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## A study on cost of caring for patients with dengue fever at Professorial Medical Unit, Colombo North Teaching Hospital

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Dengue fever (DF) and Dengue Hemorrhagic Fever (DHF) may constitute a substantial economic burden on both the healthcare system and individual households in Sri Lanka. The objective of this study was to determine cost of caring for patients with DF and to determine the economic impact of DF on households and healthcare institution. The direct economic impact of the healthcare system and on the households of 31 laboratory confirmed dengue patients who were managed in the professorial medical wards of the North Colombo Teaching Hospital, Ragama was assessed during October, 2006 to March, 2007. The institutional cost was calculated using data obtained from relevant departments of the hospital. The cost for the households of each patient was calculated using an interviewer administrated questionnaire. Of the 31 patients enrolled all had DF and none developed DHF. The median and mode for hospital admission of study sample was third day of fever (range 1-7). The mean Direct Household Cost (DHC) for a single day in hospital of a dengue patient was Rs 820.06. Over 90% of DHC consisted of cost for transportation (33.22%), food (30.44%) and for services obtained from outside hospital sources (30.14%). The mean basic institutional cost for a patient-day in a medical ward of the hospital (excluding the cost for specific management of an illness) was Rs.961.81. Total institutional cost of caring dengue patient per day was Rs. 1142.57 which comprised of cost for basic inpatient care (84.2%) and specific management of dengue fever (15.82%). Further, total cost of hospitalization due to dengue for the study sample comprised of 6.5% for drugs, 17% for investigations and 76.5% for accommodation, staff, transportation, food and other expenses. The study shows a considerable economic burden for both hospital and households due to hospitalization with dengue fever. Although this study focused on some aspects of curative care, primary prevention should be regarded as the basis for minimizing the economic and social burden. The rising demand for the laboratory investigations needs to be addressed by the public sector in a more systematic manner. The substantial burden on the household can be reduced by integration of the private sector in to the system in a rational manner and ensuring a pricing policy.

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