

**DISEASE AND DEATH RATES IN KISORO DISTRICT: A CASE STUDY OF MURAMBA
SUB-COUNTY**

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ABSTRACT

The major objective of this study lied in finding out whether there was a relationship between Disease and Death Rates in Muramba sub-county, Kisoro District. Other objectives included: To find out the level of Disease prevention in Muramba sub-county, Kisoro District and to find out the extent of Death Rates in Muramba sub-county, Kisoro District.

The study adopted a descriptive and observational research design and simple random probability sampling technique were used to obtain a sample size of 80 respondents from Muramba sub-county using solvins formula. Data was analyzed by use of Microsoft excel and presented in form of graphs, frequency distribution tables and pie chart. SPSS Software was used to analyze data in the study. In Muramba Sub-County, there is a strong positive association between disease and death rates ($r = 0.708$). The study came to the conclusion that when disease rates are high, mortality rates are likewise high, and when disease transmission rates are low, death rates are also low.

The investigator advised the authorities to supply tools and sufficient education to the populace so that they learn about the benefits of immunizing kids and are also encouraged to maintain good cleanliness in the area. The investigator urges the D.H.O. to make sure that every homestead has a VIP latrine in order to preserve proper garbage management in the Kisoro District.

Key words: disease and death rates

Background of the study

The World Bank (1993) defines an illness as a condition that compromises health or prevents the body from functioning normally. A specific aberrant condition, a disturbance of a structure or function that affects all or part of an organism is referred to as a disease. In 1994, Jamison. According to Baskent University (2005), a disease is an organ, component, framework, or structure within the body that is abnormally or improperly operating as a result of genetic or developmental abnormalities, infection, poisoning, inadequate nutrition or inequalities, and illness. A disease is also described by Lopez (1996) as a disruption of normal physiological function that affects all or a portion of an organism.

The majority of diseases caused by parasites and infections that plague Uganda, like the majority of underdeveloped nations, are easily avoidable and/or curable. These endemic illnesses include a large number of NTDs. They primarily afflict disadvantaged, impoverished groups who have little access to medical care. These characteristics account for, at least in part, why the public health community has largely neglected them despite the availability of affordable technologies and tried-and-true methods for their management.

Numerous diseases and assaults, such hearing loss and neuropsychiatric issues, can lead to significant health problems but few or no direct fatalities. Consequently, in order to give a single, comprehensive measure of the population's overall health, multiple indicators of survival and of health status amongst survivors must be merged in some way, even though they are both essential inputs when making health policy. The 1990 GBD research employed a time-based metric to evaluate the incidence of disease that accounts for both early mortality (YLL, or years of life lost due to premature death) and impairment (YLD, or years of good health lost as a result of impairment, weighed by

the degree of severity of the disability).

Statement of the problem

The Kisoro District in Uganda is dealing with serious issues with illness prevalence and death rates. Both communicable and non-communicable diseases are having a significant negative impact on the well-being of the community and general quality of life.

The high illness spread rates are a result of a lack of access to high-quality healthcare, poor sanitation, and a lack of knowledge and instruction about preventing illnesses. In addition to harming people and families, the district's social and economic development is hampered by the accompanying illnesses and mortality rates. Furthermore, the Kisoro District is becoming more and more concerned about diseases that are not transmissible. Chronic respiratory disorders, diabetes, cancer, and cardiovascular diseases are becoming more common. The prevalence of non-communicable diseases is on the rise in part due to lifestyle variables such as bad diets, idleness, and alcohol and cigarette use. The difficulties that those who are afflicted by these diseases must overcome are made even worse by the lack of healthcare facilities, such as diagnostic laboratories and specialist facilities for therapy. The challenge was determining whether there was a correlation between disease and death rates in Kisoro District's Muramba sub-county.

Specific objectives

1. To find out the level of Disease prevention in Muramba sub-county, Kisoro District.
2. To find out the extent of Death Rates in Muramba sub-county, Kisoro District.

3. To find out the relationship between Disease and Death Rates in Muramba sub-county, Kisoro District.

Research questions

1. What is the level of Disease prevention in Muramba sub-county, Kisoro District?
2. What is the extent of Death Rates in Muramba sub-county, Kisoro District?
3. What is the relationship between Disease and Death Rates in Muramba sub-county, Kisoro District?

Methodology

Research Design

The study used a descriptive research design because of the nature of the variables that were at hand to produce data required for qualitative and quantitative analysis to allow simultaneous description of views, perceptions and beliefs at any single point in time (White, B, 2000).

Study population

A group of individuals within the study's geographic area is its target. The study's intended audience consisted of 100 people from the Muramba sub-county in the Kisoro district. This was used in conjunction with Slovenes' technique for calculating sample size to create an 80-person sample population for the study.

Local residents, the LC 3 chairperson of Muramba Sub-County, and the District Health Officer of Kisoro District made up the study demographic.

Sampling procedures

The method of sampling is the process of selecting a subset of a population to test a

population-wide hypothesis (Jowin, 2003). The methods utilized to choose study participants were simple random selection and selective sampling.

