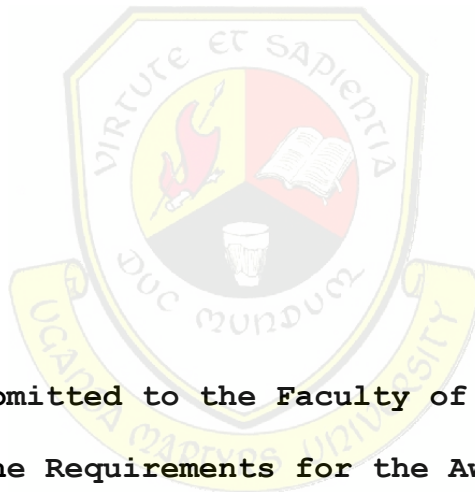


**THE IMPACT OF PARENTS' SOCIO ECONOMIC STATUS ON  
CHILD MORTALITY IN UGANDA**

**CASE STUDY: NEBBI TOWN COUNCIL**

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## **DEDICATION**

I dedicate this research to my beloved parents Mr. Kermundu Samson Agay and Mrs. Kermundu Hellen who have always been there for me at all times both socially and financially and their greatest wish is to see me excel.

Thank you so much for everything most especially for the words of encouragement and prayers. I love you all and may the almighty God bless you abundantly.

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## ACRONYMS AND ABBREVIATIONS

IMR	Infant Mortality rate
MDG	Millennium Development Goal
SES	Social Economic status
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations International Children Emergency Fund
WHO	World Health Organization



## **ABSTRACT**

This research paper determined the impacts of parent's socio economic status on child mortality with a case study of Nebbi Town Council. Socio economic status was looked at in terms of level of income, level of education and access to health care service. The study was based on a view that pointed to child mortality becoming rampant in poor countries than in wealthier countries.

The study used primary data and was conducted through a cross - sectional survey design using questionnaires administered to 60 respondents purposively selected from households with children aged 1 to 5 years in the different parishes in Nebbi Town Council, analysed using qualitative and quantitative techniques and presented in tables and figures.

The variables in this research were level of income, level of education and access to healthcare services. Data findings were drawn to show the extent to which the research variables affected child mortality. From the findings, all the three variables had significant impacts on child mortality. For instance parents' education level greatly contributed to child mortality in that parents who had higher education levels stood higher chances of their children surviving in their child hood. More so, the research proved that all respondents who had a long stretch of distance from their homes to health centers had ever lost their children.

Based on the study, the researcher discovered there is need to device methods to improve on parents' level of income such as job creation, provision of capital and introducing entrepreneurial trainings. The researcher recommends that the government should implement programs like adult education in which parents especially the mothers can enroll to achieve higher education hence increasing on knowledge relevant to raising their children. The researcher also recommends that health care services should be made accessible by providing more ambulances, decentralizing health centers, and trained medical personnel should be posted to all health centers.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.0 Introduction**

The Millennium Development Goals (MDGs) call for two-thirds reduction in the mortality rate among children under age five between 1990 and 2015. Accurate and timely estimates of infants and under five mortality are needed to help countries set priorities, design programs, to reduce child mortality and monitor progress towards the MDG4 (UNICEF, 2007).

This study was based on investigating the impact of parents' socio economic status on child mortality in Nebbi Town Council. Child mortality is the probability of a child dying between the age of one and five (Nadine, 2014). Parents' socio economic status varies from household to household as measured by level of income, level of education and access to health care services.

This chapter presents the background to the study, the problem statement, objectives of the study, the research questions, the hypothesis, the scope of the study, the significance of the study, the conceptual framework, the operational definition of terms and concepts used in the study, the anticipated limitations.

## **1.1 Background to the study**

Globally, it was highlighted that in countries with recessions, where GDP per Capita drops 5% or more, were seen to have a negative impact on child mortality. Social class indicates which medical services are available to an individual and usually the various levels within the socio economic hierarchy receive different quality of medical services. Disparities due to socio economic factors have been exacerbated by advances of technology in the medical field. (Norbert Schady and Marc-Francisco Smitz, 2009)

A view on Africa by WHO (World Health Organization, 2007) showed that the child mortality on the agenda of public health and international development agencies, has received renewed attention as part of the United Nations Millennium Development Goals. Millennium Goals Statistic show that 13.7% of children die before their fifth birthday. Approximately ten million children under five years of age die each year with large variations in fewer than five mortality rates across regions and sub-Saharan countries in Africa.

In the case of East Africa, the WHO (2007) report highlighted that the under-five mortality rate of 147 per 1000 live births within Uganda was among the highest in East Africa. Comparative analysis of Ugandan data shows that child mortality has changed over time. It decreased by 9 % from 1960-1975, increased in 1975-1985 by 9% and decreased again by 10-14 % in the 1990's.

These variations were due to civil strife in the 1980's, and the subsequent peace and economic recovery in the 1990's. The in-country regional and district differences in child mortality are most likely due to different distribution of risk factors associated with child mortality. Studies consistently show that low maternal education is associated with increased child mortality. The association of other socio-demographic factors such as maternal age and parity varies among the populations studied.

In Uganda, New vision newspaper dated 15<sup>th</sup> February 2011, UNICEF published that Uganda was one of the countries with the highest child mortality rates in the world. The World's Children Report (2009) has it that Uganda holds the 21<sup>st</sup> last slots out of 189 countries. There was less than five mortality rate of 130 out of 1000 births in Uganda. The report used the 2007 estimates. Less than five mortality rate is an international used indicator for the children's wellbeing. Social class is a major factor in infant mortality. Both historically and today over the period between 1912 and 1915, the children's bureau examined data across eight cities and nearly 23,000 live births, they discovered that lower incomes tend to correlate with higher infant mortality. If the father had low income, the mortality rate was more than that for the highest income earner.

Nebbi District has been one of the fewer districts in Uganda to have had much child mortality and demographic studies carried out in Uganda as evidenced by UNICEF (United Nations International Children Emergency Fund, 2007). These regional or district-based child mortality studies have focused on the association between nutrition and child mortality in North and South Western Uganda and HIV/AIDS infection and child mortality in Central Uganda. Data on child mortality are collected either from censuses carried out every ten years, or from representative surveys such as the Demographic and Health Surveys. This information has a limited role in effective planning for child survival programs at district level as it describes events that occurred five to ten years before the survey date. The ongoing decentralization of health services requires up-to-date information on child survival for effective regional and district planning of child survival programs. (UNICEF, 2007).

A mother's health is also critical to newborns, particularly in light of new research that suggests a sound neonatal environment is an important predictor of future health. Together with the WHO and United Nations Population Fund (UNFPA), UNICEF advocates and lends technical and financial support to comprehensive community health programs for expectant women. This would ideally include providing

micronutrient supplements, vaccines, anti-malarial drugs and insecticide-treated bed nets (UNFPA, 2009).

## **1.2 Problem statement**

As per the UN-report APHA(2011), mortality in children aged younger than five years is 20 times higher in poor countries than in wealthier countries. In 2008, the average child mortality rate in low-income countries was 108 deaths per 1000 live births, compared with 5 deaths per 1000 live births in higher income countries. Neonatal Mortality is increasing and has become a major contributor to child mortality over the past 20 years. Still births are now recognized as invisible problem of child health that is not measured in national statistics or MGDs or tracked by the United Nations (UN).

Although the association between child mortality and socioeconomic status is well established, it is unclear whether child mortality differences by socioeconomic position are present at all ages. The association of single-parent families with mortality, and the association of low socioeconomic status with mortality are not clear (Leon, 2003). This was the major factor that pushed for the need to carry out this study as means to point out what exactly are the perfect links between these two variables within Uganda's rural areas. Could it be long distances to health facilities, lack of medical care, high illiteracy rates or because of poverty.

Richard Horton in the Lancet review (2011), expressed the concern that child mortality rate had increased and over 60% of these deaths were and remain preventable. There was an estimated 19,000 children that died every day in 2011. It has been noted that overall the least developed countries have consistently had higher rates of under-five mortality than affluent countries.

It was therefore necessary for a study to be conducted to determine the impact of parents' socio economic status on child mortality.

### **1.3 Objectives of the study**

#### **1.3.1 General objective**

The study intended to investigate the impact of parents' socio economic status on child mortality.

#### **1.3.2 Specific objectives**

- i. To find out the relationship between parents' level of income and child mortality.
- ii. To find out the effect of parents' level of education on child mortality.
- iii. To find out the relationship between parents' access to health care services and child mortality.

### **1.4 Research questions**

The study intended to answer the following research questions.

- i. Is there a significant relationship between parents' level of income and child mortality?
- ii. How does the level of parents' education influence child mortality?
- iii. Is there a significant relationship between parents' access to health care and child mortality?

### **1.5 Research hypothesis**

The following hypotheses were tested to guide this study.

- i. There is a significant relationship between parents' level of income and child mortality.
- ii. The level of parents' education has a significant effect on child mortality.
- iii. There is a significant relationship between parents' access to healthcare and child mortality.

### **1.6 Justification of the study**

The study was justified because children are very essential in our communities since they are the future leaders in the country and caretakers of their parents and yet there is a high child mortality rate. Therefore, if such a study was not carried out, the parents would find it difficult to realize the dreams of their children and their own dreams.



## **1.7 Significance of the study**

This study analyzes the impact of parents' socio economic status and also the relationship between child mortality rate and their parents' socio economic status. This is bound to be helpful to the country in the following ways. To begin with, it is intended to help parents, policy makers and social workers to learn and understand how to predict and take control of the health status of their children and also have critical attitude towards the lives of their children.

Secondly, it is bound to also enlighten Individuals and help influence to appreciate their children and undertake responsibilities and get concerned about the wellbeing of their children. This will be through highlighting gaps within the family structure that can point out the need for parents to create income generating opportunities so that they can afford and have access to better and efficient health care services and healthy lives.

Finally, through the research findings, the researcher acquired more knowledge about the effects of parents' socio economic status on child mortality. This can be used as a source of information for further research on a similar topic.

## **1.8 Scope of the study**

### **1.8.1 Content scope**

The study focused on the impact of parents' socio economic status on child mortality. The study emphasized on level of income, level of education and access to health care services intended to establish their impact on child mortality.

It involved reviewing encyclopedias on social economic status, UNICEF Millennium development goal, articles on child mortality rate, reading Newspapers, journals on parents' socio economic status and child mortality and measures their impact on child mortality and ensures the relevance of the study.

