

Impact of Out-of-Pocket Expenditures on Families and Barriers to Use of Maternal and Child Health Services in Bangladesh

Findings from the ADB RETA-6515 Study

SUMMARY BRIEF



Summary

- Bangladesh has made major progress in improving maternal, neonatal, and child health (MNCH), but maternal and child mortality remain high. Continued gains depend on further improving access and coverage to essential MNCH services and reducing inequalities in access.
- The technical assistance project conducted several studies to better understand the barriers to access to MNCH care and the impact of out-of-pocket (OOP) spending on households. These included analyses of the national household expenditure surveys, a national survey of public sector facility costs, and an exit survey on OOP expenses faced by public sector patients.
- The analysis of household survey data shows that the financial costs of treatment were the major barrier to healthcare for sick mothers and children in Bangladesh. These affect access by the poor the most and discourage use of public sector services, where the cost of medicines was the main cost faced by patients.
- The facility cost survey found that operating efficiency at government facilities has significantly improved since the 1990s, with most hospitals now operating at or above capacity. The efficiency gains have led to a halving of the real cost of treating patients in 10 years and further improvements are possible if the size of *upazila* health complexes is increased and the number of the more cost-efficient district hospitals is expanded.
- Demand-side financing schemes have been effective in increasing maternal service delivery by reducing the financial costs of mothers, especially when coverage is universal. These increases in coverage have been cost-efficient since overall unit costs were reduced but have not improved the equity of access so far.
- To improve access and coverage of MNCH services, the Government of Bangladesh should focus on
 - (i) increasing overall budgetary expenditures on MNCH care to improve supply and to reduce the cost sharing by mothers and children;
 - (ii) increasing budgetary allocations to maternal inpatient care, which is the most underfunded;
 - (iii) improving the availability of medicines at Ministry of Health and Family Welfare facilities; and
 - (iv) improving operational efficiencies at facilities, including increasing the size of *upazila* health complexes and increasing the number of the more cost-efficient district hospitals.

Background

Bangladesh has made substantial progress since the 1970s in expanding access to healthcare services and in reducing fertility and child mortality. However, despite substantial gains in child and overall health, most mothers give birth outside health facilities, and many sick children do not receive appropriate medical care. Maternal mortality remains unacceptably high, and current trends are insufficient to achieve Millennium Development Goal 5. Substantial inequalities also exist, with poor and rural Bangladeshis having less access to services and worse maternal, neonatal, and child health (MNCH) outcomes (National Institute of Population Research and Training, Mitra and Associates, and Macro International 2007).

Appropriate care by qualified providers, based in adequately equipped health facilities and using effective treatments, is critical to improving health outcomes and reducing mortality. To further improve MNCH and other health outcomes, Bangladesh has to improve access to MNCH services, particularly for poorer women and families. This implies additional financial investments, reductions in financial barriers that hinder access, and greater efficiency in the delivery and management of healthcare services.

A critical barrier to accessing medical services in Bangladesh is the costs faced by patients. Out-of-pocket (OOP) expenditures are substantial, and the incidence of catastrophic and impoverishing levels of OOP expenditures for health are reported to be high in comparison with other countries (van Doorslaer et al. 2006, van Doorslaer et al. 2007). The Government of Bangladesh has focused on addressing this by providing subsidized medical services through Ministry of Health and Family Welfare (MOHFW) facilities, but these have not been effective in reaching the poor or in preventing a high incidence of OOP payments. More recently, MOHFW has experimented with maternal vouchers, a form of demand-side financing (DSF), to overcome barriers to maternal care, but their effectiveness has not been fully assessed at the national level.

To shed light on these issues, and to help identify options for improving healthcare access, the Asian Development Bank (ADB) technical assistance project (RETA-6515), in collaboration with the Health Economics Unit (HEU) of MOHFW, undertook a series of analyses examining the impact of OOP spending on access and the effectiveness of MOHFW service provision. The studies are reported in a set of linked publications, the main findings of which are summarized here.

Project Components

Analysis of Household Income and Expenditure Surveys

The Household Income and Expenditure Survey (HIES) of the Bangladesh Bureau of Statistics provides a regular snapshot of household spending in Bangladesh, surveying 7,000–12,000 households over 1 year, collecting information on household spending and healthcare use and expenses. The technical assistance project used the data from the last three HIES rounds in 2000, 2005, and 2010 to analyze inequalities in healthcare use and the levels and impacts of household OOP expenditures on health. Results from this analysis are presented in the accompanying country brief (Chandrasiri et al. 2012).

