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Cost-Recovery Strategies in the Health and Population Programmes of Bangladesh:

Issues for the Application of Users Fees

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B

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Abstract

This paper is a review of the cost recovery experiences accumulated by several of the major Rural Service Delivery Partnership (RSDP) and Urban Family Health Partnersship (UFHP), the Social Marketing Company (SMC), and other non-NIPHP NGOs–namely, Marie Stopes, Radda MCH-FP Clinic, Gonoshasthya Kendra and Grameen Health Programme. The main purpose of the review was to guide the design of an operations research intervention on cost recovery strategies for the delivery of the essential services package (ESP). This paper included a review of the literature, a review of the former MCH-FP Extension Projects' experiences with cost recovery, an analysis of the Operations Research Project (ORP)'s surveillance data, visits to related government and NGO programmes, and discussions with programme managers and supervisors.

Although it was found that various cost-recovery strategies, such as charging of user fees, insurance schemes and drug-revolving funds, were adopted by the above programmes, pricing (charging user fees for services and commodities) has been the most commonly used cost-recovery strategy.

In the GoB sector, services are generally free at the Thana Health Complex (THC) and below, except for the nominal charges placed on condoms – currently Tk. 1.20 per dozen. The Thana Functional Improvement Pilot Project (TFIPP), which is working in 55 thanas, however, has adopted some cost-recovery measures. This project charges a registration fee of Tk. 2.00 for outpatient services at its THCs. These THCs also charge fees for blood transfusion and the use of an ambulance. District Hospitals and tertiary facilities also levy nominal fees. These fees are placed, not with the purpose of recovering costs, but primarily to prevent unnecessary use of the services and wastage.

In the public sector, payments made for many of the services offered are higher than the "official" rates set by the government. Among other things, this indicates that the expenditures people make in health and family planning exceed the costs involved in delivering them. Studies on willingness and ability to pay showed that most of the people are paying for services, and for some services, such as immunization and ANC, people are willing to pay more than what they are currently paying.

As a measure of attaining improved sustainability, most NGOs began to charge nominal fees/service charges for a range of MCH-FP services in the early nineties. SMC has attained considerable success in cost recovery and recovers around 70 percent of the programme's cost. The University Research Centre (URC) study suggest that cost recovery currently ranges from 0.7 percent to 12.4 percent of recurrent costs. In most of the NGOs, however, the fees have been set arbitrarily. This reflects the overall absence of a clear-cut guideline regarding pricing and utilization of the revenues at the local level for quality improvement.

The structural adjustment agenda that are being adopted in developing countries have led to a heavy reliance on user fees for cost recovery in the health and family planning sector. Experiences of many countries with user fees show that pricing can potentially contribute to the improvement of the financial base of the health sector. Unfortunately, it can also deter those people whose health needs are greatest. Therefore, carefully discriminating fee systems, need to be designed to ensure that revenue is provided only by those who can afford to pay, and that the resulting income improves the quality and accessibility of health care targeted to the poor.

ICDDR,B's MCH-FP Extension Project experiences with charging for pills, condoms and injectables at a differential fee structure in Mirsarai and Abhoynagar thanas within the GoB programme showed that the introduction of user fees had no adverse effect on CPR or utilization of services. In fact, utilization of fixed sites increased and pill wastage was significantly reduced following the introduction of a charge levied on pills.

Several studies suggest that Bangladesh's national programme could potentially charge prices to recover costs without adversely affecting utilization of services. Besides the income generated from such a scheme, the simultaneous reduction in commodity wastage would help to enhance the programme's sustainability. Differential pricing facilitated higher utilization of services at static sites and acted as a 'safety-net' for the poor. However, a strong economic approach toward pricing (especially with regard to a multi-service delivery system, such as the essential service package), accounting and revenue management procedures have yet to be developed. Likewise, possibilities with regard to cross subsidization for the provision of services need to be examined.

Achievement of equity, efficiency and, in particular, sustainability will require the implementation of complementary interventions which result in the development of skills and the application of mechanisms to ensure accountability. Thus, the process of policy development and implementation, itself, will play an important role in the development of an effective user fee system.

The programme will need to adopt a systematic approach to the introduction or revision of prices that considers demand and supply factors such as the cost of providing the services, clients' willingness and ability to pay for particular services, customer health care expenditure, and market prices. The strategy will need to consider all of the services of the package offered, with necessary cross-subsidization and 'safety-net' measures for vulnerable groups. Similarly, a clear-cut guideline will need to be developed for the management of resulting revenues. This guideline will need to take into consideration the billing, revenue collection, accounting, and use of revenue generated at the local level for quality improvements.

I. Introduction

Provision of the additional health services included in the essential services package (ESP), along with the inevitable expansion of the country's population, will result in an increased demand for health and family planning services. This means that resource requirements will increase. The proportion of the gross domestic product (GDP) allocated to the health and population sector more than doubled between 1985-86 and 1994-95, rising from 0.6 to 1.3 percent. During the same period, per capita expenditure also increased from US$ 2.4 to US$ 3.1. Nevertheless, Bangladesh still lags behind many other low-income Asian countries in this respect. The total allocation for the health and population sector from the total budget increased from 5.32 percent in 1990-91 to 6.37 percent in 1995-96. It should also be mentioned that in 1997-98, foreign assistance accounted for 36 percent of the total expenditure and 64 percent of the development expenditure of the health sector. Thus, the resources available from the government and donors, even if they remain constant, will not be sufficient to finance the programme in the health and family planning sector.

