

# **KIBOGORA POLYTECHNIC**

**FACULTY OF HEALTH SCIENCE**

**DEPARTMENT OF GENERAL NURSING**

## **ASSESSING THE KNOWLEDGE AND PRACTICES OF PARENTS REGARDING THE FIRST 1000 DAYS OF BABY'S LIFE AT KIBUYE HEALTH CENTER**

**Case Study: Kibuye Health Center, Bwishyura sector, Karongi district**

**Period: 2/5/2022-8/8/2022**

A research paper submitted in partial fulfillment of the requirements for the bachelor's degree with honor in General Nursing Sciences.

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**DECLARATION**

Declaration by the Candidate

We URISANGA Flora Honoris, and UZABAKIRIHO Evanys hereby declare that this is our own original work and not a duplication of any similar academic work. It has therefore not been submitted to any other institution of higher learning. All materials cited in this paper which are not our own have been duly acknowledged.

Signed..... Date.....

Signed..... Date.....

Declaration by the Supervisor

We declare that this work has been submitted for examination with approval of KP Supervisor

SUPERVISOR’S NAME:Mr, NGIRINSHUTI Vedaste

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## **ABSTRACT**

**Background:** Many physical illnesses and behavioral problems in adulthood have their roots in childhood, especially in the first thousand days. This study aimed to examine the awareness of parents concerning the “first thousand days of life.

**Problem Statement.** The continued burden of child mortality represents an enormous loss of life, in 2020 , The 5.0 million deaths among children under 5 that occurred in the 12 months of life. .In Rwanda, 38% of children aged under 5 are stunted, preventing them from reaching their full potential in cognitive, motor, language and socio-emotional skills.

**Objectives:** This study is aimed at assessing the level of knowledge and practices of parents during first 1000 days of baby’s life.

**Methodology:** This study was conducted on 150 parents at Kibuye health center within 3 months, using a valid and reliable questionnaire, demographics characteristics was examined. Chi-square was used to examine the relationship between education level and parents’ awareness of first 1000 days and their practices. By using a cross sectional descriptive research design and using a quantitative approach .

**Results:** The distribution of respondents according to their knowledge about first 1000 days. only 24 %( N=34) were familiar with first 1000 days and know exactly what it describes, 42.7% (N=64) were aware with some confusion, while 14 %( N=21)% responded that they have never heard that information. About nutrition,46% strongly agreed that diet during pregnancy programs enhance baby’s health forever. The level of education shows that 5(45.45.7%) were very familiar with first 1000 days and knows what it describes. the occupational of parents shows that 52.63% of level of knowledge.

**Conclusion and recommendations:** Findings revealed that knowledge of parents about first 1000 days is still low and most activities are being practiced well but most of them routinely following them as policies of government without knowing their rationale. We recommend that knowledge of parents about first 1000 days should be increased through community education and teachings by caregivers.

**Keywords:** First thousand days of life, knowledge, Practice, Child health

## **DEDICATION**

To Almighty God

To our husbands, parents who supported us during our studies.

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

**AIDS:** Acquired Immunodeficiency Syndrome

**ANC:** Antenatal care

**ARVT:** Anti Retro Viral Therapy

**CDCHU:** Center for the Development Child at Harvard University

**GBD:** Global Burden of Disease

**GDP:** Gross Domestic Product

**HIV:** Human Immunodeficiency Virus

**IQ:** Intelligence Quotient

**MOH:** Ministry of Health

**NISR:** National Institute of Statistics of Rwanda

**PMTCT:** Prevention from Mother to Child Transmission

**RDHS:** Rwanda Demographic and Health Survey

**SDG:** Sustainable Development Goals

**TB:** Tuberculosis

**U5MR:** Under- Five Mortality Rate

**UNICEF:** United Nations for International Infants' Found

**VCT:** Voluntary Counseling and Testing

**WHO:** World Health Organization.



## **CHAPTER ONE: INTRODUCTION OF THE STUDY**

### **1.0 Introduction**

This chapter presents the background, problem statement of the study, purpose, research objectives and questions, significance of the study, limitations, as well as the scope of the study.

### **1.1. Background**

According to the World Health Organization, many physical illnesses and behavioral problems in adulthood have their roots in childhood, especially in the first thousand days. The “first thousand days of life” includes nine months of intrauterine life (270 days) and the first two years of a child’s life (730 days), Bagheri et al, 2021). It is the most affected and vulnerable period in the physical and cognitive development of each individual due to their rapid growth and development, high nutritional needs, susceptibility to infection, and complete dependence on others for treatment, nutrition, and social interaction. All the events that occur in these thousand days for the fetus or children could influence some crucial aspects of their lives including their adulthood health.(Bagheri et al. 2021 ,Manoj Jhalani 2018).

The term “1000 days” was probably first used in 2010. Since the first thousand days of life is an opportunity for human development and the best time to invest in improving health, future prosperity, and the boost of countries’ economies by having a healthier community, it is referred to as a golden period and has recently become one of the public health priorities for policy makers (Bagheri et al. 2021).

Several studies have addressed the effect of educational interventions, on parent’s knowledge and awareness about parenting. Parental education has been found to be positively associated with child health and survival in low- and middle-income countries. The context in low- and middle-income countries has changed with improving child health and increasing education, as well as related factors. These changes may have implications for the observed association. (Omar Karlsson, Jan-Walter De Neve, S V Subramanian 2016)

Globally under-5 mortality rate (U5MR) fell to 37 (35–40) deaths per 1000 live births in 2020, children in sub-Saharan Africa continued to have the highest rates of mortality in the world at 74

(68–86) deaths per 1000 live births- 14 times higher than the risk for children in Europe and North America,

The leading causes of death in children under 5 years are preterm birth complications, birth asphyxia/trauma, pneumonia, diarrhea and malaria, all of which can be prevented or treated with access to affordable interventions in health and sanitation.

The study conducted in Rwanda in 2018 on causes of deaths and childhood mortality founded that the factors associated with neonates' deaths are home delivery, multiple gestation birth, mothers' non-use of family planning, barriers to care including lack of accompanying person, lack of adequate vaccination, low maternal education level. (Felix Peter *BMC* 2018)

This study despite significant health system improvements and rapid declines in childhood mortality in Rwanda, a large proportion of child deaths in this study occurred at home. While there was a high proportion of facility-based deaths for neonates, home deliveries still represent a major risk factor for neonatal death. Significant financial and care-seeking barriers remain with a high proportion of deaths occurring outside of the health system for non-neonates, which present clear targets for focused interventions at both the community and health facility levels (*BMC Public Health*, 2018).

Malnourished children, particularly those with severe acute malnutrition, have a higher risk of death from common childhood illness such as diarrhea, pneumonia and malaria. Nutrition-related factors contribute to about 45% of deaths in children under 5 years of age. (WHO Africa 2015).

## **1.2. Problem Statement.**

The continued burden of child mortality represents an enormous loss of life, in 2020 alone, 5.0 (4.8–5.5). Half of those deaths, 2.4 (2.2–2.6) million, occurred among newborns. Moreover, most of these deaths were preventable. The 5.0 million deaths among children under 5 that occurred in the 12 months of life .(WHO, 2020)

An estimated 20% of stunting could have its origins in the foetal period, with a mother who herself is not getting enough nutrition to support her baby's growth and development during pregnancy (First 1000 days project, baseline survey report, May 2018)

In Rwanda, 38% of children aged under 5 are stunted (DHS 2015) preventing them from reaching their full potential in cognitive, motor, language and socio-emotional skills. In 2021 in

Bwishyura sector, 2% of children under 5 years were stunted as reported by health social worker's surveys.

### **.1.3 Purpose of study**

Recognizing that children are part of a family, Child health completely dependent on their parents, families to promote their well-being and health. Therefore, as country move forward to implement child protection programs,

We hope that this study will stimulate further thought, information, a change in the attitude and knowledge of parents can have a positive effect on parenting, in the goal of improving good health, growth, cognitive and emotional development in children in one thousand days of life.

### **1.4. Objectives of the Study**

#### **1.4. 1. Main Objective**

This study aimed to examine the knowledges and practices of parents concerning the "first thousand days of life.

#### **1.4.2. Specific Objectives**

I. To assess the level of knowledge of parents about first 1000 days of baby's life at KIBUYE health center

II. To identify the practices of parents in 1000 days of baby's life

III. To identify the impact of good practices during 1000 first days on child development

### **1.5 Research question (general)**

What are the level of knowledge of parents about first 1000 days at KIBUYE health center?

#### **1.5.1 Research question (specific)**

1. What are parents' levels of knowledge about 1000 days at KIBUYE health center?

2. What are the practices of parents in the first thousand days of life

And practices about first 1000 days?

3. What are the impacts of good practices of first 1000 days on child development?



## **1.6 significance of the study**

### **1.6.1 For the researchers**

The accomplishment of this research will contribute to the award of bachelor's degree of nursing.

### **1.6.2 For the health sector local leaders, other health stakeholders and parents**

First of all, through the findings from this research, Karongi district health workers will get knowledgeable about the role of the knowledge and practices of parents regarding the first 1000 days of baby's life. Health sector local leaders and other health stakeholders will get knowledge on how to plan with respect to the knowledge and practices of parents for the sensitization of baby care for the first 1000 days, and parents will have information on parenting for 1000 days of baby 's life.

