facility. For example, when women were uncomfortable attending a clinic where a male doctor was posted, they could make a choice of going to another nearby clinic, where female doctor was posted.

Discussion

The provision of primary healthcare services through community clinics with doctors, nurses, and other staff as health team, for every 2000–7,000 population, is a widely practiced approach in many countries.[21–24] [Box 1]. However, in India, the first contact between a doctor at government health facility and community is through primary health centres (PHCs). Each PHC is planned for every 20,000–30,000 population in rural area and 50,000 people in urban areas. The actual availability of PHCs is for much higher population per facility.[25] Therefore, setting up Mohalla clinics in Delhi increased the availability of health facilities with doctors by fivefold in urban setting.

Soon after setting up Community Clinics, each facility was being attended by an average of 100–150 people between 8 am and 2 pm. Thus, government increased the timing in two shifts from 7 am to 7 pm, for those clinics, which had more than 150 patients on average.[25] The findings from the studies included in this review validates what was often said by political leaders and reported in media that more women, elderly, and children attending these facilities. These findings underscore the unmet need of health services among the poor, under-served and migrant populace in major cities.

One of the impacts of these clinics has been that a number of Indian states have started a variant of community clinics[8–11] or done other primary healthcare reforms.[26] The health and wellness Centres (HWCs) component under Ayushman Bharat program started by national government of India is an initiative focused on delivery of comprehensive PHC services.[27] There seems a high relevance of community clinics in India, which has the triple burden of diseases/health issues–communicable, non-communicable and maternal and child health issues.[28] Specially, where nearly 20% of adult population is affected by either diabetes or hypertension and need regular care and management. However, setting up community clinics should be considered only a part of broader healthcare reforms. The situation demands that such primary care system should not
Table 1: Summary description of studies and reports included, with sample size and key findings\[10-20\]