Many developing countries are currently reforming their health care systems and are experimenting with various mechanisms for financing health care. One such mechanism has been the introduction of a cost recovery system for health and family planning services.

Bangladesh's current supply-led strategy has produced a number of remarkable strides in the provision of health and family planning services. It is, however, highly subsidized; providing these services, by and large, free of charge. Both the government and the non-governmental organization (NGO) programmes providing health and family planning services are beginning to experiment with various cost-recovery options. The total health and family welfare sector resource base can be effectively expanded if additional resources are mobilized through wide-scale implementation of various cost recovery measures.

II. Cost Recovery Strategies in the Health and Population Sector of Bangladesh

At the national level, to implement the ESP and to make its delivery financially viable and sustainable, the Government of Bangladesh (GoB) has to bridge a sizeable resource gap. According to a UNICEF estimate, the annual cost of providing essential health and nutrition services through a Thana Health Complex (THC) is approximately US$ 5.1 million or Tk. 200 million [1]. According to a World Bank estimate, funding for the ESP will require at least an additional US$ 850 million each year [2].

Research has been done to compare costs for health and family planning services delivered by the government programmes as opposed to those delivered by NGOs. A study by the Population Council,1997 [3] estimated the cost of services while evaluating the family planning activities of a "typical GoB programme" and the Local Initiative Programme (LIP: a special government programme), and a "typical NGO family planning programme" and Swanirvar's programme (a special NGO programme). It was found that the services in the LIP programme were costlier than those of the "typical GoB programme" in 1994. If LIP were to replace the typical GoB programme, nationwide, a projected 368,000 volunteers would need to be recruited at a cost of Tk. 177 million per year, thereby resulting in a 20 percent increase in overall cost.

It was found that cost per couple year protection (CYP) for the Swanirvar programme (in terms of delivering family planning methods) was far lower than that of a "typical NGO programme." For providing oral contraceptives, the cost was found to be Tk. 147.00 for the Swanirvar programme as compared to Tk. 267.00 for a "typical NGO programme." For the provision of condoms by field workers, the cost per CYP was found to be Tk. 192.00 and Tk. 287.00 for the two programmes, respectively.

The study jointly carried out by the Population, Development and Evaluation Unit (PDEU) of the GoB, Associates for Community and Population Research (ACPR) and Family Health International in 1996 [4], estimated the cost of providing family planning services by NGOs and the government. For NGOs, the cost per CYP for oral contraceptives was estimated at Tk. 224.00. For IUD and injectables, these figures were Tk. 164.00 and Tk. 315.00, respectively. For the government, the CYP for the three methods (oral

contraceptives, IUD and injectables) provided by the Family Welfare Visitors at the Health and Family Welfare Center (H&FWC) were Tk. 259.00, 181.00 and 338.00, respectively. Thus, findings indicated that all method costs were higher for the government programme than they were for the NGO programme.

A study by Barb *et. al.*,1997 [5] estimated the unit cost of maternal and child health and family planning (MCH-FP) services at six branches of a leading national NGO, "Concerned Women for Family Planning (CWFP)." The study concluded that costs were high at the clinics and in the field for the delivery of family planning services to new acceptors. At most branches, it was found that the cost of injectable contraceptives was especially high due to labour requirements and commodity costs. The study also showed that labour costs constituted the bulk of unit cost, i.e., 80 percent for field services and over 50 percent for clinic services.

These cost estimates were mainly used for economic evaluation of the programmes and their respective service delivery systems. For the purpose of setting standardized prices or user fees, however, unit costs will need to be taken into consideration. This will also help in the classification of providing service of appropriate cost-recovery levels for the various services. Such information will be critical in programme cross subsidization planning as well.

The two strategies that have drawn the most attention in making a programme sustainable are: i) revenue/income generation strategies which focus on recovering cost, and ii) efficiency optimization strategies which focus on financial management and making programmes more cost-effective. This paper focuses on the former – income generating cost recovery schemes, with a primary emphasis on user fees.

Revenue/Income Generation Schemes

An organisation's ability to generate income internally is essential to its financial self-reliance. It helps to reduce dependence on external financial assistance by increasing the flexibility on how money is spent, enhancing the financial stability and viability, and ultimately allowing for greater control over the organisations's financial future. Income can be generated in a number of ways. Some of the most relevant are discussed below.

Introducing/revising fees for services and products: Income generation can be accomplished by introducing or increasing fees for services. Charging

fees not only increases revenues for the health sector, but also helps to rationalize utilization through reducing moral hazards,[1] thus contributing to improvements in both the quality and quantity of health services. Thus, user fees are currently seen as an option to finance or recover a proportion of health care costs in most developing countries because of the serious limitation of these countries to finance health care through the imposition of taxes.

Charging for other services: This activity relates to the involvement in income-generating activities other than directly charging for health service delivery. This includes rental of available space for meetings, dormitories, or surgical procedures; management and rental of commercial space; training and consulting; establishing "sister" organisations as commercial enterprises; and making loans to entrepreneurs who then share the organization's profits.

Local fund raising and community financing: Such activities mobilize community resources to provide an additional source of financing or to share the total cost of the programme at the local or regional level. This includes contributions in the form of payment (at full or preferential rates) for health and family planning services, payment for socially organized voluntary community insurance schemes and payment for the creation and utilization of community capitalisation schemes for the promotion of health care.

Creative grant and contract development: An organisation can generate income or gain a new source of income through creative grant and contract development. Income can be generated by obtaining a contract to provide health care services to other organisations, or to capitalise on a specialization or extraordinary expertise by training providers and programme managers of other organisations. Activities such as these tend to decrease the need for donor support.

