HYGIENE PRACTICES OF POSTPARTUM MOTHERS IN A RURAL UGANDAN SETTING A CASE STUDY OF MUBENDE REGIONAL REFERRAL HOSPITAL

KARUNGI CLEOFAS RITAH

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DECLARATION

I **Karungi Cleofas Ritah** do hereby declare that this research report is my original writing and it has never been produced to any University or Institution of learning for this qualification or any other qualification.

KARUNGI CLEOFAS RITAH

…… ……..

Signature Date

APPROVAL

This is to certify that this research report has been produced under my supervision and ready for submission to the Academic Board of International Health Sciences University.

DR. AMONGIN DINAH

(Supervisor)

…… ……..

Signature Date

DEDICATION

This report is dedicated to my lovely parents Dr. Katusabe Kabagambe Reuben and Mrs. Kazigati Katusabe Jane, my brothers, sisters, and friends, all well-wishers and my supervisor who greatly supported me during my period of study; this would not come true without these important people.

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I would like to thank the Almighty God who has kept me in good health during the process of my studies

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May the almighty bless you all.

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LIST OF ACRONYMS/ABBREVIATIONS

ANC	Antenatal Care
NGO	Non Governmental Organizations
OPD	Outpatient Department
P.P. H	Post-Partum Hemorrhage
PID	Pelvic Inflammatory Diseases
PROM	Pre-rapture of Membranes
TBAs	Traditional Birth Attendants
UBOS	Uganda National Bureau of Statistics
UTI	Urinary Tract Infections
V.E	Vaginal Examinations
WHO	World Health Organisation

OPERATIONAL DEFINITIONS

- **Postpartum services** means care given to the mother and infant just after delivery until six to eight weeks in order to assess, identify, give support and counseling on infant breastfeeding, nutrition immunizations, safer sex and family planning.
- **Infant** means a child from birth to twelve months.
- **Mother** refers to any woman within the reproductive age (15-49) years who attends maternal child health care and family planning services.
- **Midwife** is most often a woman or a man trained and registered to assists other women in childbearing experience with delivery and care of pregnant women. (They are clinicians in their own right)
- **Practice** is the actual operation or application of knowledge as distinguished from mere possession of knowledge.
- **Quality care** refers to provision of care that meets the needs of the clients as well as external criteria set and requires that health care providers have adequate clinical skills and are sensitive to the women's needs.
- **Postpartum period** refers to the time just after the birth of the placenta up to six-eight weeks when the woman and the baby go to the health facility for review.
- **Traditional Birth Attendants** refers to older women in the society who are socially and culturally recognized and are capable of assisting in conducting home deliveries.
- **Referral Hospital** is the highest level of health facility, which provides specialized treatment to clients in-need of advanced care.
- **Access** means that services are available, suitable, and affordable and within reach of women who need them.

- **Information** (Oxford English Dictionary, 1995). In this study it means knowledge women acquire about the activities and benefits of postpartum care either before or after the examination / birth itself.
- **Knowledge** means information that health workers have acquired about the activities and benefits of postpartum care.
- **Motsetse** a Setswana word used in this study, which means a delivered mother during the first 2-3 months period of confinement.
- **Losea** a Setswana word that refers to newborn baby up to two months.

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ABSTRACT

The study was carried out basing on the topic "Hygiene practices of postpartum mothers in a rural Ugandan setting." It aimed at establishing the Perineal care practices of postpartum mothers, establishing hand hygiene practices of post-partum mothers and assessing the knowledge of postpartum mothers on prevention of puerperal sepsis at Mubende Regional Referral Hospital.

The study employed both quantitative and qualitative research designs where both questionnaires and interview guides were used to collect data from the field. All data was grouped and analyzed in a statistical way where by data was presented in tables showing frequencies and percentages.

The following results were obtained basing on the study findings**;** The perineal care practices of postpartum mothers included; mothers bath 3 times a day, use lukewarm water to clean the perineal area, use local herbs to clean the perineal area, use soft facial tissues, sanitary pads and clean cotton cloths to pad themselves. The Hand hygiene practices of postpartum mothers included use of soap and water to wash their hands, obtained water for washing their hands from the nearby wells and also washed their hands by use of water and soap to kill germs. Also mothers had knowledge on how to prevent puerperal sepsis through maintaining hand hygiene practices, through use of clean delivery kits among others.

The researcher recommends that; there is need for sensitization of the rural mothers on the causes and effects of puerperal sepsis, need for government intervention through placing required medicine in rural referral hospitals, training of the Traditional Birth attendants on the appropriate hand hygiene practice and allocation of enough funds on the national budget to build enough hospitals to cater for mothers in rural areas.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter presented the background to the study, problem statement, objectives of the study, research questions as well as the significance of the study.

1.1 Background of the study

The postpartum period is a very special phase in the life of a woman and her newborn. For women experiencing childbirth for the first time, it marks probably the most significant and life-changing event they have yet lived WHO (2012). It is marked by strong emotions, dramatic physical changes, new and altered relationships and the assumption of and adjustment to new role from the social status of "woman" to that of a "mother" (Helman, C., 2007). The postpartum period is a social as well as a personal event and has meaning well beyond the simple physiological events which mark it.

Puerperium is the period which starts about an hour after the delivery of the placenta and includes the following six weeks. Puerperal infection is an infection which arises from bacterial invasion of the genital organs during puerperium. The infection that occurs within 11 days of child birth. Puerperal sepsis was known as childbed fever in the past. Its association with a vivid and well-documented history spans over 200 years since its first recognition as a separate disease entity in the 8^{th} century. Difficulties in case identification led to inaccurate recordings and reporting of the condition, a problem that remains to this day, WHO (2014).

Various international definitions of puerperal sepsis have been proposed but none are universally. This has contributed to difficulties in estimating the incidence of the condition. To compound the problem, many sources of epidemiological data and information combine puerperal sepsis with other puerperal infections of the genital tract, surgical wounds and urinary tract infection, such as the WHO Global Burden of Diseases, which categorizes these as cases of maternal sepsis, genital tract sepsis, maternal sepsis, puerperal infections and puerperal fever are terms used in literature without clarity of their definitions. Such terms may or may not include infections of the breast or urinary tract, localized infections or those acquired after abortion. Maureen C. (2009).

Most puerperium infections take place after hospital discharge. This is usually 24 hours after delivery, in the absence of postnatal follow-up as in the case in many developing countries. Many cases of puerperal infections can go undiagnosed and unreported. The predisposing factors leading to the development of infections include home birth in unhygienic conditions, low socio-economic status, poor nutrition, primiparity, anaemia, prolonged rupture of the membranes, prolonged labour, multiple vaginal examinations (V.E) in labour, caesarean section obstetrical manoeuvres, retained secundines within the uterus and postpartum haemorrhage (PPH). Puerperal infection may present as puerperal fever or sepsis, endometritis, wound infection, mastitis, urinary tract infection (UTI) (WHO 2012).

Puerperal infection is still one of the leading causes of mortality and morbidity of women in postnatal period. It is known that the delivery type, the insufficient notification of postpartum infections cases due to lack of surveillance after discharge, the early discharge of puerperal women and the patients return outside the institution where the delivery occurred, as well as

environmental, individual and maternal factors have been related with the incidence of puerperal infections. With the advent of improved hygienic practices and the introduction of antibiotics, morbidity and mortality from puerperal infection has decreased significantly and infection is no longer the leading cause of maternal mortality, (WHO, 2012).