### **1.8.2 Geographical scope**

Since it is much demanding to undertake a complete study on the impact of parents' socio economic status on child mortality in the whole of Uganda, and due to logical constraints on the researcher, the research was carried out within Nebbi Town Council in Nebbi district which is constituted by Abindu, Jukia, Nebbi Hill, Central, Namrwodho and Nyacara parishes.

Nebbi Town Council is in Nebbi district which is a commercial and administrative Centre with an estimated population of 28,000 by UBOS in 2011. Nebbi district is in northern Uganda sub-region of West Nile bordered by Arua District to the north, the Democratic Republic of Congo (DRC) to the south, Zombo

district to the west, Nwoya district to the east, Amuru District to the northeast and Bulisa District to the southeast.

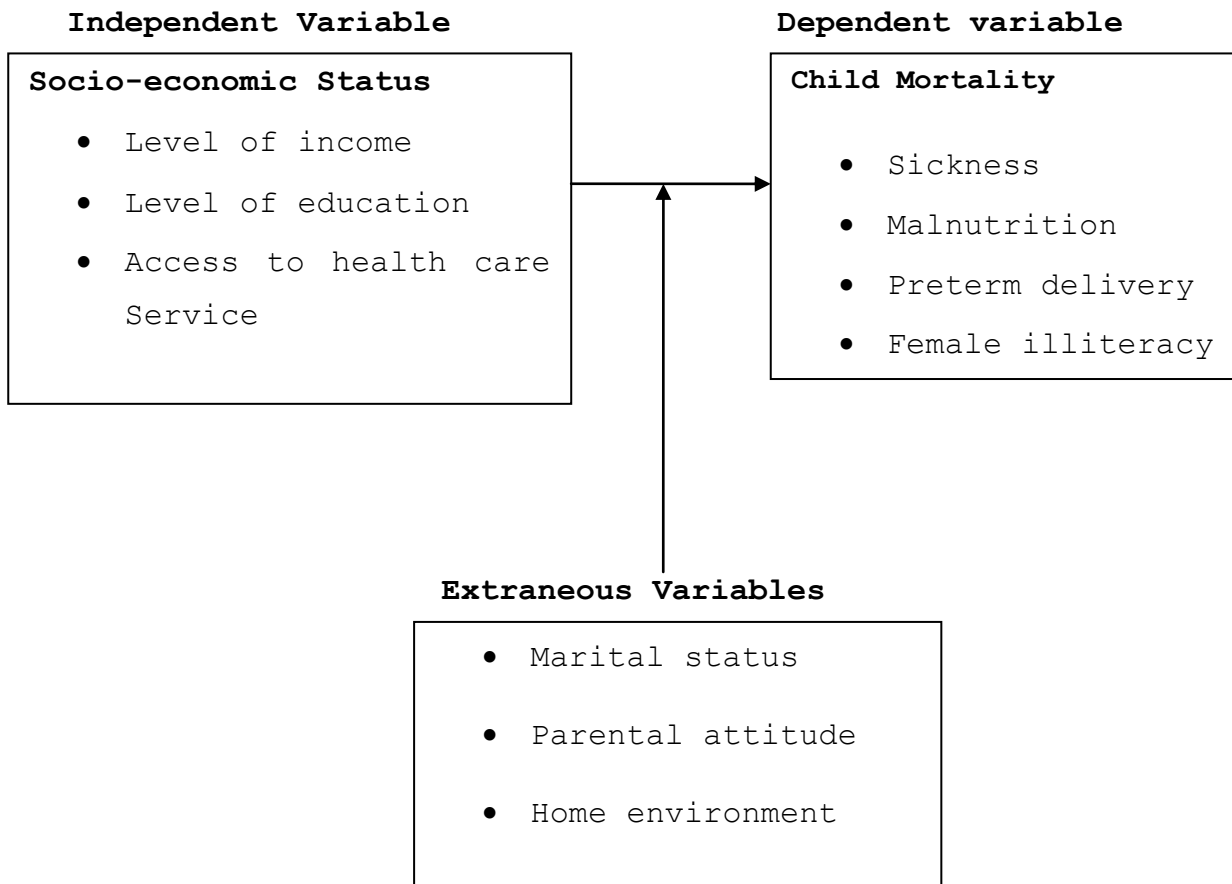
Nebbi District headquarters are located approximately 77kilometres (48mi) by road, southeast of Arua. The coordinates of the District are: 02 27N, 31 15E (Latitude: 2.4500; Longitude: 31.2500).

The hospital found in Nebbi Town Council is Nebbi hospital and a health Centre III known as Showers. There are also a number of clinics.

### **1.8.3 Time scope**

The study focused on recent journals on child mortality, minutes for the meetings during health reviews, journals, and news letters written about socio economic status and child mortality. Also the researcher administered questionnaires that were answered basing on information within four years before the time of study.

### 1.9 Conceptual framework



The conceptual framework above indicates the relationship between the independent variable (parents' socio economic status) and the dependent variable (child mortality). There is an arrow indicating that different attributes under the independent variable (level of income, level of education and access to health care services) influence child mortality.

However, the conceptual framework also shows other factors that could lead to child mortality rather than level of education, level of income and access to health care services.

## 1.10 Operational definitions

**Socio economic status** is an economic and sociological combined total measure of a person's work experience and of an individual's or family's economic and social position in relation to others, based on income, education, and occupation (Plourde, L, A,. 2006).

**Child mortality** refers to the probability of a child dying between the age of one and five (Nadine, N., 2014).

**Educational status** refers to the level of education and skill obtained within a discipline or profession.

**Neonatal mortality** is the statistical rate of infant death during the first 28 days after live birth, expressed as the number of deaths per 1000 live births in a specific geographic area or institution in a given time.(Mosby, 2009).

**Parental attitude** refers to parents' disposition to respond in a characteristic way to some stimulus in their social environment. (Spera, C., 2005).

**Health** is a state of complete physical, mental and social wellbeing and not merely the absence of diseases or infirmity. (WHO, 1948).

**Home environment** is the aggregate of surrounding things, conditions or influences surroundings. (Happer, 2011).

**Income** refers to wages, salaries, profits, rents, and any flow of earnings received. Income can also come in the form of unemployment or workers compensation, social security, pensions, interests or dividends, royalties, trusts, alimony, or other governmental, public, or family financial assistance (Lareau, 2003).

### **1.11 Limitations**

The researcher anticipated the following problems during the carrying out of the research.

The subject under study has an economic connotation since it is sensitive. Therefore some issues may not come out clearly since some parents were not willing to disclose their professions or jobs and even the amount of income earned.

There may be generalization of findings. This is because a small sample was used to present a bigger population due to time limitation.

Some respondents perceived the study as income generating activity for the researcher and demanded for payment in order to give required information .The researcher often had to give thorough explanations and intentions of carrying out the study that is for academic purpose and not income generating project at all.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter gave views of various writers about the dissenting view they have written about the study variables that is to say parents' socio economic status and child mortality. This chapter is based upon to deepen the theoretical framework of the research so as to develop an analytical frame work for analyzing and interpreting data and how the variables have been tested singularly or severally elsewhere, other than the targeted study territorial area.

#### **2.2 Highlights on child mortality and socio-economic status**

Richard Horton in the Lancet review (2011), expressed the concern that child mortality rate had increased and over 60% of these deaths were and remain preventable. There was an estimated 19,000 children that died every day in 2011. It has been noted that overall the least developed countries have consistently had higher rates of under-five mortality than affluent countries.

Although a relation between parental socioeconomic status and child mortality has been documented in several empirical studies, the background to this relation is still controversial. Case, Fertig, and relation. Life course Paxson (2005) distinguishes between life course and pathway models for describing this model allows for both direct and indirect

influences of childhood health and living conditions on adult health status and economic conditions. Direct, because children from economically deprived homes, with on average inferior health, are likely to encounter child mortality or enter their adult life with lower health status and ultimately higher mortality rate. Indirect, because children with inferior health may face more difficulties in acquiring education and the skills necessary for reaching a higher ranked position in the society as an adult. Pathway models (see, e.g., Marmot et al. (2001) for empirical evidence), on the other hand, argue a causal relation between childhood and adult living conditions through intergenerational transmission of socioeconomic status.

Among UNICEF regions, by far the highest rates of both infant and under five mortality are found in Sub-Saharan Africa, where under development, armed conflict and the spread of HIV/AIDS have seriously undermined the efforts to improve child survival. The estimated under five mortality exceeds 200 deaths per 1,000 live births in ten countries in this region (UNICEF, 2007).

According to the World Health Organization (WHO, 2007), poor neonatal conditions are the most prominent cause of young deaths. Four million babies per year die in the first week of life. In response, UNICEF advocates for and promotes programs to increase rates of exclusive breastfeeding. The strongest foundation of baby health is nutrition, and the best food for



newborns is breast milk. Breastfeeding protects babies from diarrhea and acute respiratory infections, stimulates their immune systems and improves response to vaccinations, and contains many hundreds of health-enhancing molecules, enzymes, proteins and hormones.

### **2.3 Parents' level of income and child mortality**

Lubotsky and Paxson (2002) in their research show that parental income has a protective effect on child mortality and a subsequent study Case, Fertig and Paxson (2005) show differences in economic resources during childhood to have lasting effects on the children's health status and earnings. Furthermore, van den Berg, Lindeboom, and Portrait (2006) show that economic recessions experienced early in life affect mortality later on. There is also a growing literature in epidemiology and medical sociology on parental social class and health status (e.g., Forsdahl 2002; Marmot et al. 2001; Smith et al. 1997).

Subsequently, there is a separate causal relation between parents' socioeconomic status and health. However, according to these models, there is no direct or indirect relation between childhood circumstances and health status later in life.

According to Duflo (2000), it was noted that Income itself, as a measure of SES, seems to have relatively little effect on child health. Welfare-to-work experiments, for example, have

had little impact on child health, either positive or negative. Income may however matter more in a developing country context. For example, black South African girls increased their height-for-age when their grandmothers started receiving old-age pensions, suggesting increased investment in nutrition.

Studies of American and British families find that the apparent effect of income on child mental health is considerably lessened once other factors, such as parenting skills and physical home environment, are controlled for (Berger, Paxson and Waldfogel, 2006). Estimates from the American study suggest that even cash subsidies to bring every family up to the poverty line would not eliminate the observed gaps in child outcomes.

#### **2.4 Parent's level of education and child mortality**

Socioeconomic characteristics have increasingly been believed to be important for infant and child survival. Prime among the household characteristics is the educational level of the mother, with higher maternal education contributing to higher rates of infant survival (Caldwell, 1979; Caldwell & McDonald, 1982; Hobcraft, 1993; Morelos, 1996; Sufian, 1990; United Nations, 1985). Attention need to be given to female education and expansion of public health system in order to reduce the risk of IMR and child mortality rate (CMR) (Kabir et al., 2001).