Investments: This strategy involves using the money available with an organisation to make more money. Individuals and for-profit corporations throughout the world engage in this practice. Conservative investment can be made, both safely and easily, to increase cash reserve.

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[1] Unnecessary or over utilization of services and supplies and consumption reach the point where marginal utility or benefit is zero.

Revolving fund: This strategy involves creating a seed account for recurrent expenditure such as drugs and medical supplies.

Improving Financial Management, Efficiency and Cost-effectiveness

Improving the financial management of an organisation can result in greater financial stability for prospective cost recovery strategies. The options that are available for the improvement of financial management and efficiency include fund accounting, budget and cash flow projections, costing and pricing, building of cash reserves, creative donor management, feasibility analyses, and planning for improved and rational use of available resources. This paper, however, does not elaborate on these issues.

III. Cost Recovery Policies under the Bangladesh Health and Population Sector

The issue of cost recovery in the health and population sector has been envisaged in the policies and strategic visions of the GoB's Health and Population Sector Programme (HPSP), and the National Integrated Population and Health Programme (NIPHP).

A. HPSP

In the HPSP, it has been estimated that the per capita cost of providing the ESP – a package of health, family planning, and curative services – will be US$ 10.30 [6]. Available funding allows for only US$ 4.00 per capita for heath and population services [7]. Thus, the HPSP has already articulated the need to prioritise the components of the ESP, based on what it can provide in a sustainable way. It focuses on economic criteria (externalities and economies of scale) with a potential for privatisation and financing. This need to prioritise is important against the backdrop of donor dependence, which accounts for 64 percent of the development budget for health and family planning, and may remain constant or even decrease over time. With respect to financial sustainability, the HPSP asserts that the major challenge will be to reduce the financing gap for the ESP. To address these issues, the GoB will work to achieve four equally critical objectives:

- Stronger financial commitment to the health and population sector;
- Reallocation of resources within the sector to support the ESP;
- Improvements in efficiency with regard to public sector input and service delivery; and
- Increased reliance on resource mobilization based on the clients' willingness and ability to pay.

The HPSP document has very concisely depicted the direction of the programme's future activities regarding cost recovery through pricing. Following is a quote from the document.

> "In view of the potential resource gap between the sectoral resource envelope and projected sectoral expenditures, increased reliance on cost recovery for public sector services will be considered by the Ministry of Health and Family Welfare (MOHFW) and this may lead, after piloting, to the adoption of a revised national policy on revenue generation and retention by the public sector facilities. In line with agreed HPSS (Health and Population Sector Strategy) principles, this would take into account the public willingness to pay and ability to pay and cost recovery that are being piloted. Such pilots will link revenue generation through user fees to retention of revenues at participating facilities and to quality improvements. Pilot cost recovery schemes will also help in understanding avenues to generate fund(s) locally with exceptions for vulnerable groups, while also keeping in mind administrative efficiency"[1].

As can be seen from the above statement, the HPSP recognizes the need to protect the poor, especially women, female-headed households, households headed by landless farmers or manual labourers with no assets, and other vulnerable groups such as the elderly poor, while assessing the potential involved in introducing cost-recovery mechanisms. The HPSP highly emphasizes community participation in financing care – considering it to be a fundamental feature of enhanced financial sustainability, since it facilitates the resource mobilization process while supporting improved efficiency and quality of services. Community participation and financing should be complemented by appropriate managerial authority at the facility level, enabling local managers to respond to directives from local-level supervisory bodies.

The HPSP is also designed to encourage private for-profit providers to promote more comprehensive care, including preventive care and health promotion. Through the HPSP, the programme will design and implement information, education and communication (IEC) programmes to encourage more preventative (over curative) care and practices and discourage expenditures for unnecessary drugs and medical tests.

Since drugs have been identified as the most valued items in a health and family planning facility and their absence deters beneficiaries, it has been suggested that this 'attractant' be used on a cost-recovery basis to bring the beneficiaries to the service delivery points, which may then be used as outlets for other types of services.

B. *NIPHP*

The NIPHP has placed emphasis on the sustainability issues in terms of programmatic, organizational and financial self-reliance [8]. This means that programmatically the health system needs to be more technically capable of providing quality services and less reliant on external assistance, expertise, and logistics. Thus, the NIPHP suggests further strengthening of the management processes in the government and NGO facilities which will ultimately lead to a more efficient service delivery and support system, capable of providing a basic service package valued by the customers. To achieve financial sustainability, the programme will have to reduce its reliance on external sources of funding. This will be achieved through:

- Increasing the private sector's (including Social Marketing Company's) market share of health services and products, mainly by encouraging customers to switch toward them as the source of health and family planning services;
- Increasing efficiency through measures which reduce costs (e.g., move increasingly away from doorstep delivery to delivery from static sites, thus reducing overhead; shifting to long-term family planning methods; and reducing duplication of services);
- Increasing cost recovery by promoting self-financing; and
- Steadily transferring programme responsibility to indigenous players.

The NIPHP acknowledges the fact that achieving such a degree of sustainability will require that the GoB allows the NGOs to set appropriate prices for services and products.