The diagnostic criteria for puerperal sepsis differ from study to study and data are variously obtained from hospitals, ambulatory records or population-based community surveys. Self-reported morbidity through household surveys can over-estimate incidences of puerperal sepsis, whereas hospital-based studies may under estimate incidences because cases of sepsis can occur outside the hospital setting, Hussein Walker, (2012)

In India, maternal deaths from puerperal sepsis accounting for approximately 15% of all maternal deaths. A sixteen year study from northern India found that sepsis was responsible for over 35% of maternal deaths and a study in southern India revealed that sepsis was a leading cause of maternal death responsible for 41.9% of deaths. Demographic and health survey shows that the majority of women do not receive a postnatal check-up and 14% of women who had a birth in the last 5 years reported very high fever in the postpartum period, Hussein Walker, (2012)

In the study conducted in Ayub Teaching Hospital over a period of three years. All patients admitted with diagnosis of puerperal sepsis secondary to genital tract infection were evaluated with through details of history and examination to determine their demographic details, obstetrical profiles, presenting features, state of infectious morbidity, need for intervention and mortality related to puerperal sepsis. It was 1.7% of all obstetrical admissions and 34.4% of postnatal complications. It was seen common among young patient of 15-25 years age,

61(66.3%),of lower parity, 58(63.00%), low socioeconomic status, 60(65.20%), uneducated patients, 72(78.20%),home deliveries 68(73.90%), prolonged labour ,54(58.60%), prolonged rupture of the membranes from 48-72 hours, 68(73.8%) and deliveries conducted by untrained birth attendant, 57(60.5%) puerperal sepsis is an important public health problem contributing to maternal morbidity and mortality. Majority of predisposing factors are preventable. Optimal antiseptic measures and careful monitoring are needed throughout the process of labour. (Baltimore), 2015.

A global review of puerperal sepsis provides data from seven developing country studies. A hospital-based survey from South Africa reported an incidence of 0.07 per 100 live birth, diagnosed using set criteria for severe obstetric complications in hospital assed by a medical panel. Women's self-reports of symptoms or medical diagnosis were used in community surveys to establish the incidences of 9.3 cases of puerperal sepsis per 100 lives birth in ElSalvador and 0.09 per 100 lives birth in West Africa. Two other reviews of sepsis in the postpartum periods in Sub-Saharan Africa reported incidence rate of 9% in Zambian women attending hospital for any reason postpartum. One study reported incidence rate as high as 19% in HIV infected women, although other common infections seen in the puerperium were included, WHO (2015).

Case fatality rates of between 4% and 5% are recorded in Sub-Saharan Africa. It is of interest to compare these case fatality rate with those in the late 18^{th} and 19^{th} centuries at the highest of the child bed fever epidemics, before the advent of antisepsis and discovery of disease transmission modalities. Case fatalities as high as 37% were reported in obstetric units of the time, with as many as 600 maternal deaths per 10,000 deliveries being due to puerperal sepsis. These levels

did not fall dramatically until the introduction of sulphonamides in hospitals in the 1930s, after which large declines in maternal mortality were observed, WHO (2014).

A study was conducted in Ife State Hospital of Obafemi Awolowo University Teaching Hospital Complex in Nigeria during the period of January 1986 to December 1995; finding revealed that 1.7% out of 8428 deliveries was diagnosed as having puerperal sepsis. The incidence was higher among unbooked patients (72.2%). Predisposing factors of puerperal sepsis include anaemia in pregnancy; prolonged labour (labour lasting up to 12 hours or more); frequent vaginal examination during labour (more than 5 times); premature rupture of the membranes (PROM); and no adherence to asepsis during delivery. In addition, the mortality rate was 4.1%. Thus, Antenatal Care (ANC) and supervised hospital delivery should be encouraged in order to prevent or reduce the seriousness of postpartum morbidity, (WHO 2012)

However, in both developed and developing countries Uganda inclussive, women's and their newborn health during postpartum period have been neglected by the attention given to pregnancy and birth. Such an eclipse ignores the fact that the majority of maternal deaths and disabilities occur during the postpartum period and that early neonatal mortality remains high. Driven frequently by skimpy considerations, or even non-existent care offered to women and their newborns at home or in health facilities provides little contribution to their well-being and forms a frail basis for their future health. Poor quality care reduces the opportunities for health promotion, for the early detection and adequate management of problems and disease. Therefore, quality of postpartum care is a long-term investment in the future health of women and their newborn WHO (2014).

Infections in the perinatal and postnatal periods are frequent and can lead to serious morbidity and mortality among both mothers and their offsprings. Individuals living in resource-constrained settings are most at risk because of increased exposure to pathogens through poor living conditions and hygiene coupled with reduced access to early and appropriate therapy. Although global estimates vary, data from 2008 suggest that sepsis causes 26% of all neonatal deaths, with a further 10% of neonatal deaths caused by other infectious diseases, including diarrhea and tetanus. Most discussions of sepsis have focused on either the mother or newborn, however, in resource constrained settings; it is often the same care worker who provides care to both mother and offspring. Consequently, it is important to consider sepsis in the context of mother-new born pairs. BMC Public Health (2011).

Preventive strategies have formed the cornerstone of responses to maternal and neonatal sepsis. Such strategies include education centered on promotion of genital hygiene and antiseptic (chlorhexidine) washes, clean delivery kits, hygienic delivery practices and neonatal care. The etiology and treatment neonatal infection has been widely investigated. For example, in 2009, Zaidi Et al. conducted a review that included 19 primary research papers with over 2500 culture results from neonates in low-income countries. By contrast, research into microorganisms involved in puerperal sepsis, and the potential for treatment within the community, is limited. Possible overlap in etiology, such as environmental pathogens causing concurrent puerperal and neonatal sepsis, has also received little attention in terms of primary research of reviews of the literature. Knowledge of the causative microorganisms would provide the basis for rational antibiotic choices within standardized syndromic management strategy. Thus, this question requires careful consideration, Zaidi Et al. (2009).

Mubende Regional Referral Hospital (RRH) is located about 170 kilometers west of Kampala. The hospital serves a population of 1.2 million people in the districts of Mubende, Mityana, Kyegegwa, and Kiboga and parts of Sembabule and Kibaale. The hospital has a bed capacity of 175 beds, annual inpatient admissions of 11,708 patients and an annual outpatient department (OPD) attendance of 67,338 patients. This hospital has got a section which sensitizes the mothers on how to control puerperal sepsis but the results still show a negative trend as far as hygiene of postpartum mothers is concerned. (UBOS, 2015)

1.2 Problem statement

Despite the fact that Uganda through the ministry of Health has tried to sensitize mothers on safe delivery through training postpartum mothers on how to maintain their hygiene before and after birth, maternal mortality is still very high among Ugandan mothers as they have continued to suffer from puerperal sepsis (WHO 2014). This has been attributed to the failure of Ugandan government to achieve the millennium development goal 5 of reducing maternal mortality rates (WHO 2014). It is further recognized that among the top 5 leading causes of maternal mortality is puerperal sepsis and this is as a result of factors such as prolonged labour, obstructed labour, and repeated vaginal examination in hygiene maternal practices. Basing on the different studies being carried out by different scholars in Uganda, it does not reveal any data on hygiene practices of post-partum mothers especially in rural setting and it has been realized still that Mubende has a high maternal mortality due to puerperal sepsis. This therefore attracts the researcher to investigate more on the hygiene practices of postpartum mothers in the rural settings in relation to puerperal sepsis taking Mubende regional referral hospital as a case study.

1.3 Objective of the Study

To establish the hygiene practices of postpartum mothers at Mubende Regional Referral Hospital

1.3.1 Specific Objectives

1. To establish the perineal care practices of postpartum mothers attending Mubende Regional Referral Hospital.
2. To establish hand hygiene practices of post-partum mothers attending Mubende Regional Referral Hospital.
3. To assess the knowledge of postpartum mothers on prevention puerperal sepsis at Mubende Regional Referral Hospital.

1.4 Research Questions

1. What are the perineal care practices of postpartum mothers attending Mubende Regional Referral Hospital?
2. What are the hand hygiene practices of post-partum mothers attending Mubende Regional Referral Hospital?
3. What is the knowledge of postpartum mothers on prevention of puerperal sepsis at Mubende Regional Referral Hospital?