| Authors, year | Sample size; facilities covered and respondents | Key findings |
|---------------|-----------------------------------------------|--------------|
| Mishra, 2020\[10\] | Survey of catchment areas of Mohalla clinics in Five districts of Delhi; a total of 230 patients of their immediate care givers interviewed in July 2019. | The study focus was on assessment of governance of health services and role of transformational leadership and street level bureaucrats (doctors, teachers and social workers) in satisfaction with health services. The study reported that various dimensions of transformational leadership had positive relationship with sound governance and citizen satisfaction with health services. |
| Agarwal, et al. 2020\[11\] | Community-based cross-sectional study, with primary data collection from 25 Mohalla Clinics across Delhi in June July 2018. A total of 493 ever-married women residing in study settings were the respondents. | Women & elderly were found to be more likely to use these clinics. The distance from the clinics, and awareness about the services were associated with increased use of Clinics. Proximity to households, waiting time at clinics, interaction time with the doctor, perceived performance of doctor, and effectiveness of treatment influenced the decision on a return visit for care seeking. These clinics were considered empowering the elderly population, especially women members, with limited mobility and decision-making power. The doctors at these clinics were engaged in social health issues such as gender-based violence and addressing the local problem of alcoholism. The study recommended to increase the information dissemination on service provision, assured provision of doctors and laboratory services, and increased patient-doctor interaction time to increase the use and return visits to these Community or Mohalla Clinics. |
| Jha & Singh, 2019\[12\] | Field survey of 16 Mohalla Clinics between Nov Dec 2018. | An average of 114 patients per day visited each clinic. People living up to 2-3 kilometers of distance visited these facilities. Start time of 8 am and assured provision of doctor on time ensured that people could go to work by 9 am. Patient reported that the waiting time at facilities was reduced. Majority of clinics were opened on time. The study also reported vacant position of different sub-group of staff other than doctors. The vacancies for staff nurse, pharmacist and cleaning staff were found up to 50%. The study also assessed a few amenities at these clinics and found that 25% facilities visited had no running water and 19% had no toilets. |
| Sah et al., 2019\[13\] | Primary survey conducted at 12. A total of 180 respondents (15 from each facility) were interviewed in year 2017. A total of 12 doctors and other staffs were also interviewed. | 72% of total respondents were women; nearly 83% had income less than 2.5 lakh and 56% had received either no education or up to primary level. Exactly half of the respondents were housewives by occupation. 34% of respondents used to visit private facilities before these clinics were started. 54% were attending a government facility and nearly 9% to both type of facilities. Nearly half of the total still continued to visit alternative facilities. It was reported than 9 of 10 respondent came to these facilities walking, which were within 10 min of walking in majority of cases. 68% of respondents reported treatment at these facilities effective. 53% of the respondents surveyed visited these clinics for follow up. For 80% respondents their expenditure had declined since they started attending these clinics, for remaining it remained the same or slightly increased. 94% were satisfied with the cleanliness at these facilities. 87% were satisfied with the way their queries were addressed and 68% were happy with overall services at these clinics. Average time taken by doctors to attend each patient was reported to be 2-3 min. a total of 46% of respondents were advised at least one laboratory test. 5 of 12 clinics surveyed had token system functioning. A common patients grievance was that medicines were being dispensed only for 3 days. Timing of Mohalla clinics was reported, by a few respondents, not suitable for working class people. (This was changed in Aug 2019, with longer duration and evening OPDs). 31% of respondent had either themselves or someone from their household visited Mohalla Clinics at least once I last five years. One in three of those who visited these clinics, been to these clinics 5 or more times. 91% of the visitors to Mohalla clinics were satisfied with the services with 55% of total fully satisfied. Seven of 10 respondents (or their family member) reported to have visited a hospital in last five years. Those who had visited a government facility (hospital or Mohalla clinics) rated performance of government in power at higher than those who did not visit. This rating was even higher for those who attended Mohalla clinics in comparison of those who visited hospitals. The survey asked people to rate performance of government on health on scale of 10 and mean score was 7.06, median: 7 and mode of 8. |
| Sardesai & Mohanty, 2019\[14\] | Centre for studies of developing societies (CSDS) and Lokniti Survey was conducted from Nov 22 to Dec 03, 2019 and 2,298 people from 115 polling stations across 23 assembly constituencies of Delhi. It was focused on overall health services along with specific questions on Mohalla clinics. | For 80% respondents their expenditure had declined since they started attending these clinics, for remaining it remained the same or slightly increased. 94% were satisfied with the cleanliness at these facilities. 87% were satisfied with the way their queries were addressed and 68% were happy with overall services at these clinics. Average time taken by doctors to attend each patient was reported to be 2-3 min. a total of 46% of respondents were advised at least one laboratory test. 5 of 12 clinics surveyed had token system functioning. A common patients grievance was that medicines were being dispensed only for 3 days. Timing of Mohalla clinics was reported, by a few respondents, not suitable for working class people. (This was changed in Aug 2019, with longer duration and evening OPDs). 31% of respondent had either themselves or someone from their household visited Mohalla Clinics at least once I last five years. One in three of those who visited these clinics, been to these clinics 5 or more times. 91% of the visitors to Mohalla clinics were satisfied with the services with 55% of total fully satisfied. Seven of 10 respondents (or their family member) reported to have visited a hospital in last five years. Those who had visited a government facility (hospital or Mohalla clinics) rated performance of government in power at higher than those who did not visit. This rating was even higher for those who attended Mohalla clinics in comparison of those who visited hospitals. The survey asked people to rate performance of government on health on scale of 10 and mean score was 7.06, median: 7 and mode of 8. |
| The economic society, 2020\[15\] | Quantitative and qualitative study and survey across 5 districts; 35 doctors and other staff, 356 respondents in areas of 42 Mohalla clinics; data collection was done in Oct 2019 | Nearly 82% of people attending these clinics were from low income group; 90% were very satisfied with medicines and treatment provided; nearly three-fourth found clinics easily accessible. Average waiting time reported was 35-40 minutes at the clinics. Average duration of medicines dispensed was 7 days. On supply side, nearly half of the doctors posted here were earlier working in private sector; average attendance at OPD was 128 people per Mohalla clinic per working day. Only 4 of 22 facilities for which information available had tablets for data entry. |

Contd...
be doctor-centric only and few tasks of following up the cases of chronic conditions and providing preventive and promotive health advices, the nurses and other category of staff need to be empowered. In fact, that approaches of team-based service delivery and task shifting is the “standard of care” in many middle and high-income countries. Countries such as Japan, United Kingdom, and New Zealand have systematically made efforts to empower general physicians, adopt team-based approach in health service delivery.