IV. Cost Recovery Strategies in Bangladesh: Current Trends

A. *Charging Fees*

Charging fees for services in the public sector

In rural Bangladesh, health and family planning services available from the GoB facilities at the *thana* level and below are, by and large, provided free of charge. The benefit of high subsidy within the free/nominally-priced MCH-FP doorstep distribution system is presumed to be more enjoyed by pill and condom users, who are primarily in the high and middle income group, and who obtain their supplies at their homes from the field worker [9]. In the urban areas, health and family planning services are provided free of charge at the government outdoor dispensaries – the primary level of care. As a policy, except for condoms, most of the health and family planning services are supposed to be provided free of charge at the GoB facilities. A nominal price, however, is charged for condoms.[2]

Some attempts have been made to mobilize funds through user fees at the local level. In addition to these efforts, some THCs have adopted the practice of charging for services such as ambulance use, radiology and outpatient registration, as per the decision of the Thana Health Development Committees. For example, at the THC in Abhoynagar, a registration fee of Tk. 1.00 and Tk. 2.00 are collected for outpatients and inpatients, respectively. Charges for x-ray services range between Tk. 20.00 and Tk. 50.00. Taka 250.00-300.00 is charged for blood transfusion and Tk. 30.00-35.00 is charged for determining blood group. Screening for VDRL and HBSAG are charged at Tk. 70.00 and Tk. 160.00, respectively. Some THCs brought under the World Bank-funded TFIPP, have similarly introduced fees for services. They charge Tk. 3.00 for outpatient registration. They also charge for services such as ambulance use, x-rays, and pathological tests. The TFIPP experiences

[2] The price for condoms was set in 1990 at Tk. 0.50. This price was raised in October 1997 to Tk. 1.20 per dozen.

suggest that setting the user fees at a very low level will cost the public health system more than it will generate in revenue. Cost recovery at a given user fee may, from the economic and revenue perspective, not be feasible to generate a surplus for every type of service. The user fees may mainly cover the cost incurred by the recovery system itself plus a number of the variables costs only, and not towards the fixed costs. The community's consent is an important issue of consideration in the introduction of user fees [10].

In public-sector district hospitals and in tertiary-level health facilities, modest user fees are charged for registration. The fees range between Tk. 3.00 and Tk. 5.00. There are also charges for inpatient facilities. A study conducted by the Health Economics Unit of the MOHFW [7] suggests that 12 percent of the average annual expenditure in 55 hospitals in the public sector was accrued as revenue from user fees in 1994-95. Total revenues collected from the eight medical college hospitals amounted to Tk. 20 million, representing roughly three percent of average annual expenditure.

In an operations research intervention of the ICDDR,B's MCH-FP Extension Project (Rural) at Abhoynagar and Mirsarai *thanas*, a tiered pricing structure was introduced in the GoB MCH-FP programme with the objective of recovering costs. Instead of being provided-for free at the doorstep, pills were sold at Tk. 1.00 per cycle. At the Satellite Clinic, Tk. 0.50 was charged, while pills were provided free of charge at the H&FWC. Condoms were sold at Tk. 1.00 at the doorstep, Tk. 0.50 at the Satellite Clinic, and provided at no charge at the H&FWC. For injectables, the charge was Tk. 2.00 at the doorstep, and Tk. 1.00 at the Satellite Clinic. The contraceptive prevalence rate (CPR) did not decline with the introduction of price, according to the intervention's mid-term evaluation conducted in June 1977. Moreover, it helped to reduce supply wastage of pills. The monthly average wastage for pill cycles distributed, in fact, was reduced by 40 and 50 percent at Abhoynagar and Mirsarai, respectively, which accounted for a savings of Tk. 1,756.00 per month. The potential for savings was estimated at an annual US$ 2.4 - 4.1 million if the intervention were introduced nationwide; a savings that would result from the simple reduction in oral pill wastage [11].

A similar type of intervention was undertaken by FPMD/LIP, in collaboration with ICDDR,B. The results of the study show that it is possible to charge for contraceptives (oral pills) without adversely affecting the contraceptive prevalence rate (CPR), and that wastage can be reduced [12].

Charging fees in the NGO sector

Most NGOs charge for health and family planning services. These charges vary across services and commodities and from one NGO to another. For contraceptives (pills and condoms) and oral rehydration solution (ORS), Social Marketing Company (SMC) has achieved considerable success in cost recovery (about 80 percent of total commodity costs).

The general response to the introduction of prices at many NGOs was an initial resistance among clients who, over the past two decades, had grown accustomed to receiving their contraceptive supplies entirely free of cost. Within a few months, however, resistance subsided and clients began to receive their supplies at the designated prices. For example, clients of the Pathfinder projects who were paying for contraceptives and services gradually increased payment for contraceptive supplies over time. In 1991, 36 percent of these users paid for their contraceptive supplies and services. This figure rose to 67 percent in 1992 and then to 75 percent in 1995 [13].

Barkat *et. al.*,1995 [14], found that family planning (FP) NGOs generated, on average, revenues of Tk. 32,124.00 in 1993-1994 (June 1993 - July 1994), of which about 62 percent was generated through MCH-FP activities. About three-quarters of the revenue generated through FP-MCH services came from the proceeds of oral pill and condom sales. The estimated degree of recovery of recurrent cost by an FP NGO was 2.3 percent. The average recovery for FP-MCH-related recurrent costs from the revenue generated through MCH-FP activities at an FP NGO was: 0.7 percent for AVSC, 1.6 percent for TAF, 2.5 percent for FPSTC, 3.5 percent for Pathfinder International and 12.4 percent for FPAB.

