RESEARCH PAPER

Strengthening Primary Healthcare In Rural Bangladesh: Opportunities, Challenges, And Systemic Barriers Of Community Clinics In Cumilla District

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Abstract

Community clinics play a critical role in improving the access of primary healthcare in rural bangladesh by providing inexpensive and community-based healthcare to underserved populations. This study is focussed on the opportunities, challenges and systemic barriers on performance of community clinics in the cumilla district. Using a convergent mixed method cross sectional approach, the quantitative surveys of service users was coupled with qualitative interviews of healthcare providers and members of community clinic management. The study results confirm that community clinics have been a huge leap in the accessibility of healthcare especially for women, older people and poor households. However, persistent challenges including shortage of essential medicines, human resources, poor governance mechanisms and insufficient infrastructure continue to affect quality and sustainability of services. Addressing these systemic barriers is crucial in order to address the structural problems in strengthening primary healthcare delivery and also to promote the concept of universal health coverage in rural bangladesh.

Keywords: Community Clinics, Primary Healthcare, Rural Bangladesh, Healthcare Accessibility, Systemic Barriers.

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Introduction

Health is a basic need of improving the overall quality of life of the individuals and making them able to function productively among rest of the society. The condition of the healthcare system of the country is a key factor affecting the social stability of the country and their economic progress because it is a combination of the technological development and the socioeconomic development (Okemiri et al., 2020). An effective healthcare system is not only conditional upon the availability of healthcare services, but also their accessibility and affordability as well as acceptability in forms that people can understand and use (Al-Shorbaji, 2021). It is, therefore, a common responsibility of the governments and communities to ensure healthcare services are made available to all the citizens as the access to health services has been widely recognized as a basic right and a pre-requisite for national development (Royston et al., 2020). Bangladesh is a densely population developing country located in the northern coast of the Bay of Bengal which have a large share of the population living in rural areas (Sajib et al., 2025). Rural communities often grapple with the constant socioeconomic problems like poverty, lack of infrastructure and shortage of access to skilled healthcare practitioners (Chowdhury & Ravi, 2022). To solve the problem of inequity with

access to primary healthcare services, the Government of Bangladesh took an initiative to establish community clinics (CCs) in distant and underserved areas (Zaman & Siddique, 2024). The idea behind this was to ensure that the important primary healthcare services are not more than a short walking distance from the population. Although, thousands of clinics were built in the first stage many of them did not function fully and all of them cease to function for many years (BakiBillah & Muhammad, 2023; Lahariya, 2017). Since its rejuvenation in 2009, however, community clinics have come back into life again and are now part of a core of primary healthcare delivery in rural Bangladesh (Uddin et al., 2021).

The pace at which community clinics were constructed was possible due to the nature of the public-private partnership agreements that were made specifically community donated land, which played an important role in keeping costs down. Each clinic often serves a population of about 6000 people and acts as both a first point of contact to primacy healthcare or serve as a referral link to other healthcare for healthcare situations that are more complex(Lahariya, 2020; Riaz et al., 2020). The normal form for community clinic is constituted of basic service rooms and reception area and sanitation facilities. Services are provided mostly by healthcare providers out in the community with the help of health assistants and family welfare assistants (Seddiky, 2020). Governance and management is appropriated with the support of locally selected community groups and support groups with the guaranteed participation of the community, local ownership and accountability (Hanifi et al., 2020; Schneider, 2018). Despite the broad coverage and popularity, there remain disparities to access basic healthcare services in the rural parts of Bangladesh. Factors such as long travel distance, quality of transportation services, lack of skilled personnel, availability of medicines etc, still continue to affect the quality of services (Udechukwu et al., 2023). Community clinics were to attempt to eliminate these barriers through providing medicines and prevention, health education, and maternal and child health services (Zaman & Siddique, 2024). However, there are larger structural issues, including poverty, poor levels of education, gender inequality, vulnerability to natural disasters and limited national resources that continues to limit health outcomes and delivery of health services (Staicu, 2017).

