



# International Journal of Pharmacology

ISSN 1811-7775

**science**  
alert

**ansinet**  
Asian Network for Scientific Information

## Community Participation on Health and Family Planning Programs in Bangladesh: The Role of Education and Knowledge on HFP for Plummeting Pharmaceutical Costing

<sup>1,2</sup>M.A. Kabir, <sup>2</sup>M.N. Huq, <sup>1,4</sup>Abul Quasem Al-Amin and <sup>3</sup>Gazi Mahabubul Alam

<sup>1</sup>Faculty of Economics and Administration, University of Malaya, 50603 Kuala Lumpur, Malaysia

<sup>2</sup>Department of Statistics, Jahangirnagar University, Dhaka 1342, Bangladesh

<sup>3</sup>University of Malaya, 50603 Kuala Lumpur, Malaysia

<sup>4</sup>Institute for Environment and Development (LESTARI), Universiti Kebangsaan Malaysia, 43600 UKM Bangi, Selangor DE., Malaysia

**Abstract:** Old fashioned Community Participation (CP) in Healthcare and Family Planning Programs (HFPPs) requires a number of revisions in order to confront the challenges of 21st century. Fundamentally operating any large project likewise HFPPs requires a mammoth budget. It is thus important to have some financial gains and savings for a state from the relevant areas by introducing a newer project. Evidences assert that HFPPs consumes a higher endowment without reducing the pharmaceutical cost in the respective area. Thus, in such situations, state faces financial constraints by introducing supplementary or a parallel projects. Considering this issue as research problem, this study was conducted in Bangladesh to understand the impact of community participation on HFPPs. An analytical justification is used to discover the factors that are causing the problems for existing HFPPs. Observation also notes that HFPPs fails in plummeting pharmaceutical service costing in the respective area. It rather works as marketing tool for pharmaceutical business. Additional findings indicate that socio-economic condition, basic knowledge and fundamental awareness are essential in receiving the extended benefit. In addition to these, integration of CP and HFPPs may overcome the problems of the gap between demand and available resources for meeting the extensive healthcare that a country needs. However, it is also somehow constrained because of inadequate education and knowledge in the respective area of the rural population who are the key dependents on HFPPs. Therefore, we emphasize both on the redesigning of existing HFPPs and education attainment for the long term benefits. Our study is witness to support extensive CP in existing HFPPs and advocate why current system needs to be redesigned including the plummeting pharmaceutical service costing in the way forward for Bangladesh.

**Key words:** Health care, family planning program, pharmaceutical service costing, educational knowledge, policy, Bangladesh

### INTRODUCTION

Bangladesh is one of the most densely populated countries in the world with an estimated population of 150 million (BBS, 2011). Since independence, Bangladesh has been facing challenges to cope with demand of healthcare services required by the local community. However, with some drawbacks and limited capacity, it has invested substantially in the institutionalization and strengthening of health and Family Planning (FP) services with an especial attention to rural community. These significant numbers of projects on healthcare and family planning have made people aware on the use of medical services and medicine. It is thus used as the tool for medical marketing in parallel. Consequently, the country

pays her budgets on both medical services and medicines as well as for the projects implemented. Despite intensification of costs through various ways, there has been a significant improvement in the health status of the people over the last three decades. Life expectancy at birth has increased from 55.2 in 1980 to 68.3 years in 2009. Total Fertility Rate (TFR) has decreased from 6.3 in 1971-1975 to 2.7 in 2007 (UN, 2009). The contraceptive prevalence rate has increased significantly from 8 to 56% from 1975 to 2009, with an average of 1.5% increase per year (BDHS, 2007). Notwithstanding some improvements, much still remains to be made especially for the rural community. Particularly, the mortality rates such as infant (38 per 1000 births per year) and maternal (348 per 100,000 live births per year) persist to be unacceptably high in the

rural community in Bangladesh (UN, 2011; UNICEF, 2008; Kabir *et al.*, 2011a). Moreover, there is a widening gap between the demand and the available resources for meeting the extensive healthcare that needs by the local and rural people. In addition, the Human Development Index (HDI) which reflects the quality of life is still low in Bangladesh (which is 0.469) compared to South Asia (which is 0.516) (World Bank, 2010) (The current HDI index of World is 0.624 (WB, 2010)). In addition, low calorie intake continues to result in malnutrition, particularly in women and children. On the other hand, the fundamental knowledge and education of basic healthcare is still limited in rural community (BDHS, 2007).

Considering the existing circumstances, the government's endeavor is not sufficient to provide quality healthcare services responsive to the needs of the people. Especially, those who are children, women, elderly and poor people are lacking of sufficient healthcare services (UNICEF, 2008; Kabir *et al.*, 2011b). However, the government of Bangladesh has implemented a particular service by the Health Nutrition and Population Sector Program (HNPS) to relief the drawbacks of the problems. But the HNPS is not effective due to some complexities and weaknesses of program and lacking of proper implementation (BDHS, 2007). Therefore, principally it is essential to sort out innovative alternatives together with the current system and especial attention must require in strengthening of health and family planning services, including cost-effectiveness of major pharmaceutical services (The major pharmaceuticals service we consider as pills, injectables, female sterilization, male sterilization and condoms as about 80% of people are somehow dependent for anti-contraception), particularly to the majority of population who are living in the rural area. Moreover, the roles of civil society and Non-Government Organizations (NGOs) are important to amplify the quality of healthcare service but their private services are mostly available and which are mostly located in the urban area. In order to improve the complexities and weaknesses of the existing system, alternative service rather than government ones need to be considered prominently. Concerned body must take least substantial alternative initiatives with the existing healthcare as to some alternative policy options that could imply important effects.

