



POLICY OPTIONS FOR INCREASING UTILIZATION OF COMMUNITY CLINIC SERVICES: A STUDY IN RURAL BANGLADESH

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Abstract

This paper aims to identify the problems of Community Clinic (CC) services in rural Bangladesh and to provide some policy options to increase the utilization. Here qualitative methods have been used, including document review, observation, fact check and key informant interviews with policy elites. Among those, the option relating to the absenteeism of health care providers at CC, scored the highest total value of 2.7 in multi criteria analysis as well as viable in PESTLE analysis. Therefore, the recommended option is introduction of biometric system at the CCs. This system is necessary in the CCs to ensure timely presence of the service providers to promote quality and safety in health care towards healthy communities. This system will also assist in implementing the plan of Digital Bangladesh by directly connecting the CCs with the main server of Management Information System of Directorate General of Health Services.

Keywords: *e-monitoring, multi criteria analysis, health workers, biometric system*

Statement of the problem in general outlook and its connection with important scientific and practical tasks

The health and family planning programme of Bangladesh has achieved considerable progress in reducing infant mortality, under-five mortality, maternal mortality and morbidity in last two decades. Bangladesh Government established the Community Clinic (CC) to extend the reach to the health care facilities from door to the doorstep; and to improve overall health situation of the country through ensuring comprehensive primary health care (PHC) service to the people of rural area. It is the flagship program of the government to provide PHC service at the community level to promote accessibility and availability of services along with broader community participation.

Thousands of health care seekers of poor rural community are getting services from the CCs and it has become an integral part of health system.

It was conceptualized in 1998 as an additional tier to the existing PHC delivery system of Rural Dispensary (RD)/Union Health and Family Welfare Center (UH&FWC) at union

level and Upazila Health Complex (UHC) at upazila level to bring the provision of Essential Service Package (ESP) of the beneficiaries within 30 minutes walking distance from the clinic. Initially it was planned to cater around 6000 population, but currently it is serving around 7,000-10,000 population of a defined catchment area.

Rural population generally visit CC to receive maternal, neonatal, child health, reproductive health and family planning, nutrition and some communicable and non-communicable disease related health services.

The services are provided at CC by the newly appointed Community Health Care Providers (CHCP) along with Health Assistants (HA) and Family Welfare Assistants (FWA). The CHCP is full time staff for the clinic, whereas HA and FWA each spend three days per week in CCs. CC is generally a one storied yellow colored building with two rooms with available drinking water and lavatory facilities including a waiting area.

This clinic is supposed to be open for six days a week except Friday from 9 am to 3pm. But in the current context of time, it is viewed that the operational guidelines of CCs are not properly followed and the CCs in many areas lack infrastructure, staff and leadership to deliver the committed services to the community [1].

Efforts to involve the community have not been that successful as the community groups are yet to take the initiative to run the CCs based on felt needs of the people.

On the other hand, rural health care service seekers also do not get their required services from the CCs. One study conducted at 2010 by Nargis [9] showed that use of these clinics by the local people was low. Only 19 percent of the clinics surveyed reported remaining open on all working days. Twenty-eight percent opened once a week, while 38 percent clinics were reported to be open only once in a month.

Fifteen percent of clinics have been reported to have opened only once since the formal opening. The mean time open per day was 2 hours (± 0.5 hour).

The study found that the poor performance was also due to the acute shortage of drugs and equipment in CCs. On an average, these clinics reported not more than 7-10 patients a day. Due to a very low use and attendance of patients in the clinics, the mean consultation time for the patients in those clinics were only 0.73 minutes (± 0.5 minutes).

But the current scenario is quite different from this; an evaluation report by the Implementation Monitoring and Evaluation Division (IMED) of the Bangladesh Planning Ministry has noted that the number of people visiting the community clinics is increasingly due to the proximity of the clinics to their homes and the provision of free medicines for common ailments.

A 2014 report in Prothom Alo, pointed out that 80% to 98% satisfaction among people who have used community clinic services. However, IMED evaluation report also suggested that, challenges remain, including repair and maintenance of the building infrastructure and tube wells in some of the community clinics.

However, as twenty years have been passed on after the establishment of CCs and it becomes demanding to provide health care services to the rural poor community and as about 65% of people in Bangladesh are rural dwellers, with the majority from low socio-economic status.

The CCs system was developed to cater to the primary health care needs of this people. In spite of these efforts, some health indicators still remain poor such as maternal mortality ratio is stalled at 196 which were 194 at 2010 [2].