Globally, health systems in place for many countries of low and middle-income countries have been focusing on acute care in the past, with little preparedness on how to manage chronic and non-communicable diseases (Mullings et al., 2019). Similar problems is observed in Bangladesh has too few diagnostic facility and qualified people in its primary healthcare facilities, steady supply of drugs medications and integrative referral system for longer term care(Kabir et al., 2022). Strengthening the primary healthcare level is therefore of paramount importance with the potential for cost effective prevention and management of non-communicable diseases which allows for still highest coverage of the population (Varghese et al., 2023). Primary healthcare facilities such as community clinics are one of the major links between the community and the official healthcare system. Community health workers have special roles to perform in relation to increasing access for vulnerable population in terms of basic services, health awareness and facilitating referral (Idriss-Wheeler et al., 2024; Rachlis et al., 2016). However, the access of patients to the healthcare is influenced on multiple factors such as financial affordability, physical accessibility, awareness of services available, cultural beliefs and quality of care available (Worthington & Gogne, 2011). Addressing these dimensions youth the call for concerted efforts in terms of policy frameworks and adequate allocation of resources and strong local governance mechanisms (Abiiro & Allegri, 2015).

Although Bangladesh has made a lot of advances in certain areas of the health indicators yet there are still huge problems that are to be conquered in the field of delivery of healthcare services to rural population (Roy et al., 2017). Research on the successful integration of the community clinics into the larger healthcare system is lacking particularly in the rural setting. There is obvious need to discuss the issues of referral mechanism, continuity of care, coordination with higher level facilities and the ability of the clinics to cater for changing needs in health (Sieverding & Beyeler, 2016). The overall goal of this study was the critical analyzing the functioning of the community clinics through the themes of the opportunities provided by the community clinics and the challenges experienced by the community clinics in terms of provisioning of primary healthcare services in Cumilla district of Bangladesh. Specifically, the study analysed patterns of service utilisation, the role of workforce availability and motivation in providing services and the role of community based governance in creating sustainability and accountability. It also tried to find

out some of the structural and systemic barriers like poor staffing, uneven supply of medicines, and lack of infrastructural and poor regulatory oversight (Pyone & Mirzoev, 2021; Verma et al., 2023). By generating knowledge on such issues the study aims to provide a direction to policy makers and practitioners pertaining with strengthening of the community clinics for attainment of universal coverage of health services and sustainable development in rural Bangladesh.

Literature Review

Community clinics offer up an inimitable potential to revolutionize the way healthcare services is provided via bringing healthcare services to underserved populations and concurrent overcome geographical and socio-economic barriers for access (Riaz et al., 2020). This decentralised approach, if though it is providing more convenience to patients, most of who live in the remote or less-accessed areas, it is also helping to create a more integrated and responsive healthcare system (Attipoe-Dorcoo et al., 2020). By having the opportunities to embed medical expertise into these communities, clinicians can literally improve the outcomes of their patients and improve educational opportunities for increasing levels of care appropriate to the needs of the population (Rosenthal, 2014). Furthermore, the ability to have relationships with communities not only allow the healthcare providers to cross the more traditional 'wall' of the clinic, but also potentially integration of not only medical expertise in the community, but social determinants of health which are unique to the community, ultimately leading to more holistic and sustainable improvements in public well-being (Kato et al, 2018; Rosenthal, 2014) This community-centered approach is an additional expansion of patient-centered care that takes wider aspect of the determinants of health, in an effort to build a more effective and less burnout-prone clinical practice (Morris, 2019). This model as seen in community health centers show as successful in the implementation of novel care delivery models such as team-based approaches and integrated clinical care are of key importance in enhancing access and coordination of services (Rieselbach et al, 2019). In addition, the creation of student migrant free health clinics can also be complementary to this model and can help bridge the gap in healthcare and is invaluable learning opportunities for people who will be working as healthcare professionals in the future (Singh et al., 2022). These clinics are supportive of interprofessional to provide students from multiple health disciplines the opportunity to work in a collaborative way as well as obtain a holistic understanding of providing patient care in the real world (Yap et al., 2023). Such interprofessional student-led clinics have been proven to not only benefit the patient in terms of low cost services and improved management of chronic conditions; they also prepare students for interdisciplinary practice.