Desai and Alva (1998) state that education acts as a proxy for the socio economic status of the family and geographic area of residence. There is a huge literature focusing on the determinants of infant and child mortality notably, on the influence of parental education directly or indirectly on child survival (Johan, 2008; Stockwell et al., 2008; Hargreaves, 2007). Most demographic research indicates that there is a strong statistical association between maternal education and infant mortality (Mustafa, 2008; Bicego and Boerma, 1991; Hobcraft, 1993; Mensch et al., 1985). These findings have led some researchers (Caldwell 1979; 1994) to conclude that there is a causal relationship between mother's education and child health and mortality.

However, other researchers (Desai and Alva, 1995) reject the existence of a strong causal relationship. A mother's education may influence or enhance child health and mortality through different pathways (Rosen Zweig and Schultz, 1982; Caldwell and Caldwell, 1993; Hobcraft, 1993) among which are: the acquisition and use of health knowledge. The use of health services increasing family resources, either through their own work or that of their husband, which in turn affect the health of family members. Affecting preferences for child health and family size. Generally, mothers with higher education also have higher incomes or marry husbands who have higher incomes. They

also tend to live in rich communities with better access to health services (Pallone, 1981). In the United States, about one-third of infant deaths occur after the first month and are influenced greatly by social or environmental factors, such as educational level of parents (Medicine net Report, 2010). In this study, we aim to assess the relationship between parents' education and child mortality and Formulate applicable intervention to decrease child mortality.

Lindeboom et al (2009) identifies several channels through which parental education can affect children's health. Education might have a direct impact on child's health as it increases the ability to acquire and process information. This helps parents to make better health investments for themselves and their children. Alternatively, education can affect child health through indirect pathways. An increased level of education can give access to more skilled work with higher earnings and these resources could be used to invest in health and to cushion the impact of adverse health shocks (Case et al. 2002). It is also possible that in assortative mating, individuals with higher education marry partners with higher levels of education, which positively affects family income.

Additionally, increased education can increase the opportunity cost of having children and change fertility choices or delay having children. Parental education and child health can also

be related in non-causal ways, such as endowments transmitted across generations (Lindeboom et al. 2009).

It is worth noting that Lindeboom et al (2009) also reviewed studies which show small, weak as well as no effects of education on child health outcomes. However, Lindeboom et al (2009) found that both more educated fathers and mothers reported less financial difficulties, lower prevalence of chronic conditions and obesity. Furthermore, all measures of child health were better for higher educated parents (lower probability of birth weight, illness at birth, serious conditions, stunting, under- and over-weight). This indicates the presence of positive association between parental education and child mortality. Aslam (2010) suggests that father's health knowledge is positively associated with immunization decisions while mother's health knowledge and her empowerment within the home are the channels through which her education impacts on child's height and weight respectively. Aslam and Kingdon (2010) argue that the association between parental education and child health may arise because educated parents are more efficient producers of child health through adoption of better child-care practices or superior hygiene standards.

Nevertheless, Parashar (2005) reviews work that indicates that although the argument that maternal education is critical for child health is common place in academic and policy discourse,

significant facets of the relationship remain empirically and theoretically challenged.

According to the EFA Global Monitoring Report there is striking evidence that education improves people's chances of a healthier life. If governments fail in their efforts to provide quality education for all it is therefore also a setback for their health efforts. It is estimated that the lives of 2.1 million children under 5 were saved between 1990 and 2009 because of improvements in the education of women of reproductive age. The Inter-agency Group for Child Mortality Estimation (2013) has the estimate that in low and lower middle income countries there would be 49% fewer child deaths if all women had secondary education and 15 % fewer child deaths if all women had primary education. Population growth is still a tremendous problem in many low and lower middle income countries, not least in the continent of Africa, which is expected to double its population within less than 50 years. Population growth is stressing resources for both health and education and in many Sub Saharan countries the growth in the number of people itself is making it increasingly costly and difficult to reach all with quality services.

The Global Monitoring team has calculated that whereas the African women without any education in average give birth to 6.7 children during their full reproductive period, women with primary education only give birth to 5.8 children on average,

and women with secondary education to only 3.9. It may be even more important that girls who receive education get married later in life and fewer of them become pregnant and give birth before the age of 17. In Africa, South of Sahara almost 3.5 million girls below the age of 17 annually give birth and almost 3 million girls are married at the age of 15.

Hence, better education, especially for girls and women, is both a tool for reducing child mortality and for a reduction of the total number of births in poor countries. Smaller families are normally also healthier families. Better educated parents with fewer children can live a better life and are better suited for taking care of their own health. Their own children get better education and live a healthier life.

Basic primary education can be regarded or assessed like vaccination campaigns but with much wider basic positive implications. Those who benefit are immunized against a number of easily preventable health problems. And when it comes to more specific health education provided by health personnel like e.g. maternal education the task of the health personnel is much easier when they can build health training upon quality primary education. According to Tom Murphy (2003), if girls also receive secondary education it is improving health and reducing mortality further.

Mother's education, one measure of SES, seems to have a positive impact on child health. In the U.S., the great expansion of higher education in the 1960s and 1970s raised women's education levels, which in turn improved infant health as measured by birth weight and gestational age (Currie and Moretti, 2003). The effect may have occurred through increased rates of marriage and prenatal care, as well as through substantial reductions in smoking.

Anne (2007) states that providing a basic education, especially to girls, will also be crucial to building on the gains of the recent past. Improving access to education is an essential building block for increasing the number of trained health workers, particularly at the community level. And universal basic education reduces poverty and contributes to economic growth by increasing productivity. Education also helps build the kind of behaviors and habits that have a positive impact on an individual's health. Kingdon (2010) states that children who complete basic education eventually become parents who are more capable of providing quality care for their own children and who make better use of health and other social services available to them. Evidence indicates that when girls with at least a basic education reach adulthood, they are more likely than those without an education to manage the size of their families according to their capacities, and are more likely to provide better care for their children and send them to school.



Mark Fischetti (2011), states that women with more education tend to have smaller families, in part because of increased employment opportunities and better knowledge about contraception; fewer children in a family improves the chances that an infant will survive. More education also helps women make better decisions about many health and disease factors such as prenatal care, basic hygiene, nutrition and immunization which are vital to reducing the leading causes of death in children under five.

A study published in the journal Lancet on Friday (2010), found that a mother's education level has a huge effect on the health of her children. The Washington Post reports that half the reduction in child mortality over the past 40 years can be attributed to the better education of women, according to the analysis Worldwide, there were 8.2 million fewer deaths in 2009 among children younger than 5 than there were in 1970. Of those 'averted deaths,' 4.2 million were the result of better-educated mothers.

Christopher Murray (2010) explained that a mother's education affects the health of her children in many ways, the Washington Post writes. "According to Murray, better-educated women are more likely to understand disease-prevention measures such as vaccines and mosquito nets, and to use them. They are more likely to take a sick child to a clinic early and to follow treatment instructions. They are more likely to understand germ

theory and set clean water and sanitation as household priorities. With more schooling, women tend to have fewer children and space births more widely, both of which also reduce child mortality. Al Bartlett, a child health expert at USAID, said the findings are not unexpected but the magnitude is impressive. According to Bartlett, It clearly justifies what many have been saying for a long time that one of the investments we need to make is girls' education.

Stevens (2002) however says education is not much good if the health facilities and infrastructure don't exist. If a country is massively misgoverned, like Sierra Leone, no amount of education is going to put bread on the table for children. William Easterly, an economics professor at New York University, said, "It sounds plausible that education is related to child mortality, but finding a correlation does not prove causation. The Bill & Melinda Gates Foundation funded the study.

Van Ginneken, according to International Encyclopedia of Public Health (2008) states that maternal education has a strong impact on infant and child mortality; on average a rise of one year of maternal schooling is associated with a 6-9% decline in under-five mortality. Evidence from developed countries is provided on the influence of education on adult mortality. In many countries, male adult mortality in the lowest educational group is about twice as high as in the highest educational

group; for women the impact is less. In both parts much attention is paid to the various mechanisms or intervening factors that explain how education influences health.

Cochrane (1982) also states that there is a wide range of evidence on the relationship between parental education and child health. The data reviewed here indicates that maternal education is closely related to child health measured either by nutritional status or by infant and child mortality. The effect of fathers' education on infant and child mortality appears to be about one half that of mothers' education. The exact mechanisms through which education acts to affect child health are unclear. Better nutrition among the children of the more educated has been well-documented here, but it is unclear to what extent these effects result from improved knowledge and to what extent from higher income. The analysis does suggest that income differences cannot explain all the effect or perhaps even as much as half.

Furthermore, Behm (1982) states that The association between education and child mortality is found in a variety of conditions, and mother's education appears to have a stronger effect than fathers' education. John G. Cleland, Jerome K and van Ginneken (1988) state that a considerable amount of information has become available from developing countries showing that maternal education has a strong impact on infant and child mortality.

## **2.5 Access to health care services and child mortality**

According to Javier (2010), children's access to care may be limited by their parents' knowledge and understanding of health care needs and resources, as well as language barriers. Noncitizen adults experience greater problems in accessing health care than other groups, often because of increased language and cultural barriers. These problems leave them less connected with the health care system.

Population-based studies suggest that poor access to health care, which results in delayed attendance at a health facility or none at all, may be a key determinant of mortality in children under 5 years of age in developing countries. To assess this relationship, researchers have adopted simple traditional measures, such as distance from the household to a health facility, availability of transportation and health-care costs. Their findings have been inconclusive. Recently, qualitative studies have suggested the need to consider additional barriers, such as lack of social support for primary caregivers, limited caregiver autonomy in decision-making and financial matters, and social exclusion at health clinics. Studies that assess the relationship between these factors and child death are needed.

The relationship between access to health care and health Inequality has been clearly established and well documented

(Hirsch, 2005; Roberts, 2002) Children born into low-

income households are more likely to experience developmental and health problems from birth, and to accumulate health risks as they grow older (Roberts, 2002). Although many researchers have highlighted the links between poverty and poor health (mortality and morbidity), it is important to recognize the bidirectionality of this relationship as Wagstaff (2002) argues, that poverty breeds ill-health, ill-health maintains poverty (Wagstaff 2002, p.97). It is also important to be aware of differences in access to health services along socio-economic lines. There is much evidence that, relative to their needs, people in lower socioeconomic groups are less likely to use healthcare than their higher income counterparts, and that they are more likely to delay seeking treatment (LeGrand in Hirsch, 2006). These differences may impact on children's health even before birth, with antenatal services and maternity care less accessible to women with very low incomes (Bamfield, 2007; Huston, 1991). Inequalities have also been identified in terms of access to mental health services, with children from low-income households in the US facing significant barriers to obtaining help with mental health problems (Lubotsky, 2002).

