
ECONOMIC IMPACT OF DENGUE HAEMORRHAGIC FEVER
IN JAKARTA, INDONESIA*

by

Sumarmo, Department of Child Health, Medical School, University of Indonesia; *Ascobat Gani*, Department of Public Health Administration, School of Public Health, University of Indonesia and *Thomas Suroso*, Directorate General of CDC and Environmental Health, Jakarta

ABSTRACT

Due to economic recession and inflation, health care costs are receiving more attention. This study reviews costs of treatment of dengue haemorrhagic fever (DHF) in the Department of Child Health, Dr Cipto Mangunkusumo Hospital, Jakarta. 387 children with DHF were hospitalized during 1985. This was 10 per cent of all cases hospitalized in this department and about 25 per cent of all (1 828) DHF cases in Jakarta during this period. Sixty cases were sampled for this study. There were 30 Grade II cases (DHF without shock), 20 Grades III and IV cases (DHF with shock) and 10 cases were treated in the ICU (DHF with gastro-intestinal bleeding, encephalopathy, etc.).

The costs calculated consist of hospital, laboratory and drug charges. The average cost of treating Grade II DHF was Rp 58 700 (US \$1 = Rp 1 129.00). The average cost of Grades III and IV was Rp 62 450 (about 10 per cent higher than Grade II) and the average cost of ICU care was Rp 230 100 - four times the cost of treatment of DHF Grade II. The cost of drugs increases for more severe cases, i.e., 26, 34 and 53 per cent for Grades II, III and IV, and ICU cases respectively. Similar trends are also found in hospital and laboratory costs. In looking at the cost of care in relation to family income, the cost for Grade II amounted to 33.7 per cent, Grades III and IV 42.9 per cent, and for ICU cases 187.8 per cent of the monthly family income, respectively.

Since the incidence of DHF in Jakarta is still relatively high (23.18 per 100 000 population with a CFR of 1.5 per cent), these findings indicate that early diagnosis and prompt treatment to prevent more severe complications of DHF is likely be cost-effective and should receive more emphasis in the DHF programme in Jakarta.

*Presented at the First International Conference on the Impact of Viral Diseases on the Development of Asian Countries, Bangkok, 7-13 December 1986.