Sociology of Chronic Kidney Disease of unknown etiology and its influence on agriculture: A case study of paddy farmers in Medirigiriya, Sri Lanka

L.B.M.L.M. Gunarathna¹ and K.P.P. Kopiyawattage¹

Abstract

Prevalence of Chronic Kidney Disease of unknown etiology (CKDu) has been identified as a significant health problem in the North Central Province of Sri Lanka. According to published literature, majority of the CKDu patients are engaged in agriculture or related activities. It has been suggested that agricultural practices, such as use of pesticides and inorganic fertilizer are associated with CKDu. Since Sri Lanka is an agricultural developing country, prevalence of CKDu among farmers has direct and indirect impacts on the economy, social, environmental, and ecological conditions of the country. Therefore, this study was aimed at identifying the impact of CKDu on rice cultivation. The study was carried out in Medirigiriya Divisional Secretariat of Polonnaruwa District, which reports the highest prevalence of CKDu in North Central Province. A pre-tested questionnaire based survey was conducted with CKDu affected (n=60) and non-affected (n=60) paddy farmers. Data were analyzed using descriptive statistics. CKDu affected respondents have been farming for more than 20 years. About 6% of affected respondents have completely stopped paddy farming after CKDu due to ill health condition. Both affected and non-affected respondents use filtered water for drinking purposes. The use of inorganic fertilizer is high among both affected and nonaffected respondents. Cultivated land extent and cost for labor by CKDu affected respondents is significantly higher than that of non-affected respondents while the income of affected farmers is lower than that of non-affected farmers. Government and other responsible authorities needs to take actions to introduce alternative income sources for CKDu affected paddy farmers since there is a trend of them moving away from agriculture due difficulties in continuing agricultural activities with their health condition.

Keywords: Chronic kidney disease, paddy farming

¹ Department of Agricultural Systems, Faculty of Agriculture, Rajarata University of Sri Lanka, Anuradhapura, Sri Lanka. Corresponding author's email: kumudupdn@gmail.com