As an effective alternative option together with the existing system, the community participation in health and family planning programs nowadays is much uttered in the developing countries. The fruitful outcomes we find from some recent community participation in health and family planning programs such as by Jamkhed Comprehensive Rural Health Project (CHRP), India;

Karnataka Project for Community Action in Family Planning, India; Integrated Rural Health Project in Saradidi, Kenya; Mawas diri Community-based Health Care Systems and Training Programme, Indonesia; Mobilization for Nutrition in Tanzania; Community Involvement in Health Development: Caranavi District, Bolivia; Comilla Development Model, Bangladesh and Chakaria Community Health Project of ICDDR, B, Bangladesh. All of the projects scored high in terms of the categories have direct involvement of community people. So it is very much apparent that a successful program on health and family planning needs active participation of community people.

To identify the role of community participation in health and family planning programs together with the cost-effectiveness of pharmaceutical services in the developing countries, an extensive literature is nowadays accessible. Lessons from the country-level experience can be assessable from several countries: Bangladesh, Ecuador, Honduras, Kenya, Madagascar, Nicaragua, Papua New Guinea, the Philippines, Sierra Leone and Swaziland. However, there are some shortcomings in developing of planning and policy implementation in the developing economies but the effective community participation in health and family planning programs are proven to be effective. It may ensure policies and programs that are responsive to local-level needs. It may empower individuals, particularly women, as owners and agents of change in their own sexual and reproductive health. In addition, effective community participation, may made-up women's groups, Non-Government Organization (NGOs), religious and youth associations and other organized constituencies ensure that the voice of those most in need is heard at all levels of the health care system. Therefore, the key goal of this research task is to search a sound policy option and recommendation that strengthen the existing health and family planning services in Bangladesh.

Following the key research goal this study seeks the possibilities of interaction between service providers and community participation for the efficient and sustainable health and family planning programs mostly focusing in the rural community. However, we must bear in mind that some prerequisite assessments that must in order such as (i) cost-effectiveness of pharmaceutical services (There is the substitution effect between cost on pharmaceuticals service and marinating necessary daily needs), (ii) lacking of basic healthcare knowledge, (iii) assessments of the backdoor problem and rural people's education level and (iv) problems of implementing actions and effective monitoring and evaluation system. We know that there exists a strong relationship between education level and

healthcare perceptions. Education creates awareness about general healthcare such as marriage and child-bearing age, interval between births and other socio-economic factors that responsible for healthcare problems. But, how education facilities can increase healthcare knowledge make available to every doorstep. Therefore, we also feel essential of relevant study to witness the core reason of the raised factors in Bangladesh to support effective policy scope in the way forward. In this study, we placed some sorts of logical grounds before focusing policy scope and recommendation and support of redesign of community participation and family planning programs in Bangladesh.

### **DATA AND METHODOLOGY**

This research document is based on the analysis of the secondary information. The study utilizes information from the reports of Bangladesh Demographic and Health Survey (BDHS, 2007), Health and Demographic Survey (HDS, 2000) and Household Income and Expenditure Survey (HIES, 2005). The BDHS (2007) study is conducted by National Institute for Population Research and Training (NIPORT) and that is a nationally representative survey of 10,996 women age 15-49 and 3,771 men age 15-54 from 10,400 households (BDHS, 2007). The HDS (2000) study is conducted by Bangladesh Bureau of Statistics (BBS) which included information on both the household and individual levels. HDS (2000) is covered a nationally representative sample of 11,219 households constituting 56,118 individuals. The HIES (2005) study is conducted by Bangladesh Bureau of Statistics (BBS) which is also a nationally represented sample of 10,080 households (BBS, 2006). The detailed methodology of the respective database will be found in the survey reports.

### **SERVICE PROVIDERS AND QUALITY OF SERVICES**

**Provision of health and family planning services:** The healthcare system in Bangladesh is pluralistic with extensive public healthcare programs and services, non-governmental organization (NGO) health services and a growing private sector (BNHA, 2010). The Ministry of Health and Family Welfare (MOHFW) is the largest provider of healthcare services in the country. It operates a nationwide system of facilities and healthcare programs. At the same time, Non-Governmental Organizations (NGOs) play an important role after government. Approximately, 500 NGOs are working in the overall health sector (BNHA, 2010). They are largely funded by the government and development partners. NGOs are very

effective in providing healthcare at the grass-root level and complement the efforts of the government.

For earning profit, private sector services, including pharmaceutical outlets, are concentrated in the major cities. Private ambulatory care by qualified modern providers is provided mostly by small clinics and hospitals staffed with private doctors many of who work off-duty or after retirement from government facilities (Rannan-Eliya *et al.*, 2001). In addition, many of the doctors, paramedics both from private and public hospitals or clinics are delivering healthcare services as private practitioners in the afternoons. Pharmacies and pharmaceutical shops are responsible for most of the distribution of pharmaceutical goods. Moreover, traditional unqualified providers including homeopath practitioners, Kabiraj, quacks and others play a significant role in the private healthcare market of Bangladesh, especially in the rural areas (Data International, 2000). In recent years, 589 government hospitals and 2271 non-government hospitals (i.e., registered by DGHS) are working in the health sector. Besides, 18 government medical colleges and 41 private medical colleges have been providing healthcare services in the country (DGHS, 2009). Besides, BIRDEM, DAB Cardiac Centre and other private clinics and hospitals also provide specialized healthcare services mainly in the major cities. A few charitable hospitals provide healthcare services in the country in both rural and urban areas.

