

Prevalence of the Chronic Kidney Diseases of unknown etiology (CKDu) among traditional and new settlements: Socio-anthropological perspective

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Abstract

Over the last two decades, CKDu has increased significantly in the North Central Province and has become a major environmental health disaster of national concern. Existing literature suggested many potential causal factors that are responsible for CKDu. Further, some of the studies observed that the familiarity clustering seen among the victims of CKDu could be attributed to the environmental or genetical factors. This study attempts to find out the relationship between particular environmental and social conditions with CKDu. This study employed secondary data: medical records and death records and primary data; a pilot survey using a structured questionnaire, key informants discussions, focus group interviews in two strata in Medawachchiya DS division in the North Central Province of Sri Lanka. The selected two strata are traditional and new settlements; Padiggama as the traditional settlement and Heerallugama and Galenbindunuwewa as relatively new settlements. Data were analyzed using descriptive and qualitative measures. Findings revealed that there is a significant difference between the prevalence of the CKDu between two settlements. CKDu patients as a percentage of total population of the relatively new settlements were higher than the traditional settlement recording 1.42% (7 patients) and 3.77% (72 patients) in 2016 respectively. Food habits, medical practices, attendance for clinics, social beliefs and norms, agricultural practices, geographical locations of the villages were explored to identify any potential relationship with the prevalence of CKDu. Food habits of the traditional settlements show more traditional ways while new settlements show a moderate level. Villagers of Padiggama mostly prefer traditional medicines while Heerallugama and Galenbindunuwewa people have more faith on western medicine, and also their attendance at CKDu clinic is high. The majority of the population of these settlements are farmers; farmers of Padiggama mostly depend on traditional agriculture; chena cultivation and those in new settlements depend on more commercialized agriculture, which uses more pesticides, herbicides, and chemical fertilizer. Thus, identified the significant difference between two settlements; according to the social beliefs and norms of the people, the traditional settlements; Padiggama mostly believe on traditions, however, the people of the new settlements highly believe

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on modernization. Field observation revealed that the traditional settlement is located above the tank (*wewa*) and paddy lands. However, the new settlements are located below the tank and paddy lands. This may be associated with higher prevalence of CKDu in new settlements than traditional settlements. Here, raised an important question whether these differences; behavioral patterns, beliefs and geographical factors are caused to create CKDu. Therefore, this study further suggests conducting in-depth studies to find out the long-term and sustainable solution to address this critical non-communicable disease.

Keywords: Causal factors, CKDu, New Settlement, Tradition, Traditional Settlement