1.5 Significance of the study

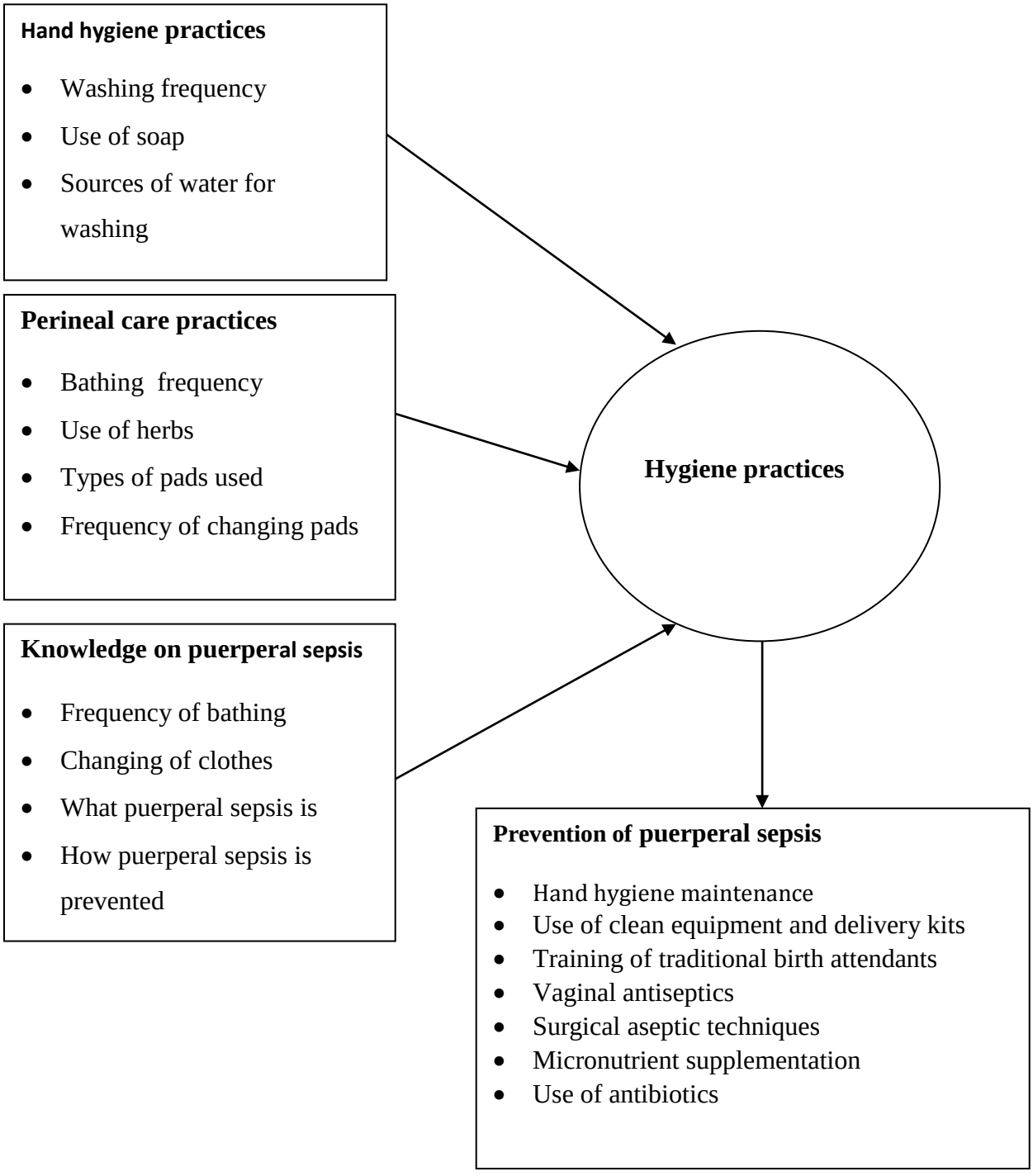
The study will help postpartum mothers at Mubende and the nearby people around to acquire knowledge on how to prevent puerperal sepsis through maintaining a hygienic environment before and after birth.

The study will also help the government and other concerned Non-government organization (NGOs) to adopt and at the same time adjust to appropriate measures of improving on the hygiene practices through sensitizing the postpartum mothers on the causes, effects and solutions to puerperal sepsis among mothers at Mubende and the whole country in general.

The study findings are expected to contribute to the existing literature about puerperal sepsis and it's dangers to the economy as a whole and this will help the researcher to easily compile her research report based on this existing related literature review.

On the researcher's side and other academicians, the study may help to develop research skills leading to the award of a Diploma in Clinical Medicine and Community Health of International health Sciences University.

1.6 CONCEPTUAL FRAME WORK



From the conceptual framework above, it clearly shows the hygiene practices done by mothers after delivery. Among the practices include Hand Hygiene practices such as washing frequency, use of soap and sources of water for washing; Perineal Care practices such as bathing frequency, use of herbs, types of pads used and frequency of changing pads. It further indicated the knowledge postpartum mothers have on prevention of puerperal sepsis and the ways through which the infection can be prevented and these can be through hand hygiene maintenance, use of clean equipment and delivery kits, training of traditional birth attendants, vaginal antiseptics, surgical aseptic techniques, micronutrient supplementation and use of antibiotics.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This section shows how the research problem under the study fits into a body of knowledge generated by other researchers. It reveals the investigations other researchers handled to come up with evidence, findings and recommendations on hygiene practices among postpartum mothers.

2.1 The Perineal care practices of postpartum mothers

In the study by done by Mashal et al., (2008) on Afghanistan postpartum mothers found out that women usually bathe three days after delivery, and newborns are bathed immediately after birth. To them bathing of mothers can take place immediately after the delivery or be postponed for as long as one month if the mother is not feeling well. They also found out that women do not start breastfeeding until they clean their breasts that sometimes women will take half-bath afterbirth to start breastfeeding and take a full bath a few days later, or breastfeeding may be delayed entirely until after the woman's first bath.

Dahlen et al. (2007); Hastings-Tolsma et al. (2007), found out that the practice involves use of warm water. A warm flannel held against the perineum during crowning can reduce the incidence of major tearing and reduce postnatal pain and urinary incontinence. A recent Cochrane Review also supported the use of warm water that it compresses/decreases the occurrence of perineal trauma. However, for some women this is intrusive and irritating so it is

important to make sure that a woman is happy to have this intervention before you do it. It is also found out that water birth is fabulous for avoiding tears.

In the study done by Byaruhanga et al (2007), found out that mothers use of herbs "*Ekyogero" for bathing*. They said that this practice involves use of herbal concoctions that are believed to prevent several diseases including the bad skin or skin rashes, bad luck or misfortunes. During the postnatal periods, herbal baths are used to clean the uterus and also heal the vaginal tears and this practice involves sitting in basin containing herbs.

Lauren Samuel (2013) found out that mothers use Sitz Baths to heal the perineum and vagina after birth. The principle is essentially the same, except that the area is placed directly in the water with the herbs, and often is combined with sea salt to aid any healing of tears and soreness. Often women wrap a special cloth or band to help the uterus and internal organs and tissues back into place. This is a valuable practice that can be combined with regular massage post-partum to help ease pains and bring comfort from pregnancy, labour and the after pains of the uterus contracting back into place.

Raven JH et al, (2007) found out that postpartum mothers use cold sitz baths to reduce on swelling and discomfort after delivery. To them mothers sit in a lukewarm or room temperature bath, and then gradually add ice cubes to the water. This prevents the uncomfortable, sudden sensation of ice water on the skin. Soak for 20 minutes at a time, up to three to four times a day. After the first two to three days, warm sitz baths will improve blood flow to the perineum.

In the study by Albers, LL & Borders, N (2007), they found out that women perform massaging during perineal time, to them the practice is done using warm water and a piece of cloth where

by the wife is being helped by husband to massage her stomach and this helps to prevent some of the abdominal pain and other problems after delivery.

According Maharaj D (2007); postpartum mothers after giving birth experience a vaginal discharge called lochia, a combination of blood and the sloughed uterine lining. So mothers use peri-bottle which are provided at hospital after delivery to help them whenever they want to urinate or use the toilet. To him mothers always wipe away blood from their vaginas from front to back. For the first week at home, mothers use soft facial tissue instead of toilet tissue to gently pat dry; they also use sanitary pads and these pads are changed after four hours.