### **1.6.3 For health policy makers**

The government will benefit from the findings of this research, as the overseer of all health matters in the country. Through the ministry of health (MoH), the challenges that may be faced by Members of community will be addressed. Second, this study will help all health stakeholders to have a better legibility of the situation by implementing the recommendations suggested at the end of this research.

### **1.6.4 For the university and other researchers**

The findings of this research will be referred to by other students either in master's or bachelor program. Besides, this research will be used by future research researchers as baseline, especially researchers in health sectors.

## **1.7 Limitations of the study**

Although this research is at initial stage, we are meeting different problems and barriers.

The problem relating to ICT accessibility due to the internet connection is hindering the carrying out of this research. This is relatively reducing our working pace and timely reporting. As we combine work and studies to manage to meet the deadline provided for reporting will be challenging. In other words, the time issue is impeding the research activities compared with the research work load and schedule.

## **1.8 Scope of the study**

### **1.8.1 Geographical Scope**

This research will be carried out on Kibuye health center, in Bwishyura sector, Karongi District, Western province in Rwanda. This health center has a mission of providing primary health care. It has the following services: administration services, accounting, consultation, laboratory, pharmacy, maternity, hospitalization, minor surgery, family planning, vaccination program, prenatal consultation, and prevention of mother to child transmission of HIV/AIDS (PMTCT), postnatal consultation, voluntary counseling and Testing (VCT), nutrition, antiretroviral therapy (ARVT), and hygiene service.

### **1.8.2 Content Scope**

The research intends to assess the knowledge and practices of mothers regarding the first 1000 days of baby's life at Kibuye health center.

### **1.8.3 Time scope**

The research will be carried out referring to relevant information about the knowledge and practices of mothers regarding the first 1000 days of baby's life at Kibuye health center from 2/5/2022-8/8/2022.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.0. Introduction**

This chapter highlights the theoretical literature, empirical literature, critical review and research gap identification, theoretical framework, conceptual framework and summary.

### **2.1. Theoretical literature**

#### **2.1.1. Definition**

##### **First 1000 days**

First 1000 days is referred as the time from conception, through pregnancy, birth, and up until a child's second birthday (Sullivan, 2014).

##### **Knowledge**

Knowledge refers to the required information to perform a task as well as the capacity to apply it back in the work situation (Wang & Noe, 2010). Anand & Singh (2011), stressed that knowledge is all about what we know but also is referred to theoretical and practical learning that an individual acquires over a period of time. In my study, the term knowledge will be indicating all parents' information or awareness about first 1000 days initiatives.

##### **Practice**

Practice: is the actual application or use of an idea or a method as opposed to theories about such application or use (Oxford Dictionary of English, 2001).

##### **Child health**

Child health is a state of physical, mental, intellectual, social and emotional well being and not merely the absence of disease or infirmity (health workgroup, 2007)

### **2.1.2. The power of parent's knowledge about the first 1000 days**

The “First 1000 Days” are a period of rapid physical growth and accelerated mental development and offers a unique opportunity to build lifelong health and intelligence. Remember that the baby in the womb is dependent on the mother for nutrition as well as mental, physical and emotional growth. What you do, as parents, in the first 1000 days makes a difference to the rest of your baby's life. (UNICEF, 2013)

The First 1000 Days between a woman's pregnancy and her child's second birthday offers a unique window of opportunity to shape healthier and more prosperous futures (1,000 Days 2014). In recent years the perceived importance of the First 1000 Days has gained traction as new evidence emerges as to the impact of maternal nutrition on brain development, the neuroscience of infants, the long-term impacts of early childhood experiences such as stress permanently affecting characteristics usually considered genetic ('epigenetics'), and the capacity of infants to begin structured learning earlier than previously supposed (Arabena 2014).

A baby or foetus exposed to toxic stress can have their responses to stress distorted in later life. Such early stress can come from the mother suffering from symptoms of depression or anxiety, having a bad relationship with her partner or from an external trauma such as bereavement (CDCHU 2011).

According the study on assessment of parents 'awareness (Fatemeh Bagher 2021), the demographic information of the participants is shown that the age of the participants ranged from 19 to 48, with a mean of  $29.81 \pm 5.24$ . Fifty percent of the participants were younger than 30, and 83% of them were women. Most of the participants (71%) and their spouses (65%) had an academic degree. Approximately half of the participants (48%) had a child under the age of two and the other half (52%) were expecting or planning to have a child. The majority of the participants (83%) stated that they had never heard the phrase “the first thousand days of life.” Eighty-seven percent of the participants wanted more information concerning this period. (Fatemeh Bagher, 2021)

### **2.1.3. Antenatal care and early childhood as practice of parents in 1000days**

Antenatal care (ANC) consists of monitoring maternal newborn and child's health (WHO, 2011). The increase in knowledge, behavior and the lifestyle of a pregnant woman has a significant impact on the unborn child (WHO, 2003). Therefore, expectant mothers attend ANC and receive support to ensure their health as well as the healthy development of the unborn child (Beckman & James, 2007). Antenatal care is how interventions with proven effectiveness are delivered to pregnant women, including health promotion, screening, risk assessment, and treatment. In Rwanda, women are aware of the need to seek ANC. Expectant mothers are ordinarily visited by a community health worker. These are people who, in addition to their day-to-day personal activities, help communities by disseminating health information and treating common ailments, such as malaria, coughs and flu (UNICEF, 2014).

To be effective, antenatal care must be sought early in the pregnancy and, more importantly, must continue regularly through to delivery. The World Health Organization (WHO) recommends at least four ANC visits at regular intervals throughout the pregnancy, as does the Rwandan health system. It is common for an expectant mother to be visited by a community health worker several times and the advice given during such sessions includes guidance to visit an antenatal clinic every three months, to eat healthy food, to engage in activities that will exercise their bodies without overly straining them, and to sleep under insecticide-treated mosquito nets. All this advice helps to protect the health of the mother and of the unborn child (UNICEF, 2013). An expectant mother also needs to be cared for. This responsibility generally falls upon the unborn child's father, who, in most cases is the husband of the expectant mother. The father should provide an environment that enables the proper care of the mother and of the unborn child. It is also known that the emotional condition of the mother has an effect on the physical and emotional health of the child even after birth (Rebecca, 2011).

### **2.1.4 post-natal care for new born and mothers**

The days and weeks following childbirth—the postnatal period—are a critical phase in the lives of mothers and newborn babies.

Women in the postnatal period need to maintain a balanced diet, just as they did during pregnancy. Iron and folic acid supplementation should also continue for 3 months after birth. Women who are breastfeeding require additional food and should drink sufficient clean water. You should spend more time on nutrition counselling with women who are very thin and with

adolescents who may need additional information to help them get a balanced diet. In some cases you may need to refer women to a nutrition counsellor, where available. It is important to note that poverty may prohibit women from accessing certain foods. (WHO 2013)

## **2.2 Empirical literature**

### **2.2.1 Review of past studies Global**

Worldwide, it is estimated that more than 200 million children under 5 years of age in developing countries do not attain their developmental potential (WHO, 2013). The cognitive and physical development of a child is influenced by the first 1000 days of life (Kattula, 2014). Additionally, brain development is rapid in the 1st 1000 days of life (UNICEF, 2014) and this, is also affected by biological factors, such as nutrition of the mother during pregnancy, breast feeding, childhood malnutrition (Kattula, 2014). Childhood infections, psychosocial factors, such as parental education, economic status and environmental exposures impact on children in their First 1000 days (Sarkar, 2014)

In 2015, more than 80% of the total 5.9 million under-five deaths were estimated to have occurred mostly from easily avoidable causes like pneumonia, diarrhea, and malaria in developing countries. (WHO 2015).

### **Impact of good practice during 1000days of baby's life.**

Globally, almost one in four children are stunted; a chronic form of undernutrition which results from poor feeding practices, repeated infections, and inadequate consumption of key micronutrients which enable the child's body and brain to properly develop. Stunting indicates that a child is failing to thrive, and the effects of stunting – which include impaired brain development, weakened immune systems., and greater risk of cancer and diabetes later in life – are irreversible.

There for prevention of stunting is possible by improving nutrition for both mothers and children during the first 1,000 days of life: from conception through to the child's second birthday. This 1,000 day 'window of opportunity' has significant impact on the child's ability to grow, learn, and thrive; and has a lasting effect on a country's prosperity. (Save the children survey, May, 2018).

The effects of stunting last a lifetime, leading to impaired brain development, lower IQ, weakened immune systems and greater risk of diseases later in life.