In societies rich and poor, those of greater privilege tend to enjoy better health. Among older adults in Britain and the United States, a move from the top education or income tercile to the bottom tercile is associated with an increase of at

least fifteen percentage points in the likelihood of reporting fair or poor health (Banks et al. forthcoming). The Mexican elderly share this pattern, with the poorest and least educated terciles reporting poor health at least ten Percentage points more often than the richest and most educated terciles (Smith and Goldman 2007). Mortality differences are just as striking for the United States and six European countries. Compared with their better educated compatriots, those with less than upper-secondary education are at least 20 percent more likely to die in a given year. There is a variation across countries, but this variation appears to have little to do with differences in health care systems. For example, the mortality differentials for the United States, which favors market-based health care (at least for the non-elderly), and Austria, where the government provides universal health care, are virtually identical.

According to UNICEF (2007), about 80 percent of health care in developing countries occurs in the home and the majority of children who die do so at home, without being seen by a health worker. Meanwhile, proper infant feeding and breast feeding are still not practiced by many families. As many as 40 per cent of child deaths could be prevented with improved family and community care - not high-tech health equipment, but access to solid knowledge, support and basic supplies.

The increased risk of death in rural dwellers was not explained by a longer physical distance to a health care facility. It may be that rural dwellers simply take longer to seek appropriate help. In Malawi, rural residence was significantly associated with an increased risk of late medical treatment, while in a multicounty analysis of sub-Saharan African countries sick urban children were more likely to visit a health facility than rural children. The lack of a significant association in our study between distance to a health care facility and child death is consistent with the results of studies performed elsewhere in Africa: non-significant increases in the risk of child death in association with increasing distance to health care were reported from Burkina Faso and the northern Democratic Republic of the Congo. This suggests that in such settings, physical distance to a health facility has little effect on access to health care.

The importance of social support in relation to access to health care has been proposed through qualitative research in Chad, the Gambia, Guinea and India. Social support is thought to facilitate health care access through increasing help with domestic tasks, peer encouragement and knowledge-sharing. In Ethiopia, a significant protective association between increased social capital (defined in terms of membership in community groups, evidence of leadership, ability to borrow money, trustworthiness and interpersonal indicators) and child

death was identified. Some caregivers are also socially excluded at health centers and treated in a discriminatory fashion. Thus, impaired access affects even those who attend health facilities.

When investigating the caregiver's time availability, having to care for other children besides the one at risk of death showed a protective effect clearly not explained by high maternal parity or overcrowding. In contrast, Van den Broeck et al. showed that the risk of child death in the northern Democratic Republic of the Congo increased with a parity of five or more as a result of having limited time for child care. It is possible that primary caregivers that look after more children have greater experience with serious illness and seek help earlier. Previous research has shown that poor symptom recognition delays health care seeking and that caregiver knowledge about health protects against child death.

The most substantial evidence on the impact of access to health services has emerged from a supported synthetic

Darmstadt, et al. (2005) found out that there is evidence to show that 41 to 72 percent of newborn deaths could be prevented by interventions such as Tetanus Toxoid (TT) immunization to mothers; clean and skilled care at delivery; newborn resuscitation; prevention of hypothermia; exclusive breastfeeding; clean umbilical cord care; and management of



pneumonia and sepsis. Around half of these prevented deaths are possible through community -based interventions

However Bhutta, et al. (2008) State that current evidence does not provide information whether these interventions can be scaled up and or will have the same impact if implemented at a larger scale. Similarly, the review by Lassi, et al. (2010) shows an overall 27 percent reduction in neonatal deaths. Community mobilization played a vital role in reducing neonatal deaths possibly because these groups focused on women in the antenatal period and on newborn care and management. There has long been a controversy about the role of medical care in mortality. McKeown (1976) argued that mortality decline in England and Wales in the 18<sup>th</sup> and 19thcenturies was mainly related to improvement in the overall standard of living and was little affected by most medical care. In developing countries, there has been consideration of the role of preventive versus curative medical care, with most credit for mortality decline resting with preventive care, such as vaccination programs. While it has been argued that access to health services is important (Frankenberg, 1995; Jain, 1985; Lalou&LeGrand, 1995; Niraula, 1994; Sandiford et al., 1991). It has sometimes been unclear whether availability of health care by itself will affect infant and child survival or whether other factors, such as mother's education, dominate. Mason (1984) argues that mothers with a relatively high level of

education will be likely to perceive the need for such care and act on it.

## **2.6 Conclusion on the Literature**

All in all, the literature points out that there is actually a problem. An issue that has not been pointed out as far as the two variables of socio-economic status and child mortality are concerned. Various studies such as UNICEF (2007); WHO (2007) and Horton (2011) have pointed out the vast degrees to which child mortality has impacted upon the LDCs (Less developing countries). Thou, when it comes to the examination of factors such as the role of family income, we see scholars such as Lubotsky and Paxson (2002) agreeing to the positive correlation between the main variables. Well as scholars like Duflo (2000) suggest that the correlation is quite marginal and not all that big. This creates a hitch that needs to be examined and clearly explained. Well as for the case of education, scholars such as (Caldwell, 1979; Caldwell & McDonald, 1982; Hobcraft, 1993; Morelos, 1996; Sufian, 1990; United Nations, 1985) specify the existence of a strong relationship as far as the variables in question are concerned. A notion that is best rejected by scholars such as (Rosen Zweig and Schultz, 1982; Caldwell and Caldwell, 1993; Hobcraft, 1993) who point out that the income of the family will best come into play before even education can be considered. This is due to the fact that with money, one can afford any basic medical care what so ever

irrespective of where they come from, where they are or what the cost is. This prompts one to clearly and carefully investigate the various variables in play to decide which one suits the rural African setting.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.0 Introduction**

In this chapter, the researcher provides the readers information on what procedures were followed to come up with research results. It is organized under different sections for easy comprehension that is research design, area of study, study population, sample size, sampling techniques and procedure, data collection methods, data collection instruments, validity and data reliability, data analysis and limitations.

#### **3.1 Research design**

The study used a cross-sectional research design that is quantitative and qualitative in nature. The research design was chosen to evaluate the impact of parents' socio economic status on child mortality that is to say; it was designed to answer questions on the significant relationship between parents' level of income and child mortality, the effect of parents' level of education on child mortality and the relationship between parents' access to health care services and child mortality.

Descriptive quantitative methods were used to collect, present and analyse data the major findings presented and organized using frequency tables, cross tabulations, percentages, graphs and charts.

### **3.2 Area of study**

The study was carried out in Nebbi town located in north western Uganda in Nebbi district. The study was conducted from household to household. Nebbi town was purposely chosen in Nebbi district because it has the largest number of people in Nebbi district since many people left their villages to come and stay in Nebbi town due to various reasons.

### **3.3 Study population**

The study was conducted in different households within Nebbi Town Council purposely targeting parents who have children from one to five years of age. This is because they were the right respondents to the researcher's questions such as number of children from one to five years lost, the parents' level of education among other information that the researcher was seeking for.

### **3.4 Determination of sample size**

The sample size of the study comprised of 60 respondents, one parent from each of 60 households in 6 different parishes of Abindu, Jukia, Nebbi Hill, Central, Namrwodho, and Nyacara.

**Table 3.1: Sample Size**

<b>Respondents</b>	<b>Number</b>
Abindu	10
Jukia	10
Nebbi Hill	10
Central	10
Namrwodho	10
Nyacara	10
<b>Total</b>	<b>60</b>

**Source: Primary data**

### **3.5 Sampling technique**

The researcher employed purposive sampling method when selecting the respondents to ensure that data provided was accurate and relevant to the study. Sixty respondents were given questionnaires.

Respondents with different types of professions were selected for instance health workers, civil servants, peasant farmers, carpenters, market vendors, accountants and others.

This was done to increase the validity of the study with a more representative study sample.

### **3.6 Data collection methods and data types**

#### **3.6.1 Questionnaire**

The researcher designed a questionnaire that included both open ended questions and closed ended questions. Questionnaire was used because it is flexible due to the fact that people can fill in at their convenience and also due to the fact that questionnaires generate more reliable data because respondents answer in their own mood and time without being intimidated by the researcher's presence.

#### **3.7 Validity and Reliability**

Cumulative validation method was focused on finding out whether the research findings are supported by other studies through comparison of various findings with reference to the literature review; chapter two of this research.

Checking for representatives was another method used to check the reliability of the research by manipulating the sample to confirm the findings. For instance, the sample was adjusted to see if there was a change in the findings.

#### **3.8 Data analysis**

The univariate analysis was done first followed by the bivariate. At the univariate level, tables, bar graphs, pie charts, frequencies and percentages were used after being

obtained by the computer software i.e. STATA. Percentages were obtained using the formula below;

$$\text{Percentages} = \frac{\text{Number of respondents to the variable}}{\text{Total number of respondents of the variable}} \times 100$$

They were presented on a pie charts and graphs.

At bivariate level, cross tables and correlation were used to test statistical significance between the dependent and the independent variables. Correlation was used because it allows the researcher to establish how confident she can be that there is a relationship between the two variables in the population.

### **3.9 Ethical Issues and considerations**

The researcher clearly explained to the respondents the purpose of the study. The researcher provided assurance to the respondents that the findings would perhaps help to reduce child mortality rate but also let them know that the study is for academic purpose. Plus, researcher neither bribed nor intimidated the respondents to get answers from them instead the researcher was gentle and polite while interacting with respondents.



## CHAPTER FOUR

### PRESENTATION AND DISCUSSION OF FINDINGS

#### 4.1 Introduction

This chapter links the field work findings to the literature on the concept of child mortality and parents' socio economic status as studied by different scholars in the literature review. Various respondents from Nebbi Town Council in Uganda were approached as mentioned in chapter three (methodology) and the findings of the study discussed in depth using tables and graphs and correlated as well followed by corresponding analysis and discussion.

A total of 60 questionnaires were issued out to target respondents purposively from homesteads with parents having children from five years and below. All questionnaires were valid giving us 100% response. The researcher also managed to administer 20 questionnaires to 20 households in search for in-depth information relating to parents' socio economic status and child mortality as detailed in the questionnaire.