Samples taken

(George & Mallery, 2003) A sample is a relatively tiny portion of the entire population. The study sample consisted of eighty participants out of the overall population of 100, 78 of whom were residents from the Muramba sub-county as well as the LC 3 chairperson and the Kisoro District Health Officer.

Sampling Techniques

Ahuja Ram (2010), defines sampling as the act or process of selecting a suitable sample of the population for the purpose of determining parameters of characteristics of the whole population, and these can be either probability or non- probability sampling techniques.

Simple random sampling

The respondents in this study were community members of Muramba Sub- County, while LC 3 chairperson of Muramba sub-county and the District Health Officer (D.H.O) of Kisoro District were used as the key informants in the study. Simple random sampling was used to select respondents in the group of community members, teachers and students and specific attention was be paid to inclusion of both male and female respondents in the study area.

Purposive sampling

Purposive sampling technique was used to select units into the sample which included LC 3 chairperson of Muramba sub-county and the District Health Officer (D.H.O) of Kisoro District. The researcher will use this technique because it is very useful in situations when you need to reach a targeted sample quickly and where sampling for

proportionality is not the main concern.

Data collection methods and Instruments

Data collection is a process of gathering data and measuring information on variables of interest in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes (Syed Muhammad Sajjad Kabir, 2016). Both the use of secondary and primary data methods was used by the researcher to collect qualitative and quantitative data information.

Data analysis

The statistical package for social science (SPSS) tool was used by the investigator to compute proportions, frequency, and tabulate answers, as well as to employ a combination of qualitative and quantitative types of data. To find and correct mistakes made by participants, data was modified. The responses to the questions were then coded into several categories. The data were analyzed using descriptive statistics like frequency distribution and percentages. The replies were all grouped according to their theme categories and the information they contained were evaluated for qualitative data using content analysis. Presentation materials included tables, charts, and figures. Software from the Statistical Package for Social Sciences (SPSS) was employed to assist in data analysis.

RESULTS

Response rate

Questionnaire return rate

All the 56 questionnaires were given out, 50 were returned, thus representing 89% response. The study was considered good because according to Peil (1995), questionnaire return rate above 50% is considered good for a study.

Personal information of respondents

Information regarding to the personal background of the respondents included their age, gender, marital status, occupation, and education level

Age of the respondents

Information regarding the age of the respondents was added to questionnaires during the piloting process. The following information regarding the ages of the respondents was analyzed using SPSS Software and presented in form of grouped data as shown in the table 1

AGE OF RESPONDENTS

	Frequency	Percent	Valid Percent	Cumulative Percent
0-10	8	16.0	16.0	16.0
10-20	1	2.0	2.0	18.0
20-30	3	6.0	6.0	24.0
Valid 30-40	27	54.0	54.0	78.0
40-50	8	16.0	16.0	94.0
50+	3	6.0	6.0	100.0
Total	50	100.0	100.0	

Therefore, from the mean (3.7000) it was deduced that most of the respondents who participated in the study were from a mature group i.e., were within the age range of 30-40 years with 54.0% and this was because such people within that age group of 30-40 years have developed minds to practice activities that can leads to high rate of disease prevention. This led to the conclusion that the researched adult brains were responsible for the correctness and dependability of the knowledge that was gathered. Additionally, the examiner learned from table 1 that 2.0% of those who participated in

Muramba sub-county, Kisoro District, were among the ages of 10 and 20 years, 6.0% were among the ages of 20 and 30, 16.0% were among the ages of 40 and 50, and 6.0% were beyond the age of 50. The standard deviation was 1.38873, and the range was 5.00. 4.0000 is the median.

Gender of Respondents

The study investigated the gender of the respondents and the findings were as shown in the table

2.

GENDER OF RESPONDENTS

	Frequency	Percent	Valid Percent	Cumulative Percent
MALE	33	66.0	66.0	66.0
Valid FEMALE	17	34.0	34.0	100.0
Total	50	100.0	100.0	

From table 2, it was found out that, majority of the respondents were males with 66.0%

compared to females with 34.0%.

Occupation of the respondents

Information regarding the occupation of the respondents in Muramba sub-county, Kisoro District was collected and presented in table 3

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OCCUPATION OF RESPONDENTS

	Frequency	Percent	Valid Percent	Cumulative Percent
FARMER	26	52.0	52.0	52.0
CIVIL SERVANT	11	22.0	22.0	74.0
TEACHER	6	12.0	12.0	86.0
STUDENT	7	14.0	14.0	100.0
Total	50	100.0	100.0	

From table 3, it was found out that 52.0% of the respondents were farmers, 22.0% were civil servants, 12.0 were teachers and only 14.0% of the respondents in Muramba sub-county, Kisoro were Students.