Quayyum *et. al.*, 1977 [15], in their operations research study, tried to test the establishment of a systematic pricing mechanism for MCH-FP services in urban areas. The study was conducted at three urban units of CWFP, located in Dhaka, Chittagong and Rajshahi. Costs for providing services, clients' willingness to pay, market prices, and perceptions among providers and programme managers about the systematic pricing mechanism were examined. Based on the analysis, the price of pills and condoms, injectable services, ANC services and immunization services were set at increased levels. The utilization of the services did not decline, and an increase in total revenue was observed. The time period for testing the intervention was, however, too short to determine the effectiveness of the systematic approach.

Barkat-e-Khuda *et. al.*, 1991 [16], Ciszewski and Harvey, 1995 [17] and Lewis, 1986 [18] all suggest that it is possible to marginally increase contraceptive prices without affecting demand. The Barkat-e-Khuda *et. al.* study showed that increases in the price of pills and condoms do not affect CPR. Lewis, in his paper, reviewed the evidence from studies in Sri Lanka, Jamaica, Colombia, and Thailand and found that contraceptive demand is relatively inelastic.

Review of the price/fee structure for various services in the NGO sector

The average price charged by NGOs in urban Dhaka for a dozen condoms is Tk. 1.40. Prices range from Tk. 0.50 to Tk. 3.00 per dozen. The average price per cycle of pills was found to be around Tk. 1.80, (price ranging from Tk. 0.70 to 3.00). For other family planning services, such as injectable or IUD, the NGOs charge for the service, but not for the commodity. The average service charge for IUD insertion by NGOs, in the urban areas was found to be Tk. 10.00, (price ranging from Tk. 5.00 to Tk. 15.00[3]). In the rural areas, the average price charged for injectables was Tk. 3.60, and the charge ranged from Tk. 3.00 to Tk. 4.00. A study by Barkat *et. al.*, 1995 [14] showed that the average price for a cycle of C-5 was Tk. 0.88, with prices ranging between Tk. 0.70 in FPSTC-supported NGOs and Tk. 2.36 in Pathfinder NGOs. The average price of one dose of Depo Provera (the leading injectable) was Tk. 2.70 with prices ranging between Tk. 2.00 in the Access to Voluntary and Safe Contraception (AVSC)-supported NGOs and Tk. 3.78 in the FPAB-supported NGOs.

The NGOs (working both in urban and rural areas) providing primary-level care for maternal and child health are charging for services and medicines. The charge for ANC visits ranged from Tk. 10.00 to Tk. 50.00. The fees for treating the general illness of a mother or her child ranged from Tk. 5.00 to Tk. 20.00 in the NGOs, and averaged Tk. 15.50. Average service charges for child immunization was found to be Tk. 5.00, although some NGOs provide child immunization free of charge.

[3] Information collected from selected NGOs, such as CWFP, UTPS, Marie Stopes, and PSTC.

Some of the NGOs in the urban areas have the facilities necessary to perform the lab tests required for ANC services. The charges for such services are generally nominal and are kept below the level of the private sector providers. These range from Tk. 5.00 to Tk. 20.00 for simple, routine blood and urine tests in most of the urban areas. The prices charged for medicine by most NGOs are often kept at levels comparable or lower than those in the market.

Willingness and ability to pay: implications for using pricing a cost recovery strategy

A few studies have addressed the question of what consumers are willing and able to pay for contraceptives and selected maternal and child health services, especially when these charges coincide with detectable improved in quality [19]. Levin *et al.*, 1997 [20] in their study surveyed the willingness to pay for contraceptives and MCH services in selected rural areas of Chittagong. Results from this study show that clients are willing to pay for contraceptives and selected MCH services. Streatfield *et. al.*,1997 [21] in their study conducted in selected rural areas in Chittagong and Rajshahi divisions of Bangladesh, found that the clients were willing to pay even higher prices for services. In their investigations, however, the willingness to pay was not measured by the contingent valuation technique. The contingent valuation approach could be said to be a methodology to the assessment of the willingness of clients to pay. Quayyum *et. al.*, 1997 [22] conducted a survey on willingness to pay for MCH-FP services in urban areas, using the contingent valuation technique, and found that the clients using the services and facilities of CWFP in three selected urban cities were willing to pay more than what they were paying for the services. The clients valued immunization and ANC services at a higher level, and agreed to a higher level of payment, which was more than what they had been paying.

The study done by Routh *et. al.*, 1997 [9] reviewed the experience with existing pricing strategies and examined the socioeconomic and demographic factors associated with payment for specific contraceptive methods among urban users and assessed the amounts paid for the methods according to various supply sources. Seventy percent of injectable users, 80 percent of pill users and 88 percent of condom users were found to have paid user fees for their commodities. These payments ranged from Tk. 2.00 to Tk. 20.00 with

a mean of Tk. 3.94 and a mode of Tk. 3.00 for each shot of injectable, Tk. 1.00 to Tk. 70.00 with a mean of Tk. 10.46 and a mode of Tk. 3.00 for one cycle of pills, and Tk. 1.00 to Tk. 20.00 with a mean of Tk. 3.16 and a mode of Tk. 4.00 for a dozen condoms. Multivariate logistic regression analysis indicated that non-slum residence, education of the women, and a monthly expenditure of the families on house rent of more than Tk. 2,000.00 were positively associated with the likelihood of payment for the specific contraceptive methods, while the number of living children was negatively associated with payment for the contraceptive methods. These findings suggest that there is a willingness to pay for services among the majority of urban contraceptive users.