Despite all these multifaceted advantages, the success of community clinic operations, the long-term sustainability and impact of these clinics are often under threat due to a complex interplay of systemic challenges, barriers of operational issues (Rojo et al, 2025). These include poor communication between the faculty and the community stakeholders, language barriers, and lack of cultural sensitivity and religious sensitivity which is critical to the effective engagement of the community and the success of the decentralized training initiatives (Villiers et al., 2017). In addition, logistical constraints such as transportation, staff turnover and insufficient funding make continuity and expansion of the services difficult especially in resource constrained localities. These problems often demand creative solutions and efficient support mechanisms to ensure that community clinics are equipped with the ability to provide quality service to their target population and to the broad goals of health equity and improved public health care outcomes (Talaat & Hamed, 2023; White et al., 2018). Overcoming these hurdles and obstacles require a concerted effort to create a stronger collaborative network between academic institutions and healthcare providers as well as local communities in order to ensure that the most resources are put to use and that culturally congruent care is provided (Noriea et al., 2018). Specifically, a lack of interprofessional clinical educational experiences within many traditional medical curriculums may contribute to a "hidden curriculum" that reinforces the hierarchical ideas of organizational relationships between professions underscoring a need for models of collaboration found within successful community clinics (Meisinger & Wohler, 2016).

Theoretical Framework

This study is based on an integrated theoretical framework grounded on Primary Health Care (PHC) Theory, Health Systems Strengthening (HSS) and Social Determinants of Health (SDH) framework to analyse the opportunities, challenges and the systemic barriers that are faced by the community clinics in

rural Bangladesh. Primary Health Care Theory as elucidated by World Health Organization (WHO) is the birth place of the frame of this study (Chanda et al., 2023). PHC emphasises on accessibility, equity, community participation and preventive care as important pillars of effective delivery of healthcare. Community clinics in rural Bangladesh are directed towards operationalisation of the principles of PHC through decentralisation and bringing PHC closer to the underserved population (Riaz et al., 2020). This theory comes in handy when asking the challenge for community clinics to overcome the geographic and financial barriers to achieve early intervention and improve population health outcomes (Shan et al., 2024). However, it also shows the difference between the policy intention and reality of implementing the policy in that clinics may be constrained by shortage of resources or workforce (Bloch & Rozmovits, 2023).

Health Systems Strengthening theory is complementary to PHC because it has structural and institutional aspects of healthcare systems. The World Health Organization has six basic building blocks of health systems: service delivery, health workforce, information systems, access to essential medicines, financing and leadership/governance (Mosadeghrad et al., 2024). This framework creates room for a conversation about some of the systemic barriers to rural community clinics, such as inadequate funding, poor supply chains and inadequate training on healthcare workers as well as lack of administrative oversight (Houghton et al., 2023). By utilizing HSS theory, this study aim to examine the limitations for effectiveness and viability of community clinics by the absence of any of the above mention building blocks (Michel et al., 2020). The Social Determinants of Health framework provides a further addition to the above analysis, within the context of community clinics in the general socio-economic and cultural context (Stockton et al., 2021). A factor such as poverty, education, gender norms and transportation infrastructure has a huge impact on access and utilisation of healthcare in rural Bangladesh. The SDH theory helps this research to examine the interaction of the non-medical determinants and health services provisions including perceived and actual healthcare outcomes (Nawaz & Bushra, 2023). It also illuminates tasks for community clinics to serve as a site for health education and social support.