2.2 Hand hygiene practices of post-partum mothers

In the study by Lawn J and Kerber K (2006) considered hand washing/glove wearing as a hand practice done after delivery. There is a clear consensus for washing of hands after delivery, but the practice of washing hands before delivery and glove usage is not universally followed. Many women who had their past deliveries at home informed that majority of the TBAs used gloves for conducting delivery but expressed skepticism about the practice of hand washing before delivery.

In the study by Wardell DW et al (2005) found out that mothers use clean material to absorb menstrual/locha flow. To them postpartum mothers use sanitary pads, new clothes, and also wash clothes with soap and clean water then dry them in sunlight for absorbing menstrual blood and lochia during the postpartum.

In the study by WHO (2011); it was found out that mothers after giving birth wash their perineum gently with soap and water whenever they are taking bath or shower; they also rinse

their perineum with warm water after using the toilet. It was also found out that postpartum mothers use a warm sitz bath to help them decrease on the pain after delivery. A sitz bath is a bathtub or basin filled to hip level. They usually stay in the sitz bath for 20 to 30 minutes, or as directed by the nurse.

In the study done by Blencowe H et al (2011) on Cambodian postpartum mothers it was found out that mothers used well water, pond water (typically used in the rainy season), as their sources of water for hand hygiene practices. Three of the 4 households observed used well and borehole water as their primary source of water. However, one of the mothers who reported well water also indicated that she purchased bottled water for cooking and drinking, the remaining observed household fetched water from a nearby pond and also stored their water in large earthen containers situated around the outside of the home.

2.3 The knowledge of postpartum mothers on prevention puerperal sepsis

In the study by Jovanovic N et al (2009), mothers interviewed said that they avoid bathing via showers or bath tubs for 1-2 weeks to allow the healing of wound. They said that this applies to postpartum mothers who give birth via caesarean section. That those who give birth via the vagina, immediately bath using warm water mixed with some salt and soap to avoid germs.

Edmond (2010) found that postpartum mothers had knowledge that hand washing can reduce neonatal sepsis and infection rates. Hand washing by birth attendants and mothers were reported in one study to increase newborn survival rates by up to 44% and in another study by Edmond 2010 on Bangladesh postpartum mothers he found out that, mothers were aware that hand washing helps them to decrease neonatal tetanus.

In the study by WHO (2012) most mothers interviewed were aware that tub baths are safe immediately following delivery, taking a tub bath after delivery can be therapeutic. Postpartum mothers through their TBAs said that they use warm water 3 times a day. To them they said that warm water helped them to soothe the episiotomy repair and ease swollen hemorrhoids, that it also help to ease the tension and fatigue that go along with having a new baby at home.

Czerwinski BS (2009) found out that mothers were aware that deliveries conducted in hospitals and clinics by trained personnel play an important role in the prevention of vaginal infections. In study done on Pakistan postpartum mothers, it was found out that women who delivered at home developed RTIs in the postpartum period and this exposed them to secondary infertility.

Ejemot R et al 2008 found that postpartum mothers considered Hand washing with soap as one of the most cost-effective ways of reducing the global infectious disease burden. Mothers interviewed in their study were aware that hand washing with soap helps them to reduce on the risk of acquiring diarrhea.

Hundley et al (2011) found out that postpartum mothers had adequate knowledge about the use clean delivery kit in prevention of puerperal sepsis. Mothers interviewed said they obtain clean delivery kits from TBAs, that the delivery kits contains materials that contribute to clean delivery practices such as a plastic sheet, pads, clean razor blade and cord ties with user instructions.

WHO (2014) found that mothers were aware of the definition puerperal sepsis and they defined it as infections of the genital tract that is particularly common with unhygienic births and induced abortions. Women said that one path for infection is through the birth canal of the woman, where microorganisms can cause puerperal sepsis. They further said that an early symptom of puerperal sepsis is fever. It is significantly related to morbidity as women who

survive the initial infection may go on to develop pelvic inflammatory disease, chronic pelvic pain, damage to reproductive organs, and infertility.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter covered the study design, methods to be used in the collection of data, research design, are of study, sample size and selection, data type and source, data collection techniques, data analysis and limitations during the process of carrying out research and their solutions.

3.1 Research Design

The researcher in this case adopted a descriptive cross-sectional study design which involved use of both qualitative and quantitative method with the help of both questionnaires and interview guide to collect data. This helped her to obtain information on variables in different contexts, but at the same time.

3.2 Study area

The study was conducted in Mubende regional referral hospital, Mubende district. The researcher decided to use this area because it had a high maternal mortality due to puerperal sepsis so it acted as a good case study area as far as the research topic is concerned.

3.3 Study population

The population was composed of postpartum mothers who have brought their babies at six weeks immunization. These six weeks were decided on because this is the end of the puerperium period and we wanted to know what they had been practicing in the first week of the puerperium.

3.4 Sampling size determination

Sample size was calculated using Kish and Leslie's formula (1965);

$$\mathbf{n = \frac{Z^2 P (1-P)}{d^2}}$$

Where:

n = required sample size

Z = reliability coefficient at 95% confidence interval (standard value of 1.96)

P = Proportion of targeted population which have knowledge on puerperal sepsis. This estimated from previous study done by Moyer et al. (2012) on establishing clean delivery practices of postpartum mothers in rural northern Ghana to be at 96.6%.

d = Margin of error at 5% (standard value 0.05).

Therefore from the formula above

$$n = \frac{1.96^2 \times 0.966 (1-0.966)}{0.0025}$$

n = 50

From the population of the study, a sample of 50 respondents was used, 45 were randomly selected rural postpartum mothers around Mubende Regional Referral Hospital and 5 consisted of the medical attendants (Midwives, Nurses and Clinical officers) from Mubende Regional Referral Hospital.

3.5 Sampling procedures

Systematic random sampling method was used to select respondents who participated in the study. Through this method the researcher randomly selected the rural postpartum mothers to participate in the study. Purposive random sampling method was also used to select medical attendants from Mubende regional referral hospital.

3.6 Study variables

The study variables included hygiene practices of postpartum mothers and their knowledge on puerperal sepsis at Mubende Regional Referral Hospital.

3.7 Data collection techniques and instruments

Two data collection instruments were used in the study; these included structured questionnaires and interview guides.

3.7.1 Personal Interview

Interviews were used to collect data from Medical attendants. The researcher used this tool during collection of primary data and this helped him ask respondents more questions than the questionnaire method.

3.7.2 Semi-Structured Questionnaires

These were used to collect primary data where by a set of predetermined questions was designed to collect data from rural postpartum mothers around Mubende Regional Referral Hospital. The respondents were allowed to fill the questionnaires as the researcher also helped in filling

responses in case of those who cannot read and write. This method was used because of being cheap and that it collected responses with minimum errors and high level of confidentiality.

3.8 Data collection procedure

The researcher got a letter of introduction from the Department of Clinical Medicine of International Health Sciences University (Namuwongo) which she presented to the relevant authorities at Mubende Regional Referral Hospital and the community around where the researcher conducted the study from to get permission to carry out the study in their premises.

3.9 Data Processing and analysis

Data analysis was done after collecting the raw data from the study field and checking for accuracy of information consistently and uniformly. The collected data was analyzed qualitatively and quantitatively.

For qualitative data, it was analyzed using bar graphs, pie-charts. The raw data gathered from the field was coded and analyzed using Microsoft Word document, Excel spread sheet packages among others.

Quantitative methods were also used to analyze quantitative data whereby data was tabulated and presented in percentages. Frequency distribution was also used to analyze data. During tabulation, numerical figures, frequencies and percentages were calculated and then presented in tables to explain and make a visual impression of the findings and this enabled the researcher come up with logical and specific conclusions

3.10 Data quality control

Data quality control was ensured by carrying out triangulation in order to ensure quality, validity and reliability in findings. Triangulation is the process of using multiple base lines, measures and later to reduce bias and errors. It was done in form of multiple data sources, use of more than one person to collect, analyze and interpret findings and use multiple perspectives to draw meaning from the findings and use multiple methods for example of data collection.