Family planning is an important component of reproductive health and knowledge of family planning methods is widespread in Bangladesh. Family planning programs help to reduce the incidence of high-risk birth of the mothers by spacing and limiting number of children. The services are usually provided at all the public healthcare facilities. Furthermore, the Government's policy has been encouraging the participation of NGOs in family planning service in the country. More than 400 NGOs are focusing especially to different aspects of MCH and family planning related activities (BDHS, 2007). Nowadays, most of the NGOs are involved in community distribution of contraceptives, while a few are engaged in clinical services. In addition, there are private providers and increasing number of service sites; those are particularly in urban areas. Moreover, partnership of NGOs with local government bodies is a new dimension for providing health and family planning services in Bangladesh. The collaborative effort provides satisfactory healthcare services in the country.

**Clients of existing service provision and pharmaceutical services:** In Bangladesh, population reported illness in a particular point in time revealed that same number of

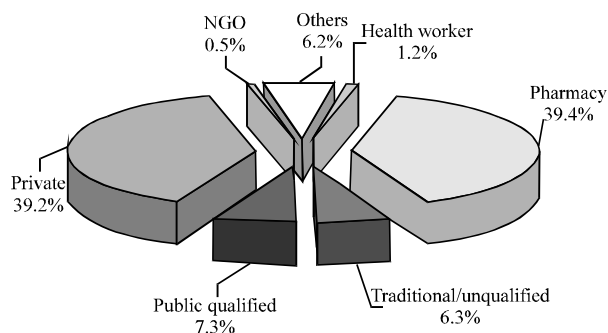


Fig. 1: Distribution of health seeking behavior (Source: BBS, 2006)

people (about 39%) relied on private doctors and pharmacy sources. The public qualified doctors accounted for only (7.3%) followed by traditional/unqualified doctors. Besides, the health workers and NGO sources contributed only 1.2 and 0.5%, respectively (Fig. 1). The prevalence of self-treatment from pharmacy as well as choice of traditional/unqualified providers are more evident among the poor people especially who live in rural areas.

The utilization of public facilities at rural areas seems to be pro-rich, while the urban people utilize public facilities at a constant rate throughout the income distribution. On the other side, the most commonly used contraceptive method is the pill. More than 50% of the currently married women who are using some form of contraception relied on pills (Fig. 2). Injections are a distant second, used by only 13% of all currently married contraceptive users, followed by periodic abstinence (9%); female sterilization (9%) and condoms (8%). Pills are the most frequently used method across all wealth quintiles in both rural and urban areas while Injections/injectables are more popular in the first three quintiles and in rural areas. On the other hand, condom use is relatively low in the first three quintiles but increases in upper two quintiles. This trend is more evident especially in urban area. Overall, 17% of currently married women in Bangladesh have an unmet need for family planning services, 7% for spacing and 11% of limiting births. The total demand for family planning in Bangladesh is 73% (BDHS, 2007).

From the existing contraceptive method-mix of Bangladesh (Fig. 2), it is essential to figure out the factors that are accountable of plummeting pharmaceutical service costing. We know that there is the substitution effect between cost on pharmaceuticals service and marinating necessary daily needs for the poor community. It is obvious that why poor should substitute their parts of income for maintaining family planning as they are

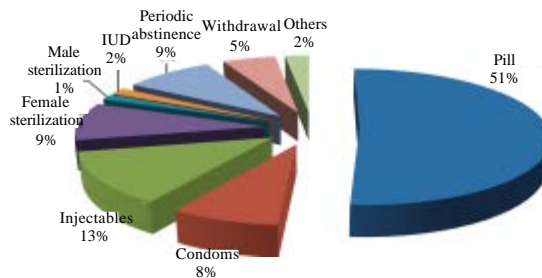


Fig. 2: Contraceptive method-mix (Source: BDHS, 2007)

Table 1: The percent distribution of modern contraceptive users of age 15-49

Socio-economic groups	Public sector <sup>a</sup>	NGO sector <sup>b</sup>	Private medical sector <sup>c</sup>	Other private <sup>d</sup>
<b>Place of residence</b>				
Urban	34.2	8.8	50.5	6.4
Rural	55.7	4.0	33.8	6.6
<b>Educational attainment</b>				
No education	66.1	5.9	23.8	4.3
Incomplete primary	56.4	5.5	30.0	8.2
Complete primary	50.8	5.3	35.5	8.4
Incomplete secondary	35.5	4.5	52.1	7.9
Complete secondary	40.3	5.0	51.0	3.7
Higher	20.6	3.4	69.0	7.1
<b>Asset quintile</b>				
Poorest	65.6	6.5	21.9	5.9
Poorer	59.6	4.1	30.3	5.9
Middle	53.2	3.6	34.5	8.7
Richer	50.5	4.9	38.0	6.6
Richest	25.9	6.7	61.8	5.6
Total	50.4	5.2	37.9	6.5

Source: BDHS (2007), <sup>a</sup>Includes government hospital, family welfare center, Upazila health complex, satellite clinic or EPI outreach site, maternal and child welfare center, government fieldworker, community clinic and other public sources; <sup>b</sup> Includes static clinic, satellite clinic, depot holder, fieldworker and other NGO source; <sup>c</sup> Includes private hospital, qualified doctor, traditional doctor, pharmacy and other private sources; <sup>d</sup> Includes shops, friends/relatives and other sources

already fighting for daily necessary needs. Therefore, the question comes around for the extensive government support as a subsidy in the pharmaceuticals service. If we consider the existing pharmaceutical service figures, the public sector is the largest supplier of contraceptives in Bangladesh which is about 50% (The private sector supplies mostly pills and condoms and account for 38% of total supply. Only 5% of users obtain their contraceptive methods from NGO sources. Other suppliers are relatively insignificant). Eventually, public sector is more popular for poor women in the lower wealth quintiles (Table 1). Therefore, before designing any effective policy and action government should consider the cost effectiveness of the pharmaceutical services to see the effective family planning in Bangladesh, particularly in the rural areas.