#### 4.2 General information about respondents

##### 4.2.1 Gender

This data is presented on the basis of the respondents' sex.

**Table 4.1 Sex composition of the respondents**

Sex	Frequency	Percentage (%)
Female	28	46.7
Male	32	53.3
Total	60	100

**Source: Primary data**

Table 4.1 shows that the female respondents were 28 (46.7%) and the male respondents were 32 (53.3%). This can be attributed to the fact that both husbands and wife play an important role as far as household child health is concerned.

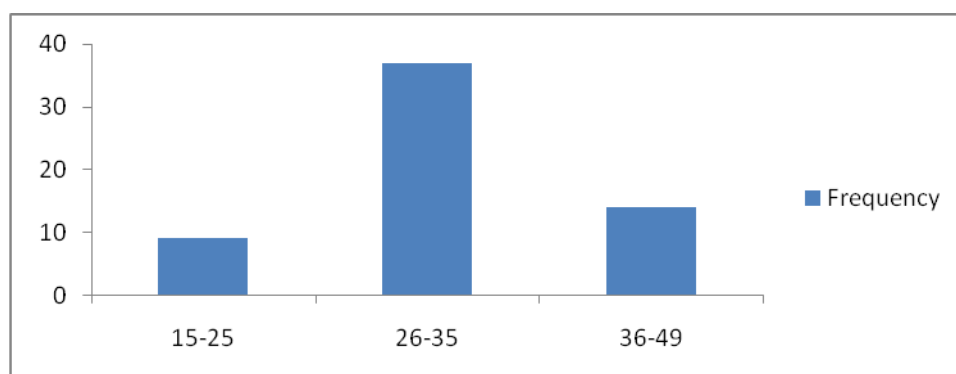
#### 4.2.2 Age distribution of respondents

**Table 4.2 Showing age distribution of respondents**

Age distribution	Frequency	Percent (%)
15-25	9	15
26-35	37	61.7
36-49	14	23.3
Total	60	100

Source: Primary data

Figure 1 Shows graphical representation of the age distribution of respondent



Source: Primary data

Majority of the respondents were between 26 and 35 years of age with the highest percentage as 61.7%. The next highest number

of respondents was of those aged between 36 and 49 with a percentage as 23.3%. The least number of respondents (15%) fell within the age category of 15 and 25 years this was because most of the people aged between 15 and 25 years were not married.

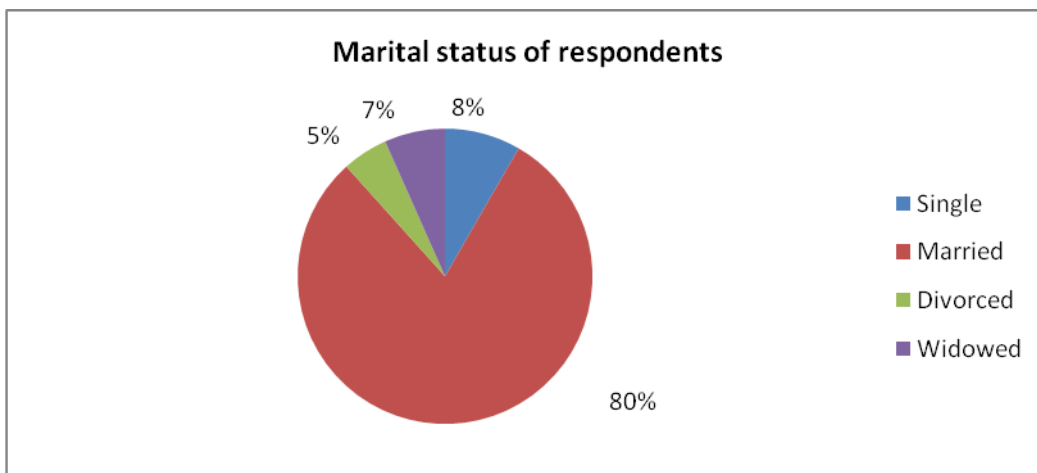
#### 4.2.3 Marital status of respondents

**Table 1.3 showing marital status of respondents**

Marital Status	Frequency	Percentage
Single	5	8.3
Married	48	80.0
Divorced	3	5.0
Widowed	4	6.7
Total	60	100

**Source: Primary Data**

**Figure 2: Showing marital status of respondents**



**Source: Primary data**

The highest numbers of respondents (80%) were married followed by respondents who were single (8%). Some of the respondents were divorced (7%) and others were widowed (5%).

### 4.3 Parents' level of income and occupation

**Table 4.4 Showing classification of occupation**

Occupation	Frequency	Percentage (%)
Professional and managerial	10	16.7
Clerical and sales	25	41.7
Skilled blue-collar	15	25.0
Semiskilled and unskilled	10	16.7
Total	60	100

**Source: Primary data**

Majority of the respondents (41.7%) were those whose occupation is classified under clerical and sales. These respondents comprised of business men and women and market vendors.

25% of the respondents' occupations were classified under skilled blue jobs. Most of these respondents were masons (builders), carpenters, brick makers and tailors.

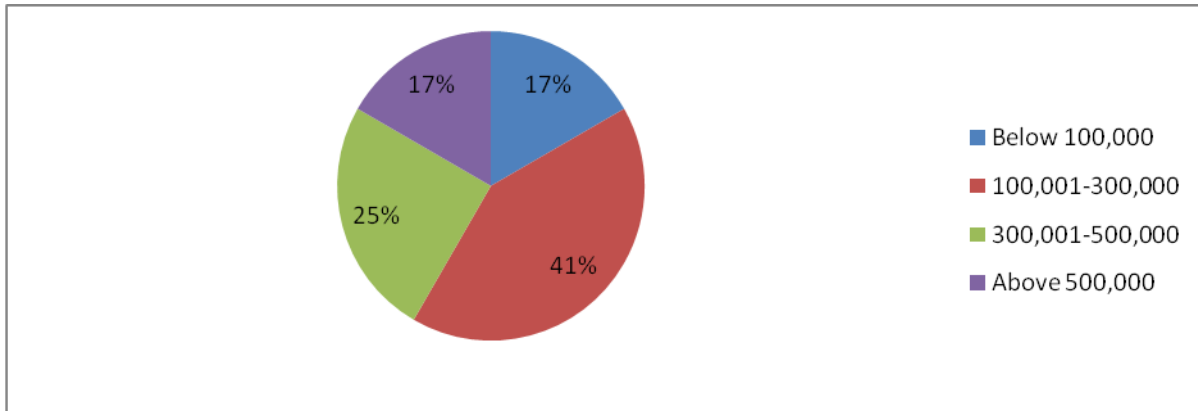
The number of respondents whose occupations were classified under professional and managerial was equal to those who were classified under semiskilled and unskilled with the least number of respondents comprising of 16.7%.

**Table 4.5 Showing distribution of respondents' salaries**

Salary scale	Frequency	Percentage (%)
Below 100,000	10	16.7
100,001-300,000	25	41.7
300,001-500,000	15	25.0
Above 500,000	10	16.7
Total	60	100

**Source: Primary data**

**Figure 3: Pie chart showing distribution of respondents' salaries**



**Source: Primary data**

The salaries of respondents were distributed as shown in the pie chart above with the highest number of respondents earning from 100,001 to 300,000 shillings comprising of 41%.

25% of the respondents earned from 300,001 to 500,000 shillings being the second highest among the respondents.

Respondents who earned below 100,000 and those who earned above 500,000 were equally distributed with 17% implying parents who earned the highest amount of money had the same number with parents who earned the least amount of money.

**Table 4.6: Showing respondents who encountered child mortality**

Response	Frequency	Percentage (%)
Yes	42	70
No	18	30
Total	60	100

**Source: Primary data**

From table 4.6, 70% of the respondents said yes when asked if they had ever encountered child mortality whereas 30% of the respondents said no.

**Table 4.7: Showing respondents' level of income against the count of a child lost or not.**

Income Level	Had lost a child before		Had not lost a child before		Total
	Frequency	Percentage	Frequency	Percentage	
Below 100,000	10	23.8%	0	0.0%	10
100,001-300,000	24	57.1%	1	5.6%	25
300,001-500,000	8	19.0%	7	38.9%	15
Above 500,000	0	0.0%	10	55.6%	10
Total	42		18		60

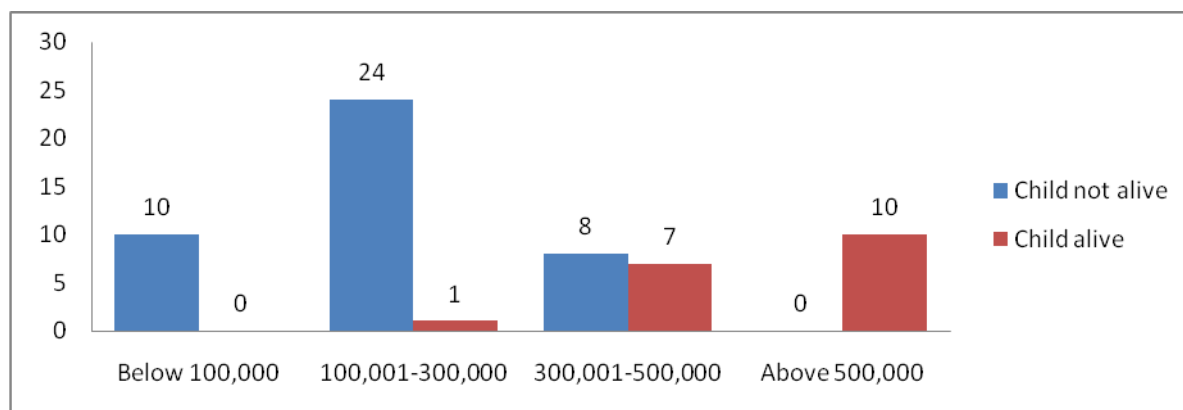
**Source: Primary data**

Table 4.7 is a cross tabulation for respondents' level of income against the count of a child being alive or not. 23.8% of the respondents who said they had lost a child before earned below 100,000 shillings, 57.1% of the respondents who had ever lost a child before earned from 100,001 to 300,000 shillings. 19% of the respondents who had ever lost a child before earned

from 300,001 to 500,000 shillings however, none of the respondents who earned above 500,000 shillings had ever lost a child.

This implies that the highest respondents who had lost a child before, were earning below 300,000 shillings hence parents level of income plays a bigger role in controlling child mortality. This is graphically illustrated in figure 4.

