



## ABSTRACT

The global diabetes epidemic has devastating human, social and economic effects. The largest costs of diabetes world wide are its divesting effects on families and national economics. Study of the pattern of morbidity of diabetes and the economic burden created by it on households and health care system is useful in health planning.

A descriptive cross-sectional study was conducted in the Endocrinology clinic unit of the General Hospital Kandy, to determine the pattern of morbidity of diabetes and demographic and socio-economic characteristics of the patients and to estimate the economic burden of these diseases on the households and the health system. The study sample was selected using stratified systematic sampling method. Data were collected using a pre- tested interviewer administered structured questionnaire and a check-list. Estimation of both direct and indirect components of the household costs of hospital diabetic clinic attendance was done. Hospital costs of a patient were estimated in diabetic clinic unit and both direct and indirect costs were taken into account.

About 72% of the patients were in the age group of 20 to 60 years and 70% were females. Age distribution was symmetrical and mean age was 55.96 (SD= 10.84). More than 63% of the patients were in the lower socio-economic level. Diseases of the circulatory system were the commonest associated morbidity and it was about 89% of total associated morbidities. Mean household cost of diabetic clinic patient was Rs.1404.54 ( SD= 2836.70 ). Indirect costs comprised about 72% of the total household cost. Cost due to lost income contributed to 92% of the indirect costs. About 67% of direct household cost was incurred for pharmaceuticals and laboratory investigations. There was a significant inverse difference in total household cost between levels of education ( $t= -2.43$ ,

p=0.016). Alcoholism and smoking also showed a significant association between the mean household costs (for alcoholism p= 0.001, t= 5.46 and for smoking p=0.001, t= 5.91).

Hospital cost for diabetic clinic patient was Rs.594.45 and the estimated direct variable cost was Rs.497.83. Hospital direct variable costs comprised of pharmaceuticals and laboratory investigations. Out of direct hospital variable costs 78% was for pharmaceuticals. Direct hospital fixed cost for a patient was Rs.85.24 and it was 14.33% of total hospital cost for a diabetic clinic patient. Staff salaries of the diabetic clinic unit contributed more than 95% of direct hospital fixed cost. Indirect hospital cost was 1.9% of the total hospital cost for diabetic clinic patient and more than 74% of that was indirect variable cost. Water & electricity and telephone & post were the main expenses. Expenditure for water and electricity contributes 94.4% of indirect variable cost.

Total government and patient cost per month was Rs.1998.99 and nearly 70% of the costs were from mean household cost. Results of this study and further research on this aspect of diabetes may be useful for restructuring our health care system to face the future challenges of demographic and epidemiological transition.