Among all users of family planning services in the lowest wealth quintile, 66% procure contraceptives from

public sources. As wealth rises, the percentage of women procuring contraceptives from public sources falls to 53% in the third quintile group to 26% among the richest group. The percentage of women procuring contraceptives from commercial sources rises in accordance with wealth level, while the share of NGOs and other sources remains steady across wealth levels. There are significant differences in sources of contraceptives in urban and rural areas. The public sector is a much larger supplier of contraceptives in rural areas compared to urban areas. The education plays an important role for selecting the sources. For instance, the higher the education level the lower the choices of public sector and increases the preferences of private sectors (Table 1).

**Accessibility and quality of services:** The availability as well as the quality of the services at public provisions makes people to rely on private providers that are obviously more expensive and most of the time that is beyond the capacity level of the poor people in the rural area. Private sector services are usually located in the major cities of the country where the ambulatory care is provided mostly by small clinics and hospitals. Nevertheless, unqualified/traditional providers are cheaper, easily reachable and poor are more familiar with these services. The reasons of the patients for not receiving treatment from public facilities are presented in Table 2. The shortage of medicine seems to be the most critical reason in both rural and urban areas for discouraging people not to visit public facilities. Long distance as well as long waiting time for treatment is also evident among the prominent reasons. Expensive along with non-availability of doctors is also noticeable for not selecting the public facilities.

The accessibility and quality of family planning services have a strong impact on contraceptive use. Quality in family planning programs means extending the choice of contraceptive methods, providing adequate information, increasing the technical competence of providers, improving interpersonal relations between providers and clients and incorporating adequate client support and follow-up. Much of the failure to use existing family planning services is attributable to lack of quality. The trends in current use of contraceptive methods are also attributable to accessibility as well as the quality of contraceptive methods. The contraceptive prevalence rate for married women in Bangladesh has increased from 8% in 1975 to 56% in 2007 which is a sevenfold increase over more than three decades (Fig. 3). Overall, current contraceptive use has declined by two percentage points in the past three years, from 58% in 2004 to 56% in 2007, but the use of modern methods has remained unchanged.

Table 2: Reasons for not receiving treatment from public facilities

Reasons	Percent of patients who didn't visited public facilities*		
	Rural	Urban	Overall
Long distance	18.8	14.1	17.2
Expensive	12.1	9.5	11.2
Long waiting time	13.1	18.8	15.0
Non-availability of doctor	10.4	10.2	10.3
Shortage of medicine	27.3	24.5	26.3
Shortage of equipment	7.6	7.0	7.4
Absence of female doctor	1.8	2.0	1.9
Inadequate treatment system	3.0	4.6	3.5
Misbehavior of doctors	3.5	4.4	3.8
Non-availability of transport	1.6	3.6	2.3
Others	0.8	1.3	1.0
Total	100.0	100.0	100.0

\* Multiple responses are considered Source: BBS (2001)

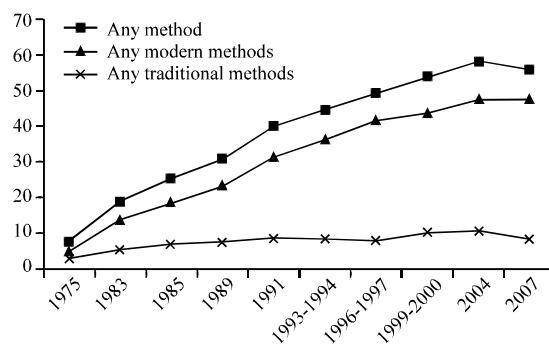


Fig. 3: Trends in current use of contraceptive methods, 1975-2007 (Source: BDHS, 2007)

In contrast, increase in the use of traditional methods is very slow. Shifting from traditional methods to modern methods indicates an improvement in access and quality of family planning services in the country. Although family planning programs in Bangladesh have a good number of success stories, but the existing system also suffers from lack of adequateness. The following are worth mentioning:

- Problems of transportation in low performing areas
- Distance to the health and family planning service delivery centers
- Social conflicts among women of different social classes who do not want to go to someone else's house for services
- Infrequent visit by FWV (Family Welfare Visitors) s and FWAs (Family Welfare Assistant (FWA)) given the increasing number of eligible couples
- Lack of service facilities, lack of coordination among service providers and referral for treatment of side effects

Other major concerns of the existing system are the increasing cost associated with the family planning program in Bangladesh (Islam *et al.*, 2001; Hamifi and Bhuiya, 2001). This is also interesting that the poorest 20% of the population are particularly disadvantaged, receiving only 16% of the public resources devoted to health. In contrast, the richest 20% of the population receive one third of the total public healthcare resources (O'Donnell *et al.*, 2005). Many of the poor do not utilize the public facilities due to lack of accessibility as well as lack of well management. However, those who utilize public healthcare facilities are not getting benefits satisfactorily. This is due to the fact that the rules of public resource allocation across regions are not conducive to delivering health subsidies to the poor. Although, fees charged in government facilities do not represent a large burden for poor households, but informal fees required in the same are comparable or even higher than the official ones (World Bank, 2001).