Facility Efficiency Survey 2011

The Facility Efficiency Survey (FES) 2011 surveyed services and costs in a nationally representative sample of 135 MOHFW facilities, ranging from union subcenters to medical college hospitals. The survey followed the design of the earlier HEU FES 1998, allowing comparisons to be made of how operational performance, unit costs, and efficiencies had changed in the MOHFW delivery system in 1 decade. The FES 2011 also sampled facilities enrolled in the DSF schemes of MOHFW to assess the impact of such financing on service delivery and cost efficiencies. Detailed findings are presented in *Technical Report A—Bangladesh Facility Efficiency Survey 2011* (Rannan-Eliya et al. 2012a).

Patient Exit Survey 2011

The Patient Exit Survey (PES) 2011 conducted exit interviews of 2,080 inpatients and 3,080 outpatients at a nationally representative sample of 133 facilities that were also surveyed by the FES 2011. The survey collected data on OOP costs incurred by sampled patients as well as their individual and household characteristics. Mothers and children were oversampled in order to better profile these groups. Detailed results of the PES 2011 are presented in *Technical Report B—Out-of-Pocket Payments by Patients at Ministry of Health and Family Welfare Facilities in Bangladesh and the Impact of the Maternal Voucher Scheme on Costs and Access of Mothers and Children* (Rannan-Eliya et al. 2012b).

Analysis of Maternal, Neonatal, and Child Health Treatment Expenditures

This analysis combined data from several sources to estimate the levels and financing of MNCH treatment expenditures in Bangladesh. The HEU Bangladesh National Health Accounts (BNHA) provided a baseline of overall health expenditures. FES 2011 data on facility costs were combined with data from two HEU surveys of inpatients and outpatients in 2009, which collected information on the diagnoses and treatment of representative samples of inpatient and outpatients at MOHFW facilities, to estimate the distribution of MOHFW

facility spending by disease, age, and sex. Another HEU survey of pharmacy patients permitted estimation of the distribution of pharmacy expenditures by disease, age, and sex. The HIESs and the PES 2011 were then used to estimate other MNCH OOP expenditures. Combining all these results yielded estimates of how much was spent and by whom on MNCH care in Bangladesh at government and private healthcare facilities in 2007. Further details are presented in *Technical Report C—Maternal and Child Health Expenditure in Bangladesh* (Rannan-Eliya et al. 2012c).

Analysis of Household Income and Expenditure Surveys

Illness Perception and Healthcare Seeking

The HIES data reveal substantial inequities in use of healthcare in Bangladesh, but also improvements during 2000–2010. Inequities in the use of services affect both children and adults, and are driven by disparities between the poor and nonpoor in health awareness and in barriers to accessing health services. Ill individuals only seek treatment if they perceive themselves as sick. Although the available evidence, such as the Demographic and Health Surveys, shows higher rates of child and maternal morbidity and mortality, the poor were substantially less likely to recognize that they are ill and report this when asked in the HIESs. However, this disparity in illness recognition and reporting decreased during the 2000s, suggesting increasing health awareness among poor Bangladeshis, so that by 2010, the poor no longer reported less sickness than the nonpoor. This suggests that improving health awareness can contribute significantly to reducing health inequities.

Not everyone who thinks that they are sick actually obtains healthcare—only 78% did so in 2000. At the same time, the poor were less likely to seek care, even when they recognized that they were sick. However, this disparity almost vanished during the 2000s, as overall healthcare use by sick Bangladeshis increased, reaching 92% by 2010. The net result was that by 2010, overall rates of healthcare use were roughly equal between poor and nonpoor Bangladeshis, although still not equitable given that poor Bangladeshis suffer from more illness. Despite this, the poor were far less likely to make use of qualified medical providers, and instead depended on visiting pharmacies and drug shops.

