

Spatial and Temporal Variations and Community Perception of CKDu as a Societal Hazard: A Case Study from Medawachchiya, Sri Lanka

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L. M. A. P. Gunawardhana^{1(*)}, P. S. K Rajapakshe¹, J. M. S. B. Jayasundara¹

SSH23

¹*Department of Environmental Management, Faculty of Social Sciences and Humanities, Rajarata University of Sri Lanka, Mihintale, Sri Lanka*

(*) E.mail: pradeeplmap85@gmail.com

Chronic Kidney Disease of unknown etiology (CKDu) is one of the serious societal hazards in the North Central Dry Zone of Sri Lanka. Though, various researchers carried out numerous researches on CKDu, still the cause of CKDu remains unknown. The number of CKDu patients and deaths are rapidly increasing. Hence, this research aimed at identifying the spatial and temporal variations and community perception of CKDu in Medawachchiya Divisional Secretariat Division (DSD). Primary data were collected through a questionnaire survey conducted using 645 persons in 9 Grama Niladari Divisions (GND). Secondary data were collected from Divisional Secretariat Office, Medawachchiya, and CKDu prevention and research unit, Anuradhapura. Data were analyzed using the mixed method - both qualitative and quantitative with Statistical Package for Social Sciences (SPSS) and Geographic Information System (GIS). The results highlighted that 10% of total population in Medawachchiya have been affected by CKDu in 2018. There is a spatial and temporal variation of CKDu patients in Medawachchiya DSD area during 2010-2018. Extreme prevalence of CKD could be observed in adjoining GNDs of Medawachchiya DSD such as Puhudivula and Heeralugama, Puleliya and Kubukgollewa. There are 34 factors responsible for development of CKDu as mentioned by the respondents. Most prominent cause is the drinking water (64%) and next is the use of agrochemicals (26%). The highest satisfaction level of people on mitigation measures taken by various parties is moderate ranging from 40-49%. Proactive, preventing approach must be adopted to mitigate occurrence of CKDu and achieve resilience in the long term.

Keywords: CKDu, societal hazard, drinking water, agro-chemicals, resilience