### **2.2.2 Review of past studies in Africa**

Children in South Africa continue to die from preventable causes of death including pneumonia, HIV, TB and diarrhea - all of which are influenced by poor health seeking behavior, health care, infectious diseases, nutrition and hygiene of the pregnant mother and child during the first 1000 days. About half of all children dying in South Africa are HIV positive, 34 per cent have severe malnutrition, and 30 per cent are underweight. Neonatal deaths account for nearly 40 per cent of overall deaths of children under the age of 5. While access to prevention of mother to child transmission of HIV (PMTCT) services is nearly universal, retention in care, poor infant feeding practices, as well as challenges with immunization coverage continue to jeopardize the health

According to an estimate from GBD 2017 collaborates, even though numerous countries are on the track for achieving the target of SDGs at least 25 deaths per 1000 live birth by 2030, African countries would need to increase the annual rate of decline from 2015 to 2030 that two to ten times higher than what was recorded between 1990 to 2015 to meet the stated goals. Furthermore, recent studies conducted in East Africa (Rwanda, Burundi, and Tanzania) have indicated that child survival has been influenced by community socio-demographic factors, maternal and child health characteristics, environmental and behavioral factors U5MR is still highest in the WHO African countries (greater than 80 per 1000 live birth, about 7 times higher than the WHO European region 11 per 100 live births in high-income countries (DHS 2010-2018)

### **Socio- demographic characteristics**

This finding was supported by studies carried out in Cambodian, Nigeria, Egypt, and Eretria . The possible explanation for this finding is that children learn to crawl and walk and they experience exposure to pathogens that causes diarrhea from a variety of environmental sources, including contaminated water. It is also households often use unimproved water to prepare weaning foods; thereby transmitting pathogens to children that causes diarrheal disease which has been resulted in high mortality Sub-Saharan Africa (DHS, (2010-2018) The result of this study indicated that out of 370,237 under-five children 27,221 (7.35%) were died before celebrating their fifth birth year. Children's death depends on socio-demographic characteristics

of the respondents, child characteristics, obstetric and environmental factors. Hence, this study revealed that the hazard of death among under-five children decreased exponentially as the age of under-five children increase. This means that the survival probability was very low among newborns.

### **Critical gaps in nutrition Key challenges in child nutrition:**

Stunting remains a major concern. In 2015, Stunting rates are higher in rural than urban areas (41 per cent and 24 per cent, respectively). They are also higher in children whose mothers have no education (47 per cent) than in children whose mothers have secondary or higher education (19 per cent). Infant and young child feeding practices are sub-optimal. Only 30 per cent of children aged 6 to 23 months received food from at least four food groups (minimum dietary diversity); 47 per cent were feed with adequate frequency; and only 18 per cent were feed in accordance with all three minimum recommended infant and young child feeding practices. Children are less likely to be fed properly in poorer households and where the mother's education levels are lower (WHO, 2015)

### **2.2.3 Review of past studies in Rwanda**

The consequences of malnutrition should be a significant concern for policy makers in Rwanda, where 38 percent or 661,200 children under 5 years suffer from chronic malnutrition (stunting or low height-for-age) and 37 percent or 643,800 suffer from anemia, according to the most recent Demographic and Health Survey (DHS) (National Institute of Statistics of Rwanda [NISR] [Rwanda], Ministry of Health [Rwanda]).

In the 2014 study conducted by Ministry of Health and UNICEF Rwanda; it was reported that poor feeding practices and lack of child and maternal care is major problems. Indeed, more and more countries are scaling up Nutrition program to reach children healthy life during that critical first 1000days period and in a child's life (UNICEF Rwanda, 2014). Previous studies indicated that several factors, including limited accessibility of food, breastfeeding and poor nutrient intakes, contributed to stunting in Rwanda ,Stunting in the Eastern and Western provinces of Rwanda in 2010 was at 44% and 50% and by 2015 declined to 35% and 45%, (Rwanda,DHS,2015).The adjusted odds ratios for all identified potential risk factors for stunting in the Eastern and Western provinces. The multivariate analysis yielded similar results for the two forms of under nutrition: stunting and underweight. In the final model, the factors related to



the higher probability of being stunted and underweight were lower birth weight (<2.5 kg), being breastfed for 6 months or more, having a mother or father who was underweight or had short stature, and having a mother who had never attended formal education (Rwanda Demographic and Health survey 2014/2015).

### **Causal explanatory model for optimal nutrition and fetal and child development**

Shows the means to achieve optimal fetal and child growth and development. It describes the dietary, behavioral, and health determinants that lead to optimal nutrition, growth, and development, and how they are affected by the underlying food security, caregivers' resources, and environmental conditions, which in turn are shaped by economic and social conditions, national, and global contexts. After adequate development and nutrition are achieved, the following is expected to occur: (1) decreased mortality and morbidity in children; (2) an increase in cognitive, motor, and socio-emotional development; (3) increase in social performance and learning capacity; (4) increase in adult height and decrease in obesity and chronic-degenerative diseases; (5) and increased work capacity and productivity. Therefore, according to our perspective and based on the conceptual framework, actions must be implemented, particularly in the first 1000 days, at the individual and collective levels, aimed at promoting healthy nutrition



#### Major direct nutritional interventions

- |  |   |   |   |
|--|---|---|---|
| <ul style="list-style-type: none"> <li>• Maternal iron, folate, and multiple micronutrient supplementation</li> <li>• Calcium supplementation</li> <li>• Iodized salt</li> <li>• Interventions to reduce pollution of air in internal ambients and the use of tobacco</li> <li>• Deworming</li> <li>• Intermittent preventive treatment for malaria</li> </ul> | <ul style="list-style-type: none"> <li>• Exclusive and immediate breastfeeding</li> <li>• Delayed cord clamping</li> <li>• Vitamin A supplementation</li> </ul> | <ul style="list-style-type: none"> <li>• Exclusive breastfeeding</li> <li>• Handwashing and hygiene</li> <li>• Conditional cash transfer (with nutrition education)</li> <li>• Mosquito nets treated with insecticides</li> </ul> | <ul style="list-style-type: none"> <li>• Continued breastfeeding</li> <li>• Complementary feeding</li> <li>• Preventive zinc supplementation</li> <li>• Zinc use in diarrhea management</li> <li>• Vitamin A supplementation</li> <li>• Salt</li> <li>• Multiple micronutrient powder</li> <li>• Handwashing and hygiene</li> <li>• Treatment of severe acute malnutrition</li> <li>• Deworming</li> <li>• Iron supplementation and fortification</li> <li>• Conditional cash transfer (with nutrition education)</li> <li>• Mosquito nets treated with insecticides</li> </ul> |
|--|---|---|---|

## 2.5. Conceptual framework

The conceptual framework will be viewed in two variables which are independent and dependent variables and intervening variables

**Figure 1: Conceptual framework**

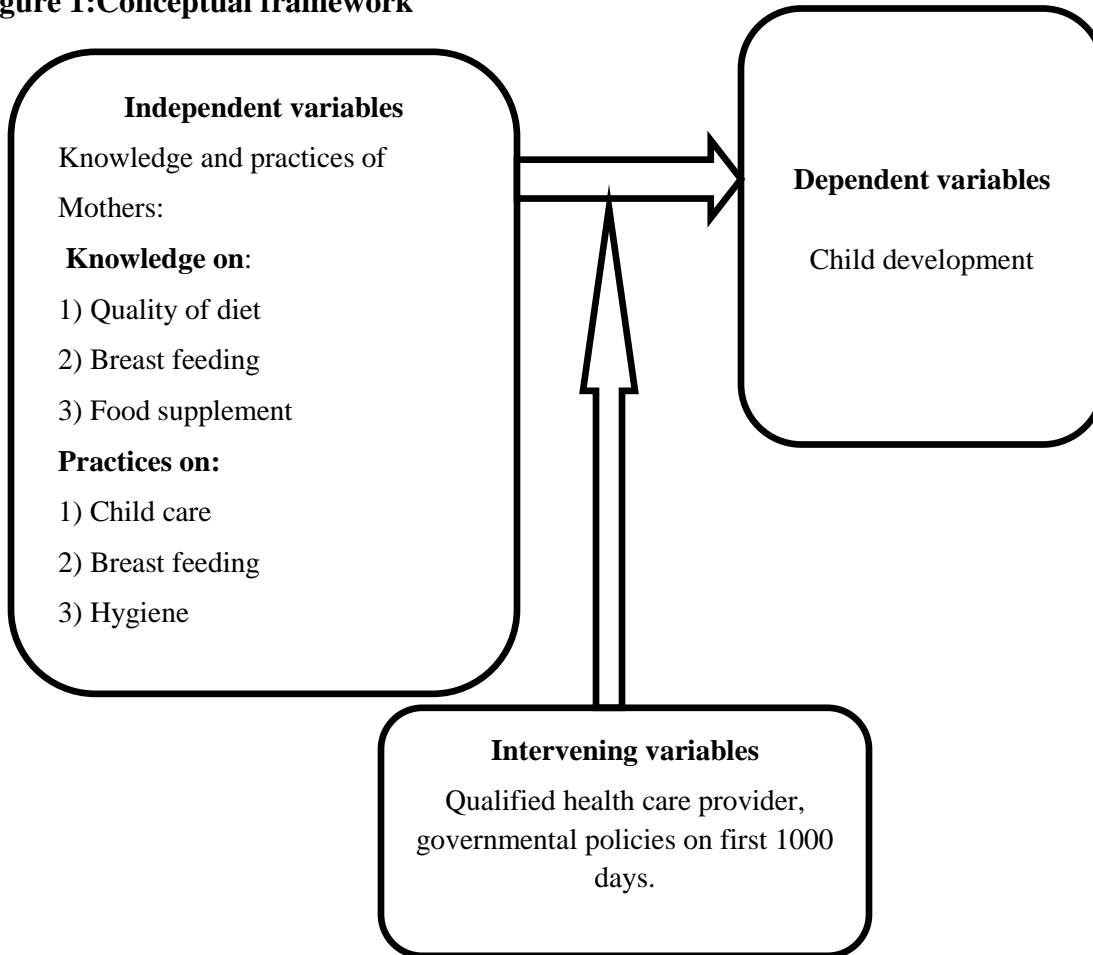


Figure1: shows, the factors influencing knowledge and practice of parents about first 1000days include healthy diet, breast feeding exclusively, food supplement, child care and hygiene as the factors influencing child development. the knowledge means refers to the required information to perform a task as well as the capacity to apply it back in the work situation and practice is the actual application or use of an idea or a method as opposed to theories about such application or use (Oxford Dictionary of English, 2001), while intervening variables includes qualified health providers and governmental policy.