One recent study findings reported that less awareness is available to describe the importance of utilizing the CCs and one of the foremost factors contributing to the poor health indicator is the under-utilization of CCs. These facilities are yet to gain full-scale level of utilization due to several factors such as inadequate medicine and equipments, absenteeism of health care providers, in active role of CC management committee which resulted in poor awareness and utilization of CC services by the rural community [3].

Analysis of latest research where the solution of the problem was initiated

Bangladesh Health Facility Survey 2014 reported one-fifth of CCs (n=1010) have an electric connection with national electric grid, although only 9 percent have regular electricity. However some numbers of CCs are equipped with solar panel with the support of development partners. On the other hand, 85% of CCs have facilities with improved water sources. Moreover, some research findings showed that due to negligence of CC management committee, a minute problem of electricity or water sources become larger which can be solved in the very initial stage.

Some research study observation report showed that some CC location is not convenient for the sick people to arrive there. In case of advanced stage of pregnancy, it might not be feasible for a pregnant woman to reach at the CC to perform her delivery. This scenario is mostly seen at the hilly area and during the rainy season. However, this situation can also be solved by the CC management committee with their proactive manner or leadership.

Bangladesh Facility Survey 2014 reported that among the surveyed 1010 CCs, the availability of adult scale is 84.2%; child scale 47.5, infant scale 21.2; thermometer 95.6; stethoscope 91.9 blood pressure apparatus 86.00 and light source 32.9. However, some other observation report told about the use of thermometer and stethoscope only. Other instruments are available there but not in functioning stage.

A report published on 2012 showed that no community clinics visited had GOB provided baby scales on site, which undermines the GOB mission of strong nutritional monitoring and regular growth monitoring [4].

Inadequate logistics distribution along with medicine supply is another challenge to run the community clinics activity smoothly. Currently 27 types of medicines are being provided from the community clinic to the rural people.

The supply of this medicine is almost smooth but the quantity of the medicine is not adequate for the health care seekers. There is another important factor is rational use of medicine.

One recent study conducted at 2016 ([5] showed that about 11% of children were prescribed antibiotics from CC when they should not have been.

Therefore, this picture also delineates the scenario that some would require antibiotic but it might not be available there. One study report showed that 54.9% mentioned unavailability of medicine supply at the community clinic [6].

The opening and closing time of community clinic is not properly maintained that is from 9 to 3 pm. From the previous research observation report, it is figured out that the clinic was opened in delayed time and closed in the earlier time.

One study showed that absenteeism is a reported problem in Bangladesh which needs investigation and control. A 2003 World Bank report ‘ Absenteeism in Bangladesh Health Facilities’ puts absentee rate for doctors at 40% and when separated by facility, the absence rate for doctors at larger clinics is 40%, but at smaller sub-centers with a single doctor, the rate is 74% (HRH Strategy).

With the vision of making Digital Bangladesh, CCs are provided with laptop and internet connection to perform online reporting of day to day data in the computer which is connected with the central server of MIS. But the previous research observation data showed that still there is a huge skill gap on computer operation.

Another study data showed that 80.5% gave suggestion for proper training of health workers for the proper utilization of the laptop [6].

Functional integration by FWA and HA is still not evident in most community clinics. While the CHCP is intended to support functional integration, one study findings reported that CHCPs are wary of playing this role and do not have the appropriate mandate/empowerment to ensure better coordination.

Moreover, as many CCs are built on donated land, researchers observed conflict between the land owners and the many parties who were involved in CC management. Even the community clinic management groups were not fully functional, but hold tremendous potential to meaningfully involve communities into health systems management. It also suggested that this tensions need to be resolved to ensure CC remains fully supported [4]. Therefore, utilization of healthcare services of CC is crucial and appropriate interventions are required by identifying the causes of the problem to improve the general health outcomes of the rural people.

Objectives

The overall objective of this study is to find out ways to increase the utilization of community clinic services in rural Bangladesh.

The specific objectives are

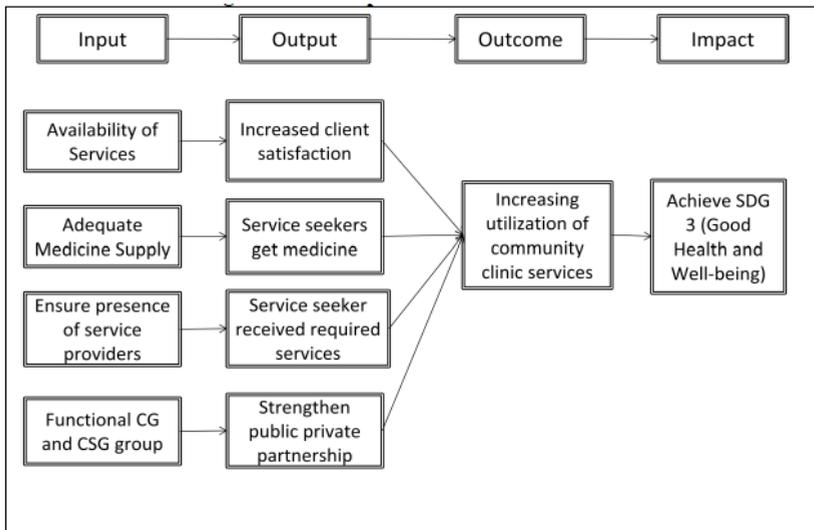
- To find some policy options against each identifiable problem
- Recommend best policy options to increase the utilization rate of community clinics.