Methodology

This study was a convergent mixed method, cross-sectional study that included a combination of quantitative survey, qualitative interviews and structured observations of in-depth assessment of opportunities, challenges and systemic barriers in community clinics (CCs). The combination of both quantitative and quantitative methods (mixed-methods approach) has been adopted in order to reflect both the measuring trends and experiences living in the service users, healthcare providers and management members (Albataineh et al., 2023). Quantitative data helped to provide a wide overview of the way services were utilised and perceived in terms of accessibility whereas the persecuting narratives gained a deep insight into social, organisational and governance-related elements that impact service delivery (Chowdhury et al., 2022). The combination of a number of sources of data enabled the methodological triangulation, which adds to the credibility, depth and completeness of findings, which is particularly relevant in health systems research (Bazirete et al., 2020).

The research was conducted in the Cumilla district in Bangladesh which has high population concentration and where community clinics are used as first port of call for primary healthcare especially in the rural and remote areas. Established from 1998, CCs are the most decentralised level in the national health system with the clinics, in each of these, representing a serving population of around 6000 people. Clinches are generally manned by a Community Health Care Provider (CHCP), a Health Assistant (HA) and a Family Welfare Assistant (FWA) assisted by a Community Clinic Management Group (CCMG) for trying to promote community participation. Despite the very wide geographical coverage, CCs still have a number of problems such as human resource, infrastructure, availability of medicines and accountability so Cumilla is a good place for this investigation (Uddin et al., 2021).

Multistage sampling technique was applied. Five upazilas were selected for the purpose and ten CC out of each of them were selected randomly for a total of fifty clinics. From these clinics 500 service users were enlisted using exit interview and all healthcare providers were contacted yielding 55. In addition, one member from the CCG from each clinic was interviewed making total number of management participants 50. The final sample size of 605 specific respondents was judged to be adequate to conduct descriptive statistics and achieve quality saturation too. Data collection with four instruments as part of structured questionnaire for patients exit interview, semi-structured interview guides of providers and

CCM group members and observation checklist to assess infrastructural equipments in clinics, cleanliness, waste management practises were used (Lebina et al., 2020; Sullivan et al., 2021). Instruments were developed in English language and were converted to the Bangla language and then re-translated making them accurate. Following pretesting and improvement, trainings have been conducted in interviewing and observations have been conducted by trained enumerators with close supervision (Sultana et al., 2025). Findings obtained from both of the strands were integrated during the interpretation process in which numerical trends were contextualised based on experiences and perceptions of the participants in order to enhance the explanatory power of the study (Othman et al., 2020).

Results

Characteristics of Study Participants

The study sample consisted of 605 respondents who were sampled as five upazilas of the Cumilla District (comprising of service users, health care providers as well as the service users members of the Community Clinic management group or CCMG). Feminization of frontline primary healthcare provision in Bangladesh The sample consisted of females making the majority of the sample (n = 55), which were 91 per cent of the sample. Community Health Care Providers (n = 41) formed the biggest number followed by Family Welfare Assistants (n = 12) and then underrepresented was Health Assistant (n = 2). This allocation puts the CHCPs at the forefront of sustenance to the day-to-day services in the community clinics (CCs).