Studies on household-level expenditure in urban areas show that consumers use private sector facilities primarily for general illness and curative care. A household-level survey in Zone 3 of Dhaka City [23] showed that 91 percent of those who sought care from health care providers for illness received services from the private sector. The public sector facilities are mostly used for Expanded Programme for Immunization (EPI) (60%), ANC (42%) and delivery care (35%) services. The NGO facilities are mainly used for family planning services. Thirty-two percent of the users of family planning services in the sample area of Dhaka City, however, used private sector facilities (mostly pharmacies) for supplies of contraceptives, compared to the national figure of about 21 percent [24]. Expenditure for health care services were also examined. For ANC, it was found that the median expenditure per episode (excluding travel expenditure) was Tk. 100.00 in both slum and non-slum households, and for general illness, Tk. 30.00 and Tk. 40.00 in the slum and non-slum households, respectively. For delivery care at home, the non-slum households were found to be spending more than double (Tk. 425.00) that of the slum households (Tk. 200.00). For delivery care outside the home, these figures were found to be Tk. 197.00 and Tk. 550.00 for slum and non-slum households, respectively. The median expenditure for FP and EPI services in the slum and non-slum households was found to be Tk. 5.00 [23].

Another study [25] found from their illness episode surveillance in slum areas that the monthly average household expenditure on illness was Tk. 80.6 (US$2.02), and the average per capita expenditure was Tk.15.40. Modern private sector care was found to be the most important source of care for both non-chronic and chronic illness.

The Levin et. *al.*, 1997 [20] study in Abhoynagar (Jessore) and Mirsarai (Chittagong) showed that the private sector providers were also the main source of child curative care. The village practitioner was used more often than the homeopath, followed by the private doctor and the *kabiraj* (folk or traditional healer). Public sources were used less frequently. The median total expenditure per episode was found to be around Tk. 35.00 in Abhoynagar and Tk. 55.00 to Tk. 60.00 in Mirsarai. For women's health services, the median expenditure per episode was Tk. 52.00 in Abhoynagr and Tk. 90.00 in Mirsarai.

A study on Bangladesh health finance and expenditure at the household level conducted in 1987 in both rural and urban areas of the country showed that the largest single health service provider is the qualified doctor, accounting for 30 percent of all treatment [26]. The next category was the unqualified doctor; representing 25 percent of all treatment. Government medical centres accounted for only 12.5 percent of all treatment. Traditional healers accounted for about 18 percent. About 13 percent of all sicknesses were not treated. Average cost of treatment (for any sickness; from all types of providers) during the past three months of the survey was Tk. 143.00 per sickness. This figure was highest for the qualified doctor, followed by the NGO clinics, government medical centres, unqualified doctors, and finally, the traditional healers. The components of treatment included in the analysis were medicine (73%), consultation fees (8.8%), pathology/x-ray (5.5%), and transportation (5.4%). These figures are similar to the national figures as reported in Bangladesh Bureau of Statistics (BBS)'s Bangladesh Health and Demographic Survey,1996 [27] where it is shown that medicine constituted 73 percent; pathology/x-ray, 6.6 percent; and travel expense, seven percent of the total costs of treatment.

According to another BBS study [28], the total household health care expenditure in 1995-96 was 2.3 percent of the GDP. Total expenditure by rural households accounted for 73 percent of the national total expenditure, while that of urban households accounted for 27 percent. Of the total expenditure, 63 percent was for medicine, 27 percent was for services like physician's fees, pathological tests or x-rays, and 10 percent was for health-care-related travel. Another finding of the BBS statistical report,1996 [27] was that average annual expenditure per household in 1994-95 was Tk. 748.30. The Martenus et. *al.*, 1998 [25] study in Dhaka City found that this figure was Tk. 996.00.

B. Social Marketing as a Cost Recovery Measure in the Family Planning Sector

Social marketing in Bangladesh began in 1974, and is now responsible for popularizing various brands of pills and condoms. The prices of the most commonly used brands vary from Tk. 5.00 to Tk. 20.00 for a dozen of condoms and Tk.2.00 to Tk. 40.00 for a cycle of pills. In April 1990, SMC increased the prices of its condoms and pills by an average of 60 percent in a bid to make the programme more sustainable and lessen its dependence on donor funding. Csizewski and Harvey,1995 [17] evaluated the impact of this increase and noted that the market reaction to the price change was "immediate and emphatic, with the lowest priced, most popular products being severely affected." Wholesale and retail traders refused to buy SMC products. Similarly, the consumers resisted the price increase. The overall impact on product sales and income was severe, and "hundreds and thousands of poor clients were lost to the programme." In 1992, SMC decided to go back to the April 1990 levels, and the sales rebounded dramatically several NGOs in Bangladesh sell contraceptives marketed by SMC to generate income and recover costs.

C. Developing and Charging for Other Services

Some of the NGOs funded by FPAB, FPSTC and The Asia Foundation (TAF) offer their rooms and buildings as commercial rental space. Moreover, FPAB received a free lease contract on a prime piece of government land in the capital and in other towns where the organisation has branches. FPAB constructed a commercial building at the contractor's expense and rented it out at a rate lower than the market rate. The income generated from the rental amortizes the cost of the building, and the excess income goes to the association's general operating fund. About 20 percent of the association's independently generated income results from the rental programme.