## CHAPTER THREE: RESEARCH METHODOLOGY

### 3.0. Introduction

Methodology is about research design, target population, sample size and sampling technique, data collection procedure, data collection instrument, validity and reliability, data analysis procedure and ethical considerations.

### 3.1. Research Approach and Design

This study was conducted within 3months by using a cross sectional descriptive research design, using a quantitative and qualitative approach to assess parents' knowledge and practices in the first 1000 days...According to course of research methodology, the design examines a group of subjects in various stages of development, trends, patterns, and changes simultaneously with the intent to describe changes in the phenomenon across stages, and data on the selected variables are collected at a single point in time

### 3.2. Target population

The population will be parents who will attend antenatal care and in vaccination and PMTCT services at Kibuye health center for three months, involve 240 parents

**Table 1: Target population**

Category of Population	Number
Vaccination	120
Pregnant	80
PMTCT	40
Total	240

### 3.2. Inclusion and exclusion criteria

#### 3.2.1. Inclusion criteria

All parents, all pregnant women who will attend antenatal care, vaccination, and PMTCT and who listen and understand well one of the two languages, Kinyarwanda or /and English.

### **3.2.2. Exclusion criteria**

Parents of children aged more than two years were excluded.

### **3.3. Sample Techniques**

#### **3.3.1 Purposive sampling**

Purposive sampling is a technique of selecting the sample to represent a group of persons by referring to the people which are likely to have more information on the study (Palys, T,2008). In this study the researcher selected purposively parents attending antenatal, post-natal, PMTCT and services for their children at Kibuye health center because they are thought to have more information concerning our research focus.

#### **3.4 Sample size**

Sample size will calculate by using the formula of Taro Yamane where by the confidence

Level will be 95% with the precision level (e) of 5%, where;

**n:** is the sample size,

**N:** Is the population size, which is 240 mothers

**e:** is the level of precision which is 0,05

Therefore  $n=N \div 1 + N(e)^2$

Then  $n= 240/1+240(0.05)^2$

$n= 240/1.6=150$  which finally equals to 150(simple size)

### **3.5 Data collection methods and instruments**

#### **3.5.1. Questionnaire**

A questionnaire is a form comprising a series of questions to be answered by the respondent (Tripathi, 2007). The technique will allow wide coverage of collecting data within a short time and free expression of individuals. Both closed and open-ended questionnaires were organized to capture the quantitative information.

### **3.5.2 Interview**

Interviews are conversations between an investigator (interviewer) and a respondent (interviewees, informants or sources) in which questions are asked in order to obtain information. Interviews seek to collect data and narrative information in order to better understand the respondent's unique perspectives, opinions, and world-views (Denscombe, 1998).

In this research, the researcher given the interview to 6 parents who are unable to read and write

### **3.5.3 Documentary review**

Documentary review method is where a researcher collects information through reviewing existing documents.

### **3.5.4. Administration of data collection instruments**

The questionnaire will be in English and then translated into Kinyarwanda language. We will obtain permission from the management of KIBUYE Health Center. After getting the authorization, we will pass in concerned services and for concerned people. We will introduce our self to the participants and give them explanation about the research and the importance of their participation before giving them questionnaires as the participation will voluntary. Then give those questionnaires and those who will not able to read, we will ask questions and tick for them, after we will collect the Questionnaires.

### **3.6. Ethical issues**

To ensure the confidentiality of the information provided by the respondents and to ascertain the practice of ethics in this study, the following activities will be implemented by the researcher:

- 1) Seek permission to adopt the standardized questionnaire through a written communication,
- 2) The names of the respondents will be coded instead of reflecting them,
- 3) Solicit permission through a written request to the concerned officials of the selected sector in the study,
- 4) Acknowledge the authors quoted in this study and the author of the standardized instruments through citations and referencing.

### **3.7. Data Analysis**

During data analysis and interpretation, Data were analyzed in the computer using SPSS version 23 descriptive statistics will be used. Descriptive statistics are tabular, graphical, and numerical methods by which essential features of a sample can be described. Some computer software like Microsoft Excel and word will also be used to make calculations easy.

### **3.8. Reliability and Validity measures**

#### **3.8.1. Validity**

Validity is concerned with the way in which the researcher valued information from analysis and took into account what he observed. It was found that every item was meaningful. Besides, validity of research outcomes refers to extent to which what is observed reflects what was expected. This is manifested by the accuracy and authenticity of the method applied, and the potential for generalization this consideration will be used in this research.

#### **3.8.2. Reliability**

As for reliability, Kothari (2004:74) said that, a measurement instrument is reliable if it provides consistent results. While Bless and Higson (1995), defined it as, “accuracy or consistency of measurement. That is, the extent to which the results remain similar over different forms of the same instrument. Reliability is the level of internal consistency or stability of the measuring.” In this study, reliability is on how the results/findings should be consistent and stable.

## CHAPTER FOUR: ANALYSIS AND DISCUSSION OF FINDINGS

### 4.0. Introduction

This chapter highlights the demographic characteristics of respondents, presentation of findings and discussion of the result.

**Table 2: Demographic characteristics of respondents**

<b>Socio--demographic Characteristics</b>	<b>Classification</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Age</b>	20-24	32	21.3
	25-29	58	38.6
	30-34	37	24.7
	35-39	16	10.7
	40 and above	7	4.7
	Total	150	100
<b>Gender</b>	Male	18	12
	Female	132	88
	Total	150	100
<b>Marital status</b>	Married	99	66
	Illegal union	44	29.3
	Separated	7	4.7
	Widow/Widower	0	0
	Total	150	100
<b>Education level</b>	University	11	7.3
	A 'level	47	31.3
	O'level	22	14.7
	Primary	64	42.7

	No education	6	4
	Total	150	100
<b>Occupation</b>	Student	4	2.7
	Farmer	53	35.3
	Business	23	15.3
	Professional	19	12.7
	No occupational	51	34
	Total	150	100
<b>Being pregnancy</b>	Yes	47	31.3
	No	103	68.7
	Total	150	100
<b>Number of current children</b>	No child	17	11.3
	One	61	40.7
	Two or more	72	48
	Total	150	100
<b>Age of the youngest child</b>	No child	14	9.3
	0-5 months	88	58.6
	6-11 months	25	16.7
	12-23 months	13	8.7
	24 months	10	6.7
	Total	150	100

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Source: Kibuye health center primary data, 2022

#### **4.1 Demographic characteristics of respondents**

Table 2, demographic data, the results show that the majority of distribution of respondents are aged between 25 and 29 which are represented by 38.6% (N=58) and the minority is the age group of 40 years and above which is represented by 4.7% (N=7), the majority of respondents were female which represents 88% (N=132) while male were 12% (N=18). 66% (N=99) respondents are married which presents the majority party, most of respondents did primary



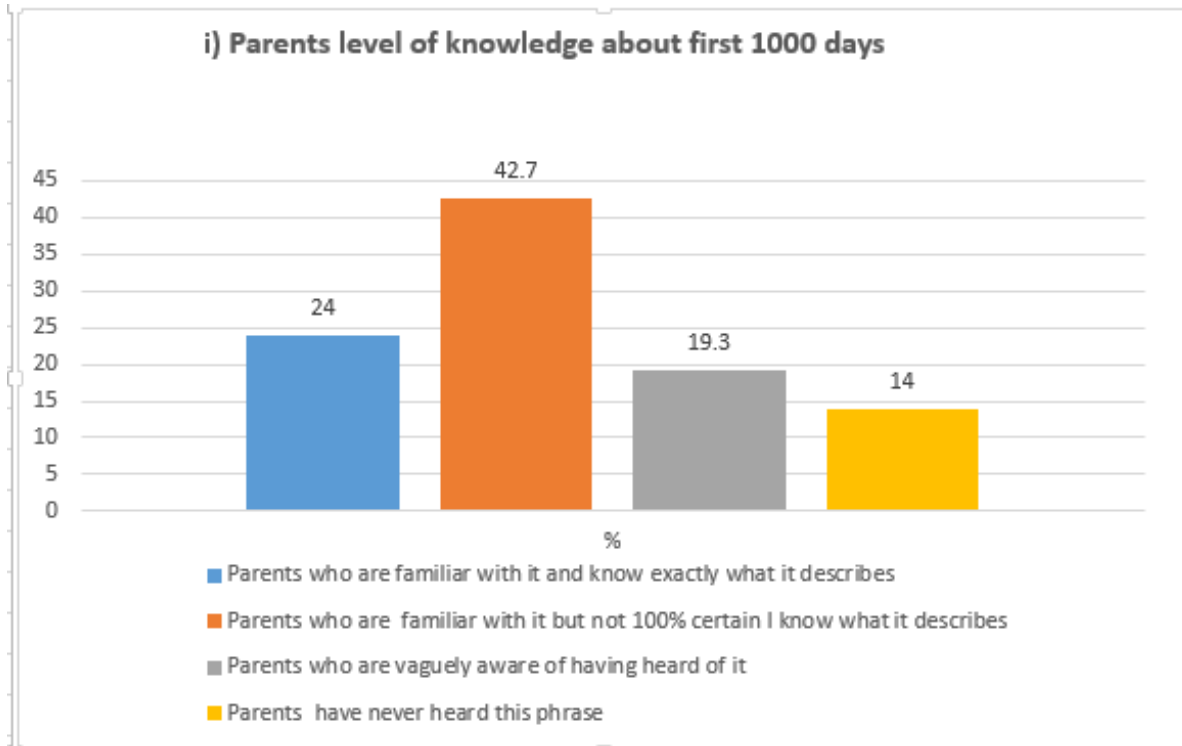
education only which represents 42.7% (N=64) while 4% (N=6) have no education level. And then, majority of respondents 35.3% (N=53) are farmers and a few of them 2.7% (N=4) are students.