The largest proportion of the respondents (n = 500) was service users. Female patients are the ones utilising CCs since 62 percent of this group was represented by women. The age groups showed that the major service users were the old and middle aged. The largest percentage of 45.2 percent was on getters between the ages of 41 50 years and the next age group of 51 years and above had 31.2 percent. The younger age (18 30) adults were not well represented, suggesting the application of the CC to be age-related and adoption in the future is contingent on the presence of chronic or chronic health conditions. The socioeconomic population determined that most of the service users belonged to families of low-income. Nearly two-thirds of them responded that they earned less than 300 BDT daily in their households meaning the importance of CCs as one of the low-cost healthcare options among the poor rural citizens. The other informal workers and social workers (25.6) and teachers (29.6) constituted another cluster as the range of social coverage of the CC services was wide. The majority of the members were men (n=50), who participated in the CCMG (88%), with only 12% being players and it implies that women lack a representative voice in the health governance of the place. Majorities of the members fell within the range of 40-49 years that demonstrate that middle-aged community leaders are driving the controls in clinics. Members of the Union Parishad were also extremely represented in CCMG based on the fact that, just a single chief was a member; who clearly illustrated that the local government structures were still strictly connected with CC management. Overall, the characterization of the participants revealed that CCs can mainly help women, old age, low income families, and service provision is largely facilitated by the female frontline providers operating in the community-based governance system.

Quantitative Results (Service Accessibility and Utilisation)

The quantitative findings indicate that the community clinics serve the community in improving the access and usage of services by the rural communities residing in Cumilla district. The statistics of 500 service users indicates that the visitation to the clinic is high particularly among the women who made 62 percent of the total visitation. This means that the community based clinics are one of the key points of entry of the maternal and reproductive and family health services. It has further noted that, utilisation was high with older adults at 45.2 years 41- 50 years 31.2 years 51 years and above of age with reference to the fact that the two age groups have found the clinics important in the management of the common illness and chronic conditions in the ageing rural communities. The socioeconomic background data moves on to point to accessibility by presenting the fact that the majority of the service users were the households with low income levels with nearly two out of three of them indicating that their daily household incomes were less than 300 BDT. This means that poor populations specially visit the community clinics and may dictate limiting their inclusion in the more formal healthcare provision due to the confines of finances.

In terms of physical access, most of the respondents affirmed that the clinics were not too far away and, thus, could be reached by walking for as much as 10 minutes, which was in line with the national policy objectives, which included the community accessing the primary healthcare at the community level.

Consistency however lacked in as far as serving awareness was considered. The rate of appropriately reporting the official operating hours of the clinics has been also low (only 22 percent), and the rest of the respondents have been indicating the shorter or irregular operating hours, which suggest a potential issue of communication breakage and the inadequate way of providing the service. However, the utilisation was consistent and providers represented an average of 31-40 patients in the clinic daily, and this has been a representation of the perpetual demand of services.

The trends of the service utilisation indicated the clinics were largely used when it comes to treating minor illnesses, antenatal care, blood pressure and low level preventive services. Referring to the quantitative data of the providers, 60% said that the essential medicines were normally available and facilitated its further application. Nevertheless, two-thirds of the patients stated that they were not always able to receive the necessary medicines which had a direct effect on them receiving services completely when they visited. This imbalance represents the supply-side constraints that prevent effective use of services whatever their location is relative to physical accessibility.

Availability of human resource also affected the utilisation. The majority of the providers (84% of all) stated that they did not have staff, especially MBBS doctors that limited the number of services they could provide and referred more of them to the higher level facilities. Despite the service users stating that they received the services within the shortest time possible whenever they were visiting the facility (78% of the service users stated that they did so), the governance data revealed that they had issues because 62% of the representatives of the community clinic management noted inconsistency of staff attendance. This type of discrepancy could diminish the degree of trust and discourage from using it in the long-term. In general, it is quantitative results as features the existence of meaningful positive outcomes of community clinics on rural and low income communities in the situations of primary healthcare access, and the sustainability of high utilisation rate is pre-determined by the affordability and accessibility and dependence on the community. However, the supply of medicine, staff shortage and disparities in the working schedule has the limitations related to maximised use of the services. This systemic provision needs to be taken up to enhance the effectiveness and reliability of community clinics as a point of care in the rural parts of Bangladesh.