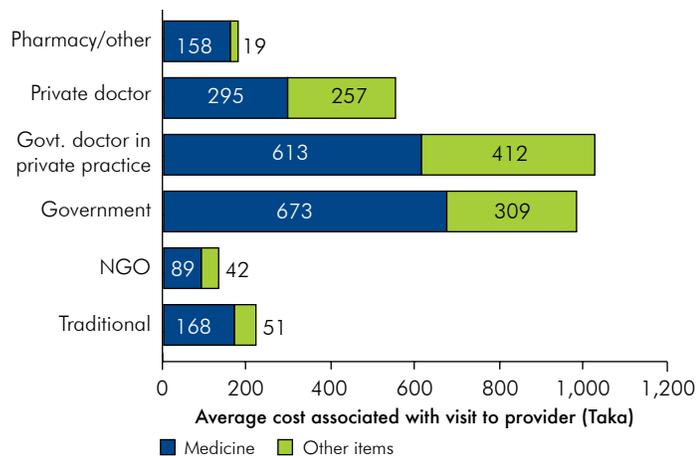
Reasons for Not Seeking Care

The HIES asks the reasons why sick Bangladeshis did not seek healthcare. The cost of treatment was consistently reported as the main reason (59% in 2005 and 21% in 2010, for children), followed by the distance to reach healthcare providers (8% in 2005), and concerns about quality of providers (e.g., competency or politeness) third (4% in 2010) (Chandrasiri et al. 2012).

The HIES analysis reveals that treating children at government health facilities was almost twice as expensive as by private

doctors (Figure 1). Pharmacies and drug shops were one of the cheapest options, explaining why the poor rely on them so much. The HIES data also indicate that lack of medicines is the major reason for the cost of visits at government facilities, with medicines accounting for 69% of the costs of such visits.

Figure 1: Average Costs for Child’s Visit to Healthcare Provider in Bangladesh, 2010



NGO = nongovernment organization.

Note: Reproduced from Figure 6 in Chandrasiri et al. (2012).

Source: Institute for Health Policy analysis of Household Income and Expenditure Survey 2010 data set.

The HIES findings indicate that to improve access by the poor to MNCH care, the focus should first be on reducing financial barriers and then distance, and less on improving quality. As direct healthcare delivery is the main option that the government has to reduce financial barriers, attention should focus on reducing the OOP cost of visits at government facilities, especially the expense of medicines.

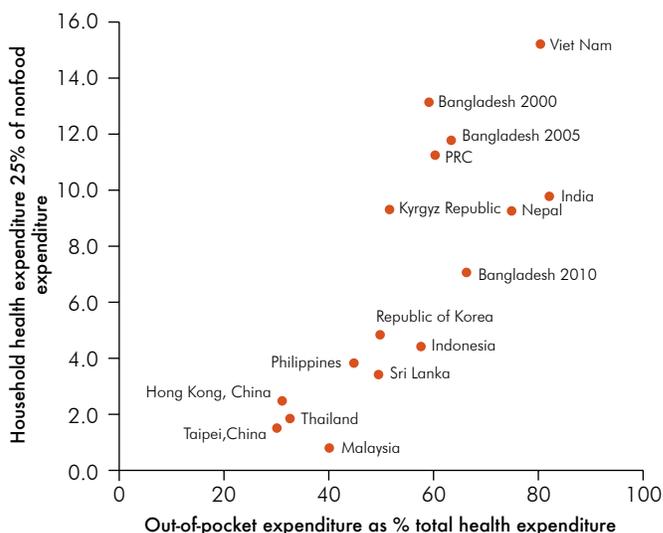
Distribution of Out-of-Pocket Spending between Poor and Nonpoor

The BNHA reported that out-of-pocket spending represented 67% of total financing in Bangladesh’s health system in 2007 (MOHFW 2010). The HIES analysis profiled its distribution and its impact on households. Spending is highly concentrated. The richest quintile accounted for 46% of total OOP health expenditures, spending 6–7 times as much per capita as the poorest quintile. Medicines were the main expense, accounting for two-thirds of all spending, for both children and adults. In the case of the poorest Bangladeshis, medicines accounted for 90% of all health costs when seeking care for their children.

Financial Impact of Out-of-Pocket Spending on Households

The high levels of OOP spending result frequently in catastrophic and impoverishing expenses for families. The HIES data show that during the 2000s, 1%–4% of Bangladeshis were forced below the international \$1-a-day poverty line in any given month as a result of OOP medical expenses, and 7% of families in 2010 had to allocate more than 25% of their monthly nonfood expenditures to healthcare.

Figure 2: The Incidence of Catastrophic Health Expenses and Reliance on Out-of-Pocket Financing in Regional Countries, Recent Years



PRC = People’s Republic of China.

Sources: Institute for Health Policy analysis of Household Income and Expenditure Surveys 2000, 2005, and 2010 data sets, van Doorslaer et al. (2007), and forthcoming estimates by the Equitap research network.