**Table 3: Parents level of knowledge about first 1000 days**

i) Awareness of the parents on first <u>1000 days</u>	Level of knowledge	Frequencies	Percentages
	I'm very familiar with it and know exactly what it describes	36	24
	I'm familiar with it but not 100% certain I know what it describes	64	42.7
	I'm only vaguely aware of having heard of it	29	19.3
	I have never heard this phrase	21	14
	<b>Total</b>	<b>150</b>	<b>100</b>
ii) What is mostly associated with first 1000 days?	Nutrition in the first 1000 days affects a baby's health throughout its whole life	84	56
	The future health of baby's in the developing world can be significantly improved if they get the right nutrition in their first one thousand days	42	28
	The first one thousand days are a window of opportunity to shape a baby's future health	7	4.2
	None of these	17	11.3
	<b>Total</b>	<b>150</b>	<b>100</b>

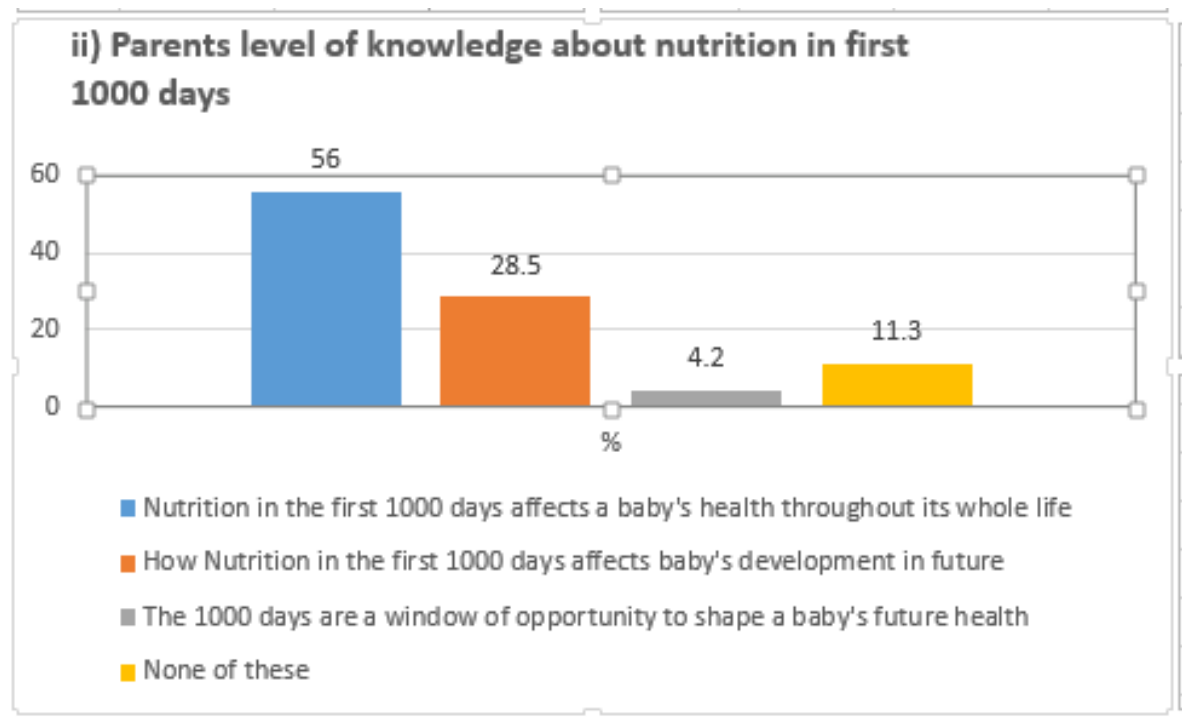
Source: Kibuye health center primary data, 2022

Bar chart1: demographic characteristics of respondents



Source: Kibuye health center primary data, 2022

Bar chart2: demographic characteristics of respondents



Source: Kibuye health center primary data,2022

## **4.2 Presentation of findings**

### **4.2.1 The level of knowledge of parents about first 1000 days.**

Table 3 and bars chart demonstrates the distribution of respondents according to their knowledge about first 1000 days. Among respondents, only 24 % ( N=34) were familiar with first 1000 days and know exactly what it describes, and 56% (N=84) know that nutrition in the first 1000 days affects a baby's health throughout its whole life .42.7% (N=64) were aware with some confusion, while 14 % ( N=21) % responded that they have never heard that information.

**Table 4: Parents level of knowledge about nutrition within the first 1000 days**

Nutrition during first 1000 days	I strongly agree with this statement and I'm determined to act upon the information completely	I agree with this statement and I try to act upon it as best as I can	I agree with this Statement but with the best will in the world, I don't think I will be able to act upon it	I don't really believe in this statement	I don't believe in this statement at all	Total
In the First 1000 Days your diet during pregnancy Enhances your baby's health forever.	69 (46%)	62(41.4%)	14 (9.3%)	3 (2%)	2(1.3%)	150(100%)
In the First 1000 Days, breastfeeding reduces your child's risk of being obese.	27 (18%)	44(29.3%)	11 (7.3%)	32(21.4%)	36 (24%)	150(100%)
In the First 1000 Days, introducing a healthy varied diet will improve eating habits for life	50(53%)	53(35%)	11(7.3%)	22(14%)	14(9.3%)	150(100%)
In the First 1000 Days, nutrition affects your child's Brain development forever.	71(47.3%)	39(26%)	11(7.4%)	14(9.3%)	15(10%)	150(100%)

Source: Kibuye health center primary data,2022

#### 4.2.2 Parents level of knowledge about nutrition within the first 1000 days

The table 4 shows that 46% strongly agreed that diet during pregnancy enhance baby’s health forever, 29.3% of respondents agreed that breastfeeding in the first 1000 days reduces child's chances of being obese, 35.3% agreed that introducing a child’s healthy varied diet in the first 1000 days will improve eating habits for life, and almost half of respondents (47.3%) strongly agreed that nutrition in the first 1000 days affects child's brain development forever

**Table 5: Education level and awareness of parents on the first 1000 days of baby’s life, cross tabulation**

Education value	Awareness of the parents on first 1000 days				X2	Df	p
					<b>46.63</b>	<b>12</b>	<b>0.000</b>
	I am very familiar with it and know exactly what it describes	I am familiar with it by not 100% certain, I know what it describes	I am only vaguely aware of having heard it	I have never heard this phrase	Total	46.63	
University l	5(45.45.)	4(36.36)	1(9.09)	1(9.09)	11(100%)		
A’ level	17(36.1)	23(48.7)	5(10.6)	2(4.2)	47(100%)		
O’ level	3(13.6)	12(54.5)	4(18.2)	3(13.6)	22(100%)		
Primary	4(6.25)	23(35.93)	17(26.56)	20(31.25)	64(100%)		
No education	0(0)	2(33.3)	2(33.3)	2(33.3)	6(100%)		
Total	29	64	29	28	150		

Pearson chi-square (\* $\chi^2$ ) \* Degree of freedom (df). \* P-value (p) Significant p (<.05)

Source: Kibuye health center primary data,2022

#### 4.2.3 Distribution of respondents’ awareness on the first 1000 days by level of education

Table 5 Shows that out of 150 participants, 11 of them finished their studies in the university and 5(45.45.7%) of them were very familiar with first 1000 days and knows what it describes, and only one(9.09%) has never heard of it; 47 of them finished secondary school where 17(36.1%) of them were very familiar with first 1000 days and knows what it describes, and 2 (4.25%) have never heard of it; 22 finished ordinal level, 3(13.6%) of them were very familiar with first 1000

days and knows what it describes, and 3(13.6%) have never heard of it; 64 did primary, 4(6.25%) of them were very familiar with first 1000 days and knows what it describes, and 20(31.25%) have never heard of it; 6 of them have no education, none(0%) of them was very familiar with first 1000 days and knows what it describes, and 2(33.3%) have never heard of it. From the above results, it is showing that as the level of education increases, the level of parents' awareness about first 1000 days increases too. The chi-square test was carried to determine the relationship between parents' awareness on the first 1000 days and level of education.

