Reducing Drug Costs through Rationalization of Diarrhoea and ARI Case Management in Urban Areas

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Objective: Examine the possibility of reducing the drug costs through rationalization of diarrhoea and acute respiratory infection (ARI) case management in urban areas.

Methodology: Based on the WHO guidelines, protocols were adapted for the management of diarrhoeal diseases and ARI cases at the primary healthcare (PHC) level. Service providers at three selected clinics of the Concerned Women for Family Planning in urban Dhaka were trained on the protocols. The diagnosis and treatment patterns for diarrhoeal diseases and ARI cases before and after the introduction of standardized procedures were examined. Such information was collected from the clinic registers for six months before and six months after the introduction of the protocols. The drugs that were dispensed by the providers for the treatment were costed, and the drug cost per client for the treatment was estimated in two different situations, i.e. treatment with and without the use of standard protocols. These were then compared to determine whether the cost per client decreased after the protocols were introduced.

Results: The diagnosis pattern changed both in the case of diarrhoeal diseases and ARI cases. Before the introduction of the protocols, 50% of the patients with diarrhoeal diseases were inappropriately diagnosed. This had implication on the treatment procedures. Following introduction of the protocols, the use of oral rehydration solutions (ORS) increased, and metronidazole was not used for treating the diarrhoea cases. Similarly, cotrimaxazole was appropriately used for treating dysentery. The drug cost of treating diarrhoeal diseases declined by Tk 1.96 (12%) per client after introduction of the protocol. For the ARI cases, the drug cost was reduced by Tk 11.9 (53%) per client. This has helped reduce the total drug cost for diarrhoea and ARI cases by about 32%, saving Tk 1,688 for the clinics in the six-month period.

Conclusion: Inappropriate diagnosis and treatment pattern increase the cost of services for the providers. The use of standard protocols may help reduce the drug cost for treating cases of ARI and diarrhoeal diseases.

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Factors Contributing to Low Immunization Coverage among Urban Slum Children in Bangladesh

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Objective: Describe the extent of immunization coverage in the urban slum of Zone 3 of the Dhaka City Corporation, and identify the factors contributing to the low immunization coverage.

Methodology: Childhood immunization coverage and socioeconomic data were collected from 651 women who had a child aged 12-23 months from the Urban Panel Survey (UPS) of the Urban MCH-FP Extension Project of ICDDR,B. Thirteen immunization service providers were interviewed, and 33 children were observed when obtaining their vaccination. Bivariate analysis was done to identify the association between the low immunization coverage and the sociodemographic characteristics.

Results: The results of the study showed that the complete immunization coverage of the children aged 12-23 months in the study area was 60.2%. However, in the slum area, the immunization coverage was 48%, whereas in the non-slum cluster, it was 67%. The drop-out rate in the slum cluster from DPT1 to DPT3 was also higher than that in the non-slum cluster (21.7% vs. 9.3%). The characteristics of the urban slum children who completed their immunization series were strongly associated with the following variables: maternal education, maternal employment, family income, father's occupation, household possessions, and the number of living children. Provision-related factors that influence the low immunization coverage in urban slums were: inadequate location and timing of clinics, improper supervision, lack of referral, missed opportunities for vaccination, and lack of coordination among different service provider organizations.

Conclusion: The immunization coverage should be improved through strengthening routine immunization services and increasing the integration and coordination among the service providers. The Expanded Programme on Immunization (EPI) should develop a "Slum Strategy" to ensure that high-risk slum children are vaccinated properly. The EPI services should also be linked with development organizations to improve the overall health status of the slum dwellers. Further, health system research is needed to identify operational problems of EPI.

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Maternal Morbidity in Rural Bangladesh: Where Do Women Go for Care?

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Objective: Assess the complications experienced and subsequent care-seeking behaviour of rural women and their knowledge about the complications of pregnancy and childbirth.

Methodology: A structured questionnaire was used for interviewing 2,105 rural Bangladeshi women who delivered within one year of the survey. They were interviewed in their homes between May and August 1996. In this study, maternal morbidity refers to any compilations reported by women during their last pregnancy, delivery and/or within 42 days after delivery.

Results: Obstetric complications were experienced by 66% of the women, and commonest among these were prolonged labour, fever, bleeding, and oedema. The older and higher parity women, and those with less education, were more likely to develop complications, and stillbirths were four times higher among those with complications. Among all the women who had complications, 41% consulted village practitioners, 18% went to homeopaths, and 6% went to traditional healers. Thirty-seven percent of the women went to nobody. Husbands were the principal decision-makers for consultation with service providers. Use of institutional facilities and/or trained providers was positively associated with women's education, parity, their knowledge of obstetric complications and average monthly family expenditure. Women's knowledge about complications of pregnancy and childbirth was limited. Most women knew about prolonged labour and malpresentation, but very few knew about bleeding, retained placenta, and convulsion. A majority knew nothing about postpartum complications. Thirty-seven percent of the women received antenatal care from medically trained personnel, like paramedic, and doctors. Ninety-two percent of all the deliveries took place at home, and only 7% of the complicated cases delivered at the health facility. Eighty-nine percent of the women had a livebirths, nearly 3% had stillbirths and rest had either induced or spontaneous abortion as the outcome of their last pregnancy.

Conclusion: Very few women in rural Bangladesh know about the common complications of pregnancy and childbirth, and most do not seek medical help for these. Also, use of government health facilities for the management of obstetric complications is poor. Therefore, efforts need to be strengthened for raising community awareness