Aims of paper. Methods

Theoretical and Conceptual Framework

In this study increasing utilization of community clinic services is the main outcome variables which will be dependent on some input and output variables. The following framework (Figure 1) gives the ideal format for increasing the usage of CC services in the rural area which will finally fell impact to achieve desired SDG target on time.

Fig. 1. Conceptual Framework



Source: Compiled by author.

Methodology

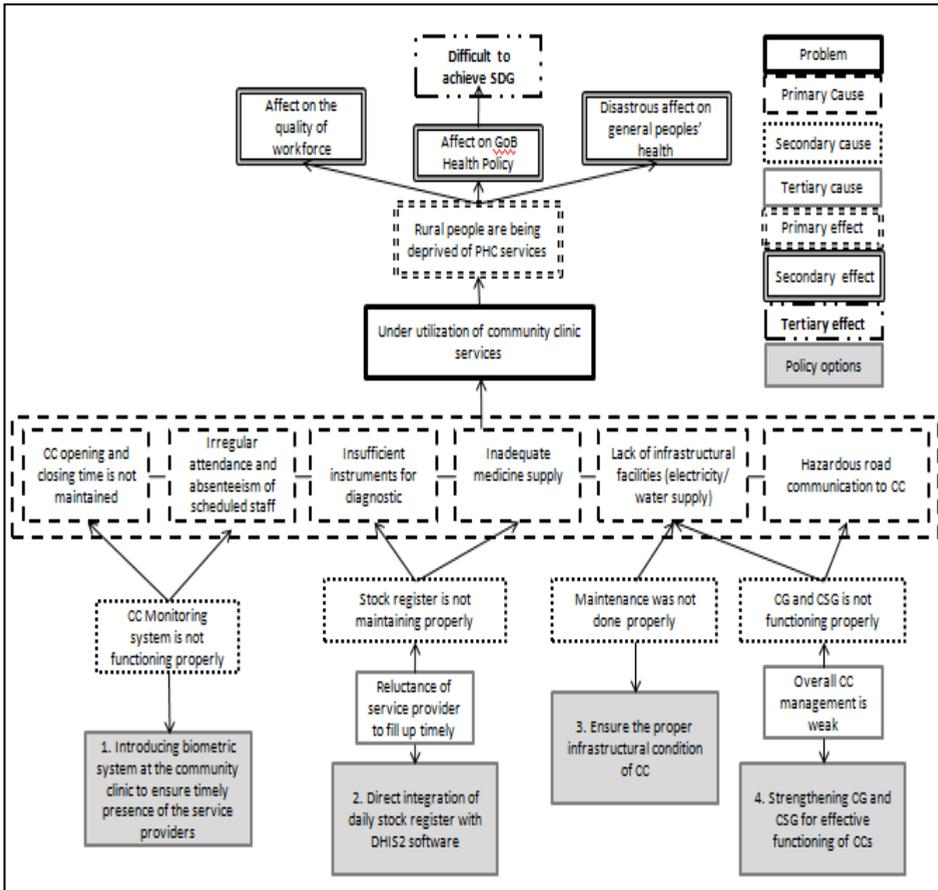
For this study, qualitative methods have been used, including document review, observation reports, fact check interviews, key informant interviews with policy elites (health policy makers, managers, researchers, etc.), and a stakeholder analysis and position mapping exercise. The literature and documents included published documents, grey literature (particularly government documents), and information from conferences and from media sources. For stakeholder mapping and analysis process at first a list of stakeholders has been prepared who are involved with the community clinic activities.

In the second step, a list of priority stakeholders was developed with inputs from experts. A focused literature review was also conducted to identify additional stakeholders in Bangladesh. Later on an Interview Guideline was prepared to conduct interview with relevant stakeholders. Observations on two community clinics had been conducted from 9 am to 3 pm in working day and some fact check interviews were conducted with CC service providers about the patient flow, clinic timing, available services in the clinics, medicine stock as well role of community group and community support group. Moreover, a total of eight interviews were conducted with relevant stakeholders from government sector, research organizations and development partners. Based on collected data from both primary and secondary sources, four policy options were identified initially. Later each of the policy options was analyzed through PESTLE and MCA to recommend the best policy option. Finally a tentative action plan has prepared to implement the recommended policy option with required monitoring and evaluation activities.