**Figure 4: Shows the distribution of respondents' level of income against the count of a child lost or not.**



**Source: Primary data**

Figure 4, above illustrates the tabulations in table 4.7 of the cross tabulations of income level of respondents against the count of a child being alive or not. This implied that respondents who earned 100,000 shillings or less lost more children than the respondents who earned above 500,000 shillings. This was because majority of the respondents who earned 100,000 shillings or less had mainly one source of income whereas those who earned above 500,000 shillings had other sources of income as well and this helped them to take

care of their children's' medical bills while sick unlike those who had little income and could hardly take care of their children's medical bills that explained the lower the level of income, the higher the rate of child mortality.

This also implies that there is a relationship between parents' level of income and child mortality.

**Table 4.8 Showing relationship between parents level of income and child mortality**

Response	Frequency	Percentage (%)
Strongly agree	31	51.7
Agree	21	35.0
Not sure	7	11.7
Disagree	0	0.0
Strongly disagree	1	1.7
Total	60	100.0

**Source: Primary data**

51.7% of the respondents strongly agreed that there is a relationship between parents' income level and child mortality, 35.5% agreed, 11.7% were not sure, none of the respondents disagreed and 1.7% of the respondents strongly disagreed.

#### 4.4 Level of education of house hold head

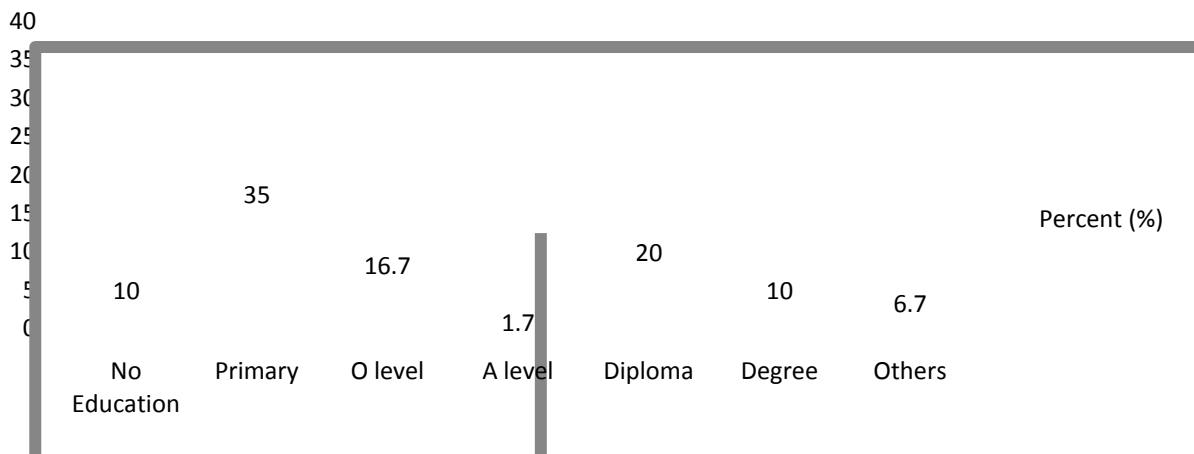


**Table 4.9 Showing level of education of respondents**

Education level	Frequency	Percent (%)
No Education	6	10.0
Primary	21	35.0
O level	10	16.7
A level	1	1.7
Diploma	12	20.0
Degree	6	10.0
Others	4	6.7
Total	60	100.0

**Source: Primary data**

**Figure 5 A graph showing respondents' level of education**



**Source: Primary Data**

Figure 5 represents the education attainment categories of the respondents. Basing on the graph above, 35% of the respondents had attained primary education, 20% had attained a diploma, 16.7% of the respondents had attained Ordinary level of education, 10% of the respondents had attained degree and those with no education were 10% while respondents who had other levels of education like Certificates and tertiary institutions were 6.7%, The least number of respondents had attained Advanced level of education (1.7%)

**Table 4.10: Showing the education level of the respondents against children lost or children not lost.**

Education Level	Lost a child before		Never lost a child before		Total
	Frequency	Percentage	Frequency	Percentage	
No education	6	14.3%	0	0.0%	6
Primary	21	50%	0	0.0%	21
O Level	10	23.8%	0	0.0%	10
A Level	1	2.4%	0	0.0%	1
Diploma	4	9.5%	8	44.4%	12
Degree	0	0.0%	6	33.3%	6
Others (higher)	0	0.0%	4	22.2%	4
Total	42		18		60

**Source: Primary data**

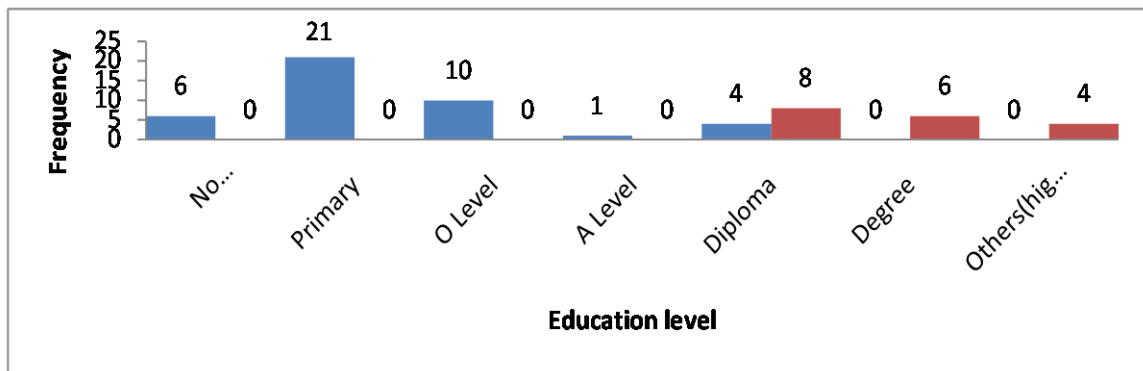
Of the respondents who had ever lost a child before, 14.3% had no education, 50% had attained primary education, 26.2% had attained secondary education, 9.5% had attained diploma

However, respondents who had attained degree and higher education had not lost any child.

Of the respondents who had never lost a child before, 44.4% had diploma, 33.3% had degree and 22.2% had others.

The highest level of child mortality being at primary level implies that a parent with low levels of education lacks the basic skills to look after their child or children when sick compared to those with a high level of education who had 0% loss of children. This can be graphically illustrated as in figure 6.

**Figure 6 Showing the distribution of education levels attained by the respondents against the count of a**



**Source: Primary data**

The bar chart in figure 6 is drawn from table 4.10. From figure 6, the respondents who had attained diploma, degree and higher education registered lower percentages of loss of children because they were better informed about precautions to take so as to ensure child survival. The mothers also had better knowledge on how to boost their children’s immunity.

On the other hand, respondents who were not educated attained primary education and secondary education registered a high percentage of loss of children.

It implies that the respondents in the households had little knowledge on how to prevent or treat their children from the various diseases that claimed their children such as malaria, pneumonia and even snake bites and poisoning.

The results in figure 6 imply that parents’ level of education has an effect on child mortality since respondents who had attained no education lost more children than those who had

attained some level of education. The higher the level of education the lower the rate of child mortality.

**Table 4.11 Showing respondents who read health related books**

Responses	Frequency	Percentage (%)
Yes	34	56.7
No	26	43.3
Total	60	100.0

**Source: Primary data**

From table 4.11, it is evident that majority (56.7%) of the respondents read health related books whereas the minority (43.3%) did not read health related books.

The response is agreeable since a number of respondents had attained some level of education meaning they were able to read literature of any type.

**Table 4.12 Showing extent to which reading health related books has helped improve the health of respondents' children.**

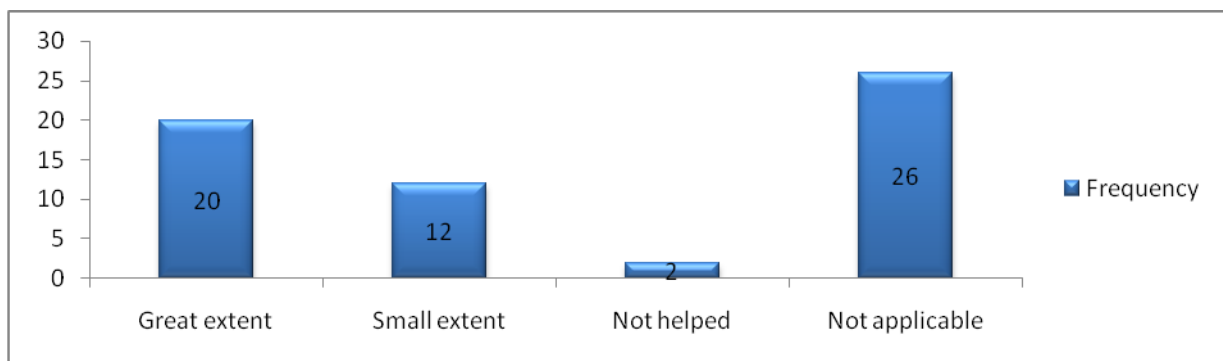
Responses	Frequency	Percentage (%)
Great extent	20	33.3
Small extent	12	20.0
Not helped	2	3.3
Not applicable	26	43.3
Total	60	100.0

**Source: Primary data**

Table 4.12 shows that health related books were irrelevant to 43.3% of the respondents. This is because they did not read health related books due to illiteracy; others felt it is not necessary to read such books while other respondents had no

interest generally in spite of the fact that they were literate. Whereas among the respondents who read health related books, the highest number (33.3%) said that it had helped them improve the health status of their children to a great extent. 20% of the respondents said it helped to a small extent and the least number (3.3%) said reading health related books was not of help to them as regards the improvement of the health status of their children. This can be graphically shown as below.

**Figure 7 A graph showing the extent to which reading health related books has been helpful.**



**Source: Primary data**

**Table 4.13 Showing distribution of respondents who received health education on child mortality**

Response	Frequency	Percentage (%)
Yes	51	85.0
No	9	15.0
Total	60	100.0

**Source: Primary data**

From table 4.13, it is evident that majority (85.5%) of the respondents received health education on child mortality whereas 15% of the respondents did not receive health education on child mortality.

The results were right since majority of the respondents took their children to hospital when they fell sick and that is where they are educated about child health by health workers, other sources of information included radios.

Meanwhile, a few of the respondents who were literate learnt about health education through the internet.