The overall incidence of catastrophic health spending fell in Bangladesh during 2000–2010, but it remains high. Data from other regional countries show that the incidence of catastrophic and impoverishing spending is directly related to the extent of reliance on OOP financing in healthcare systems (Figure 2). Reducing such impacts in Bangladesh will depend on lessening the overall reliance on OOP spending.

Efficiency in Public Sector Healthcare Facilities

Improvements in Efficiency of Government Healthcare Delivery, 1997–2011

Provision of healthcare services is the main tool available to the Government of Bangladesh to increase access for the poor and overcome any financial barriers. The FES 2011 provides up-to-date information on the costs and efficiency of government service delivery, which are the major constraints on how much MOHFW can expand service delivery. The survey also sheds light on how costs and efficiency have changed since 1997.

The study has two major findings:

- (i) Major MOHFW facilities operate at or above capacity, achieving high average levels of bed occupancy.
- (ii) Average operating efficiency of MOHFW hospitals has substantially increased since 1997, with lengths of stay declining and unit costs falling in real terms.

Average inpatient utilization of the major public sector hospitals—*upazila* health complexes (UHCs) to medical college hospitals—was high, at over 80% bed occupancy.

Patient demand was well distributed, with occupancy rates high across all major facility types, indicating that underuse of facilities is not a significant problem. This is a big improvement on 1997, when many facilities were underused, and others overused. Occupancy rates fell from 100% to 80% at medical college hospitals, while increasing at district hospitals to 130% and UHCs to 90%. This suggests that most primary-level facilities operate close to or above optimal capacity levels.

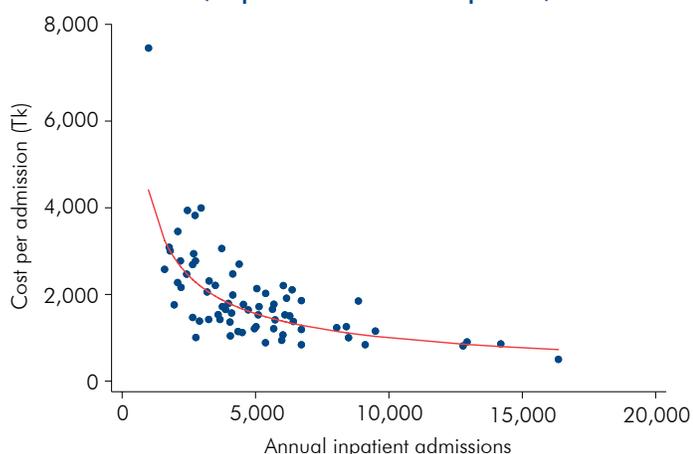
The increases in operating efficiency have been due to widespread rises in patient flow, bed turnover, and bed occupancy rates. At the average UHC, inpatient admissions increased from 2,347 to 4,043 per year, and outpatients treated from 50,228 to 81,431 per year during 1997–2010. Faster patient throughput was possible due to average lengths of stay declining across all facilities. The largest declines were at medical college hospitals (from 10 days to 4 days), with the average length of stay averaging only 2.8 days at UHCs. Lengths of stay are now so short that there is little room for improvement. Given that many MOHFW facilities are now near or above 100% occupancy, it is clear that the current MOHFW bed stock is inadequate to meet overall patient demand.

The increases in patients treated have been much larger than the rises in staffing levels, indicating large improvements in staff productivity. The increase in patient flow has also not been at the expense of treatment quality, with case fatality rates declining since 1997, and the number of complex procedures and operations carried out increasing.

Unit Costs

Average patient unit costs are driven by overall turnover; facilities that treat more patients tend to have lower unit costs (Figure 3). In terms of unit costs, district hospitals were the most cost-efficient with costs per patients up to 40% less than at UHCs, which were the next cheapest. Unit costs were highest at medical college hospitals, specialized hospitals, and small inpatient facilities.

Figure 3: Relationship between Inpatient Unit Costs and Admission Rates, Upazila Health Complexes, 2010



Note: Reproduced from Figure 2 in Rannan-Eliya et al. (2012a).
Source: Institute for Health Policy analysis of Facility Efficiency Survey 2011 data set.