Problem Identification

The Problem Tree method is a planning method based on needs. The ultimate result of this process is an 'image of reality', enabling the formulation of projects (policy) that comprise objectives that have been accepted and supported by all parties concerned [7]. The following diagram (Figure 2) illustrates the causes and effects of the problems as well as tries to provide possible policy options to mitigate the problem.

Fig. 2. Problem Tree Analysis of Under Utilization of Community Clinic Services



Source: Compiled by author.

Stakeholder Analysis

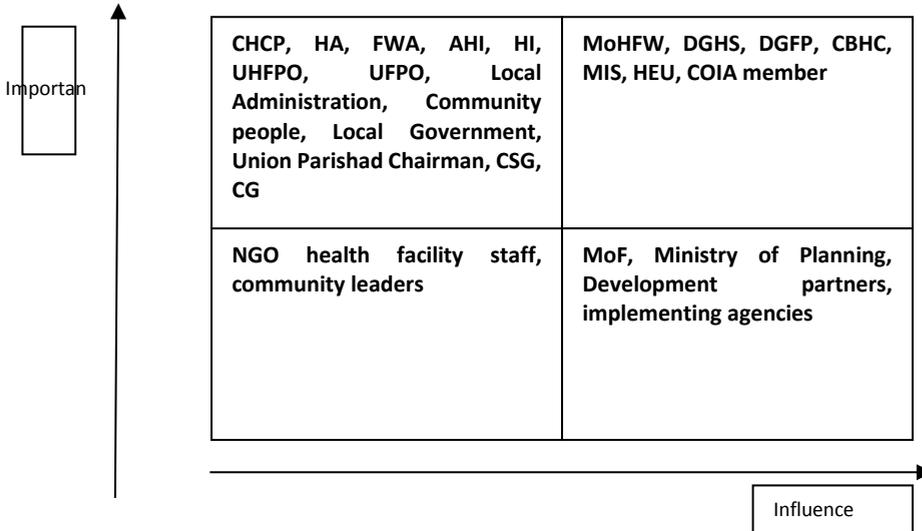
Stakeholder analysis is a process of systematically gathering and analyzing qualitative information to determine whose interests should be taken into account when developing and/or implementing a policy or program [8]. After identification of the problem for this study, a stakeholder analysis process has performed. Through this process, the following list of stakeholders has been identified who have a direct or indirect role as they are the key persons to be affected with the new policy. Therefore, there level of influence on the policy and community is delineated here (Table 1 and Figure 3).

Table 1. Level of influence and role of stakeholders in community clinic.

Stakeholders	Influence on policy	Influence on community	Potential role for the proposed policy (study)
1. Director General of MOH&FW	Very strong	Poor	Supporter
2. Line Director of CBHC, Program Manager, CBHC	Very strong	Poor	Supporter
3. Line Director of MIS	Very strong	Poor	Supporter
4. Line Director of HEU	Very strong	Poor	Supporter
5. COIA team	Strong	Poor	Supporter
6. Development Partners	Moderate	Moderate	Supporter
7. Ministry of Finance	Strong	Poor	Supporter
8. Ministry of Planning	Strong	Poor	Supporter
9. CHCP	Poor	Moderate	Blocker
10. HA/FWA	Poor	Strong	Blocker
11. HI/AHI	Poor	Strong	Neutral
12. Local Administration	Moderate	Strong	Supporter
13. Local Government	Poor/ moderate	Strong	Supporter
14. NGO health facility staff	Poor	Moderate	Neutral
15. Community Leaders	Poor	Strong	Supporter
16. Community people	Poor	Strong	Supporter

Source: Compiled by author.

Fig. 3. Stakeholders' Impact on the Policy Options.



Source: Compiled by author.

Exposition of main material of research with complete substantiation of obtained scientific results. Discussion

Findings and Analysis

To formulate the above mentioned four policy options, the political, economic, social, technological, legal and environmental consideration of each policy options has been delineated in the form of PESTLE analysis (Table 2). A PESTEL analysis is a framework or tool used by policy makers to analyze and monitor the macro-environmental (external environment) factors that have an impact on an organization. It is useful tool to understand the policy situation as a whole. Through this process, the most viable policy option/s can be identified

Table 2. PESTLE Analysis.