**Table 4.14 Does parents' level of education have an impact on child mortality?**

Response	Frequency	Percentage (%)
Strongly agree	29	48.3
Agree	23	38.3
Not sure	3	5.0
Disagree	3	5.0
Strongly disagree	2	3.3
Total	60	100.0

**Source: Primary data**

Majority 48.3% of the respondents strongly agreed when asked whether there is a relationship between parents' level of education and child mortality. 38.3% of the respondents agreed, 5% of the respondents were not sure, 5% disagreed and the least percentage 3.3% of the respondents strongly disagreed.

From table 4.14, since 86.6% of the respondents agreed to the fact that parents' level of education has an impact on child mortality, then it is true that parents' level of education has a significant impact on child mortality.

#### 4.5 Access to health care services

**Table 4.15 A table showing time taken to reach health facility/ hospital and child mortality**

Duration in minutes	Lost a child before		Never lost a child before		Total
	Frequency	Percentage	Frequency	Percentage	
0-30	2	4.8%	12	66.7%	14
30-60	10	23.8%	6	33.3%	16
60-90	30	71.4%	0	0.0%	30
Total	42		18		60

**Source: Primary data**

Table 4.15 shows that respondents who were staying near health units, in that it would take them at most 30 minutes to reach these units had the least percentage of loss of children with 4.8% while those who lived at a long distance from the health units in that it took them an hour and above to reach the health units registered the highest percentage of 71.4% loss of children in their families.

This shows that the distance of a household from a health unit plays a significant role in child mortality. This is because the results in the table 16 indicate that the more time respondents take to reach a health care facility, the more children they lose. And most of the respondents who live far from health care facilities do not have faster means of transport to bring their children when very ill. That explains the high number of children lost by respondents who stay far from hospitals and health care units.

**Table 4.16 Showing respondents with medical insurance**

Response	Frequency	Percent (%)
Yes	5	8.3
No	55	91.7
Total	60	100.0

**Source: Primary data**

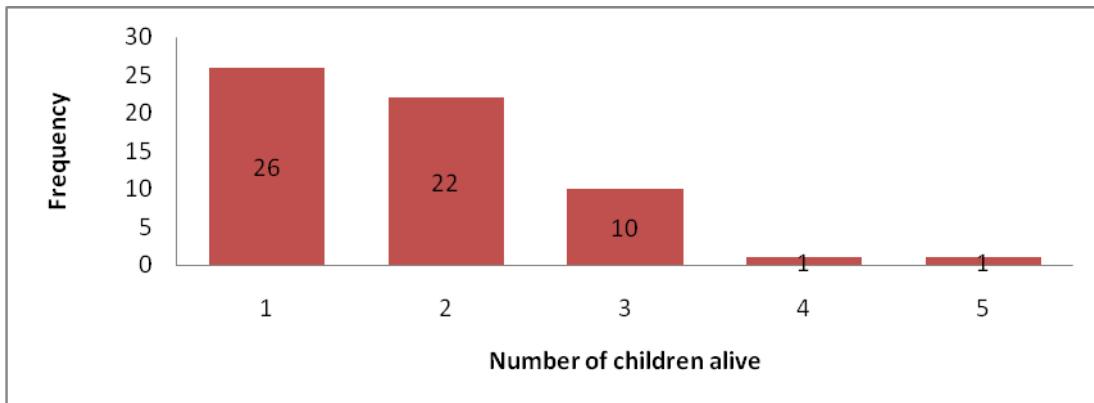
Majority (91.7%) of the respondents according to table 4.16 had no medical insurance and the least percentage (8.3%) of the respondents had medical insurance.

**Table 4.17 Number of children in a household from one to five years of age alive**

No of children(1-5) years	Frequency	Percentage (%)
1	26	43.3
2	22	36.7
3	10	16.7
4	1	1.7
5	1	1.7
Total	60	100.0

Source: Primary data

**Figure 8: A graph showing number of children aged 1 to 5 alive**



Source: Primary Data

From table 4.17, 43.3% of the respondents had only one child per household, 36.7% had 2 children per household, 16.7% had 3 children per household, 1.7% of the households had 4 children per household and 1.7% had 5 children per household.



**Table 4.18: A cross table showing expenditure on child/children's medical bill yearly and how often the children fall sick**

Expenditure on medical bill	How often respondents' children fall sick						Total
	Very often		Often		Rarely		
	Frequency	%	Frequency	%	Frequency	%	
10,000 below	0	0%	8	22.2%	6	40%	14
10,001-50,000	2	22.2%	17	47.2%	7	46.7%	26
50,001-100,000	5	55.6%	8	22.2%	1	6.7%	14
Above 100,000	2	22.2%	3	8.3%	1	6.7%	6
Total	9		36		15		60

**Source: Primary data**

9 of the respondents' children fell sick very often. In this category, none of the respondents spend from 10,000 and less on medical bills, 22.2% of the respondents spent from 10,001-50,000 shillings, 55.6% respondents spent from 50,001-100,000 and 22.2% respondents spent above 100,000 shillings.

36 of the respondents' children often fell sick. In this category, 22.2% of the respondents spent 10,000 shillings and less on medical bills, 47.2% of the respondents spent from 10,001-50,000 shillings, 22.2% respondents spent from 50,001-100,000 shillings and 8.3% respondents spent above 100,000 shillings.

15 of the respondents' children rarely fell sick. In this category, 40% of the respondents spent 10,000 shillings and below, 46.7% of the respondents spent 10,001-50,000 shillings, 6.7% of the respondent spent from 50,001-100,000 and 6.7% of the respondent spent above 100,000 shillings.

From table 4.18, the highest number of respondents spent from 10,001 to 50,000 shillings on their children's medical insurance whereas the least number of respondents spent above 100,000 shillings yearly. This is agreeable because most of the

respondents took their children to Nebbi hospital when sick and Nebbi hospital being a government hospital in most cases patients are not charged if at all they had to pay for their medical expenses then it would be minimal or affordable. However, a few (10%) of the respondents spent above 100,000 shillings because these respondents prefer to take their children to other hospitals that they feel have better services than Nebbi hospital and in most cases these alternative hospitals are more expensive.

The majority(43.3%) spent between 10,001 and 50,000 shillings only yearly because when asked whether the hospital or health centres they go to provided charity care, (74.6%)responded yes and (25.4%) responded no. these respondents said they opted for the government hospital (Nebbi hospital) because they learnt about the charity offered in these hospitals through radio, others got to know by looking at posters on the hospital notice board when they go to visit their relatives and friends and other people were told by their local leaders such as the village health team (VHT).

**Table 4.19: A relationship between access to health care and child mortality**

Response	Frequency	Percentage (%)
Strongly agree	25	41.7
Agree	34	56.7
Not sure	1	1.7
Disagree	0	0.0
Strongly disagree	0	0.0
Total	60	100.0

**Source: Primary data**

The biggest percentage 56.7% of the respondents agreed when asked whether there is a relationship between access to health care services and child mortality.41.7% of the respondents strongly agreed and 1.7% of the respondents was not sure. However, none of the respondents disagreed or strongly disagreed.

#### 4.6 Correlation between independent and dependent variables

Correlation was carried out between dependent variable (number of children dead) and independent variables that included level of parents' income, level of parents' education and distance/time taken to reach health facility and the results in the following tables were obtained. The criterions used in the correlation analysis were as follows:

Its data ranges from 0 to 1 that is  $-1 \leq R < 1$  between two data sets

-1 there is a perfect negative correlation

-1 to -0.5 there is a strong negative correlation

-0.5 to 0 there is a weak negative correlation

0 there is no correlation

0 to 0.5 there is a weak positive correlation

0.5 to 1 there is a perfect positive correlation

**Table 4.20 Correlation measures between parents' level of income with child mortality**

	Income level	Children dead
Income level	1.000	
Children dead	0.6710	1.0000

**Source: Primary data**

Considering table 4.20, there is a strong positive correlation (0.6710) between parents' level of income and child mortality hence parents level of income has an impact on child mortality.

**Table 4.21 Correlation measures of parents' level of education and child mortality.**

	Education level	Children dead
Education level	1.000	
Children dead	0.5621	1.0000

**Source: Primary data**

Basing on table 4.21, the correlation between parents' level of education and child mortality was recorded as 0.5621 indicating there is a strong positive correlation between parents' level of education and child mortality, in that the higher the education level of the parent, the lower the mortality rate.

**Table 4.22 Correlation measures of access to health care services and child mortality**

	Distance	Children dead
Distance	1.0000	
Children dead	0.5311	1.0000

**Source: Primary data**

From the table 4.22, there is a strong positive correlation between access to health care services and child mortality. It is indicated by the figure 0.5311, in that the longer the distance is from a health centre, the higher are the chances of losing a child.

**4.7 Conclusion**

In conclusion, chapter four, was about presentation and discussion of findings, basically the findings were presented at the univariate and bivariate levels by use of frequencies, percentages, pie charts, bar graphs, cross tabulations and correlation were carried out between the independent and dependent variables. The results from the correlation show that the hypotheses the researcher stated in chapter one are true.

## **CHAPTER FIVE**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents the general conclusion about the study based on the literature and research findings. It also gives various recommendations for the end users and other researchers in the future to completely root out the cause to the problem which in this case is child mortality. The conclusion was handled objective by objective as shown below starting with general information about respondents.

#### **5.2 Conclusions**

##### **5.2.1 General information about respondents**

Majority of the respondents were male. This was because the fathers in households were more willing to fill in the questionnaires compared to the women since most of the women who were given questionnaires expected the researcher to give them money despite the fact that it was clearly explained that the research was for academic purposes.

In spite of the fact that the respondents' ages ranged from 15 to 49, majority of the respondents were aged from 26 to 35 years. This was because the respondents believed that it is better off to get married at around that age because one is more mature and can take care of their children and act more responsibly.

The highest number of the respondents was that of those who were married implying that there were low rates of death, divorce and very few children were born out of wedlock.

### **5.2.2 Parents' level of income and child mortality**

Parents' income level was one of the factors that had an effect on child mortality. From the findings, parents' level of income had a strong positive relationship with child mortality. This indicated that decreasing income level of parents would lead to increase in child mortality and vice versa. Since respondents who earned 500,000 shillings and below lost more children than those who earned above 500,000 shillings.

Majority of the respondents also agreed that there is a relationship between parents' level of income and child mortality and this corresponded to the findings in chapter four. The response was so because these respondents had their experiences and made their conclusions basing on that.

### **5.2.3 Parents' level of education and child mortality**

Parents' education level has a great influence on child mortality. In this research, most parents had attained primary education and fewer parents had attained higher education levels. With low qualifications in education, parents are less aware of the childhood conditions that could affect their children. For instance parents who have no level of education may not be aware of how often or when to take their children for immunization, which foods are best for their children and many other techniques that may be helpful for a child's development and health but are attained at higher levels of education. Therefore, children born to parents who attained no level of education stand lower chances of surviving through their childhood.