The high unit costs of UHCs are due to having too many staff members, given the numbers of beds that they operate, and provides strong evidence that these facility types have too few beds to be efficient given their patient demand. The large increases in patients treated with only modest increases in facility budgets means that the costs of treating patients have substantially declined in real terms. At UHCs, the unit costs of inpatients and outpatients have declined in constant 2010 taka real terms from Tk3,617 and Tk118, respectively, in 1997, to Tk1,962 and Tk79, respectively, in 2010. Since real incomes increased substantially in Bangladesh during this time, the costs of treating patients at MOHFW facilities, in effect, more than halved.

Out-of-Pocket Costs of Patients at Ministry of Health and Family Welfare Facilities

The HIES analysis shows that OOP costs are the main barrier discouraging patients, especially poor ones, from using government services. The PES 2011 was designed to identify what OOP costs patients, particularly mothers and children, actually incur at MOHFW facilities. Costs fell into four categories:

- (i) travel costs to reach the healthcare institution,
- (ii) official fees charged by MOHFW facilities,
- (iii) informal or unofficial fees paid to persons at the facility to obtain services or other benefits, and
- (iv) the costs of purchasing medicines recommended by the medical staff that were not provided by the health facility.

Most patients incurred travel costs to reach MOHFW facilities, but these were relatively modest, averaging Tk27 for outpatients and Tk131 for inpatients. Expectant mothers reported much higher average costs of Tk220, which may reflect the difficulties of transporting a mother in labor. A total of 50% of outpatients and 75% of inpatients paid official user charges, but the overall cost was small, about Tk6 for the average outpatient and Tk270 for inpatients, with inpatient mothers who had delivered reporting higher-than-average fees. Most (89%) outpatients knew about the need to pay official fees before they visited, but 91% of inpatients reported that they did not know. Awareness of inpatient fees should be improved to make the costs of care more predictable, but fear of official fees is unlikely to be a barrier to demand for MNCH inpatient services.

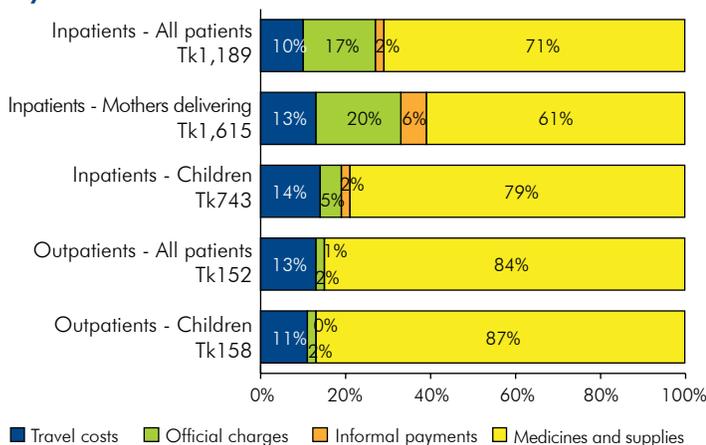
The incidence and burden of informal payments was much less than anticipated. Less than 1% of outpatients and only 9% of inpatients reported making informal payments, but these were most frequent in the case of inpatient mothers, where the incidence was 33%. The typical informal payment averaged Tk0.6 per outpatient and Tk19.0 per inpatient.

The key finding of the survey, confirming the HIES data, is that the major OOP cost for both outpatients and inpatients was the purchase of medicines and supplies recommended by medical

staff, which were unavailable at the MOHFW facility. About 50% of outpatients and over 90% of inpatients were advised to purchase such medicines outside the facility, with no difference between MNCH and other patients in this respect. The cost of medicines and supplies was significant, with expected outlays averaging Tk301 per outpatient and Tk980 per inpatient.

Overall costs incurred by patients using MOHFW facilities averaged Tk152 for outpatients and Tk1,189 for inpatients. Medicines account for more than 70% of this cost (Figure 4). Such high costs not only impose a financial burden on poor families but discourage utilization of needed MNCH services. They imply that despite the intention to provide free or nearly free services, 30%–50% of the costs of treatment were actually borne by MOHFW patients, with the degree of cost sharing even higher among women who were admitted for institutional delivery.

Figure 4: Average Out-of-Pocket Costs Reported by Patients at MOHFW Facilities



Note: Based on Table 9 in Rannan-Eliya et al. (2012b).
Source: Institute for Health Policy analysis of Patient Exit Survey 2011 data set.