3.11 Ethical considerations

The researcher got an introduction letter from Department of Clinical Medicine of International Health Sciences University (Namuwongo). This introduced her to the relevant authorities at Mubende Regional Referral Hospital where the researcher collected data from. The researcher also presented a consent form to the respondents for the purpose of data collection. This helped to maintain confidentiality; the researcher also verbally informed the respondents on the purpose of the study and its benefits to both the researcher and the respondents.

3.12 Limitations and delimitations of the study

The researcher faced a problem of the respondents having recall bias since some of them didn't remember everything they practiced during the period however this was solved by asking help from the medical workers in the area to highlight more on that.

CHAPTER FOUR

RESULTS

4.0 Introduction

This chapter coved the presentation, findings and discussion of data collected from the field so as to answer the questions in chapter one. The findings were obtained using the questionnaires and interview guides.

4.1 GENERAL INFORMATION OF RESPONDENTS

Table 4.1: General information of respondents

Respondents	**Age bracket**				**Religion**				**Marital status**			**Education level**			**Occupation**			**Tribe**		
	15-19	**20-24**	**25-29**	**30^{+}**	**P**	**RC**	**M**	**Others**	**M**	**S**	**Others**	**P**	**S**	**Others**	**BP**	**CS**	**Others**	**Ganda**	**Banyoro**	**Others**
Mothers	20	8	7	10	15	11	4	15	6	8	31	30	10	5	8	-	35	32	9	4
Medical personnel	-	2	2	1	1	3	1	-	4	-	1	-	-	5	2	4	1	3	1	1
Total (n = 50)	**20**	**10**	**9**	**11**	**16**	**14**	**5**	**15**	**10**	**8**	**32**	**30**	**10**	**10**	**10**	**4**	**36**	**35**	**10**	**5**

Source: Primary data.

Basing on the table 4.1 above, 20 (40%) of the respondents were between age bracket of 15-19 years, 10 (20%) were between 20-24 years, 9 (18%) were between 25-29 years while 11 (22%) were from that of 30 years and above.

Basing on the same table 4.1 above, 16 (32%) of the respondents were protestant by religion, 14 (28%) were Roman Catholics by religion, 5 (10%) of them were Muslims and 15 (30%) were other tribes. This implies that in Mubende district there is freedom of worship because it is composed of many people with different religious affiliations.

Still on the same table 4.1 above, 10 (20%) of the total respondents were married, 8 (16%) were Single while the remaining 32 (64%) of them were divorced, separated or widowed.

Basing on the same table 4.1 above; 30 (60%) of the total respondents had stopped at primary level, 10 (20%) of them had just stopped in Secondary level and 5 (10%) had at least attained a certificate, diploma, degree or masters from recognized Universities in Uganda.

Still on the same table 4.1 above, 10 (20%) of the total respondents were business personnel, 4 (8%) were Civil servants while the rest (32%) were either housewives or peasants.

On the table 4.1.6 above, 35 (70%) of the total respondents were Baganda by tribe, 10 (20%) were Banyoro by tribe, 3 (6%) and the rest (10%) of them included other tribes like Bakonzo, Basoga, Batoro and many others.

4.2 The Perineal care practices of postpartum mothers

Table 4.2.: Perineal care practices of postpartum mothers

n= 50

Responses	Frequency	Percentage (%)
Bathing frequency of mothers during postpartum period		
Once in a day	7	14
Twice in a day	8	16
Thrice a day	30	60
More than three days a day	5	10
Whether mothers used soap whenever bathing		
Yes	48	96
No	2	4
Tools/materials used in cleaning the perineal area		
Lukewarm water	10	20
Herbs	25	50
Plain warm water and soap	12	24
A clean towel soaked in a disinfectant	2	4
Cold water	1	2
Frequency of using herbs to clean the perineum		
Once in a day	35	70
Twice in a day	10	20
Thrice in a day	5	10
Types of pads used by mothers after giving birth		
Cotton wrapped with gauze	15	30
Cotton cloth	25	50
Sanitary pads	4	12
Soft tissue	6	12

Source: Primary data

Basing on the table 4.2 above, 7 (14%) of the respondents said that they bath once during postpartum period, 8 (16%) of them bath two times a day, 30 (60%) said for them during that time they were bathing three times a days and 5 (10%) of them said they used to bath more than three times a day. They said bathing was good since it kept them with their baby in a hygienic condition and those who bathed once were miss informed by the TBA that they had to do it once so these people needed sensitization by the concerned specialist from Mubende hospital on how to maintain their hygiene during the postpartum period.

Basing on the same table 4.2 above, 48 (95%) of the total respondents said they used soap during the postpartum period and 2 of them didn't know what to use due to insufficient knowledge about it.

Still on the table 4.2 above, 10 (20%) the respondents said they use lukewarm water to clean the perineal area, 25 (50%) of them said the used herbs given to them by their grandmothers and TBA to clean it, 12 (24%) said they apply plain warm water and soap to clean the perineum, 2(4%) said they used a clean white towel soaked in a disinfectant to clean it whereas 1 (2%) of the respondents for them they said they applied cold water and soap to clean the perineum.

Basing on same the table 4.2, most of the respondents 45 (90%) used herbs to clean the perineal area and 5 (10%) did not use herbs just because of the religious affiliation. It was found that some the mothers didn't even use anything they just used plain warm water because herbs are against their religion and these were Born again Christians.

On the same table 4.2 above, 15 (30%) of the mothers used cotton wrapped with gauze to pad themselves after giving birth, 25 (50%) used to cut clean Cotton cloth and they pad themselves, 4 (8%) of them used sanitary pad and 6 (12%) used soft facial tissues to pad themselves. Most of the mothers used clean cotton cloth because it is cheaper and can be afforded by them than any other types of pads. Most of the respondents also said they change these pad as many times as possible to maintain their hygiene during this period.

4.3 Hand hygiene practices of postpartum mothers

Table 4.3: Showing the hand hygiene practices of postpartum mothers

n= 50

Responses	**Frequency**	**Percentage**
Hand washing frequency of post partum mothers		
Once in a day	-	-
Twice in a day	5	10
Thrice a day	15	30
More than three days a day	30	60
Whether mothers used soap when washing their hands		
Yes	40	80
No	10	20
Types of soap used by mothers to wash their hands		
Herbal soap	15	30
Hard soap	35	70
Detergents	-	-
Whether mothers washed their hands each time they changed pads		
Yes	10	20
No	40	80
Whether mothers washed their hands after changing pads		
Yes	5	10
No	45	90
Source of water for washing hands during postpartum period		
Tap water	5	10
Well water	10	20
Borehole water	29	58
Pond water	6	12

Source: Primary data

Basing on the table 4.3 above, most of the respondents 30 (60%) said they wash their hands more than 3 times in a day, 15 (30%) of them said they wash their hands three times a day and 5 (10%) of the respondents wash their hand two times a day.

Basing on the same table 4.3 above, 40 (80%) of the mothers washed their hands with soap during the postpartum mothers and 10 (20%) didn't use soap to wash their hands and they explained that they didn't had enough money to purchase the soap so this shows that some of

these mothers lived in unhygienic conditions during the postpartum period due to lack of enough money to buy the soap for themselves.

Still on the same table 4.3 above; 15 (30%) of the mothers said they used herbal soap to wash their hands and 35 (70%) of them used hard soap mostly the blue hard soap to wash their hands. The ones who used herbal soap said they preferred it because it is mixed with herbs which are good for maintaining their skins.

Basing on the same table 4.3 above; most of the mothers 40 (80%) don't wash their hands whenever changing their pads due to insufficient knowledge about it and the few mothers 10 (20%) said they used to wash their hands so as to remove germs that could disinfect their hands.

In the same table 4.3.4 above, most of the mothers (90%) don't wash their hands after changing pads and a few (10%) washed their hands after changing pads. This implies that mothers in this area need to be sensitized more on the hand hygiene practices since most of them didn't know that they had even to wash their hands after changing their pads which is so unhygienic.