On the other hand, highly educated parents have increased knowledge on how to handle their children's health issues. They are also more willing to take their children to better hospitals so as to have their children survive throughout their childhood. Highly educated parents are better informed on how to raise their children healthily.

There were more respondents who read health related books than those who did not read health related books despite the fact that most of the respondents had not attained higher education levels this implied that parents in households had positive attitude towards the health of their children. However, some of

the respondents said reading the health related books did not help improve the health of their children implying the books were not actually helpful.

The research found out there is a positive correlation between parents' income level and child mortality implying that parents' level of education has an impact on child mortality.

#### **5.2.4 Parents' access to health care services and child mortality**

Most of the respondents in the rural areas of Nebbi Town council had a long stretch of distance from their homes to the hospital or medical centres since most of them reported they took an hour and above to reach the nearest medical health centres. This indicated that parents with a child who needed immediate attention would risk losing his or her child because of the burden of the distance to the medical centre

For the case of medical insurance, most of the respondents had no medical insurance. This was because of the type of work most of the respondents were involved in that is to say semiskilled and unskilled jobs that did not generate enough income for them to pay for the medical insurance. However, a very small percentage had medical insurance this was because these particular respondents were given medical insurance by the organizations they worked for.



The researcher found out that parents whose children fell sick often and very often spent more money on medical expenses than parents who had children that rarely fell sick. This was because the more times the children fell sick, the more money the parents had to spend.

Majority of the respondents agreed that there is a relationship between access to health care services and child mortality. Only one respondent was not sure whether there is a relationship between access to health care services and child mortality whereas none of the respondents disagreed that there is a relationship. The correlation carried out by the researcher showed that there was a strong positive correlation between access to health care services and child mortality as per chapter four.

### **5.3 Recommendations**

Basing on the fact that the research found out that the lower the parents' income, the more their children are likely to die. The researcher advocates for more employment opportunities to be created so that parents are able to generate more income.

In addition, parents should also be offered capital to start their own businesses especially the market vendors. They should also be taught entrepreneurial skills such that they get reasonable and sustainable profits.

Furthermore, the researcher also suggests that parents should plan well for their income such that they are able to meet their children's medical bills.

As earlier discovered, that parents who had no education level lost more children than those who attained some level of education, the researcher suggests that people should take education more seriously and if possible the government should intervene especially the mothers should be encouraged to go to school since mothers are the ones who spend most of their time with the children. The government can implement programs like adult education in which parents especially the mothers can enroll to achieve higher education hence increasing on knowledge relevant to raising their children. This is possible if finances for scholastic materials, fees and other materials that aid in the delivery of these services are provided by the government.

Following the fact that the research found out that most children died due to long distance from homes to health care facilities, the researcher advocates for decentralization of health service delivery since this would decrease the burden of the distance to health centres. Through the government, it could set up more health centres most especially in the rural areas where most people are challenged with distance to medical centers.

In addition, trained medical personnel can also be posted in these areas so as to improve on the quality of medical services provided. The government could also fund the health centers in rural areas with equipment like drugs, gloves, sterilized syringes and many more as this can help those who do not have medical insurance to get free or relatively cheap treatment.

Furthermore, more ambulances should be provided to help out those individuals who live far from health centers or hospitals. This would help to reduce on child mortality as well.

#### **5.4 Suggestions for further research**

The researcher sought further research should be carried out on a number of areas including;

Child health, poverty and morbidity in Uganda.

The effect of maternal child marriage on child mortality.

The impact of sanitation on child mortality.

War and famine, their impact on child mortality.

There are so many other areas to be researched on to help reduce child mortality in addition to what the researcher mentioned.

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**APPENDICES**

**Appendix I: Questionnaire (To be filled by parents in households)**

Dear respondent, I am Faith Ayungurwoth a student of Uganda Martyrs University Nkozi pursuing a degree in Bachelor of Science in Statistics and Mathematics. I request for your contribution towards my research on **"The Impacts of Parents' Socioeconomic Status on Child Mortality in Uganda a case study of Nebbi Town Council"**. Your responses will be treated for academic purposes only, with assurance that such information will not be used against you or any other person. Thanks for your generous contribution and cooperation.

**Instruction**

Please put a tick in the box in front of the objective that is most appealing to you for the closed ended questions and write your view in the spaces provided for the open ended questions.

**.SECTION A: Respondent's general information**

**Location**

**Town Council** .....

**Parish**.....

**Village**.....

1. What is your sex?

1. Male                       2. Female

2. How old are you?

1. 18-25 years       2. 26-30 years       3. 31-50 years

4. above 50 years

3. What is your marital status?

1. Single             2. Married             3. Divorced   
4. Widowed                             5. Other

**SECTION B: Parents' level of income and occupation**

4. What is your occupation? .....

5. In your opinion, how can your occupation be defined?

1. Professional and managerial     2. Clerical and sales   
3. Skilled blue-collar   
4. Semi skilled and unskilled

6. What is your salary scale?

1. Below 100,000   
2. 100,001-300,000   
3. 300,001-500,000   
4. Above 500,000

7. Do you have another major source of income?

1. Yes                             2. No

8. If yes, mention .....

9. What is your total monthly expenditure?

1. Below 50,000   
2. 50,001-150,000   
2. 150,001-250,000   
4. Above 250,001

**SECTION C: Level of Education**

10. What is your level of education?

- 1. No Education
- 2. Completed Primary
- 3. Completed O level
- 4. Completed A Level
- 5. Diploma
- 6. Degree
- 7. Others, specify .....

11. Do you read health related books?

- 1. Yes
- 2. No

12. If yes, to what extent has it helped you in improving the health of your child/ children?

- 1. Great extent
- 2. Small extent
- 3. not helped

13. Have you received any health education on child mortality?

- 1.
- 2. No
- Yes

14. If yes, from what source?

- 1. Books
- 2. Health worker
- 3. Radio
- 4. Others (specify).....

**SECTION D: Access to Health Care Service**

15. Do you have medical insurance?

- 1. Yes
- 2. No

16. How many children do you have below the age of 5?

.....

17. In any case, did you encounter any child mortality (below 5 years)?

1. Yes

2. No

18. If yes, how many children have you lost?  
.....

19. If known, what was the cause? .....

20. How often do your children below 5 years fall sick?

1. Very often

2. Often

3. Rarely

4. None

21. How much do you spend on your child's medical bill yearly?

1. Below 10,000

2. 10,001-50,000

3. 50,001-100,000

4. Above 100,000

22. How much time does it take to reach the health care facility or hospital that is closest to your household?  
.....

23. Given opportunity, would you take your child/ children to another hospital/health Centre while sick?

1. Yes

2. No

24. What happens to uninsured children who need hospital care?

i) .....

ii) .....

25. Does the hospital give charity care?

1. Yes

2. No

26. If yes, how do people find out about it?

i) .....

ii) .....

27. Do people without insurance get bills from the hospital/health care?

1. Yes

2. No

28. What happens if they can't pay the bill?

i) .....

ii) .....

29. Suggest ways in which health services can be made more accessible

i) .....

ii) .....

Tick appropriately for the following:

30. There is a relationship between parents' level of income and child mortality.

1. Strongly  agree

2  Agree

3. Am not sure

4. Disagree

5. Strongly disagree

31. Parents' level of education has an impact on child mortality.

1. Strongly  agree

2. Agree

3. Am not sure

4. Disagree

5. Strongly disagree

32. There is a relationship between access to health care services and child mortality.

- 1. Strongly agree
- 2. Agree
- 3. Am not sure
- 4. Disagree
- 5. Strongly disagree

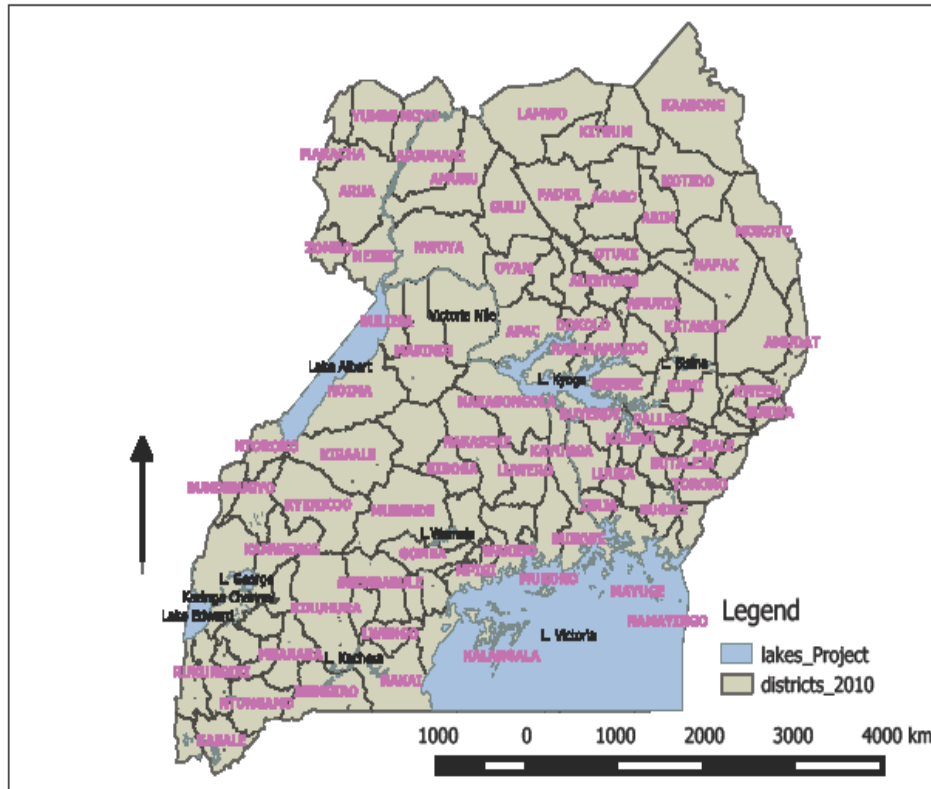
33. In your opinion, what should be done to reduce child mortality rate?

- i) .....
- ii) .....

***Thank you for your time***

Appendix II: A map of Uganda showing districts.

**MAP OF UGANDA SHOWING DISTRICTS**





Appendix III: Map of Nebbi District showing the wards where the study was conducted

**NEBBI DISTRICT MAP SHOWING THE WARDS WHERE THE STUDY WAS CONDUCTED**

