

Economic Loss of Chronic Kidney Disease of Unknown Etiology; A Case Study in Madawachchiya DS division in Sri Lanka

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Abstract

Chronic kidney disease of unknown etiology (CKDu) is a tragic national health issue in Sri Lanka which generates severe social, economic, political and environmental implications. Besides the deaths and physiological pains, CKDu places a significant economic burden on both affected households and the country. This study assessed both direct and indirect economic losses incurred by CKDu patients and reviewed the government expenditure on CKDu during the past five years. The study used a representative sample of 46 registered CKDu patients from the Madawachchiya divisional secretariat. Primary data of the study was collected through pre-tested questionnaires and secondary data from the annual reports of the Ministry of Finance. The cost of illness method was employed to assess the economic loss of the individuals. It assumed that mean annual total economic loss consists of mean annual direct cost and mean annual indirect cost. The majority (37%) of the employed patients are farmers. The mean annual direct cost of a patient at end-stage treatment (26%) (hemodialysis) (LKR 41305.00) is nearly six times higher than that of the patients at pre-dialysis stages (73.9%) (LKR 6618.82) of illness. Also, the highest proportion of the direct cost (64.9%) is incurred for transportation to obtain medical treatments. The monthly mean indirect cost, calculated through the loss of farming income, revealed that the farming households incur the highest indirect cost (LKR 22,120) compared to other livelihoods. Furthermore, the mean annual total economic loss of the total study population is as high as LKR 151,765 with more so for patients at the hemodialysis stage (LKR 158,248). From the period of 2014-2018, the government has spent LKR 3.88 billion capital expenditure, with the highest incremental change (193%) during 2015-2016 on the disease prevention programs, construction of treatment centers, and provision of safe drinking water. Even though free medical services are available within the country, shortage of drugs, lack of facilities in government hospitals and cost of frequent hospital visits have resulted in an increase in direct costs. The study revealed that the hidden indirect cost of the disease is much higher than the direct cost of the disease. However, the government also spends substantial public expenditure on treatments and prevention measures. While continuing planned interventions by the government to improve the quality of life and financial situation of affected households, a collective effort of all responsible stakeholders is vital to eradicate the CKDu issue.

Keywords: *Cost of illness, direct cost, indirect cost, government capital expenditure*

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