

CONSUMER PERCEPTION ABOUT REVERSE OSMOSIS DRINKING WATER - A CASE STUDY IN ANURADHAPURA DISTRICT

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Sri Lanka has been categorized as one of the most Chronic Kidney Disease of unknown etiology (CKDu) affected country in the world. Quality of drinking water is recognized as the factor that influences CKDu most and could be prevented by using safe drinking water. Anuradhapura District is found to be the most affected area, which recorded around 13,000 patients in 2014. Thus, Reverse Osmosis (RO) technology has been introduced as a mechanism to purify water before consumption. RO purified water is distributed by 48 large-scale systems, which are established by community based organizations. People use this water to minimize the risk of CKDu, and their perception of safe water is not clear. This study attempted to identify the awareness of CKDu and perception about RO water, while estimating the average household cost of RO consumption. A questionnaire survey was conducted with consumers of RO water in CKDu highly affected areas in Medawachchiya, Kebithigollewa and Padaviya. From available RO systems, ten were selected purposively and 300 randomly selected consumers were interviewed with 30 respondents from each system. Results were supported by available information from secondary sources and key-informants. SPSS statistical package was used to analyze the descriptive statistics of given variables. Majority (64%) of the respondents had at least one CKDu patient in their family. More than 60% of the consumers knew the possible root causes, symptoms, medical treatments and precautionary measures for CKDu as they are frequently exposed to many awareness programmes. For medical treatments, a family (average size - 4) bear an average cost of Rs.600 per month per person while, incurring an average cost of Rs.350 per month on RO purified water. All the respondents were having a positive perception about the RO water as a precautionary measure and they have indicated that current cost of water is reasonable and they are willing to continue buying RO water. Therefore, this mechanism can be encouraged and suggested as an immediate relief for safe water in CKDu affected areas.

Keywords: Chronic Kidney Disease, Purified water, Reverse osmosis