It is intriguing that in spite of 5 years in operation, there are very limited studies based upon primary data collection and to assess the performance of these clinics. Even the available studies have variable methodology and small sample sizes of 3–6 facilities. In contrast, even a few newspaper stories are based upon more visits and interactions with more number of facilities. There is need for more rigor in these type of survey and analysis. This lack of enough primary research, in spite of large number of medical colleges and academic research institutions in Delhi state, need to be further examined. One possibility is that health systems and policy research in India is most often under-funded and at times there is limited and insufficient expertise. This on one hand underscores the need for establishing institutional mechanisms for such research. Alongside, it is proposed that while starting

### Table 1: Contd...

| Authors, year | Sample size; facilities covered and respondents | Key findings |
|---------------|-----------------------------------------------|--------------|
| Praja Foundation, 2019 | Information collection through legal mechanism of the right to information act, 2005 of India. | The report noted poor management of data at these facilities. Responses on query were provided by 3 of 11 districts of Delhi. There was poor digitization of most healthcare facilities. Issues of mis-governance and lack of data on outpatient attendance. Average population covered by govt dispensary+Mohalla clinics was found to be 26,000. |
| ID Insight, 2019 | Two sample surveys to understand awareness, usage, and service delivery through Mohalla Clinics. In one was through the exit interviews of 1716 patients at 109 clinics, with at least 10 or more patients per clinic. Second survey was of general population covering 1,410 households, 6,824 household members, 135 clinic areas. These respondents in second survey were living within 1 or 2 kilometers of the clinic. | Nearly two fifth of respondents in the catchment area were aware about exact location of Mohalla clinic in their neighborhood. Most had become aware when they had seen the clinic or through the word-of-mouth. Nearly one third of people who sought healthcare responded that had they been aware about community clinics, they would have sought care at those clinics. Of those, who attended services at Mohalla clinic, considered the quality of services at par or better than other public or private medical facilities. 74% of the respondent in the general population survey, who sought healthcare went to the government healthcare facilities. Of these, 20% attended Mohalla clinics; 23% dispensaries/polyclinics and 57% attended hospital. On most parameters. Mohalla clinics were considered either at par or better than other existing healthcare facilities. 97% of attendees at Mohalla clinic said they would return for treatment in future as well. Ten percent of the respondents said medicines were unavailable at Mohalla clinics at least once in the last three months; |
| Bhandari A, et al. 2017 | This was a comparative study on hospitals and Mohalla clinics. Three Mohalla Clinics and Three hospitals were visited and exit interviews of a total of 105 respondent at Mohalla Clinics and 159 at hospitals were interviewed. Doctors at Mohalla Clinics were also interviewed. | Amongst those attending Mohalla clinics, before these clinics, one-sixth attended dispensaries; one third government hospitals and remaining half attended private facility. More than 80% patient reported that attending Mohalla clinics did not cost them any amount of money on transportation, while 60% of people attending hospitals had incurred some expenditure. 80% of patients attending Mohalla clinics reported that attending these clinics did not result them to have work. Only 16.4% of patients attending a government hospital were aware about Mohalla clinics, launched a year ago. 93% of these patients were not aware about government scheme for free healthcare such as Delhi Arogya Nidhi and Delhi Arogya Kosh. |
| Khanijou & Sundararaman, 2017 | Qualitative case study with field visits to 5 Mohalla clinics. The authors clarified that this work was a documentation and evaluation. | The authors described the engagement and process for sample collection by phlebotomist, outsourcing of laboratory function, Corporate social responsibility and private sector engagement in Mohalla clinics. The case study noted that while first Mohalla clinics was set up by community and population need profile, that process has not been done for other clinics. The study reported high satisfaction rate, all services at no cost to beneficiaries; validity of registration slip for one year. The study also highlighted the challenge of frequent change in doctors at select clinics. It was reported that from April 2016 to Feb 2017, there nearly 28 lakh patients attended these clinics. The authors proposed to conduct population based NCD screening at these facilities. |
| Hazarika N, et al. 2016 | One of the first published report, based upon survey of 4 Mohalla clinics. Of these surveys were done at two clinics only and only qualitative information was collected from other two clinics. Total sample from two clinics was reported to be around 30 people. | People were often not aware about the public health care, government program and preventive healthcare. Most respondents had visited private clinics before opening of these clinics and reported to have waited for 1 to 8 hours for seeking outpatient care. With these clinics, the waiting time had come down to 15-20 min. The assured provision of doctor, medicine and diagnostics was appreciated by people. One of the major expectation people had from Mohalla clinics was faster availability of lab reports. A few people in locality suggested that morning only time is not very convenient for them and evening clinics should be considered. The doctors posted at these facilities wanted to gain experience and were thrilled about providing health care to poor and underserved. A doctor at these clinics suggested that clinics should be linked to NGOs, which can deliver health educational activities and public health activities in the areas. |
Mohalla Clinics with primary care focus seems to have been reversing that trend of over-utilization of hospitals for basic need, which is such clinics, the policy makers and program managers should proactively make provision of funding for conducting assessment and evaluation of new policy initiatives, to support evidence informed decision making. The lack of research on primary care initiatives can also be because of the factor that most of the research capacity is based at tertiary level facilities and academic institutions and the physicians working in primary healthcare are not always involved in the health research. The capacity building of primary healthcare providers in design and implementation of health services and research through institutional mechanisms need to be streamlined and sufficiently funded.