Basing on the 4.3.5 above, 5 (10%) of the postpartum mothers obtained water for washing their hands from the nearby taps, 10 (20%) received it from the nearby wells, 29 (58%) used borehole water and 6 (12%) obtained it from pond.

4.4 Knowledge of postpartum mothers on hygienic practices during the puerperal period

Table 4.4: Showing the Knowledge of postpartum mothers on hygienic practices during the puerperal period

n=50

Responses	Frequency	Percentage
Whether mothers have knowledge on unhygienic practices		
Yes	28	56
No	22	44
Ways of preventing unhygienic practices among mothers		
Hand hygiene maintenance	30	60
Use of clean equipments and delivery kits	6	12
Training of TBA	9	18
Vaginal antiseptics methods	5	10
Frequency of changing clothes by postpartum mothers		
Once a day	44	88
Twice a day	4	8
Thrice a day	2	4
Frequency of bathing by mothers during postpartum period		
Once a day	30	60
Twice a day	16	32
Thrice a day	4	8

Source: Primary data

Basing on the table 4.4 above, 28 (56%) of the postpartum mothers had enough knowledge on unhygienic practices and 22 (44%) lacked sufficient knowledge about it, those who had the knowledge said they obtained it from the medical workers during the antenatal period and the first day of postpartum.

Basing on the same table 4.4 above, 30 (60%) of the mothers said that unhygienic practices can be controlled by maintaining hand hygiene, 6 (12%) said it can be prevented by use of clean equipments and delivery kits, 9 (18%) said can be controlled through getting knowledge from

traditional birth attendants and 5 (10%) of the mothers said it can prevented through use of vaginal antiseptics.

Still in the same table 4.4 above; 44 (88%) of the postpartum mothers said they changed clothes once in a day, 4 (8%) said they changed their clothes twice a day and 2 (4%) of them said they changed them three times a day.

In the same table 4.4 above; 30 (60%) of the postpartum mothers bathed once a day during postpartum period, 16 (32%) of them bathed twice a day and 4 (8%) bathed thrice a day. Few of them knew that they are supposed to bath at least three times but they said it becomes difficult to them due to lack of money to buy enough soap and water.

CHAPTER FIVE

DISCUSSION OF RESEARCH FINDINGS

5.0 Introduction

This chapter looked at discussion of the results in relation to the research finding, more so it is discussed basing on the topic "Hygiene practices of postpartum mothers in a rural Ugandan settings" and it is based on the following objectives; to establish the perineal care practices of postpartum mothers attending Mubende Regional Referral Hospital, to establish hand hygiene practices of post-partum mothers attending Mubende Regional Referral Hospital and to assess the knowledge of postpartum mothers on prevention of puerperal sepsis at Mubende Regional Referral Hospital

5.1 Discussion of findings

The findings were discussed in line with the objectives as follows;

5.1.1 The perineal care practices of postpartum mothers

Mothers during post partum period bath three times a day and this is supported by 60%. This is in line with Mashal et al (2008) who also carried out their studies on Afghanistan women in the postpartum period and found that women usually bathed three times a day but they do it three times after delivery.

Postpartum mothers use lukewarm water to clean the perineal area and this is supported by 20%. This is also in agreement with Dahien et al (2007) who in their studies on postpartum mothers found that the practices involved use of lukewarm water to clean the perineum.

Postpartum mothers use local herbs to clean the perineal area and this is supported 90%. This also corresponds with Byaruhanga et al (2007) who their studies on postpartum mothers found out that mothers used herbs to clean their perineum. To them herbs are believed to prevent several diseases including bad or skin rashes.

Postpartum mothers also use soft facial tissues, sanitary pads and clean cotton cloths to pad themselves during the postpartum period. This also correlates with the findings of Maharaj (2007) who contended that mothers after giving birth experience a vaginal discharge called Lochia, so to him, mothers always wipe away blood from their vaginas by use of soft tissues instead of toilet tissues to pat dry, also mothers use sanitary pads which are changed after four hours in a day.

5.1.2 Hand hygiene practices of postpartum mothers

Mothers use soap and water to wash their hands during the postpartum period and this is supported by 80%. This is also in line with WHO report (2011) which highlighted that mothers wash their perineum gently with soap whenever they are taking a bath or a shower.

Mothers obtain water for washing their hands during postpartum from the nearby bore holes and this was supported by 58%. This is also in argument with Blencowe et al (2011) who carried out a study on postpartum mothers and found that mothers used borehole water as their sources of water for hand hygiene practices.

Mothers also washed their hands by use of water and soap to kill germs and this was supported by 20%. This also corresponds with Lawn J, Kerber K (2006) who found out that mothers practice hand hygiene practice after delivery by use of water and this is always taught to them by their Traditional birth attendants.

5.1.3 The knowledge of postpartum mothers on prevention of unhygienic practices

Postpartum mothers have some knowledge on prevention of unhygienic practices and this is supported by 56%. This is line with Edmond (2010) who carried out his study on the knowledge of postpartum mothers towards puerperal sepsis and found out that mothers are aware that hand washing can reduce on puerperal sepsis and infection rates.

Mothers also know that unhygienic practices can be prevented through maintaining hand hygiene practices like use of water and soap and this is supported by 60%. This also corresponds with Ejemot R et al (2008) who found out that mothers had adequate knowledge about the prevention of the infection as mothers said it could be reduced through hand washing with use of soap which they considered to be cost effective way of reducing the global infectious disease.

Mothers also had knowledge that it can be prevented through use of clean delivery kits and this is supported by 12%. This also in argument with Handley et al (2011) who found out that postpartum mothers were aware that the clean delivery kit could reduce on sepsis among them and this was trained to them by the TBAs in their areas.

The health workers should also be continuously motivated to health educate the mothers on the causes, effects and how to control injections so that they are well informed to reduce the maternal mortality rate due to failure of practicing proper hand hygiene practices.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.0 Introduction

This chapter covers conclusion and recommendations of the study after carrying out a thorough investigation of the whole research study.

6.1 CONCLUSION

After cutting across the whole study, the researcher concludes that although some postpartum mothers practice hygiene practices after delivery, their rate is still low due to insufficient knowledge about the causes, effects and how to control the infections which exposes their lives at stake especially in a rural Ugandan setting.

6.2 RECOMMENDATIONS

There is need for sensitization of the rural mothers on the causes of puerperal sepsis by the ministry of health through organizing seminars for mothers to be trained in different hygiene practices and how to maintain them after delivery.

There is need for government intervention through placing required medicine in rural referral hospitals to cater for mothers who affected by the infections after delivery.

The government through the ministry of health should also train the Traditional Birth attendants on the appropriate hand hygiene practice to be applied to mothers after delivery so as to reduce on the rate of puerperal sepsis after delivery.

The government should also allocate enough funds on the national budget to build enough hospitals to cater for ladies who are always give birth in rural areas.

6.3 Areas for further research

- Knowledge and attitude of mothers on prevention of mother to child transmission (PMTCT)
- Knowledge and practices of pregnant mothers towards Routine counseling and testing (RCT).

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APPENDICES

APPENDIX I: CONSENT FORM

Principle Investigator: Karungi Cleofas Ritah.

Research title: Hygiene practices of postpartum mothers in a rural Ugandan setting a case study of Mubende Regional Referral hospital.

Study procedure: On agreeing to participate in the study, you will be asked to provide information on questions indicated in the questionnaires.

Benefits and incentives: There are no individual benefits and incentives for the study participants. The wider community and health sector stand to benefit from this study if the findings are adapted.

Risks: You may only experience some anxiety or discomfort while being interviewed.

Rights to refusal or withdrawal: Your participation in this study is strictly voluntary and you are free to take part or not affecting your rights. You choose to answer all or some of the questions.

Confidentiality: As a participant you are assured of confidentiality.

Questions: The study will commence once the researcher has explained the topic to participants and they have understood. Study participants will get a chance to have understood. Study participants will get chance to have their questions answered.