D. Local Fund Raising and Community Financing

Mobilization and utilization of local resources for the purpose of FP-MCH activities are means toward attaining a sustainable FP programme. Local resources are diverse in nature. They include all available community facilities (schools, colleges, *madrasas*, household premises), staff members,

charitable contributions (both in cash and kind), membership subscriptions, volunteers, community leaders and influential members of the community. Studies have shown that local contributions comprised only about 17 percent of the total revenue generated by an average FP NGO in 1993/94 [14]. Thus, the community's contribution and initiative for the health and family planning sector could be further improved. Involving general members in health and family planning activities could be a major step toward mobilizing local funds. A system of membership subscription payment exists in many NGOs: the average monthly membership fee was Tk. 9.74 in FPSTC, FPAB, and TAF-funded NGOs. Members also pay an annual subscription, averaging Tk. 173.00 [14].

There is evidence of community resource mobilization in Bangladesh – mostly in the context of family planning NGOs. Various schemes that were tried by FPAB, FPSTC, and Pathfinder International-funded NGOs included donations, ad-hoc subscriptions, lotteries, and raffles.

E. Prepayment System

The experience of Grameen Bank and Gonoshasthya Kendra (GK) is enlightening. Grameen Bank covers 38,000 households (206,000 individuals), comprising 52 percent of the population in their catchment area. They have a prepayment system where the members pay an annual premium. A charge of Tk. 50.00 to Tk. 70.00 is paid by the poor and Tk. 100.00 is paid by the relatively less poor. Then, different consultation fees are charged for the insured and the uninsured. GK covers 37,000 households (166,000 individuals), comprising 27.5 percent of the district in which it is working. The annual premium is set at Tk. 3.00 to Tk. 10.00 for the poor and Tk. 25.00 to Tk. 30.00 for the relatively less poor. GK also has different fees for insured and uninsured customers seeking health and family planning services provided at their facilities.

F. Investments

Relatively few NGOs have ventured investment activities to generate income. CWFP runs restaurants and catering services in Dhaka, Tangail, and a women's hostel which is used by the female trainees who come to Dhaka for training at CWFP.

V. International Experience with User Fees

The World Bank publication "Financing health care: an agenda for reform, 1987" [29]; provided a clear statement of the policy instruments of structural adjustment for the health sector, and advocated greater reliance on user charges, insurance mechanisms, the private sector, and administrative decentralization. Many developing countries with structural adjustment agenda have attempted to rely on user charges. Thus, it may be useful to review the experiences of these activities.

Creese, 1991 [30] in his international review of programmes working with user charges found that user charges can potentially contribute to improving the financial base of the health sector. Unfortunately, they also deter those people whose health needs are greatest. Stanton and Clemens, 1989 [31] noted, with regard to the Bangladesh programme, that the health care of those who are not willing or able to pay for health care at the government facilities, but who are current users of this system, would be jeopardized by the imposition of user fees.

Carefully discriminating fee systems are, therefore, necessary to ensure that revenue is provided only by those who can afford to pay, and that resulting income improves the quality and accessibility of health care targeted to the poor. The study suggests that fee income, appropriately used, represents a small but significant additional resource for health care.

Related national efforts appear to have concentrated on achieving cost recovery objectives, rather than improving service quality and health outcome [32]. Unfortunately, many countries have little choice but to try to exploit the potential for majority gains. The necessity is becoming increasingly obvious, however, of placing more emphasis on ensuring quality improvement than on superficial financial measures of success.

Gilson,1997 [33], in her paper has reviewed Africa's experience in implementing user fees. She describes the two main approaches to implementing user fees that have been applied in African countries – the standard and the Bamako Initiative models – and their common objectives. This report summarizes the evidence concerning the impact of fees on equity, efficiency and system sustainability (as opposed to financial sustainability), and the key bottlenecks to their effective implementation. On the basis of this evidence, it then draws out three main sets of lessons, focusing on: where and

when to implement fees; how to enhance the impact of fees on their objectives; and how to strengthen the process of implementation. The study suggests that if introduced by themselves, fees are unlikely to achieve equity, efficiency or sustainability objectives. They should, therefore, be seen as only one element in a broader health care financing package that should include some form of risk-sharing. This financing package is important in limiting the potential equity dangers clearly associated with fees.

Fees have a potentially larger role in hospitals than they do in primary facilities. Achievement of equity, efficiency and, in particular, sustainability will also require the implementation of complementary interventions to develop the skills for the systems and mechanisms of accountability to ensure effective implementation. Finally, the process of policy development and implementation is, itself, an important influence over effective implementation. Studies have shown that national user fee systems can generate an average of only around five percent of total recurrent costs. Vogel,1988 [34] reviewed the success of the "cost recovery" policies of four West African countries in terms of the proportion of recurrent costs covered by revenues brought in through user charges. This figure ranged from 2.7 to 12.1 percent.

Yazbak and Leighton,1995 [35] found that cost recovery measures which employ user fees for curative care at the government health facilities in Niger did not reduce the utilization of facilities for preventive care. Conversely, they increased utilization. At the facilities in this study, preventive care remained free of charge. Fees were only charged for curative care. Here, quality improvements such as provider training and improved drug supplies were undertaken along with the introduction of user fees. Litvack and Bodart,1993 [19] also showed that a user fee along with quality improvement (with regard to the availability of drugs) increased access to health care and facility utilization. In fact, the lowest income group – which is often said to be hurt by user fees – was found to seek more care than the other groups. This could be the case because the lower income group appears to be benefitting more from the local availability of drugs than the other groups.