#### **COMMUNITY PARTICIPATION AND RESPONSIBILITY**

To make health and family planning programs sustainable, it is imperative to reduce the inequalities that exist in the program. Sustainability and efficiency of these programs also call for strong community participation, consistent administration and political commitment. Moreover, community participation is essential for successful health and family planning programs through transparency and accountability of the service providers. Community participation is a process through which stakeholder's influence and share control over development initiatives, the decisions and resources which affect them and it has a diversity of definitions (Askew, 1989; Rifkin, 1990; WHO, 1991). The common theme of most definitions of community participation includes population involvement in:

- Decision-making processes
- Implementing programs
- Sharing of benefits of development programs
- Efforts to evaluate such programs

The community participation has been recognized as an important element for sustainability, effectiveness and optimal use of health and family planning programs, particularly among poor and under-served population in developing countries. Both governments and donor agencies in developing countries have become increasingly aware of the importance and need for active local participation to achieve greater success rate in

performance of health, family planning and development programs and their limited impact on the welfare of the intended beneficiaries (Stone, 1992). Specifically to Bangladesh, there is a growing realization that the innumerable problems the nation will face in near future that no existing government and non-government mechanisms would not be able to address them adequately without effective participation from the community members (Islam *et al.*, 2001). Participation of stakeholders in healthcare, a major policy theme and a fundamental principle of the Alma-Ata Declaration of 1978 is still considered an essential part of health development (Catino, 1999). The Alma-Ata Declaration stressed people's right and duty to participate individually and collectively in planning and implementing their healthcare programmes. Other international conferences emphasized on the need of users of health services, especially women and the civil society, to participate in planning, monitoring, and evaluating health services to reorient the services to address their needs and rights and to hold the State accountable to their agreements (Catino, 1999).

Bangladesh has a long tradition of community participation in certain development activities. However, very little is known about community participation in health and family planning activities (Bhuiya and Ribaux, 1997). Under the rubric of community participation since 80s aiming at building a partnership between government and people, the use of community-donated space for Expanded Programme on Immunization (EPI) camps, satellite clinics for providing immunizations and reproductive health services to women and children have already shown the way how the community can contribute to their health development in Bangladesh. The village healthcare providers nominated by the community and trained by the government health authorities have been providing services satisfactorily from the village health posts with community resources (Uddin *et al.*, 2001). One good example of community participation in health and family planning programs in Bangladesh is the South Eastern Community Health Project (SECHP) supported by German Red Cross (GRC) and implemented by Bangladesh Red Crescent Society (BDRCS). The project with the purpose of ensuring sustainable healthcare services has developed several mechanisms for contribution of the community that includes cost recovery and cost sharing, fund raising activities and income generating activities through a center management committee. Many of the centers will become self-reliance by the end of the project through active community participation. Under this innovative approach the community members act as the owner of the centers and getting no monetary returns at all.

Although, community participation in health and family planning programs is limited in Bangladesh, there are instances of community involvement to some extent under some innovative programs and some successes have already been achieved through these pilot programs in the country. The benefits of community participation as well as the activities of the committees formed so far in health and family planning programs can be summarized as follows (Islam *et al.*, 2001; Uddin *et al.*, 2001; GRC, 2003).

- Community participation ensures active support of the government officials at Thana level and elected representatives of the community at Union level
- Ensures improvement in cleanliness, waiting arrangement, waiting time and service-providing hours at the health centers after the formation of committees
- Addressed barriers to the quality of care, such as negative attitude/behavior of service providers, poor interactions between clients and service providers and lack of essential drugs and supplies in the health facilities
- Organized community-awareness sessions about their health problems, referring patients in the nearest health facilities and ensuring the availability of service providers for longer hours in the health facilities
- Keep up to date about client needs and improve provision of services through regular meetings with the clients
- The community participants share the benefits of the program with access to family planning services and supplies
- Regular contact with government workers at the grass-roots level and program assistant's help in providing efficient services. It is also helpful to refer clients to FWVs for side-effects and other problems
- Community volunteers act as a liaison between family welfare assistants and eligible couples and it is one step forward towards community participation
- Volunteers are better informed about problems of their clients and they have better scope to communicate the problems to family welfare assistants and family welfare volunteers, thus the community benefits from the existing programs to a greater extent

On the other hand, this innovative approach also suffers from a number of limitations. The committees ensure women's participation, many of them are housewives inducted just for formalities. As a result, it is

important to induct active and committed women capable of breaking social barriers. The present committee members are mainly village leaders and influential people. Moreover, a true representation of the real beneficiary population, which mainly includes, lower middle class and poor sections of the society are not ensured. In many cases the committee members do not understand their role and therefore are unable to contribute even though they are willing to. Sometimes the chairperson of the committee enjoys hidden liberty to select the members (GRC, 2003). Although various committees were formed at different levels of the health system in the past in Bangladesh, most committees remained non-functional due to lack of vision, work plan and action (Uddin *et al.*, 2001).

**Role of community leaders:** The local community leaders, usually the Chairman and the members of the Union Parishad (UP), local school teacher, social worker, village leader, local businessman/elite and imam (Islamic religious leader) of mosque, have a significant role to play for making the countrywide health and family planning programs successful. To this end, political commitment is essential and program activities should be focused around the grass root level. The local elected Member of the Parliament (MP) could be the chief patron to promote the health and family planning programs successful to his/her locality. The participation of the local leaders helps to increase transparency of the health and family planning programs and hence exposes the weaknesses within and between government and citizens. In addition, local leader's involvement assists to build the image of the existing system to the mass community people. Nevertheless, local leaders are often accused of commandeering participatory initiatives to further their own connections with local elites for political gains rather than promote any active engagement with the poor (Hulme and Siddique, 1997). The Thana Functional Improvement Pilot Project (TFIPP), a project of the Directorate General of Health Services of the Ministry of Health and Family Welfare (MOHFW), points out that sometimes the Thana managers felt the difficulty in ensuring the continuous participation of community leaders and feared getting involved in local politics. The UP chairmen did not often attend meetings, which negatively influenced the participation of other members. Lack of orientation, motivation and decision-making power and perceived less important role by the community leaders resulted in their low participation (Gazi *et al.*, 2001). These satiations also affect the way local government interacts with community organizations, informal leaders and contractors and so on. But, these cannot be avoided in the process of health sector reform.