Policy Options	Political	Economic	Social	Technological	Legal	Environmental
1. Introducing biometric system at the CC to strengthen monitoring system	- Political agenda of current government is favorable to this.	- This system does not cost too much. It costs one time allocation for buying the system and some amount for installation charge in the computer. For example 10000 taka for system price and 2500 taka for installation of the software in the computer. - This system does not require extra workforce. -It can be allocated from the development budget.	-Bangladesh is now characterized as digital Bangladesh, and there is already a social acceptability of the digital process even in the health care service provision for the rural population.	-This system is technologically feasible to implement. -This system is already introduced in UHC where all Medical Officers have to provide their finger print in the system just after their entrance in the hospital. The system is located in the UH & FPO's room.	-This system does not have any legal barrier to implement this.	- This electronic system does not require paper based filing system. -Union Digital Center (UDC) is the major example.
2. Direct integration of daily stock register with DHIS2 software electronically	-e-Health is the priority sector of current government.	-DHIS2 software is already established within the health sector. Therefore, no establishment cost required in this regard. - This system will control misappropriation of medicines and other logistics.	-Already four types of CC service data is uploaded in the DHIS2 software.	- DHIS 2 is the flexible, web-based open source information system with awesome visualization features including GIS, charts and pivot tables. - DHIS2 software is yet to show its optimum performance with its existing data reporting.	-MIS is one of the important Operational Plan (OP) of current health main actor or authority to implement this.	-This electronic system does not require paper based filing system.
3. Ensure the proper infrastructural condition at the CC	- Construction of 18000 CC is plan of current government.	- It will cost huge money for repair and maintenance at regular basis.	Representative of community people (both male and female), service provider and Union Parishad (UP) members are there in the CG and CSG.	-It will require technology for construction and maintenance of CCs.	-No legal barrier to implement this	
4. Strengthening CG and CSG for effective functioning of this CCs	Local level political leaders have some role to implement of this.	Coordination among all local level stakeholders require more time.	Representative of community people (both male and female), service provider and Union Parishad (UP) members are there in the CG and CSG.	-It will cost small amount of money to regularize the meeting.	-Both CG and CSG members are legally empowered to monitor the activities of CCs.	

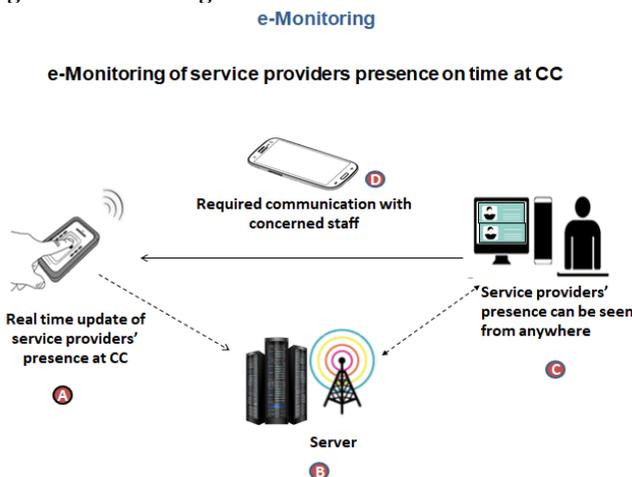
Source: Author's made

Policy Option 1: Introducing biometric system at the community clinic to ensure timely presence of the service providers

Biometric system or fingerprint scanning is one of the most common methods to monitor staff attendance at the workplace on time. Such systems control employees coming in and leaving, With the establishment of an electronic monitoring system at the it will ensure

the timely presence of service providers at CC to provide required health care services to the people as well as increase the utilization of community clinic activities. However, our research findings showed that service is available in a CC only one day in a week though the number of required staff is available there. In case of another CC, where the CHCP position is vacant and HA and FWA is performing the CC activities. In that case, mostly HAs are providing health care services to the rural people who come to receive health care from the CC. But alternatively, the domiciliary visits of the HAs are hampered and most of the rural people are deprived from their door to door service. Whereas FWAs are not cooperative in this matter and their presence in the CC is very low. Therefore, monitoring system need to be strengthened to provide adequate service to the people. More interestingly, our study finding also figured out the problem that there is no monitoring visit conducted in a CC in last five years. This monitoring visit is meant that without AHI, HI, FPI, SMO of WHO, no other higher officials visited that place ever. In that context, introduction of bio metric system is necessary in the CC. This system will also ensure the objective of Digital Bangladesh and directly connected with the main server of MIS of DGHS. Through this mechanism (Figure 4), the system will be installed in the entry point of the CC and will be connected with the server. Every health care staff will give their finger print in the system which will be automatically updated in the dashboard of the software. This update can also be seen from anywhere in specific portal address with the availability of internet service. For example, Upazila Health and Family Planning Officer can view attendance of CHCP/HA/FWA at respective CC from his computer or smart phone sitting at his own office. This performance can also be seen from the CBHC office room at Mohakhali, Dhaka. This system will provide real time data; therefore, any manager can take immediate action to ensure the adequate service for the rural community. There will be another option to enable monitoring at CC which can also be updated in the system with the existing laptop at CC with GPS.