VI. Discussion

Only recently NGOs have begun to implement user fees and service charges to recover a percentage of the costs incurred in delivering services. Most of the rates set by the various NGOs have been set arbitrarily, however, without a giving adequate consideration of the prices of other providers, costs involved in the delivery of services, or customers' willingness and ability to pay. Moreover, these prices are not uniform, within or between urban and rural areas. Some NGOs have attempted to recover costs by generating income. Prices or service fees, in case of most of the NGOs, were initially introduced to develop the habit of paying for services among the clients. These initiatives have resulted, in some cases, not only in revenues, but in reduced wastage of family planning commodities. Many NGOs that are charging prices for services, however, do not have any guidelines for the use of the revenues they generate at the local level.

Many studies have shown that people are willing to pay for the MCH-FP services at rates higher than what they have been paying. The NGOs which, in most cases, collect nominal charges have priced MCH-FP services and commodities lower than what their clients might be willing to pay.

The fact that the government sector providers– as per their existing policy–do not charge for services, is a deterrent to the successful implementation of cost recovery measure by most NGOs. Ironacilly even though public sector services are provided free of charge at the primary level of care, unofficial payment for services does exist. Thus the government has begun to consider its options for cost recovery.

VII. Needs for the Future

Introducing fees for services or increasing existing charges levied on services should continue to help cover programme costs. And since customers respond to improvements in quality, special efforts should be made to ensure that revenues recovered are used toward such improvements. A systematic approach to the introduction or revision of prices should be developed and adopted, however, that considers the cost of providing the services, along with other demand and supply factors, e.g., willingness and ability to pay, health care expenditure patterns, prices of other providers in the market, and the associated revenue collection and management system. The systematic pricing strategies should cover the services that are included in the ESP and address the billing, accounting system and use of revenues generated. The administrative costs involved will also need to be considered.

There is considerable willingness among most clients to pay for services and commodities. However, there should be a well-designed safety net for those users/potential users who are unable to pay for services. Protecting the poor under such a pricing scheme can be worked out based on the principles and practices of "means testing" to assess how it can be used [36].

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MCH-FP Extension Work at the Centre

An important lesson learned from the Matlab MCH-FP project is that a high CPR is attainable in a poor socioeconomic setting. In 1982, the MCH-FP Extension Project (Rural) with funding from USAID began to examine in rural areas how elements of the Matlab programme could be transferred to Bangladesh's national family planning programme. In its first year, the Extension Project set out to replicate workplans, and record-keeping and supervision systems, within the resource constraints of the government programme.

During 1986-89, the Centre helped the national programme to plan and implement recruitment and training, and ensure the integrity of the hiring process for an effective expansion of the work force of governmental Family Welfare Assistants. Other successful programme strategies scaled up or in the process of being scaled up to the national programme include doorstep delivery of injectable contraceptives, management action to improve quality of care, management information systems, and strategies to deal with problems encountered in collaborative work with local area family planning officials. In 1994, this project started family planning initiatives in Chittagong, the lowest performing division in the country.

The Centre and USAID, in consultation with the government through the Project's National Steering Committees, concluded an agreement for new rural and urban Extension Projects for the period 1993-97. Salient features include: improving management, quality of care and sustainability of the MCH-FP programmes, and providing technical assistance to GoB and NGO partners. In 1994, the Centre began an MCH-FP Extension Project (Urban) in Dhaka (based on its decade long experience in urban health) to provide a coordinated, cost-effective and replicable system of delivering MCH-FP services for Dhaka urban population. This important event marked an expansion of the Centre's capacity to test interventions in both urban and rural settings. The urban and rural extension projects have both generated a wealth of research data and published papers in international scientific journals.

In August 1997 the Centre established the Operations Research Project (ORP) by merging the two former MCH-FP Extension Projects. The ORP research agenda is focussed on increasing the availability and use of the high impact services included in the national Essential Services Package (ESP). In this context, ORP has begun to work with partners in government and NGOs on interventions seeking to increase coverage in low performing areas and among underserved groups, improve quality, strengthen support systems, enhance financial sustainability and involve t he commercial sector.

ORP has also established appropriate linkages with service delivery partners to ensure that research findings are promptly used to assist policy formulation and improve programme performance.

The Division

The Health and Population Extension Division (HPED) has the primary mandate to conduct operations research, to disseminate research findings to program managers and policy makers and to provide technical assistance to GoB and NGOs in the process of scaling-up research findings to strengthen the national health and family planning programmes.

The Division has a long history of solid accomplishments in applied research which focuses on the application of simple, effective, appropriate and accessible health and family planning technologies to improve the health and well-being of underserved and population-in-need. There are various projects in the Division which specialize in operations research in health, family planning, environmental health and epidemic control measures. These cut across several Divisions and disciplines in the Centre. The Operation Research Project (ORP) is the result of merging the former MCH-FP Extension Project (Rural) and MCH-FP Extension Project (Urban). These projects built up a considerable body of research and constituted the established operations research element for child and reproductive health in the Centre. Together with the Environmental Health and Epidemic Control Programmes, the ORP provides the Division with a strong group of diverse expertise and disciplines to significantly consolidate and expand its operations research activities. There are several distinctive characteristics of these endeavors in relation to health services and policy research. For one, the public health research activities of these Projects are focused on improving programme performance which has policy implications at the national level and lessons for the international audience also. Secondly, these Projects incorporate the full cycle of conducting applied programmatic and policy relevant research in actual GoB and NGO service delivery infrastructure, dissemination of research findings to the highest levels of policy makers as well as recipients of the services at the community level; application of research findings to improve program performance through systematic provision of technical assistance; and scaling-up of applicable findings from pilot phase to the national program at Thana, Ward, District and Zonal levels both in the urban and rural settings.

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