A few experts have argued that India is rapidly evolving as in hospital oriented, technocentric healthcare system, fueled by private sector providers[29] and the focus and attention from primary healthcare is seemingly lost. The top 20% of population often seek care at high end hospitals for even primary healthcare needs; however, this trend is trickling down to poor as well, where they also wish to seek services at large facilities, even for basic healthcare needs. Mohalla Clinics with primary care focus seems to have been reversing that trend of over-utilization of hospitals for basic need, which is

**Table 2: Comparative performance of hospitals and Mohalla clinics, 2017[^18]**

| | Hospitals (n=159) | Mohalla Clinics (n=105) |
|---|---|---|
| A | Time taken in seeking care | | |
| <10 min | 04 | 59 |
| 11-30 min | 16 | 37 |
| 31-60 min | 19 | 08 |
| 61-90 min | 23 | 01 |
| More than 90 min | 97 | 00 |
| B | Received the all the medicine they were prescribed | 97 (61%) | 90 (86%) |
| C | Rating by the beneficiaries for services delivered | | |
| One out of five | 08 (5%) | 00 |
| Two out of five | 27 (17%) | 05 (4.5%) |
| Three out of five | 36 (22%) | 11 (10%) |
| Four out of five | 39 (25%) | 22 (20%) |
| Five out of five | 50 (31%) | 67 (65%) |

Adapted from reference 16 and other sources

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**Box 1: Approach to health service delivery in select countries[^21-24]**

**Brazil:** Community-based healthcare network, Family Health Clinics. PHC services delivered through a network of 38,000 family healthcare team, 275,000 Community health workers, which covers two third of the population. Family health team comprises of one doctor, one nurse, 1-2 ANM and 4-6 community health workers for every 1,000 households or 4,000 to 5,000 people.

**China:** Primary healthcare services delivered through 37,000 township health centres and 639,000 village health clinics. There are multiple types of doctors with full training to village doctors who are authorised to prescribe limited number of medicines and can serve in village only. Traditional Chinese medicine care is widely provided along with allopathic medical care.

**The Cost Rica:** Delivers primary health services through EBAIS clinics health networks across the country. The entire country is divided into Health Areas and Each health area has five and fifteen EBAIS teams, each covering approx. 6,000 population. These doctors and nurses provide, technical assistant medical data clerk and pharmacist.