## **CHALLENGES AND POSSIBLE ACTIONS**

Although Bangladesh has achieved a significant progress in health and family planning programs but much still remains to be achieved. New challenges to health and family planning programs are emerging. Currently, there is a gap between the demand and the available resources for meeting the extensive health needs in the country. The challenges of existing health and family planning programs as well as possible actions to overcome these shortcomings are discussed below:

- Unqualified or traditional providers render healthcare services to a significant portion (i.e., 50%) of the population of the country. Their necessity cannot be ignored. Therefore, they should be provided with adequate trainings through Public-Private Partnership (PPP) in healthcare. Moreover, awareness creation programs should be introduced to make people conscious regarding the long-term impact of the unqualified traditional treatments on internal health. The community leaders like school teachers, religious leaders, etc. and local elites and those who are willing to provide voluntary services should work together to change the health seeking behavior of the community people
- In order to ensure the optimum utilization of the public facilities, particularly the community clinics, the private sector as well as NGOs should be encouraged to utilize those provisions. These clinics could be the focal points of community participation where the ownership would be left to the community and they would subsequently run those clinics
- In family planning, although half of the currently married women rely on modern methods for contraception, but the incidence of using short-term methods seem to be more reflective. As a consequence, there are strong opportunities for the public and private sectors to collaborate on Behavioral Change of Communities (BCC) to reach the women who have unmet contraceptive needs. Community participation is absolutely important and community should become the gatekeeper for behavioral change of the community people to select the appropriate method of contraception. Moreover, family planning activities should be performed jointly with health programs to make these services more acceptable to the community people
- The poor spend a significant of their income for healthcare. Unofficial payments in forms of 'baksheesh' also create more burdens to the poor. It

is imperative to introduce an efficient healthcare system so that the poor can get more benefits from the inadequate public resources owed to the health sector. Such an efficient system may provide vouchers to the clients. The poor would use the card to receive health services at subsidized rates. The identification of poor would be done through community participation

- The curative services provided at public facilities are very poor quality and majority of the poor does not have an access to such subsidies and whatever they get is in the form of few minutes' consultation as outdoor patient. Moreover, orientation of service providers is required to change their attitude especially for the poor customers that would increase customers' satisfaction. The monitoring and supervision should also be strengthened through community participation to ensure the Quality of Care (QoC)
- The management of side effects of family planning methods and pregnancy related problems remain to be a major concern for enhancing the family planning activities in Bangladesh. This requires strengthening the role of family planning committees for proper supervision and monitoring of the services
- For a sustainable health and family planning programs it is equality important to create demand for services in the community regarding particular diseases. The people themselves will identify the health related problems and prioritize those problems to take appropriate measures. In order to do that community based volunteers should be trained and these could be done by the Community-Based Organizations (CBOs). The community volunteers will organize and motivate the mass people by conducting meetings called "Uthan Baithak"
- An efficient and cost effective pharmaceutical system is desirable to make health and family planning programs sustainable in the future. As we have seen the service is primarily depends on government supports (about 50%). This suggests that health and family planning may benefit by offering a wider choice of government subsidy related actions and plans. As such a government watchdog (i.e., administration) would identify the existing problems of an efficient and cost effective pharmaceutical system on health and family planning. Once the causes of a problem have been diagnosed, the next step for a policy maker would be to identify the right solution for a particular problem with proper implementation

## DISCUSSION

**How educational attainment offers benefit:** The current position of family planning program, health impact, overall awareness, mapping of the gap of health concern between rural and urban community is mostly suffering and national policy particularly in the rural areas are lacking of effective implementation. The national policy on community health program is primarily suffering due to limited resources and cost effectiveness. Moreover, the educational attainments are also causing additional difficulty to implement effective policy and programs in the healthcare. The rural communities are mostly (about 65%) depending on public sector's community service. However, if we notice the scenarios following on the educational attainments the observations are very appealing. The rural community with "no education" is dependent on 66.1%, "incomplete primary education" dependent on 56.4%, "complete primary education" is dependent on 50.8 for the public sector service where the "higher educated" community is only dependent on 20.6%. On the other hand, if we see the scenarios by private sector medical facilities with "no education" is dependent on 23.8%, "incomplete primary education" is dependent on 30% and "complete primary education" is dependent on 35.5% which is almost totally opposed compared to rural scenarios (BDHS, 2007). The rural poor quartile is also mostly depended on the existing pharmaceutical service which we have seen from Fig. 2.