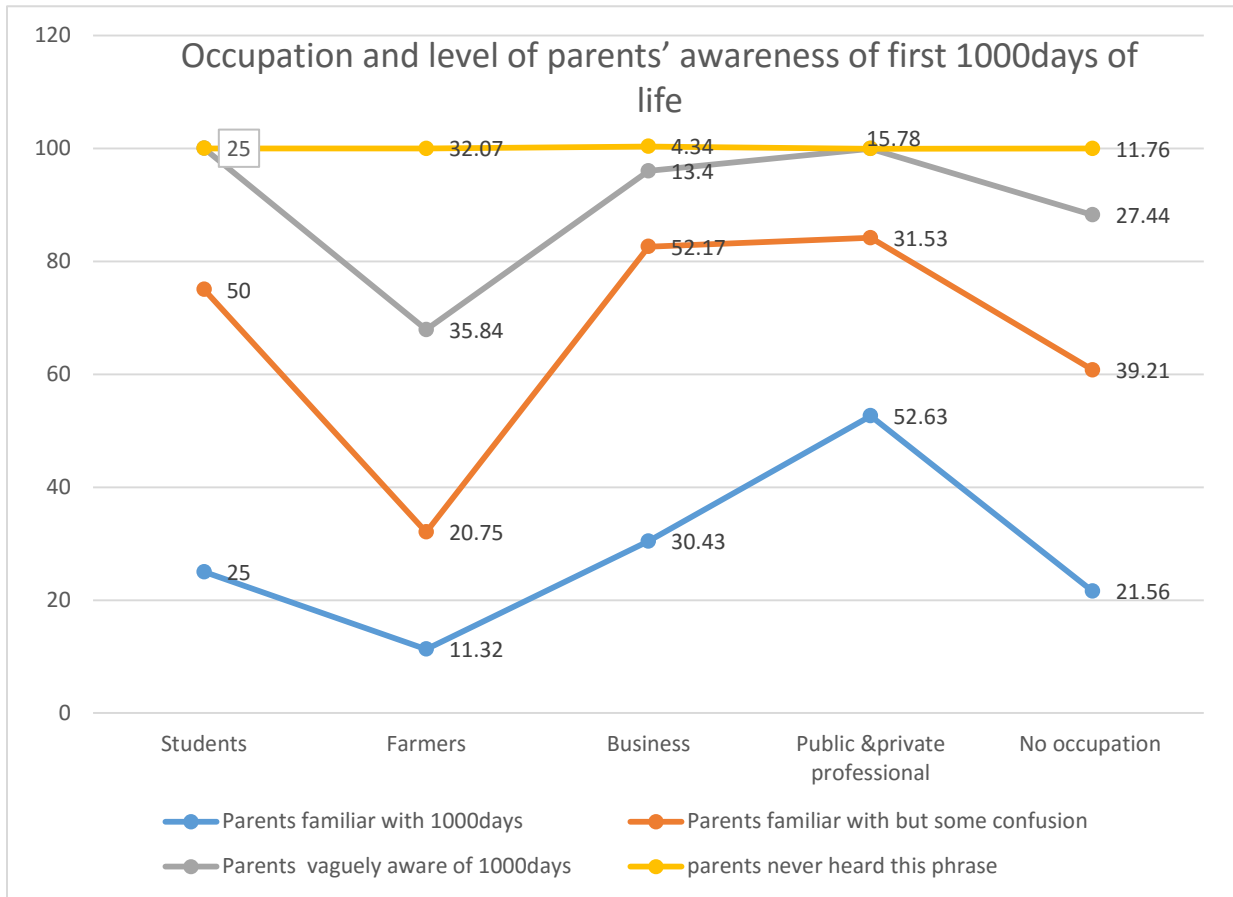
The results in Table 4.4 ( $\chi^2(12) = 46.63$ ,  $P=0.000$ ) indicate that the level of knowledge is significantly associated with parents' awareness about the first 1000 days.

**Table 6: Occupation and level of parents' awareness of first 1000 days of life**

Occupation	Awareness of the parents on first 1000 days				Percentage
	I am very familiar with it and know exactly it describes	I am familiar with it by 100% certain, I know what it describes	I am only vaguely aware of having heard it	I have never heard this phrase	
Students	1(25 %.)	2(50%)	1(25%)	0(0%)	4(100%)
Farmers	6( 11.32% )	11(20.75 )	19(35.84 )	17(32.07)	53(100%)
Business	7( 30.43 )	12(52.17 )	3( 13.04)	1( 4.34 )	23(100%)
Public & private professional	10( 52.63 )	6(31.57)	3( 15.78 )	0(0% )	19(100%)
No occupation	11( 21.56 )	20( 39.21)	14( 27.45 )	6( 11.76 )	51(100%)
Total	35	51	40	24	150

Source: Kibuye health center primary data, 2022

Line chart1: Occupational level of parents ‘awareness of first 1000 day of life



Source: Kibuye health center primary data, 2022

#### 4.2.4 Distribution of respondents' awareness on the first 1000 days by occupation

Table 6 and line chart 1 shows that out of 150 participants, the majority are farmers 53 (35.3%) and only 6 (11.32%) participants were very familiar with first 1000 days and knows what it describes, 17 (32.07%) has never listen that information, participants without employment have low level of information on first 1000 day 11 of 51 (21.56%) only are very familiar on that information, who have employment, the level of awareness is high than farmers and unemployed, 10 out of 19 (52.63%) are very familiar with first 1000 days. None is not aware of it.

**Table 7:Parents practices in the first 1000 days**

Practices	Variables	Frequencies	Percentages
Collaboration in the first 1000 days between a men and women	Yes	11	7.3
	No	139	92.7
	Total	150	100
Attending antenatal care in the first 1000days of life	Yes	146	97.3
	No	4	2.7
	Total	150	100
Attendance of men in PMTCT in the first 1000days of life	Yes	29	19.3
	No	121	80.7
	Total	150	100
Consulting health care facility for the presence of danger signs of pregnancy	Yes	145	96.7
	No	5	3.3
	Total	150	100
Follow up of vaccination calendar in the first1000 days of life	Yes	147	98
	No	3	2
	Total	150	100
Giving birth at a healthy facility	Yes	146	97.3
	No	4	2.7
	Total	150	100
Knowledge(know100%) tree mains elements (baby care,	Yes	64	42.7
	No	86	57.3



hygiene, nutrition) in the first 1000 days	Total	150	100
Proper hand washing and breast cleaning before breastfeeding in the first 1000 days	Yes	28	18.7
	No	122	81.3
	Total	150	100
Emptying one breast before giving another	Yes	106	70.7
	No	44	29.3
	Total	150	100
Practice of exclusive breastfeeding for 6 months	Yes	81	54
	No	69	46
	Total	150	100
Complementary food supplements after 6months	Yes	83	55.3
	No	67	44.7
	Total	150	100
Measurements of W&H of the child(follow up of child's growth) in 100days	Yes	141	94
	No	9	6
	Total	150	100
Birth spacing between 2-3 years	Yes	108	72
	No	42	28

Total	150	100
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Source: Kibuye health center primary data,2022

Table 7 demonstrates the distribution of results according to the practice of parents about first 1000 days. Regarding collaboration within men-women in first 1000 days, only 7.3% (11) reported that there is collaboration and attendance of men in antenatal care is very low at 19.3 % (29) of respondents. Regarding hygiene, 18.7% (28) only perform a proper hand washing and breast cleaning before breastfeeding. According to nutrition of child in the first 1000 days of respondents reported that 54% (81) were exclusively breastfed within first 6 months, 46% (69) reported that they mixed breast milk and cow 'milk from four months. 57.3% parents don't know food elements after 6 months and child care, and 44.7% do not give complementary food. 72% of respondents reported that their birth spacing is between 2 and 3 years or more where 28 % reported below 2 years.

### **4.3 Discussion of the results**

#### **4.3.1. Demographic characteristics**

In demographic data, the results show that the majority of respondents were female which represents 88%, and similar to the study done on assessment of knowledge, attitudes and practices on early nurturing of children reported that it is female caregivers especially mothers who interact more with children; the role of the father is generally limited to that of breadwinner and protector (UNICEF& MoH, 2014); 35.3% respondents are farmers which presents the majority party, this is related that this health center is located in urban area.

Most of respondents had only reached primary level education (42.7%) and, 14.7% completed ordinary level, 31.3% had secondary education, and 7.3% had attained university; 4% attested to having no formal education Similarly to the Rwanda Demographic Health Survey (RDHS) 2010 which recorded that 58% of respondents had attained some primary education and a much lower proportion had attained education up to secondary level. However, the low level of education may contribute to the limited knowledge about first 1000 days.