**Cuba:** Considered to have one of the most effective primary healthcare systems. Primary care delivered through community-based polyclinics & family doctor-and-nurse offices. Each polyclinic serves 30,000 to 60,000 people, supplemented by neighbourhood-based doctors and nurses office, one for every 1,000-2,000 people. The doctor or nurse offices ensure care closer to the communities.

**India:** There is an extensive network of primary healthcare system in rural India, which has nearly 2/3 of total population. There is one urban PHC proposed for every 50,000 population; For a population of nearly 370 million, there are only 5,600 UPHC in early 2020. There were nearly 26,000 Primary healthcare centres in rural India, which is five times more than urban setting; though rural population is just double of urban population. There is a health sub-centre staffed by multi-purpose workers and auxiliary nurse midwife in rural area for every 3,000 to 5,000 population. The Govt of India has announced a new program by the name of health and wellness centres to upgrade the existing government primary healthcare facilities.

**Kazakhstan:** Primary healthcare services are delivered at the level of Uchstok -locality if around 4,000 people, through Feldsher accousherski punt or Feldsher-midwife post. Each of the posts has provision of 2-3 physicians. There is an increasing focus in the country on preventive health services and inclusion of general physician in health services.

**Sweden:** Primary Care Clinics mostly run by the county councils. Each clinic has a team of 4-6 General Practitioners; Nurses; Physiotherapists, occupational therapists, psychologists, and Social welfare counsellors. Average population catered by each clinic is 4,000-6,000.

**Thailand:** Primary healthcare services through district health system with typical district's catchment population of around 50,000 served by a district hospital and 10-15 subdistrict health centres, each with 3-5 paramedical staff. Primary Care Units: For every 10,000-15,000 registered beneficiaries. Contracted (district) hospitals to set up one primary care units for every 10,000-15,000; the “contracting unit for primary care” or CUP.

**United Kingdom:** The Primary care run by General Physicians (GPs) forms the bedrock of National Health services (NHS). Primary medical care provided by general practitioners (GPs), free (or with small co-payment). GPs work in group of 4-6 and people get registered with them. People have to be mandatorily seen by GPs or Primary care system, before they can access secondary level of facilities. On average, one GP and related services are available for every 2,000 to 3,000 people.

**Venezuela:** Primary healthcare services are delivered through; popular medical dispensaries, consultation points (in family homes), dental clinics and optical centres, for every 5,000-7,000 population. The number of popular medical dispensaries has increased from 5,360 in 1998 to total 13,731 in 2012.

**Vietnam:** Primary healthcare is delivered through 11,400 commune health centres, each serving an average of 5,000 people, located in an area. The district health centres (CHC) serves as first point of referral. Each of Commune Health centres operates three days per week and employ full time traditional medicine specialist, a village health worker, one population/family planning officer, one pharmacist and one midwife. Benchmark is minimum of five staff per CHC with maximum ten depending upon population density and coverage area.
unsustainable and unaffordable for the country, in long run. Mohalla clinics seems to have potential to shift the focus from specialist care to a general physician-based health services. These clinics are bringing the attention back on the role primary healthcare physician can play in a system which has excessive attention on super-specialist care. Healthcare system in Japan is an example where in spite of most modern and advanced technologies, health services focus, and importance of primary care physicians is fully understood. The practitioners of primary healthcare are rarely recognized. A few analyses have pointed out that of prestigious Padma Awards in India, of awardees from the field of medicine less than 2–3% were primary healthcare physicians or public health workers.\textsuperscript{[31,32]} Mohalla and other community clinics provides opportunity to reclaim primary healthcare space in times when technocratic and specialist care get more attention.

Setting up community clinics is not enough and to make process lasting and sustainable, a few additional steps are needed for empowerment of healthcare providers in primary care settings. The representation of primary care providers need to be ensured in the decision-making bodies such as medical council and other national level health policy and program making committees. The primary healthcare physicians and nurses need to be adequately empowered and invited to join policy high table and process of decision making. The voice of primary healthcare providers and public health specialist need to be sought beyond consultations with them, by having them as regular part of these processes.