Consent signature

Your signature acknowledges that you have read the information stated or been explained to the contents above and ready to participate in study.

…….. ……

Participant signature **Date**

APPENDIX II: QUESTIONAIRE TO RURAL MOTHERS AT MUBENDE REGIONAL REFERRAL HOSPITAL

Dear respondents, Karungi Cleofas Ritah with registration number 2012-DCM-FT-032 a student of International Health Sciences University pursuing a Diploma in Clinical Medicine and community health and you have been selected to participate in the ongoing study on "Hygiene practices of postpartum mothers in a rural Ugandan setting a case study of Mubende Regional Referral hospital"**.** I am asking about the practices during the first week when you gave birth**.** I kindly seek your opinion and answer the questions raised in this questionnaire to facilitate my study. The result of the study obtained thereafter shall be used for academic purposes only and will be treated with maximum confidentiality. It is only through your positive response that this study can be successfully completed. Thank you for your co-operation and time provided.

Tick in the boxes which you wish provides you with the appropriate opinion.

Section A: Background Information of the respondents

1. Age

a) 15-19 years ☐
b) 20-24 years ☐
c) 25-29 years ☐
d) 30-34 years ☐
e) 35-and above ☐

2. Religion

a) None ☐
b) Moslem ☐
c) Roman catholic ☐
d) Protestant ☐

Other (specify)…….

3. Marital status

a) Single ☐

b) Married ☐

c) Separated/divorced ☐

d) Cohabiting ☐

4. Educational level.

(a) None. ☐

(b) Primary. ☐

(c) Secondary. ☐

(d) Tertiary. ☐

5. Occupation

(a) Business person. ☐

(b) Civil servant. ☐

(c) Housewife

(d) Peasant ☐

6. Tribe

(a) Ganda ☐

(b) Soga ☐

(c) Gishu ☐

(d) Others specify……

Section B: The perineal care practices of postpartum mothers

7. After giving birth how many times were you bathing?

……

……

8. Did you use soap when bathing?

(a) Yes ☐ (b) No ☐ (c) sometimes ☐

b) If yes, what type of soap did you use?

……

……

9. What were you using to clean the perineal area?

……

……

10. Did you use herbs for cleaning or massaging the perineal area?

(a) Yes ☐ (b) No ☐

b) If yes how often?

……

……

11. What type of sanitary pads did you use after giving birth?

……

……

12. How often were you changing pads in the first week?

……

……

13. Did you massage the perineal area in the first week?

(a) Yes ☐ (b) No ☐

b) If yes, how often ……...

c) What were you using to massage?

……

……

Section C: Hand hygiene practices of post-partum mothers

14. How many times did you wash your hands?

(a) Once a day ☐ (b) twice a day ☐

Others specify……

b) Did you use soap when washing hands?

(a) Yes ☐ (b) No ☐

c) If yes, what kind soap did you use?

……

……

15. Did you wash your hand before changing the pad?

(a) Yes ☐ (b) No ☐

16. Did you wash your hands after changing the pads?

(a) Yes ☐ (b) No ☐

b) If yes, what are kind of water did you use?

……

……

17. Do you use soap when washing hands?

18. What was the source of water for hand washing?

……

……

Section D: The knowledge of postpartum mothers on prevention puerperal sepsis

19. Do you know what unhygienic practices are?

(a) Yes ☐ (b) No ☐

b) If yes, how can they be prevented?

a) Hand hygiene maintenance b) Use of clean equipment and delivery kits

c) Training of traditional birth attendants (d) Vaginal antiseptics

Others specify……

20. How often did you change your clothes?

(a) Once a day ☐ (b) Twice a day ☐ (c) Thrice a day ☐

Others specify……

21. How often did you bath?

(a) Once a day ☐ (b) Twice a day ☐ (c) Thrice a day ☐

Others specify……

THANK YOU SO MUCH FOR YOUR COOPERATION.

APPENDIX III: INTERVIEW GUIDE TO THE MEDICAL ATTENDANTS.

Dear respondents, Karungi Cleofas Ritah with registration number 2012-DCM-FT-032 a student of International Health Sciences University pursuing a Diploma in Clinical Medicine and community health and you have been selected to participate in the ongoing study on "Hygiene practices of postpartum mothers in a rural Ugandan setting a case study of Mubende Regional Referral hospital". I am asking about the practices during the first week when you gave birth. I kindly seek your opinion and answer the questions raised in this questionnaire to facilitate my study. The result of the study obtained thereafter shall be used for academic purposes only and will be treated with maximum confidentiality. It is only through your positive response that this study can be successfully completed. Thank you for your co-operation and time provided.

1. How old are you?

2. What is your marital status?

3. What is your highest level of education?

4. Position held as a medical attendant?

5. How many years have you spent working as a medical attendant?

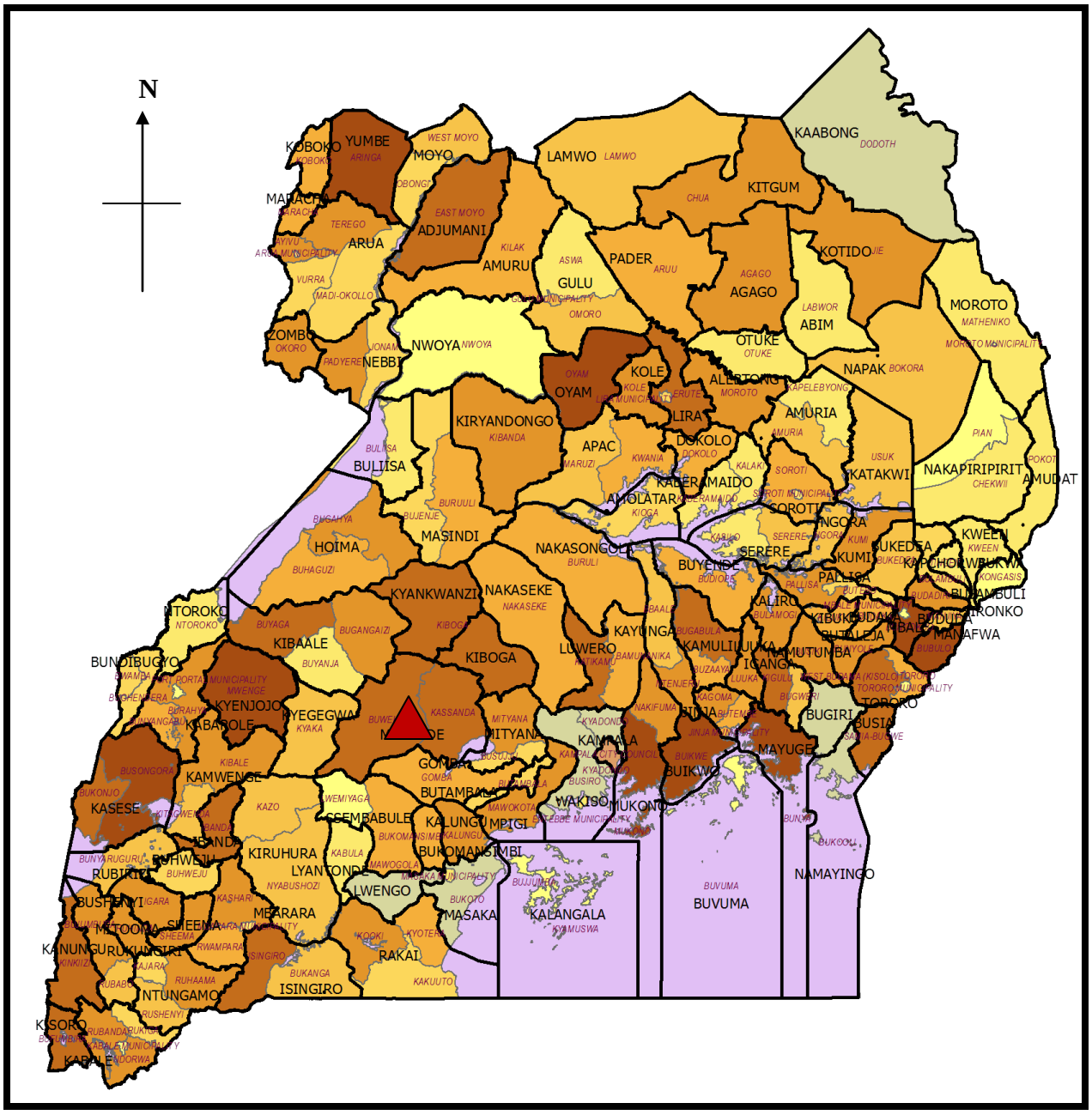
6. What are the perineal care practices of postpartum mothers attending Mubende Regional Referral Hospital?

