

Title: Statistical analysis for categorical data: case study is based on the demographic and socio economic determinants of access to clean and safe water among Basotho.

Abstract

The study will examine demographic and socio economic determinants of access to safe and clean drinking water in Lesotho. The purpose of the study will be to isolate the factors that ultimately lead to the greater access of clean and safe drinking water among Basotho and to raise awareness on the importance of being responsible for quality health and socioeconomic development. The data will be taken from the 2014 Lesotho and Demographic Health Survey and will be extracted, processed and analysed using STATA version 12.

The sample size will be equivalent to 9402 respondents who were enumerated on whether they were using safe and clean water for drinking and cooking. Both bivariate and multivariate analysis for categorical data will be applied to determine the effect of single explanatory variable on response variable and to explore the influence of combined explanatory variables on response variable. Moreover, the study will examine if age, sources of water, educational level, wealth index and residence are determinants of access to clean and safe water in Lesotho.

It will therefore be concluded if there is a need for Basotho to use clean and safe drinking water. The findings will constitute to informed recommendation against deadly pandemic known as COVID-19 as well as some strategies the Government and its ministry may develop for better development of the country.

Keywords: Categorical data, Water, Clean Water, Statistical Analysis