Furthermore, the educational knowledge of the family planning program, particularly of people in the rural area in Bangladesh is limited. The people from rural areas are lacking of form of contraception relied on pills for family planning or other popular methods. Sometime religious misunderstanding of taking any form of contraception (i.e., major pharmaceutical services on contraceptive) for family planning is causing further difficulties. Fundamental issues of family planning need to be convey to the people who are lacking in the modern knowledge contraception. Therefore, fundamental education on the concerned issue is essential to implement effective healthcare programs. Moreover, an efficient educational knowledge is desirable to make health and family planning programs sustainable in the future for Bangladesh. Such a basic education would identify the existing problems of health and family planning and place the issue to policymakers for further progress. Following on the challenges; the subsequent issues should be considered to ensure successful and fruitful healthcare issue in the country:

- The government should play the catalyst role to increase the basic awareness of knowledge of family planning to the rural community and aware the benefits and implementation of health and family planning programs in future. The NGOs could complement these efforts by involving actively but here NGOs need government support
- The government should pay attention to the community who are under "no education" attainment. About 17% of currently married women in Bangladesh have an unmet need for family planning services and almost all of them are under "no education" in the educational attainment (BDHS, 2007). Here basic education on family planning should be delivered to them
- The linkage among volunteers/workers, government officials, elected representatives, community leaders and users of health and family planning services needs to be redefined in light of existing problems in the rural areas
- Attention should be taken to ensure that women and people of different socio-economic background can represent the rural committee on health and family program. Committee should have their by-law approval, which elaborates the composition of the committee, its election/selection process and terms in the office, rights, duties and responsibilities of the members, division of work, working modalities, conflict resolution procedures etc.
- Government should form more and effective trainers from the committee members that augment the commitment towards quality of care and clients' satisfaction
- Government must bear in mind an efficient and cost effective pharmaceutical system that is desirable to make health and family planning programs sustainable
- Finally, government should more focus on the family planning actions on the long-run in the national plans and special attention should place to national educational policy based on the current and distant literacy rate. Here, especial attention should be placed on the implementation as developing economies are mostly lacking on policy implementation due to limited resources as the evidences we find from the related literatures (Al-Amin and Alam, 2011; Al-Amin *et al.*, 2011; Kabir *et al.*, 2011a; Zarra-Nezhad and Hosainpour, 2011; Rezaie, 2011; Abdelhak *et al.*, 2011; Nazrun *et al.*, 2010; Yacob *et al.*, 2009; Sepehrdoust, 2009)

## CONCLUSION

In this study, we focus on the community participation in health and family planning programs in Bangladesh and how the existing health and family planning programs can be more sustainable. We also emphasize on the cost-effective of pharmaceutical services in this segment. We address some issues of lacking in the existing healthcares and how a sound effective policy can develop by overcoming the issue. We focus on the inter-linkage of national policy and planning lacking including the shortcomings on the current system. We also observed that the health and family planning programs constrained by the limited educational knowledge in Bangladesh as rural people lacking of basic education. Therefore, we highlight on educational attainment for the long term benefits. We feel that the current health and family planning needs to be redesigned and therefore, we place some discussion in the way forward.

In conclusion, we note that increasing number of projects on health and family planning as a marketing tool for medical services; medicine and pharmaceutical orientation may help the country to improve the situation but it will cost immeasurable. Consequently, developing countries will face the constraints in prioritizing their budgets allocation to the fundamental and urgent necessities. It thus important to find out a way that the projects health and family planning would not work as marketing tools as complimentary, rather they will act as supplementary in reducing the cost for medical services, medicines and pharmaceutical orientation providing "prevention is better than cure" postulate for the sector and the projects.

## ACKNOWLEDGMENT

The authors are extremely thankful to S. N. Mitra, the CEO of Mitra and Associates in Bangladesh, the National Institute of Population Research and Training (NIPORT) under the Ministry of Health, Government of Bangladesh and Macro International, USA for giving permission to use their database. Thanks are also due to Bangladesh Bureau of Statistics (BBS) and other open access sources for their information related to the current article.

## REFERENCES

Abdelhak, S., J. Sulaiman and S. Mohd, 2011. A bounds testing to cointegration: An examination of natural disasters and GDP relationship in Southern Africa region. *The Int. J. Applied Econ. Fin.*, 5: 213-225.

- Al-Amin, A.Q. and G.M. Alam, 2011. The impacts of climate change on animal health and economy: A way forward for policy option. *Asian J. Anim. Vet. Adv.*, 6: 1061-1068.
- Al-Amin, A.Q., G.M. Alam and A.J.B. Othman, 2011. The impact of climate change on public health: Exploring the link of pharmacological knowledge and education. *Int. J. Pharm.*, 7: 773-781.
- Askew, I., 1989. Organizing community participation in family planning projects in South Asia. *Stud. Fam. Plann.*, 20: 185-202.
- BBS, 2006. Household income and expenditure survey (HIES-2005). Bangladesh Bureau of Statistics, Dhaka, Bangladesh.
- BBS, 2011. Population and housing census 2011: Preliminary results. Ministry of Planning, Government of the People's Republic of Bangladesh, Dhaka, Bangladesh. <http://www.bbs.gov.bd/WebTest/Application/userfiles/Image/BBS/PHC2011Preliminary%20Result.pdf>.
- BBS., 2001. Report of health and demographic survey 2000. Ministry of Health and Family Welfare (MOHFW), Government of the People's Republic of Bangladesh, Dhaka, Bangladesh.
- BDHS, 2007. National institute of population research and training (NIPORT). Bangladesh Demographic and Health Survey, Dhaka, [http://www.bssrcbd.org/directory/NATIONAL%20INSTITUTE%20OF%20POPULATION\\_NIPORT.pdf](http://www.bssrcbd.org/directory/NATIONAL%20INSTITUTE%20OF%20POPULATION_NIPORT.pdf).
- BNHA, 2010. Bangladesh national health accounts (BNHA-III) 1997-2007. HNPS of the Ministry of Health and Family Welfare, [http://www.who.int/entity/nha/country/bgd/bgd\\_nha\\_III\\_\(2\).pdf](http://www.who.int/entity/nha/country/bgd/bgd_nha_III_(2).pdf).
- Bhuiya, A. and C.A. Ribaux, 1997. Rethinking Community Participation: Prospects of Health Initiatives by Indigenous Self-Help Organizations in Rural Bangladesh. International Centre for Diarrhoeal Diseases Research, Dhaka, Bangladesh.
- Catino, J., 1999. Meeting the Cairo Challenge Progress in Sexual and Reproductive Health Implementing the ICPD Programme of Action. Family Health Care International, New York, USA.
- DGHS, 2009. Health bulletin-2009. Ministry of Health and Family Welfare, Government of the People's Republic of Bangladesh, Directorate General of Health Services, Dhaka, Bangladesh.
- Data International, 2000. The existing situation and scope analysis for public private mix: A case study. The British Council, Dhaka, Bangladesh.
- GRC, 2003. Mid-term evaluation report on south eastern community health project of Bangladesh red crescent society (BDRCS). German Red Cross, Dhaka, Bangladesh.