7. What are the hand hygiene practices of post-partum mothers attending Mubende Regional Referral Hospital?

8. What is the knowledge of postpartum mothers on prevention puerperal sepsis at Mubende Regional Referral Hospital?

THANK YOU SO MUCH FOR YOUR POSITIVE RESPONSE.

APPENDIX IV: A MAP OF UGANDA SHOWING THE LOCATION OF MUBENDE DISTRICT

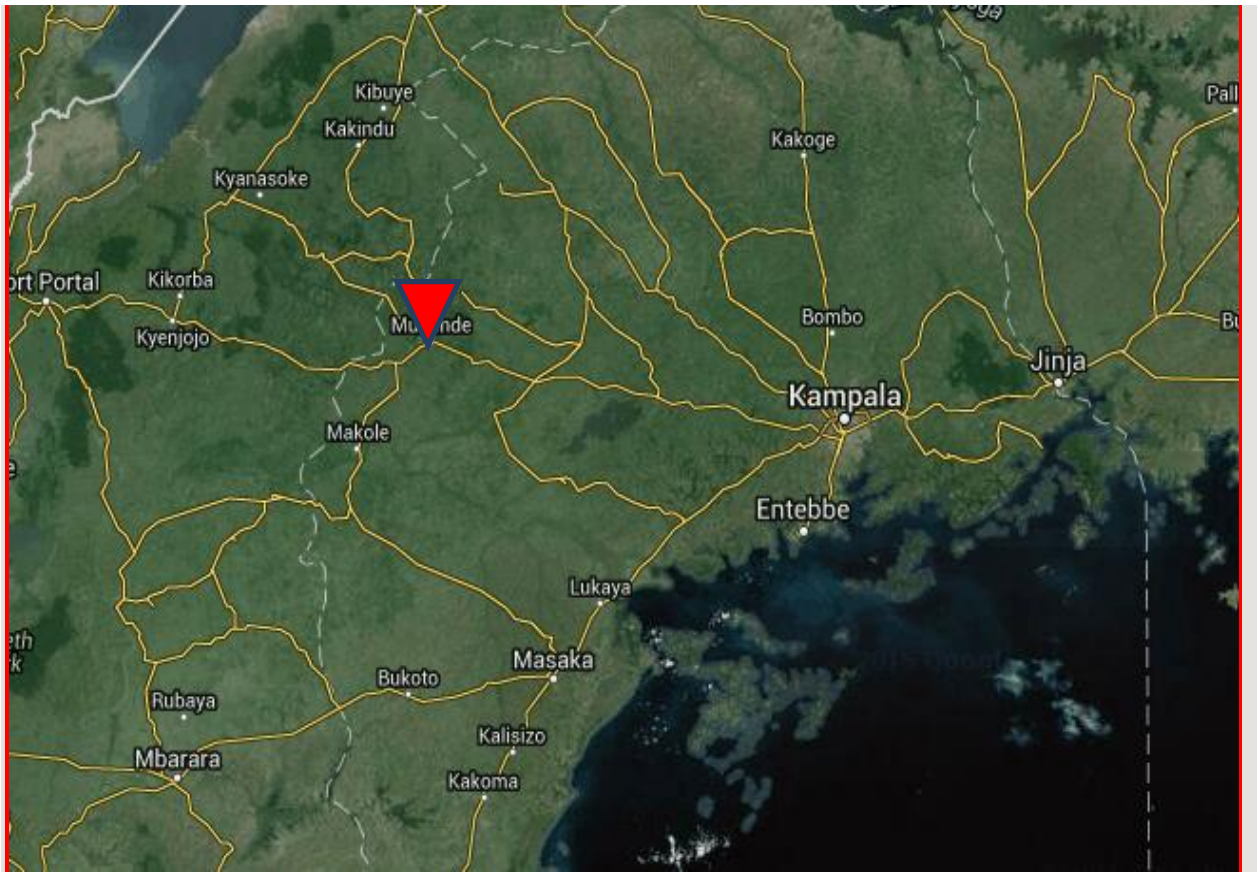


KEY

Mubende District

APPENDIX V: A MAP SHOWING THE LOCATION OF MUBENDE REGIONAL REFERRAL HOSPITAL (STUDY AREA).

N



KEY

Mubende Regional referral hospital

APPENDIX VI: INTRODUCTORY LETTER

IHSU INTERNATIONAL HEALTH SCIENCES UNIVERSITY
sanitas per scientiam
PART OF INTERNATIONAL MEDICAL GROUP

making a difference to health care

Dean's Office-Institute of Allied Health Sciences

Kampala, 03th July 2015

THE HOSPITAL DIRECTOR
MUBENDE REGIONAL REFERRAL HOSPITAL
P'O BOX 4, MUBENDE

Dear Sir/Madam,

RE: ASSISTANCE FOR RESEARCH

Greetings from International Health Sciences University.

This is to introduce to you **Karungi Cleofas Ritah**, Reg. No. **2012-DCM-FT-032** who is a student of our University. As part of the requirements for the award of a Diploma in Clinical Medicine & Community Health of our University, the student is required to carry out research in partial fulfillment of her award.

Her topic of research is: **HYGIENE PRACTICES OF POSTPARTUM MOTHERS IN RURAL UGANDAN SETTING. A CASE STUDY OF MUBENDE REGIONAL REFERRAL HOSPITAL.**

This therefore is to kindly request you to render the student assistance as may be necessary for her research.

I, and indeed the entire University are grateful in advance for all assistance that will be accorded to our student.

Sincerely Yours,

13 JUL 2015

Okiria John Charles
Senior Lecturer / Dean, Institute of Allied Health Sciences

The International Health Sciences University
P.O. Box 7782 Kampala – Uganda
(+256) 0312 307400 email: jokiria@ihsu.ac.ug
web: www.ihsu.ac.ug

APPENDIX VII: ACCEPTANCE LETTER

COMMUNITY HEALTH DEPARTMENT
Telephone : 256 (0) 464 444 004
Fax : 256 (0) 464 444 394
Email : mubendehosp@gmail.com
Website : www.mubendehosp.go.ug
In any correspondence on
this subject please quote No: **MRH/213/9**

THE REPUBLIC OF UGANDA

MINISTRY OF HEALTH
MUBENDE REGIONAL REFERRAL HOSPITAL
PLOT 6 KAKUMIRO ROAD,
P. O. BOX 4,
MUBENDE, UGANDA

10th July, 2015.

REF: MRRH/MBE
MISS. KARUNGI CLEOFAS RITAH
REG: NO. 2012-DCM-FT-032
INTERNATIONAL HEALTH SCIENCES UNIVERSITY

RE: ACCEPTANCE TO CONDUCT A STUDY IN MUBENDE REGIONAL REFERRAL HOSPITAL.

The institution has received your request today 10th July, 2015 requesting for a study in Mubende Regional Referral Hospital, targeting mothers who are still in the peuperium period and have brought their babies for immunization in the immunization unit.

The purpose of this letter is to grant you permission to conduct your study.
The unit in charge is requested to provide you with the necessary Assistance.

Regards

MUBENDE REGIONAL REFERRAL
10 JUL 2015
P.O.BOX 4, MUBENDE
FOR: HOSPITAL DIRECTOR

.....
Kikomeko Solomy
IN-CHARGE. C.H.D