As a number of Indian states are setting up community clinics and reforming their primary healthcare system, it will be useful if learnings from these clinics is used and widely shared. A common feature of most such clinics in India is curative care focus, with limited attention on public health services. There is need to expand the benefit package offered through these clinics to deliver comprehensive primary healthcare services including preventive, promotive, rehabilitative, and public health services.

One of the limitation of specialist based and hospital-based health systems is doctor–physician relations become transactional, which is often bereft of personal touch and empathy. The amount of time doctors spend with every patient is often less than a minute. Studies have noted that time spent by doctors with patient at Mohalla Clinics was higher than other facilities and was associated with higher satisfaction. This is fully in consonance with global evidence where smaller clinics have been found to be associated with higher patient satisfaction, better treatment compliance, regular follow-ups, and improved clinical outcomes.\textsuperscript{[33,34]} The longer and personalized patient–doctor interaction time at Mohalla Clinics could clearly have been associated with regular use of these clinics as well as return visits.

There are reports where doctors at Mohalla clinics of Delhi have been involved in mediating social issues of domestic violence and problem of alcoholism. This has created a connection between doctors and other healthcare providers and communities being served. This provides a very conducive opportunity and environment, which should be effectively used for increased people’s participation in health, deliver preventive and promotive health services (people are more likely to be receptive) and address social determinants of health (i.e., improved sanitation, improved water supply, etc.). This personal touch between doctors and patients and communities can results in better health outcomes and reflects the potential of these clinics.

There are a few aspects of clinics, with scope for improvement. A large proportion of people were not aware about location of these clinics or services provided. There is need for awareness generation about these clinics in target populations through localized campaigns and by engaging community members and civil society organizations. The regular assessment and patient satisfaction survey can contribute to further improvement in quality of these clinics and this will be essential as more clinics are being set up. Despite India being considered as an Information and communication technology (ICT) hub, the use of ICT at these clinics has been found very limited. An adaptation of Mohalla clinics in Telangana state of India as Basthi Dawakhana has effectively used ICT platforms including the tele-medicine for consultations, which indicates the possibility and potential of ICT in improved health service provision.\textsuperscript{[35]}

Mohalla Clinics at times are criticized for not delivering comprehensive primary healthcare services. While true, this criticism is unfair as these clinics were designed for a specific type of services, which are delivering. Therefore, these clinics should be assessed against the objectives these were set up. The officials in state government of Delhi have repeatedly indicated that Mohalla clinics would be linked to appropriate facilities to make services provision comprehensive; however, that had not happened till March 2020. (Later, the COVID-19 pandemic had changed the priority actions and the focus at present is on response to pandemic).

In year 2018, nearly 15–20% of total patients who attended government health facilities for outpatient consultations attended Mohalla clinics. This may appear a small proportion; however, in that years only around 200 such clinics were functioning. Since then, by February 2020, around 480 Mohalla clinics were functioning in Delhi and everyday around 50,000 patients were being attended at these clinics. This number makes a significant proportion of all patients attending outpatient services at all government facilities. This number would understandably increase as and when the planned 1,000 such clinics would be set up.

One of the stated goals of these clinics was to reduce the overcrowding in government hospitals. By early 2020, the clinics did not seem to have achieved this objective. Possible explanation is that the initial care seeker at these clinics were those who were either not attending any health facility (pent-up demand for services) or were going to private (qualified or unqualified) providers. Whichever is the case, the government provision of such clinics has increased health services access and utilization.
and improved affordability of health services for poor and underserved populations. These clinics, clearly contributing to India’s journey toward universal health coverage as envisaged countries latest national health policy.\textsuperscript{34} There is need to make active and targeted interventions to shift people from hospitals to Mohalla clinics. Approaches such setting up screening OPDs at large hospitals and then giving preferential treatment for consultations at larger facilities to those who have attended and been referred from Mohalla clinics to next level of facility.

