

indicating that the differences in the categorical frequencies of household water-user preferences and quality of water are small enough, and could be explained by chance. Hence, the alternative hypothesis H_{a3} that household water-user preference in the informal settlement is dependent on the quality of water was accepted. Household water-user preference in the study area is dependent on the quality of water. That the way water is used depends on its quality as perceived by the households' in Obunga informal settlement.

It should be noted that 13.8% of respondents have poor quality of water, yet have good household water-user preference, and 15% of 40.6% who have moderate quality of water have good household water-user preference. This is an indication that the residents of the slum regard quality of water they use as good just because they trust it has already been treated by the provider. Many of the residents use tap water just as gotten from the taps, while some take further measures of adding some chlorine into it before drinking or cooking with it, as the researcher was able to gather from key informant interview. While this may be a measure of taking precautions against water contamination, they may not use appropriate rations as indicated, and treating water which has already been treated runs the danger of over-chlorination (KIWASCO and WARMA offices, 2013)

Discussions

Water-user preferences among households' in Obunga informal settlement are poor. This implies that the way households' use water in this area disregards recommendations by the UN (2009) for wise water-use. The households' under study also seem use water contrary to proportions suggested by Istifanus (2017). This concurs with findings in Ongere, et al (2017) who also established that households' in Obunga informal settlement have poor water-user preferences. This user behaviour revealed in the study perhaps resonates with the households'' perception that water sources in the informal settlement are unsafe hence can be used without following strict procedures as revealed in Cherunya, et al (2015) moreover, Wagner, et al (2018) also found in another study done in Kenya that households', in their preferences in using water, are not sensitive to other source qualities including taste, color, health risk, or availability. Contrary to expected ions, households' in the area tend to use water in disregard to water pricing. This contradicts findings in Grafton, et al (2011) which showed that the average volumetric price of water is an important predictor of differences in residential consumption. This insensitivity among households' could perhaps be the reason behind unavailability of adequate safe water frequently faced by households' in the informal settlements such as Obunga.

Additionally, the study reveals in Table 4.2 that household water-user preference in the informal settlement is not dependent on the availability of water to households'. Hence, it can be deduced from these results that household water-user preference is one of the factors causing water insecurity in the informal settlement. They (households') tend to use water in undesirable proportions. This tends to contradict a study in Afghanistan by Mohammed and Sanaullah (2017) who found that major components

of water consumption included washing clothes, taking bath, sanitation and kitchen in that order. Water-user preferences established in this study is also contrary to what Olufayokemi (2017) found in a study done in Nigeria that: the largest percentage of total water consumption was used for washing clothes. Findings in Table 4.2 also disagree with Ongere, et al (2017) who found that household water-user preference in Obunga is dependent on the sustainable supply of water. The findings in Table 4.2 may imply that water-user preference depends on other factors such as pricing, distance to the source of water, attitude and size of the family. These were revealed in studies by Grafton et al (2011) and Hanasaki, et al (2019).

CONCLUSIONS

It is concluded that household water-user preference in Obunga informal settlement is poor. In this regard, water stress facing households' in the informal settlement is due to use of water in proportions that are not recommended. The study also concluded that household water-user preference is dependent on the quality of water. The user preference depends on the family size, water pricing and attitude of the users among others.

RECOMMENDATIONS

Quality of water should also be improved in Obunga informal settlement. In this regard, the households' should be sensitized to use water in appropriate proportions geared towards saving the commodity for essential usage such drinking and cooking. This study also recommends water recycling behaviour whereby reusing water for house cleaning and gardening would reduce wasteful behaviour of clean water. More water connections (infrastructure) should also be embarked on in Obunga informal settlement to ensure that water is made available to the residents.

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