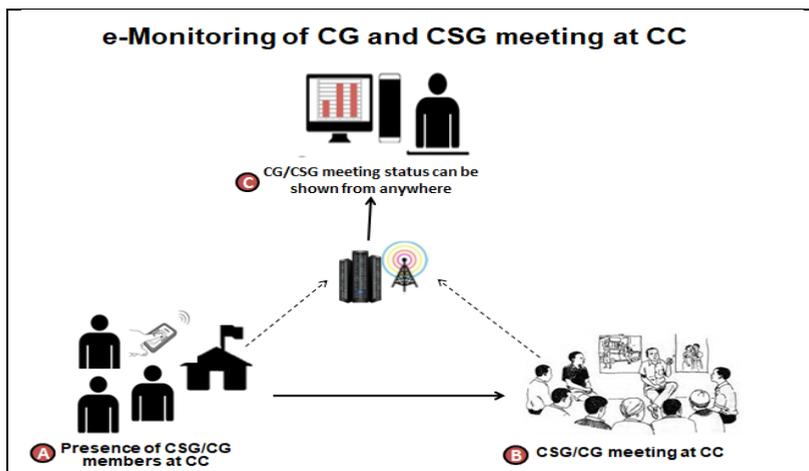
Fig. 4. e-Monitoring of Service Providers' Presence on time at CC.



Source: Author's made.

Each community clinic has one managing body titled community group (CG) with active participation of local community members, elected local government representatives including women, teachers, representatives of landless and poorest of the poor, and adolescent girls and boys. Before the opening of a clinic, CGs are given training by local health authorities on how to manage the clinics – on security, cleanliness and day-to-day maintenance. CHCP acts as the member secretary of the CG, manages the clinic and mobilizes people to avail of the health services. This committee has to organize a meeting which is not conducted in a regular manner. Therefore, this system (Figure 5) can also monitor the frequency of meeting conducted at CC and the presence of CG and CSG members will be automatically updated in the system.

Fig. 5. E-Monitoring of CG and CSG meeting at CC



Source: Author's made.

Policy Option 2: Direct integration of daily stock register with DHIS2 software electronically

The Government of Bangladesh has placed a high priority on e-Health. The strategic areas/issues relevant to health includes the following: Improve healthcare delivery management through use of telemedicine and modern technology; create awareness at all levels, including hard-to-reach areas with particular importance in making maternal, child and reproductive care available; ensure quality of care and increase the capacity of health care delivery system. Bangladesh has made commendable progress in digitalization of the health management information system (HMIS) data at the national level.

Community clinic monthly data is also maintained through the district health information system 2 (DHIS2). The Management Information System (MIS-Health) is one of the directorates of the Directorate General of Health Services (DGHS) under the MOHFW. MIS-health has been assigned additional responsibility to implement the Digital Bangladesh vision of the Government for the health sector of the country.

With this new direction and vision of the government, the demand from MIS-health has been increased manifold. Government's commitments and enthusiasm have proved that a great leapfrog will occur in MIS-health through implementing the newer programs, viz. e-health and tele-medicine, in addition to health information systems. With the link between previous RCHCIB and MIS-health, an initiative was taken by the government "Introduction of extension programme of web-based healthcare services and information management in community clinics", which take the nation one step further towards building 'Digital Bangladesh' as people supposed to take healthcare services sitting at their homes through the internet.

The Bangladesh government is providing laptops (mini-computer) to all Community Clinics in phases and these clinics would be made sources of information for their respective areas, containing information of all patients including mother and children. CCs are the first level one stop service center for Primary Health Care with emphasis on Maternal & Neonatal Health. However, one previous study finding suggested that use of mobile phone contributed in significant improvement of immunization coverage both in rural and urban areas which is quite feasible to implement even in the rural hard to reach areas of Bangladesh. Through this system, all the service related forms are updated electronically including the stock register of community clinic.

Policy Option 3: Ensure the proper infrastructural condition of CCs

Some Community Clinics are lack of electricity and adequate water supply system though these facilities were available there.