Impact of the Maternal Voucher Scheme on Costs and Access

Since 2006, MOHFW has piloted two DSF schemes to improve access to MNCH care. These give cash and gifts to mothers delivering at MOHFW facilities, and make incentive payments to the facilities. The universal DSF or maternal voucher scheme benefits all mothers in a district, while the means-tested DSF scheme targets mothers who are assessed to be poor and meet other criteria.

Positive Impact of Demand-Side Financing Schemes on Maternal Delivery

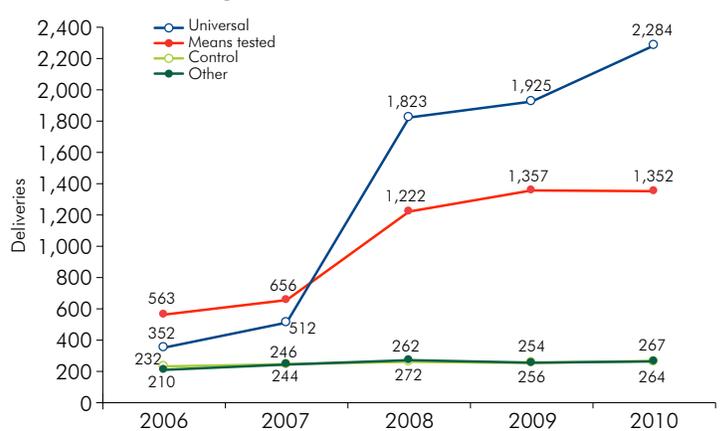
Both the FES 2011 and PES 2011 sampled DSF facilities to evaluate the impact of the schemes. Their data reveal substantial increases in the numbers of childbirths at DSF-enrolled upazila health complexes since 2006, in comparison with only modest changes at non-DSF-enrolled complexes (Figure 5). However, the increases were higher and only statistically significant at universal DSF UHCs. These findings confirm at the national

level, previous research that showed a positive impact of the DSF schemes in a few districts.

Reductions in Unit Costs at Demand-Side Financing Facilities

The increases in maternal deliveries, as well as other patients treated at DSF facilities, had another positive consequence. Combined with the modest increases in budgets owing to the incentive payments made to such facilities, they resulted in significant reductions in unit costs. The cost reductions were greatest in the universal DSF UHCs, where unit costs of treating inpatients and outpatients were reduced by 25%–35%. In contrast, the PES 2011 found no significant reduction in the OOP costs incurred by mothers at DSF facilities, although their net costs will eventually be lower once they receive the voucher payments due to them.

Figure 5: Trends in Childbirth Deliveries at Upazila Health Complexes, by Demand-Side Financing Scheme Coverage, 2006–2010



Note: Reproduced from Figure 1 in Rannan-Eliya et al. (2012b).
Source: Institute for Health Policy analysis of Facility Efficiency Survey 2011 data set.

Impact on Equity of Access

The PES 2011 collected data on the socioeconomic status of patients interviewed. These show that at all facilities, the distribution of patients was unequal and dominated by patients from nonpoor households. Although the DSF schemes substantially increased the use of facilities for childbirth, this surprisingly had no impact on the overall equity of use, with poor patients as underrepresented at such facilities as at others. It is possible that this is because so few mothers deliver in institutions, any increase will initially involve richer mothers, and only when most of these mothers are being admitted will overall equity start to increase.

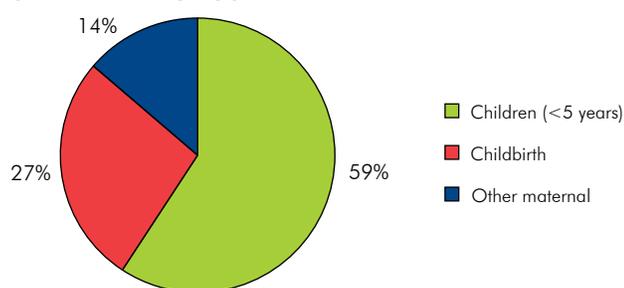
Estimation of Maternal and Child Health Treatment Expenditures

As suggested by these analyses and the BNHA, household spending makes a major contribution to the financing of MNCH care in Bangladesh. To determine how much, the technical assistance

project combined the available data to estimate overall flows of financing for MNCH treatment. BNHA estimates provided total annual medical treatment expenditures, and other data were used to estimate how much of this spending was for MNCH patients.