#### **4.3.2. Parents education and level of knowledge about first 1000 days**

Education level was significantly associated with parents' awareness ( $X^2(12) = 46,63$   $P = .000$ ). As Table 4.4. Shows; a high level of education increases the level of knowledge. Consequently, the low level of education may contribute to the limited knowledge about first 1000 days. A study conducted in Zambia (DHS, 2007) confirmed that the education level of women is a key determinant for childhood nutrition and growth, then they reported that as mothers are being more educated, the percentage of underweight among their children decreases.

Additionally, save the children Rwanda program (2013), mentioned that parent education increases awareness about child development in the first 1000 days.

#### **4.3.3 Parents occupation and level of knowledge about first 1000days**

Parents occupation status is significantly associated with their knowledge, the majority are farmers 53(35.3%) and only 6 (11.32%) participants were very familiar with first 1000 days and knows what it describes, 17(32.07%) has never listen that information, participants without employment have low level of information on first 1000 day 11of 51(21.56%) only are very familiar on that information, who have employment, the level of awareness is high than farmers and unemployed ,10 out of 19(52.63%) are very familiar with first 1000 days. None is not aware of it

#### **4.3.4. Parents practices in the first 1000 days**

This study shows that 97.3% of women attend antenatal care program but 80.7% of men don't attend. The male involvement in antenatal care was low at 19.3% . 72% of respondents reported that their birth spacing is between 2 and 3 years or more where 28 % reported below 2 years. WHO and other international organizations recommend at least 2-3 years between pregnancies to reduce infant and child mortality, and also to benefit maternal health (WHO, 2005); however, USAID suggested that longer birth spacing 3-5 years, might be more advantageous? 54% of the women were breastfeeding exclusively at birth but others mixed breast milk and cow's milk to 46% at age of four to six months. Practice of hygiene before feeding is very low at 81.3%

Concerning knowledge about nutrition according to our findings; 57.3% parents don't know food complement essential and child care, and 44.7% do not give complementary food supplement at 6mons, which is a key for better child's growth and children to development. A balanced diet

during first 1000 days of life can improve child health and reduce the severity of childhood illness and under-5 mortality (USAID, 2014).

## **CHAPTER FIVE: GENERAL CONCLUSIONS AND RECOMMENDATION**

### **5.0. Introduction**

The study is to assess the level of knowledge of parents about first 1000 days of baby's life by using a quantitative and qualitative approach, the studies show that the insufficient knowledge of parents affects more child life and development (MOH, 2014).

### **5.1. Conclusions**

In this study, the mean parental awareness of the “first thousand days of life” was below the average. According to the results, education level and occupation were significantly associated with the level of knowledge about First 1000 days, the respondents with university level (5/11= 45.45%) were very familiar with first 1000 days and know exactly what it describes. From the above results, it is showing that as the level of education increases, the level of parents' awareness about first 1000 days increases too education gives us knowledge. The respondents with employment also have increased level of knowledge of 52.63% , means that employees parents have opportunities to gain information through internet, media and/or workmates.

Even educated people are unaware of the opportunity of the first thousand days of their children. Based on the results of a study, parents need educational interventions on different aspects of the “first thousand days of life” and its impact on the children's development and health in adulthood.

### **5.2. Recommendations**

According to studies, a change in the attitude and knowledge of parents can have a positive effect on parenting. Attitude is influenced by education degree, training level, and experience. According to the finding of the present study, although the parents have an academic education, their awareness of the “first thousand days of life” is lower than the average. It seems that due to the lack of information sources and corresponding training, even educated people are unaware of the opportunity of the first thousand days of their children. Based on the results of a study, parents need educational interventions on different aspects of the “first thousand days of life” and its impact on the children's development and health in adulthood. Therefore, it is recommended that health officials and policy-makers use the capacity of information sources such as media, books, cyberspace, healthcare staff and community health workers to improve awareness of the society about the “first thousand days of life. As our study was undertaken at

Health Center of KIBUYE, it is recommended that there is a need of a community-based study on knowledge and practices of parents about the first 1000 days of baby's life.

### **5.3 Suggestion for further studies**

In this study, number of children was asked but not examined, further studies can focus on the relationship between parental awareness of first thousand day of life and the number of children. And encourage father's participation by different incentives.

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## **APPENDICES**

## **Appendix I**

### **Information sheet with a consent form**

Hello, We Frora Honoris Urisanga, Evanys Uzabakiriho, we are students from KIBOGORA University Department of General Nursing and Midwifery University and I 'm conducting a research on Knowledge and practices of parents about first 1000 days (iminsi igihumbi). This research involves mothers who are pregnant, both wife and husband consulting Kibuye Health Center for PMTCT and antenatal care or mothers with a children Under 2 years, I'm inviting you to participate in this research project because you are meeting inclusion criteria.

Do you agree to participate? If no: (You reject her/him)

Thank you for your time. Good--- bye.

If yes: we would like to have 30 minutes of your time, 15mins to explain questionnaire and 15minutes for answering questions. This information will show the outcome of Government's sensitization first 1000 days towards the community, also to plan programs and services for a pregnant woman and children under 2 years old. This Research is confidential and voluntary. This means that your responses will not be shared with others. We will not ask for very personal or embarrassing information. There is no right or wrong answers. You may refuse to answer any question or stop at any time. However, your participation is important for us to get accurate information about first 1000 days? May we continue now?

I agree to participate in this research on knowledge and practice of parents in first 1000 days of life.

Signature..... Date: .....

**Thank you for accepting, your participation is helpful.**

## Appendix II

### II.1 Questionnaire English version

#### QUESTIONNAIRE

##### Demographic information of participants

**Note:** use x in the corresponding response

Sex: male  Female

Age

##### 1. What is your marital status?

a) Married  c) Divorced

b) Illegal union  d) separated  e) Widows

##### 2. What is your education level?

a) University)  c) O' level

b) A-level  d) Primary  e) None

##### 3. What do you do? (Occupation)

a) Student  c) Business

b) Farmer  d) Professional  e) other occupation

4. Are you pregnant? YES  NO

##### 5. How many children do you currently have?

a) Do not currently have any children

b) One

c) Two or more

**6. What age is your youngest child?**

a) Have no children

c) 6-11 months

e) 25 months or above

b) 0-5 months

d) 12-24 months

**7. Which of the following phrases best describes your level of awareness of the phrase ‘First 1000 days’?**

**Note: Use  $\surd$  in the corresponding column**

STATEMENT	TICK
I am very familiar with it and know exactly what it describes	
I am familiar with it but not 100% certain I know what it describes	
I am only vaguely aware of having heard of it	
I have never heard this phrase before	

**8. In your opinion does the phrase first 1000 days relate to:**

a. 0-1 year

b. 1-2 years

c. Pregnancy to 2 years

d. Don't know

**9. Which of the following do you most associate with First 1000 Days?**

a) Nutrition in the first one thousand days affects a baby's health throughout its Whole life

b) The future health of baby's in the developing world can be significantly improved if they get the right nutrition in their first one thousand days.

c) The first one thousand days are a window of opportunity to shape a baby’s future Health

d) None of these

**10. Here are some statements relating to first one thousand days, to what extent do you agree and are committed to each one?**

**Note: Use √ in the corresponding column**

STATEMENT	AGREEMENT	TICK
In the First 1000 Days your diet during pregnancy have impact to your baby's Health forever?	I strongly agree with this statement and am determined to act upon the information completely	
	I agree with this statement and would try to act upon it as best I can	
	I don't really believe in this statement	
	I don't believe in this statement at all	
In the First 1000 Days, nutrition affects your child's Brain development forever.	I strongly agree with this statement and I am determined to act upon the information completely	
	I agree with this statement and would try to act upon it as best I can	
	I agree with this statement but with the best will in the world, I don't think I will be able to act upon it	
	I don't really believe in this statement	
	I don't believe in this statement at all	

### 11. Questionnaire on practices in the first 1000 days of life

PRACTICE	YES	NO
Do all practices done in the first 1000 days of life concerning both man and woman?		
In the first 1000 days of life, do you attend antenatal care when you are pregnant?		
In the first 1000 days of life, is your husband accompanying you for PMTCT Program?		
In the first 1000 days of life, do you consult health facility when you present danger signs on pregnancy?		
In the first 1000 days of life, do you follow vaccination calendar for you and your child?		
In the first 1000 days of life, do you give birth at a health facility?		
In the first 1000 days of life, do you know that the main practices are both maternal and child's health, hygiene especially during breastfeeding and crucial nutrition?		
In the first 1000 days of life, do you remember to wash hands with water and soap and cleaning your breast before breastfeeding your baby?		
In the first 1000 days of life, do you empty one breast before giving the other one to your child?		
In the first 1000 days of life, do you practice exclusive breastfeeding at least 6 months after delivery?		
In the first 1000 days of life, do you start giving food supplement after 6		

months of birth (weaning)?		
In the first 1000 days of life, both you and child eat a balanced diet?		
In the first 1000 days of life, a man helps her wife to feed the baby?		
In the first 1000 days of life, do you consult community health workers for measuring the weight and height of the child?		
Your birth spacing is between 2-3 years?		