Due to lack of proper monitoring and coordination within the union level service sector, this situation has been created. Data suggested that most of the CC do not have adequate physical infrastructure facilities i.e. not properly furnished, weak ventilation system and absence of gender segregated visiting rooms for the patients; the provision of drinking water and toilets in the CCs were also not satisfactory. Sometimes these were used for other purposes, not for healthcare purpose.

Therefore, some CC cannot provide adequate service to the rural people for example normal delivery has been conducted at only 1008 CCs. But electricity and available water source is precondition for providing this type of health care services.

Policy Option 4: Strengthening Community Group (CG) and Community Support Group (CSG) through local government.

Our study findings revealed that the CG and CSG is yet to perform their responsibility to manage the CC activities. Therefore, members of local government can take initiatives to strengthen the CGs and CSGs.

Table 3. Advantages and Disadvantages of Policy Options.

Policy Option	Introducing biometric system at the CC to strengthen monitoring system	Direct integration of daily stock register with DHIS2 software electronically	Ensure the proper infrastructural condition at the CC	Strengthening CG and CSG for effective functioning of CCs
Advantages	-Dedicated to record time of employees coming in and leaving	Electronically handling of Community Clinic Stock Register	Rural people will get their required health care services from the community clinic	Local level coordination will be increased
	-Automated and needs no manual paper sheets filling	Daily use of equipment and medicine stock can be updated in the system		
	-Easy to analyze the information	It will reduce the wastage of medicine use		
	-Record the monitoring visit of upazila or district level supervisors	There are huge potential of using these real-time data sources in decision making by the supervisors and program managers for monitoring performances of the health systems	These data is also readily accessible by the policy makers for national level planning	
Disadvantages	-Count the number of CG	Auto generation of report helps to analyse data easily	It will take long time to implement	Someone can utilize power for personal benefit
	-Record the presence of CG or CSG members in the meeting	DHIS2 software is yet to show its optimum performance with its existing data reporting	Additional efforts are needed for increased coverage and improved quality of HMIS data to attract the users	It will cost money to coordinate all stakeholders
	-Have huge potential of using these real-time data sources in decision making by the supervisors and program managers for monitoring performances of the health systems		Someone can misuse of these services such as can use electricity of CC for their personal use	It will take long time to organize meeting
	-This system can be initiated within a very short period of time			

Source: Author’s made.

Risk Analysis to Assess the Options - Introducing the biometric system at community clinic to ensure the timely presence of service provider sometimes face difficulties during interrupted electricity supply. Moreover, in some cases internet bandwidth may be slow which create disruption in implementing the system maintaining the daily stock register with DHIS2 software electronically. For other third policy option, lengthy and open tendering and bidding process can be maneuvered by local leaders for the construction of CCs. Additionally, CG/CSG members can exercise power for their own benefits.

Analysis of Options - Multi Criteria Analysis (MCA) technique is generally used to identify a single most preferred option, to rank options, to short-list a limited number of options for subsequent detailed appraisal, or simply to distinguish acceptable from unacceptable possibilities (Multi-criteria analysis: a manual, 2009). To find out the best possible option, MCA technique has been used here. Through this analysis, all the values of each policy options are quantified here, based on the assumption of collected data as well as the personal perception of the researcher. Though Cost benefit analysis is a necessary instrument for choosing policy options in quantifiable manner but it is not possible to perform in this stipulated time frame. Therefore, MCA has been used here.

Table 4. Multi Criteria Analysis (MCA).

Policy Options	Point (P) (-5--+5)	Weights (W) (0-1)	Impacts (P*W)	Total Value
Option 1: Introducing biometric system at the CC to ensure timely presence of the service providers				
Social	3	.3	3*.3= .9	
Fiscal	2	.2	2*.2=.4	
Administrative	3	.2	3*.2=.6	
Economic	3	.2	3*.2=.6	
Environmental	2	.1	2*.1=.2	
Total				=2.7
Option 2: Direct integration of daily stock register with DHIS2 software electronically				
Social	2	.1	2*.1= .2	
Fiscal	3	.3	3*.3=.9	
Administrative	1	.2	1*.2=.2	
Economic	3	.3	3*.3=.9	
Environmental	2	.1	2*.1=.2	
Total				=2.4
Option 3: Ensure the proper infrastructural condition of CCs				
Social				
Fiscal	2	.4	2*.4=.8	
Administrative	2	.3	2*.3=.6	
Economic	1	.3	1*.3=.3	
Environmental				
Total				=1.7
Option 4: Strengthening CG and CSG through local government				
Social	2	.2	2*.2=.4	
Fiscal	1	.3	1*.3=.3	
Administrative	3	.3	3*.3=.9	
Economic	2	.2	2*.2=.4	
Environmental				
Total				=2.0

Source: Author’s made.