Qualitative Results (Opportunities, Challenges, and Systemic Barriers)

The qualitative results show that the community clinics are generally realised as a worthy and trustworthy health institutions in the rural communities, most notably the convenience, affordability and requirement in basic healthcare needs. Service users constantly spoke of the fact that clinics were their first stopping point for their frequent diseases and maternal services and to seek health advice, emphasising the proximity of clinics to their home locations reducing travelling time and transportation costs, and dependency on private service providers (Binyaruka & Borghi, 2022, p. 8). Women particularly found community clinics to be safe and convenient places to come for antenatal check-ups, have their blood pressure checked and discuss child health (Uddin et al., 2021, p. 8). Healthcare providers further discussed the possibility of building close relationships with members of a community including the need for recognising that familiarity built trust and people wanting to use a service regularly(Sivertsen et al., 2022, p. 7).

Despite these opportunities, there were high challenges emanating from the narratives the providers, service users and members of the management. Medicine shortages were a constant issue of providers airing their frustrations of not being able to meet expectations of patients due to limited or irregular supplies (Waiswa et al., 2021, p. 376). This often resulted in the patient being dissatisfied and referring to outlying pharmacies who lost confidence in the clinics. Human resource constraints were also very important. Providers described heavy workloads with the lack of staff and MBBS Doctors and limited services to basic care leading to limited clinical decision making (Ramani et al., 2020, p. 6). Many providers described stress in their emotions and low job satisfaction due to low salaries, little incentives and little opportunity for career progression (Prytherch et al., 2012, p. 7).

Systematic barriers had high relations with the governance and infrastructure weaknesses. Community Clinic Management Group members cited lack of accountability mechanisms, and poor staff attendance and supervision by the higher level authorities (Mutale et al., 2013, p. 1). Both users and providers pointed out deficiencies of poor infrastructures which include lack of diagnostic equipment, waste management and facilities for emergency transport. A shortage of ambulances was often cited as a major limiting factor especially in the

case of obstetric emergencies (Essendi et al., 2015, p. 9). Communication gaps between the clinics and communities had also fed more fuel to these problems as in many instances users were unaware of the number of the hours of access to the services and available services options (Minerva et al., 2017, p. 118). Overall, the results of the qualitative study indicate that although the community clinics have a great potential to transform rural primary healthcare, there are systemic inefficiencies surrounding but not limited to supply chains, human resources, governance and infrastructure - these continue to constrain the effectiveness and sustainability of community clinics.

Discussion

The findings from this study, on the one hand, is important in bringing out insights in the working of community clinics in rural Bangladesh, and the complex balance of avail of improved access to primary healthcare, persistent with systemic weaknesses. The findings show the success of community clinics to promote access to healthcare for the rural population, among women in particular, among the elderly and among poor households (Zaman & Siddique, 2024, p. 3). High utilisation and high reliance of the communities supports the view that these clinics are an important first level of healthcare seeking behaviour in support of earlier evidence supporting proximity and affordability as important determinants of healthcare seeking behaviour in rural settings.(Naserrudin et al., 2024, p. 7) The domination of women amongst the service users further goes to corroborate the role of the community clinics in the advancement of maternal and reproductive health for more public health goals such as reduction in maternal morbidity, improved preventative care amongst others (Halder, 2016, p. 6).

However, despite these achievements, from the study, there are some structural and operation related challenges which affects the quality and continuity of service. One of the identified problems is the deprive access of essential medicines this compromises the confidence of the patient on the other hand complies with the success of clinical encounters (Njuguna et al., 2023, p. 10). Equity priorities of community clinic model gets further hampered by the fact that even if are available if provides prescribed medicine, the patient goes elsewhere to get treated or have to expenditure out of pocket expenses(Kumar, 2022, p. 93; Lankester, 2019, p. 270). Similar problems have been recorded in other low and middle-income countries and where the impact of the primary healthcare intervention is restricted by the low efficiency of the supply chain (Alemu et al., 2022, p. 2; Olaniran et al., 2021, p. 2; Yadav, 2015, p. 5).