**Thank you for participating and answering my research questions!**

**Signature.....**

## II .2 Questionnaire Kinyarwanda version

### URUPAPURO RW'UBUSHAKASHATSI

Muraho

Twebwe Urisanga Frora Honoris na Uzabakiriho Evanyis , turi abamunyeshuri bo muri kaminuza ya KIBOGORA, ishami ryigisha Abaforomo, Abaforomokazi n'Ababyaza, turi gukora ubushakashatsi kubumenyi n'ibikorwa by'ababyeyi muminsi yambere igihumbi y'umubyeyi n'umwana. Ubu bushakashatsi bukaba bureba abagore batwite baje gupimisha inda n'abaje gukingiza abana, ndetse n'abandi bafite abana bari muni y'imyaka ibiri baje gushaka serivisi zita bu buzima bw'Abana. Ubu bushakashatsi burizewe kandi kubugaragaramo ni ubushake turafata iminota mike tubasobanurire ibibazo ubundi musubize buri wese ukoabyumva. Ubufatanye bwanyu ni ingenzi cyane kugirango tubone amakuru afatika

ku minsi yambere 1000 y'umubuzima bw'umwana.

Nemeye kugira uruhare muri ubu bushakashatsi ku bumenyi n' ibikorwa

by'ababyeyi mu minsi ya mbere igihumbi y'umwana,

Umukono ....., itariki .....

Murakoze !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

### UMWIRONDORO

Murakoresha aka kamenyetso (x) Ku gisubizo mwahisemo

Igitsina: Gabo

Gore

Imyaka:

1.Irangamimerere



a)Nashatse byemewe n'amategeko

b)Nashatse bitemewe n'amategeko

c) Natandukanye nuwo twashakanye byemewe n'amategeko

d) Natandukanye nuwo twashakanye bitemewe n'amategeko

e) Ndi umupfakazi cg umupfakare

## 2.Amashuli wize:

a) Kaminuza

b) Ikiciro cya 2 cy'ayisumbuye

c) icyiciro rusange

d)Abanza

e) Ntago nize

## 3.Ukora iki ? :

a) Ndi umunyeshuli

c) Ndikorera e) ibindi

b) Ndi umuhinzi

d) Nkorera leta

## 4.Ese uratwite?

Oya

yego

## 5.Ese umaze kubyara abana bangahe?

a) Nta mwana numwe mfite

b) Umwe

c) Babiri gusubira hejuru

**6.Umwana muto wawe afite amezi angahe?**

- a) Ntamwana mfite
- b) ) Amezi 5 cyangwa muni yayo
- c) Hagati y'amezi 6-11
- d) 12-24 months
- e) Amezi 25 no hejuru yayo

**7.Ese waba uzi icyo iminsi igihumbi bivuga?Murakoresha aka kamenyetso ( ✓ ) mwuzuzura im bere y'akazu k'igisubizo mutanze.**

Icyo mbiziho	Kwemeza
1. Ndayizi cyane	
2. Ndayumva ariko simenya ijana kw'ijana ibikorwamo	
3. Ndayumva ariko simbyiteho	
4. Sindabyumva habe narimwe	

**8.Ese iminsi igihumbi ku mubyeyi itangira ryari ikarangira ryari?**

- a. Kuva umwana avutse kugera ku mwaka
- b.kuva umwana afite umwaka 1kugera kuri 2
- c. Kuva umubyeyi asamyeye kugera umwana yujuje imyaka 2
- d. Simbizi habe na gato

**9.Ese niki gikorwa kitabwaho cyane muri ibi bikurikira ?**

- a. Ni imiririre y'umubyeyi n'umwana mu gihe cy'iminsi igihumbi kuko igira

ingaruka kumukurire, imiterere, imibereho y'ubuzima bwose bw'umwana

b. Ubuzima bw'ahazaza bw'umwana bwa gerwaho ari uko umwana yariye neza mu

gihe cy'iminsi igihumbi

c. Iminsi igihumbi nicyo gihe cyonyine cyo kwita ku buzima bw'ahazaza

bw'umwana

d. Nta gisubizo nyacyo kirimo

### 10. HITAMO UKO WUMVA BURI HAMWE?

UBUSOBANURO	UKO MBWEMERA	KWEMEZA
Mu minsi igihumbi, imiririre y'umubyeyi niyo igena ubuzima bw'umwana bw'ahazaza?	Ubu busobanuro ndabwemera cyane kandi ntawampiga mu kubukurikiza.	
	Ubu busobanuro ndabwemera kandi nagerageza kubushyira mu bikorwa	
	Ubu busobanuro ndabwemera ariko sinabasha kubushyira mu bikorwa	
	Ubu busobanuro simbwizeye neza ko aribwo	
	Ubu busobanuro simbwizeye habe nagato	
Mu minsi igihumbi, konsa Bigabanya ibyago by'uko	Ubu busobanuro ndabwemera cyane kandi ntawampiga mu kubukurikiza.	
	Ubu busobanuro ndabwemera kandi nagerageza kubushyira mu bikorwa	

Umwana yabyibuha Birengeje urugero	Ubu busobanuro ndabwemera ariko sinabasha kubushyira mu bikorwa	
	Ubu busobanuro simbwizeye neza ko aribwo	
	Ubu busobanuro simbwizeye habe nagato	
Mu minsi igihumbi, gutangira kugaburira umwana iryo yuzuye, imuryoheye bimwongerera uburyo aryoherwa n'amafunguro amaze kuba mukuru	Ubu busobanuro ndabwemera cyane kandi ntawampiga mu kubikurikiza	
	Ubu busobanuro ndabwemera kandi Nagerageza kubushyira mu bikorwa	
	Ubu busobanuro ndabwemera ariko Sinabasha kubushyira mu bikorwa	
	Ubu busobanuro simbwizeye neza ko aribwo	
	Ubu busobanuro simbwizeye habe nagato	

Mu minsi igihumbi,imirire igira	Ubu busobanuro ndabwemera cyane kandi ntawampiga mu kubikurikiza
ingaruka kumukurire y'ubwonko	Ubu busobanuro ndabwemera kandi Nagerageza kubushyira mu bikorwa
,n'imitekerereze y'umwana	Ubu busobanuro ndabwemera ariko Sinabasha kubushyira mu bikorwa
	Ubu busobanuro simbwizeye neza ko aribwo
	Ubu busobanuro simbwizeye habe na gato

## 11. IBIBAZO KUMIKORERE Y'ABABYEYI MU GIHE

### CY'IMINSI IGIHUMBI

<b>Imibereho n'imikorere</b>	<b>YEGO</b>	<b>OYA</b>
Ese iminsi igihumbi ireba umugore n'umugabo bombi?		
Mu minsi igihumbi, ese witabira gahunda yo gupimisha inda ku bagore batwite?		
Mu minsi igihumbi, ese umutware wawe mujyana muri gahunda ya Minisiteri y'ubuzima yo kurwanya ubwandu kubana bavuka PMTCT?		
Mu minsi igihumbi,ese wihutira kujya kwa muganga iyo ubonye Ibimenyetso mpuruza by'abagore batwite?		
Mu minsi igihumbi, ese ukurikirana gahunda y'ikijyizar y'abana n'ikingirwa ry'umubyeyi utwite?		
Mu minsi igihumbi ,ese ubyarira kwa muganga?		
Mu minsi igihumbi, ese wibuka ko ibikorwa by'ingenzi ari ukwita ku		

Buzima bw'umubyeyi n'umwana, isuku cyane cyane mu gihe cyo konsa ndetse no kubiribwa ,ikanita by'umwihariko kumiririre?		
Mu minsi igihumbi ,ese wibuka koga amazi meza n'isabune no koza Ibere mbere yo gutangira konsa umwana?		
Mu minsi igihumbi, ese utuma umwana ahumuza ibere rya mbere mbere yo Kumuha irindi?		
Mu minsi igihumbi, ese wonsa umwana neza mu gihe cy'amezi 6 ntakindi umuvangiye?		
Ese utangira imfashabere nyuma y'amezi 6 umwana avutse?		
Mu minsi igihumbi, ese wowe n'umwana wawe murya iryoyuzuye?		
Mu minsi igihumbi, ese umugabo agomba gufasha umugore we kugaburira umwana ?		
Mu minsi igihumbi, ese witabira gahunda y'ipimwa ry'abana rikorwa n'abajyanama b'ubuzima?		
Ese ukurikiza umwana hagati y'imyaka 2-3?		

**Murakoze kwitabira no kugira uruhare mu bushakashatsi bwacu!**

**Umukono.....**

## **Appendix II. Supporting Documents**

### **II.1 Letters for requesting for the authorization for conducting the study**

URISANGA Flora Honoris

UZABAKIRIHO Evanys

Kibogora Polytechnic

Bachelor of Sciences in nursing

Email: [uzevanys@mail.com](mailto:uzevanys@mail.com), [sangahono@gmail.com](mailto:sangahono@gmail.com).

0788542590/0789841707

Kibuye, May 17, 2022

To, The head of KIBUYE Health Center

Re: Requesting for the authorization for conducting the study

Dear Sir,

We are humbly wish to request for the authorization to conduct the study within the

Institution of which you are the head.

In fact, we are student at Kibogora Polytechnic, in general nursing department our research project title is<< Assessing the knowledge and practice of parents regarding first 1000 days of baby's life>> within 3months from June-August/2022.

Your response will be highly appreciated

URISANGA Flora Honoris

UZABAKIRIHO Evanys