In the above analysis it is figured out that policy option 1 has scored the highest total value of 2.7 whereas option 2 has scored 2.4; option 3 and option 4 has scored 1.7 and 2.0 respectively.

Policy Options and Recommendation

To choose the best policy option from the above mentioned policy options, PESTLE analysis, risk analysis and MCA have been used. Among the four policy options, policy on Introducing biometric system at the community clinic to ensure timely presence of the service providers is recommended based on the highest total value of 2.7. This system can also monitor the presence of CG and CSG members in the CC meeting as well as their activities. Implementation of this policy is also feasible in terms of administrative, fiscal, social, economical and environmental perspective. However, the second option of integrating daily stock registers with DHIS2 software electronically is scored 2.4 in MCA which is also possible policy to be implemented within a short period of time.

Possible Impact of the Policy

With the introduction of biometric system (proposed) at the community clinic, full time presence of service providers at CCs will be ensured in the long run. Community Based Health Care (CBHC) website data suggested that daily 39 service seekers receive the

health care service from each CC. Therefore, if the CC opening and closing time is properly maintained then it will cater the service for more people. Simultaneously CC service utilization rate will be increased as rural people will get more services with the timely presence of service providers. It will increase the satisfaction level of service seeker that they know CC is open and ready to provide service for them from 9 to 3 Pm. They do not have to waste time due to seeing the locked CC and return to home or visit other health care centers for required services. It will also uphold the trust of rural people on CC services. Overall, it will have a positive impact on health indicator to achieve the sustainable development goals (SDG). From the service providers' view, it will also improve their skill and ways to show dedication to their work. It can also be a motivational force for them.

Action Plan for Implementation and Next Steps

Figure 6. Recommended Policy: Introducing biometric system at the community clinic to ensure timely presence of the service providers

HOW (Activities)	WHO	TIMELINE						M&E
		1 st Q Year1	2 nd Q Year 1	3 rd Q Year1	4 th Q Year1	1 st Q Year2	2 nd Q Year2	
-Organize a consultative meeting with the relevant agencies to inform about the decision	MoHFW/MoF/MoP							- Meeting minutes
-Distribute the responsibility among the ministries	MoHFW/MoF/MoP							-Meeting minutes
-Take decision to implement it as a project	MoHFW/CBHC/HEU/MIS							- Meeting minutes
-Ensure and arrange adequate funding	MoHFW							-MoU between ministry and donor
-Disseminate the information to the field level	CBHC							-Notice sent to the field level
-Complete the procurement process of the system	MoHFW/CBHC/PSSM							-Money receipt
-Arrange local level meeting and training of the staff	DGHS/CBHC/District level Health Manager/Upazila health Manager							-Meeting notice -Training schedule
-Establishing the biometric system at selected CCs	CBHC/MIS							- Upazila health Manager -Web monitoring, using URL address
-Start implementation	-Service providers at Upazila/ District/national level							-Monitor the activity according to the given work plan -Periodically review of DQA results -Bi-annually administrative data quality assurance
-Involve media as communicative strategy for general people -Use signboard of biometric system at the CC to inform rural people	-CBHC/Local Government/CG/CSG members							-Awareness and knowledge of rural population who received services from the CC
-Collect service data from the DHIS2 software of MIS	-MoHFW/CBHC/ District level Health Manager/Upazila health Manager							- By analyzing the trend of CC service utilization
-Recruit 3 rd party evaluator	-DGHS/Development Partners							-Review the report and provide feedback

Source: Author's made.

Conclusion

The services of community clinics can be more utilized through introducing the biometric system which will ensure the timely presence of service providers at community clinics. This option is related to the absenteeism of health care providers at CC, scored the highest total value of 2.7 in multi criteria analysis (MCA) as well as viable in PESTLE analysis. Therefore, this option has been recommended as the most viable one for this policy paper. Our study finding also discovered that there was no monitoring visit conducted in a particular CC in the last five years. In this context, introduction of biometric system is necessary in the CCs to ensure timely presence of the service providers to promote quality and safety in health care towards healthy communities. This system will also assist in implementing the plan of Digital Bangladesh by directly connecting the CCs with the main server of Management Information System of Directorate General of Health Services. Here, GoB order/notice can be used to disseminate information to the local level from national level; media can be involved here and putting signboard of biometric system at the CC can be some successful communicative strategy to inform rural people about this system. The service seekers, rural people will be benefitted to get their required services throughout the office time of community clinic i.e. 09 AM to 03 PM and six days per week. This will in turn, help to increase client satisfaction by providing adequate and required health care services to them.

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