Human resource constraint even became a big impediment. The high reliance on the health care providers in the community and the defence of MBBS doctors creates a limitation on the provision of services and also burden the health care providers (Adhikari et al., 2022; Solanki et al., 2020, p. 803). This is not only affecting on quality of care, but this is adding to the problem of poor job satisfaction and job burnout of frontline workers. Although many of the providers were intrinsic in motivation and felt synonymous with community service the lack of financial incentives, career progression and institutional support puts the long-term sustainability of the workforce at risk (Haq et al., 2008, p. 4; Mir et al., 2013, p. 142). These findings are in line with general work on health systems where the focus tends to be on the crucial role of motivated and appropriately supported health workers in delivery of effective primary care.

Governance and accountability Difficulties become further challenges and compound upon Weak management of community clinic group and irregular staff attendance and monitoring by the higher authorities find weak reliability of services and contribute to public uncertainty on clinic operation (Hanifi et al., 2020, p. 2). In addition infrastructural shortcomings such as inadequate diagnostic equipment, poor waste management and absence of emergency transports limit the ability of the clinics to respond to urgent health responses. The absence of ambulance services particularly, is serious in the cases of the motherly and emergency cases, where the delay in the reference can cause life threatening consequences (Chinyakata et al., 2021, p. 341; Dalinjong et al., 2018, p. 6; Visagie & Schneider, 2014, p. 8). Overall, the study suggests that while community clinics is a promising and community-oriented approach towards delivery of primary healthcare, the scope of such an approach is limited because of connected systemic barriers. Strengthening supply chains, investment in human resources, better governance mechanisms and upgrading of the infrastructure are important for better quality and sustainability of the services (Darmstadt et al., 2020, p. 2). Addressing these issues would allow community clinics to look beyond provision of basic levels of service provision and have a better role to play in bringing about universal health cover and equitable healthcare outcomes in rural Bangladesh.

Conclusions and Recommendations

This study concludes by stating that community clinics are playing a vital role in improving the access to primary healthcare in rural and underserved communities in Bangladesh. The results suggest that the success of improving an increased accessibility and utilisation of services in these clinics, especially women, older persons and household groups of low income, has been possible due to geographically close by and affordable care(Karim et al., 2016). Community clinics have evolved into trusted institutions of first contact for basic treatment, maternal and child health and prevention for the community (Grant & Marshall, 2019; Lankester, 2019; Sihotang & Simangunsong, 2022). However, despite its importance the effectiveness of these clinics remains limited due to persistent challenges related to shortage of medicines, human resource limitations, weak governance and inadequate infrastructure (Khanna & Srivastava, 2021). These barriers effect on the quality of the services, create gaps in patient's confidence and barely support the capacity of the clinics to respond to the cases of the emergency and complex disease needs of the patient (Akhtar & Ramkumar, 2023; Alharbi & Alzghool, 2019; Leslie et al., 2017). Based on the findings some recommendations are made towards improving the performance and sustainability of the community clinics. First of all, the government should focus on bettering its supply chain management so that the required medicine and basic diagnostic equipment is always available. Second, the investment in human resources is critical, having to do with the hiring of more healthcare staff, regular use of deployments/rotational visits of MBBS doctor and introduction of financial incentives and career development opportunities to improve the motivation and retention of staff (Darkwa et al., 2015; Mir et al., 2013). Third, the governance and accountability systems should be improved, through regular monitoring, better definition of roles in community clinic management groups and improved coordination with higher health authorities. Finally, infrastructural improvements are needed especially provision of emergency transport facilities, improved waste management facilities and better clinic facilities (Edward et al., 2015; Hanifi et al., 2020; Uddin et al., 2021). Overall, the tackling of these inter-related challenges will help community clinics to provide more reliable, and more comprehensive and equitable, primary healthcare services to help contribute more effectively to national health goals and progress towards achieving universal health coverage.

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