- Gazi, A.H.R., U. Nowsher and H. Nazrul, 2001. Functioning of thana functional improvement pilot project: Perspectives of managers, service providers, clients and community. ICDDR, B Working Paper No. 147. ICDDR, B Centre for Health and Population Research.
- Hanifi, S.M.A and A. Bhuiya, 2001. Family-planning services in a low-performing Rural Area of Bangladesh: Insights from field observations. *J. Health Popul. Nutr.*, 19: 209-214.
- Hulme, D. and N. Siddique, 1997. Central-local relations and responsibilities in Bangladesh: Experiments with the organisation, management and delivery of services. ESCOR Research Project.
- Islam, M.A., M.M. Islam and M.A. Khan, 2001. Community participation in family planning in Bangladesh: Prospects and strategies. *J. Health Population Dev. Countries*, 4: 35-42.
- Kabir, M.A., A.Q. Al-Amin, G.M. Alam and M.A. Matin, 2011a. Early childhood mortality and affecting factors in developing countries: An experience from Bangladesh. *Int. J. Pharm.*, 7: 790-796.
- Kabir, M.A., K.L. Goh, M.M.H. Khan, A.Q. Al-Amin and M.N. Azam, 2011b. Safe-delivery practices: Experience from cross-sectional data of Bangladeshi women. *Asia Pacific J. Pub. Health* (In Press).
- Nazrun, A.S., M. Norazlina, M. Norliza and S.I. Nirwana, 2010. Comparison of the effects of tocopherol and tocotrienol on osteoporosis in animal models. *Int. J. Pharmacol.*, 6: 561-568.
- O'Donnell, O., A. Karan, A. Somanathan, B.R. Pande and C.C. Garg *et al.*, 2005. Who benefits from public spending on health care in Asia? EQUITAP Working Paper No. 3, Erasmus University, Rotterdam and IPS, Colombo.
- Rannan-Eliya, R.P., A. Somanathan, V. Sumathiratne and G.D. Dayaratne, 2001. Equity in financing and delivery of health services in Bangladesh, Nepal and Sri Lanka: Results of the tri-country study. Institute of Policy Studies, Colombo, Sri Lanka, pp: 65.
- Rezaie, A., 2011. Pouchitis: An empirically treated disease in the era of evidence-based medicine. *Int. J. Pharm.*, 7: 550-551.
- Rifkin, S.B., 1990. Community Participation in Maternal and Child Health/Family Planning Programs: An Analysis Based on Case Study Materials. WHO, Geneva, Switzerland.
- Sepehrdoust, H., 2009. Eliminating health disparities call to action in Iran. *The Int. J. Applied Econ. Finance*, 3: 22-34.
- Stone, L., 1992. Cultural influences in community participation in health. *Soc. Sci. Med.*, 35: 409-417.
- UN, 2009. World population prospects: The 2008 revision. Department of Economic and Social Affairs, Population Division, United Nations, Working Paper No. ESA/P/WP.210, [http://www.un.org/esa/population/publications/wpp2008/wpp2008\\_highlights.pdf](http://www.un.org/esa/population/publications/wpp2008/wpp2008_highlights.pdf).
- UN, 2011. Levels and trends in child mortality: 2011 report. UNICEF, WHO, The World Bank, UN DESA/Population Division. <http://www.healthynewbornnetwork.org/resource/levels-and-trends-child-mortality-2011-report>.
- UNICEF, 2008. State of the world's children, child info and demographic and health surveys by macro international. Calverton, Maryland, USA.
- Uddin, M.J., A. Ashraf, A.K.M. Sirajuddin, Mahbub-ul-Alam and C. Tunon, 2001. Incorporation of community's voice into health and population sector programme of Bangladesh for its transparency and accountability. ICDDR, B: Centre for Health and Population Research, Mohakhali, Dhaka, 1212, Bangladesh, ICDDR, B Working Paper No. 148, <http://centre.icddr.org/images/wp148.pdf>.
- WHO, 1991. Community involvement in health development: Challenging health services. WHO Technical Report Series. No. 809. Geneva, Switzerland.
- World Bank, 2001. Benefit incidence analysis: Education and health sectors. Background Paper NO. 6, Bangladesh Poverty Assessment, Poverty Reduction and Economic Management Unit, South Asia Region, The World Bank, Washington DC.
- World Bank, 2010. HDI value: Calculated based on data from UNDESA (2009d), Barro and Lee (2010). UNESCO Institute for Statistics (2010b), World Bank (2010b) and IMF (2010a), Washington DC.
- Yacob, M.R., A. Radam and S.B. Rawi, 2009. Valuing ecotourism and conservation benefits in marine parks the case of redang island Malaysia. *The Int. J. Applied Econ. Finance*, 3: 12-21.
- Zarra-Nezhad, M. and F. Hosainpour, 2011. Review of growth models in less developed countries. *The Int. J. Applied Econ. Finance*, 5: 1-17.