The analysis found that total expenditure on MNCH patient services was Tk17.3 billion in fiscal year 2007. This represents 12% of all recurrent expenditures on health in the country, and was equivalent to Tk121 per capita. Of this, 59% was for treating children (i.e., less than 5 years of age), and only 27% was for childbirth care (Figure 6). This allocation of spending to maternal care was certainly inadequate to finance the costs of providing safe motherhood services to most mothers in Bangladesh.

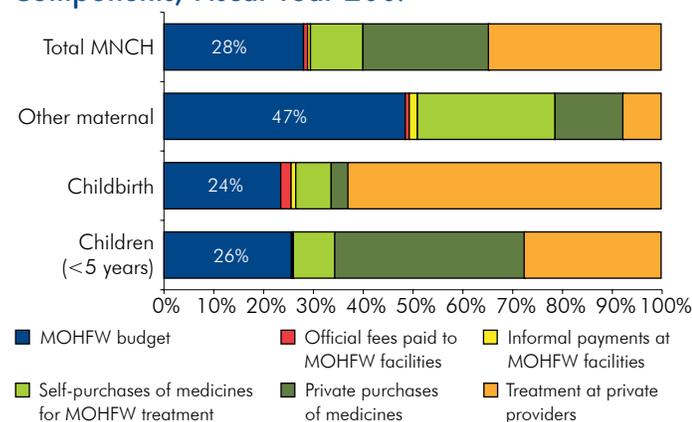
Figure 6: Maternal, Neonatal, and Child Health Expenditures by Types of Care, Fiscal Year 2007



Note: Reproduced from Figure 5 in Rannan-Eliya et al. (2012c).
Source: Institute for Health Policy analysis.

In terms of financing, the government financed only 28% of this expenditure (Figure 7). Household OOP spending emerges as the major financier of MNCH patient care, most of which was spent on purchasing medicines and other commodities from private pharmacies and shops. Even childbirth, which the government has prioritized and where there is a strong case for public financing given the high cost for individual mothers and the importance of skilled birth attendance to prevent death, was predominantly privately financed (76%).

Figure 7: Sources of Financing of Maternal, Neonatal, and Child Healthcare and Its Key Components, Fiscal Year 2007



MNCH = maternal, neonatal, and child health, MOHFW = Ministry of Health and Family Welfare.
Note: Reproduced from Figure 6 in Rannan-Eliya et al. (2012c).
Source: Institute for Health Policy analysis.

Conclusions

The high burden of maternal and child ill health in Bangladesh is due primarily to inadequate access to and use of essential MNCH services. Bangladesh has made progress in improving MNCH outcomes, but continued gains depend on further improving access and coverage. This is particularly the case for childbirth, where increased use of skilled birth attendance and facility-based delivery is critical. Inadequate use of essential MNCH services is linked to significant disparities in access and outcomes. Poor Bangladeshis suffer from worse MNCH health outcomes, and make much less use of MNCH services than the nonpoor. The Government of Bangladesh has attempted to improve coverage of MNCH services by delivering services through MOHFW facilities, that it provides free or at highly subsidized prices to facilitate access by the poor. Despite this, poor mothers and children usually do not make use of MOHFW services when they are sick, and they rely mostly on pharmacies and other private providers, or often go without any care at all.

The findings show that the main barrier to accessing MNCH services in Bangladesh is the financial cost of treatment. Government services are intended to be mostly or almost free, but in practice patients incur significant costs to use them. The main expense is the need to purchase medicines, which are not available at facilities. This cost outweighs the expense of official user charges, informal fees, and travel costs for most patients. They are the biggest barrier to poor families, and are the main reason why they fail to use public services or obtain no treatment when sick. High OOP costs for patients using MOHFW facilities leads to frequent use of private providers, particularly pharmacies, and families spending a large percentage of their incomes on healthcare. The level of OOP financing results in a high incidence of financial hardship for millions of families each year, impoverishing many.

At the same time, the public sector has achieved significant improvements in service delivery in the past decade. MOHFW facilities have treated increasing numbers of patients, and done so despite only modest increases in real spending. This has been achieved by substantial improvements in operating efficiency at all levels, with staff productivity increasing, average lengths of inpatient stay falling, and quality of care not being impaired. These efficiency gains have resulted in a halving of unit costs. Despite this, there is significant potential for MOHFW to improve cost-efficiency more. In particular, the findings reconfirm earlier studies that UHCs are too small in terms of beds for the staffing that they have, and that the larger district hospitals are more cost-efficient. The budgetary allocations for medicines have improved but remain inadequate.