Marital status

Information regarding the marital status of the respondents in Muramba sub-county, Kisoro

District was collected and presented in table

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MARITAL STATUS OF RESPONDENTS

	Frequency	Percent	Valid Percent	Cumulative Percent
SINGLE	16	32.0	32.0	32.0
MARRIED	25	50.0	50.0	82.0
DIVORCED	9	18.0	18.0	100.0
Total	50	100.0	100.0	

From table 4, it was found out that, majority of the respondents were married with 50.0%,

32.0% of the respondents were single and only 18.0% had divorced.

Educational level of the respondents

Information regarding the academic background of respondents in Muramba sub-county, Kisoro

District was obtained and tabulated as shown in table 5

Table 5: Educational background of the respondents

EDUCATION LEVEL OF RESPONDENTS

	Frequency	Percent	Valid Percent	Cumulative Percent
Primary and below	27	54.0	54.0	54.0
O level	10	20.0	20.0	74.0
Valid Certificate	4	8.0	8.0	82.0
Diploma	6	12.0	12.0	94.0
None	3	6.0	6.0	100.0
Total	50	100.0	100.0	

When the survey and interview responses were analyzed, it was revealed from table 5 that the majority of the participants (54.0%) had only completed the primary level of schooling and had never pursued additional schooling, while 20.0% had completed the ordinary level, 8.0% had answered their certificate level of schooling, 12.0% had answered their diploma level of schooling, and 6.0% had never completed any level of schooling throughout their lives. The statistics show that Kisoro's Muramba sub-county's education system is deficient and in need of improvement.

The level of Disease prevention in Muramba sub-county, Kisoro District

This Section describes the independent variable (Disease). The independent variable was addressed in Section B of the questionnaire for respondents.

Table 6: The level of Disease Prevention**LEVEL OF DISEASE PREVENTION IN MURAMBA SUB-COUNTY**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid HIGH	6	12.0	12.0	12.0
MEDIUM	8	16.0	16.0	28.0
LOW	36	72.0	72.0	100.0
Total	50	100.0	100.0	

The results were interpreted as follows: 12.0% of the participants thought Muramba sub-county had a good level of disease prevention, while 72.0% thought it had a low level of prevention of illnesses. The level of prevention of diseases in the Muramba sub-county was reported to be Medium by 16.0%. When questioned about specific diseases that exist in the Muramba sub-county as part of this study's purpose, participants overwhelmingly mentioned Covid 19, malaria, AIDS, TB, lung cancer, polio, and bilharzia.

The extent of Death Rates in Muramba sub-county, Kisoro District

This Section describes the dependent variable (Death Rates). The dependent variable was addressed in Section C of the questionnaire for respondents. Information regarding the extent of Death Rates in Muramba sub-county, Kisoro District was collected from respondents and analyzed using SPSS Software and the results were presented and tabulated in table 7 below.

EXTENT OF DEATH RATES IN MURAMBA SUB-COUNTY

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Small	6	12.0	12.0	12.0
Medium	12	24.0	24.0	36.0
Large	32	64.0	64.0	100.0
Total	50	100.0	100.0	

The size of the death rates in the Muramba sub-county was determined to be significant because 64.0% of the participants in the research agreed that they are significant and are caused by the people's poor living conditions and the area's subpar healthcare facilities. Only 24.0% of the people surveyed indicated that the degree of Death Rates in Muramba sub-county is at a medium extent, while 12.0% agreed that it is at a small extent. When asked about the main reasons for the high death rates in this region, the majority of the participants cited inadequate sanitation, a lack of medical facilities including healthcare facilities, and high criminal activity.

Relationship between Disease and Death Rates

Table 8: Showing Pearson Correlation between Disease and Death rates

Correlations		Disease	Death Rates
Disease	Pearson Correlation	1.00	.708
	Sig. (2-tailed)		.000
	N	50	50
Death Rates	Pearson Correlation	.708	1.00
	Sig. (2-tailed)		.000
	N	50	50

** Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS output

Table 8 indicates that there is a very strong positive relationship between Disease and Death Rates at $r = 0.708$ and since the sig. value (.000) was far less than 0.05, which is the maximum level of significance required declaring a significant relationship between Disease and Death Rates, this implies that if the level of Disease is high, the level of Death rates is also high and if the level of Disease spread is low, then the level of death rates is also low.

Conclusion of the findings

The study came to the conclusion that the area's high death rates are caused by both the people's poor living conditions and the area's subpar medical care.

The third goal was to determine how disease and death rates in Muramba Sub-County related to one another. In Muramba Sub-County, there is a strong positive association between disease and death rates ($r = 0.708$). The study came to the conclusion that when disease rates are high, mortality rates are likewise high, and when disease

transmission rates are low, death rates are also low.

Recommendations of the study

The researcher recommended the government to provide equipment and enough sensitization to the people so that they get to know about the advantages of immunization of children and also encourage people to ensure proper hygiene in the area.

The researcher recommends the D.H.O to ensure that each homestead has a VIP latrine so that proper disposal of human wastes is maintained in Kisoro District. The researcher also recommends the V.H. Ts to ensure that homes of people have good sanitation.

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