A recent study had listed these clinics as one of the potential model for expanding primary healthcare in India.\textsuperscript{25} Many have argued that these clinics have placed health higher on the political agenda, as was noted in recent national and state level elections in India, a potential which can be further harnessed with engagement of community and civil society organizations.\textsuperscript{35} The concept of Mohalla Clinics is being widely accepted by additional Indian states. In end September 2020, one more Indian state proposed to set up Mohalla Clinics.\textsuperscript{36}

During the COVID-19 pandemic in early 2020, the clinics played a major role in assured provision of essential primary healthcare services in New Delhi. While the larger facilities and hospitals had suspended the outpatient consultation services, Mohalla clinics continued to provide the services. This was very useful where service continuity was assured yet risk of transmission was minimized. At later part of pandemic response in July onwards, select Mohalla Clinics of Delhi had also started offering COVID-19 laboratory testing services. Many of the staff posted at these clinics proven useful in fulfilling various activities related to COVID-19 including contact tracing. In August 2020, many of the Mohalla Clinics served as facility for expanded COVID-19 testing in Delhi.\textsuperscript{37} These clinics once again proved that primary healthcare facilities can be essential for effective health services, in normal situations as well as during the health emergencies.

More than 9 months into the pandemic, it has become amply clear that high end super specialty facilities and technology driven solutions are useful but not sufficient in itself. The COVID-19 response success stories have emerged from countries such as Vietnam and Thailand.\textsuperscript{38} Much of the success in COVID-19 pandemic response has been reported and emerged from the countries, which have over the years invested in stronger primary healthcare system as well as in public health services.\textsuperscript{39–41}

One of the limitations of the finding in this review is that a few of the included studies were based upon smaller sample size of 3–6 facilities. None of the study except two published in peer reviewed journals were comparable in study design. The type of questions asked in each of these researches varied and there was no standardization. These limitations suggest the need for caution in generalization and interpretation of results. There is need for regular assessments and evaluation of community clinics in Delhi. A few comprehensive external evaluations and assessment, with robust research methods are needed to objectively assess accessibility, utilization, and quality of services provided and whether it has made an impact on the out of pocket expenses. The learnings and evidence can not only help Indian states but also the other low and middle income countries focusing on similar initiatives.

**Conclusion**

Mohalla Clinics and the similar community clinics from Indian states have made primary care accessible and affordable to under-served population. These facilities have brought attention of policy makers in strengthening and investing on health services. These clinics have arguably placed health services, higher on the political and policy agenda in India. There is need to utilize this opportunity and develop mechanisms to ensure that community clinics results in delivery comprehensive package of primary healthcare services with inclusion of preventive, promotive, community outreach and other public health services. India’s national health policy 2017 has proposed to strengthen primary healthcare for advancing toward Universal Health coverage and the community clinics are expected to accelerate this journey.

**Key messages**

- Mohalla (community) clinics of Delhi, India are highly attended by target beneficiaries. These clinics have made primary care services accessible, available, and affordable to so far under-served populations.
- These clinics are contributing to address inequities in health services utilization as more women, children, elderly, migrants and those who had no access to health services are attending health services at government facilities, free of cost.
- Most of the beneficiaries who attended these clinics reported high rate of satisfaction. A findings also corroborated by high rate of repeat visits by the target beneficiaries for next health condition.
- There are areas for further strengthening such as improved provision of medicines, better data recording and reporting system and increasing awareness about the location of these facilities.
- Mohalla clinics played important role in continuity of essential non-COVID-19 health services during the COVID-19 pandemic period, even when large facilities were temporarily closed. The staff at these clinics contributed to surge capacity for COVID-19 response. The facilities doubled up as COVID-19 testing centers.
- Indian states, which are setting up Community Clinics on the similar concept can learn from the experience and learnings from Mohalla Clinics of Delhi. The state government of Delhi should consider a detailed and scientific evaluation on functioning of these clinics.
- The health services provision through Mohalla Clinics should be expanded to a broad range of comprehensive primary healthcare services. Each clinic should be linked with facilities providing public health services, to ensure people in catchment area received entire range of health services.
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Author was involved in the design and scale-up of Mohalla Clinics of Delhi, India, in personal and honorary capacity.

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