These findings of inefficiencies and barriers are confirmed by the evaluation of the DSF schemes. Modest increases in budgetary expenditures, focused on compensating mothers for OOP costs and increasing staff incentives, have been effective in substantially increasing uptake of maternity services. The

resulting increases in patient demand, which are greatest when there is no attempt to means test access, result in significant increases in cost-efficiency at the facility level.

Overall government spending on MNCH services is too low. The government finances only 28% of MNCH expenditures. This low level of spending by the government imposes a substantial part of the costs of delivering public services on mothers and children. This discourages access by the poor and contributes to financial impoverishment in sick households.

To improve access and coverage of MNCH services, the Government of Bangladesh should:

- (i) increase overall budgetary expenditures on MNCH care to improve supply and to reduce the cost-sharing by mothers and children, which discourages use;
- (ii) increase budget allocations to maternal inpatient care, which is particularly underfunded;
- (iii) improve the availability of medicines at MOHFW facilities by increasing budgetary allocations to medicines and adopting other measures to improve the efficiency of purchasing and distribution of supplies; and
- (iv) increase attention to improving operational efficiencies, including increasing the size of UHCs and increasing the number of the more cost-efficient district hospitals to maximize increases in service delivery.

References

Chandrasiri, J., et al. 2012. The Impact of Out-of-Pocket Expenditures on Poverty and Inequalities in Use of Maternal and Child Health Services in Bangladesh: Findings from the ADB RETA 6515 Study – Summary Brief. Manila: Asian Development Bank.

Ministry of Health and Family Welfare (MOHFW), Health Economics Unit. 2010. Bangladesh National Health Accounts, 1997–2007. Dhaka: Data International.

National Institute of Population Research and Training, Mitra and Associates, and Macro International Inc. 2007. Bangladesh Demographic and Health Survey 2007. Dhaka

Rannan-Eliya, R. P., et al. 2012a. Impact of Maternal and Child Health Private Expenditure on Poverty and Inequity in Bangladesh: Bangladesh Facility Efficiency Survey 2011. Technical Report A. Mandaluyong City: Asian Development Bank.

Rannan-Eliya, R. P., et al. 2012b. Impact of Maternal and Child Health Private Expenditure on Poverty and Inequity in Bangladesh: Out-of-Pocket Payments by Patients at Ministry of Health and Family Welfare Facilities in Bangladesh and the Impact of the Maternal Voucher Scheme on Costs and Access of Mothers and Children. Technical Report B. Mandaluyong City: Asian Development Bank.

Rannan-Eliya, R. P., et al. 2012c. Impact of Maternal and Child Health Private Expenditure on Poverty and Inequity in Bangladesh: Maternal and Child Health Expenditures in Bangladesh. Technical Report C. Mandaluyong City: Asian Development Bank.

van Doorslaer, E., et al. 2006. Effect of Payments for Health Care on Poverty Estimates in 11 Countries in Asia: An Analysis of Household Survey Data. *Lancet*. 368 (9,544). pp. 1,357–1,364.

van Doorslaer, E., et al. 2007. Catastrophic Payments for Health Care in Asia. *Health Economics*. 16 (11). pp. 1,159–1,184.

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ADB RETA 6515 Country Brief Series

Poor maternal, neonatal, and child health adversely affects women, families, and economies across the Asia and Pacific region. This burden of illness must be reduced if the Millennium Development Goals (particularly 4 [reduce child mortality] and 5 [improve maternal health]) are to be achieved and improvements made in the health and economic well-being of households and nations. Progress in this regard will require an increased supply of effective healthcare services, as well as demand for such services. This series of country briefs provides evidence from national household surveys on the financial burdens imposed on the poor by private expenditures on public and private healthcare services. Countries can use this information in building awareness within health systems and policy bodies of financial constraints on healthcare, and in designing demand-side interventions to increase the use of maternal, neonatal, and child health services. Summaries of the analysis of household data from Bangladesh, Cambodia, the Lao People's Democratic Republic, Pakistan, Papua New Guinea, and Timor-Leste, and a summary overview, are included in the series.

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Australia is taking a leading role in global and regional action to address maternal and child health. A key part of this is to strengthen the evidence for increased financial support and the most effective investments that governments and donors can make to meet Millennium Development Goals 4 and 5. Australia supported this technical assistance project as a part of this commitment.

About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to two-thirds of the world's poor: 1.7 billion people who live on less than \$2 a day, with 828 million struggling on less than \$1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

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