

**BURDEN OF PUERPERAL SEPSIS AND ASSOCIATED FACTORS
AMONG MOTHERS ATTENDING MATERNITY WARD
IN ISHAKA ADVENTIST HOSPITAL
BUSHENYI DISTRICT**

BY

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DECLARATION

I AYEN FELIX, declare that this research project is my original work which has never been presented by anyone else and has been submitted in partial fulfillment of the requirements for the award of Diploma of Clinical medicine and Community Health

Signature.....date.....

SUPERVISORS APPROVAL

This research report has been submitted for examination with approval of the research supervisor

Signature.....

Date.....

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DEDICATION

I would like to greatly dedicate this research study my lovely parents Mr. Joel Opena and Miss. Molly Opena, my lovely brothers and sisters for their great support towards my academic success. Finally to all my relatives and fellow friends.

ACKNOWLEDGMENT

First, I glorify my thanksgiving to my Almighty Heavenly Father for His grace and mercy upon to have made it successful.

Besides, i further thank the administrators of KIU-WC and KIU-WC TH for their tireless effort they rendered towards my academic success and also recognizing our faculty of Allied Health science for the closed mentorship they rendered in the course of my study equipping me with relevant knowledge and skills.

I would like to extend my sincere thanks to the KIU scholarship scheme board administrators in collaboration with my home district administrators, Amolatar District for enrolling me into the program that has shaped my future.

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LIST OF ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
ANC	Antenatal Care
HIV	Human Immunodeficiency Virus
MDG	Millennium Development Goal
MMR	Maternal Mortality Rate
PROM	Prolonged Rupture of Membranes
UNICEF	United Nations International Children Emergency Funds
UNFPA	Uganda National Family Planning Association
WHO	World Health Organization
PS	Puerperal Sepsis

OPERATIONAL DEFINATIONS

Puerperal sepsis ; is the infection of the genital tract occurring at any time between the onset of labor rapture of the membrane and the 42nd day postpartum in which fever and one of the following are present; pelvic pain, abnormal vaginal discharge, abnormal odour of the discharge and delay in the rate of reduction of size of the uterus.

Maternal mortality; this is the death of woman while pregnant or within 42 days of termination of pregnancy from any cause related to or aggravated by the pregnancy or its management but not from accident or incidental cause.

Maternal morbidity; these are medical complications in a woman caused by the pregnancy, labor or child delivery.

Postpartum infection; this is the period beginning immediately after the birth of a child and extending for about six weeks.

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ABSTRACT

BACKGROUND

puerperal sepsis is the infection of the genital tract occurring at any time between the onset of the rupture of membranes or labor and the 42nd day postpartum in which fever and one or more of the following are present: pelvic pain, abnormal vaginal discharge, abnormal odour of discharge, and delay in the rate of reduction of size of the uterus(WHO, 2008). It is a major cause of morbidity and mortality in most hospitals worldwide especially in developing world.

AIM; The study was carried out in Ishaka Adventist hospital with the aim of identifying burden of puerperal of puerperal sepsis and associated factors among among mothers in the post natal ward.

METHODS; A quantitative and qualitative cross sectional study was conducted where by the questionnaires was availed to Mothers in maternity ward to fill.

RESULTS; in the results, most mothers were age between 25-29 and married. Out 70 mothers who was interviewed, only 8 mothers was diagnosed with puerperal sepsis and the major risk factors was; home birth 39(55.7%), socio economic factors is.ie. No money 26(37.1%), inadequacy of food during pregnancy 49(70%) and repeated vaginal examination 43(61.4%). Majority of mothers (59%) also believed that puerperal sepsis can lead to a serious complication like infertility, fallopian tube blockage, chronic pelvic pain, acute morbidities and death and 41% don't know.

CONCLUSION; majority of the respondents agreed that puerperal sepsis lead to the complication like chronic pelvic pain, infertility, acute morbidities, long term disabilities and the major risk factors was home delivery, inadequacy of food, socio economic factors and prolonged labor.

Health workers also agreed that management of puerperal sepsis involved a multidisciplinary approach to achieve a good outcome.

RECOMMENDATIONS; The following recommendations were put forward; encouraging mothers to deliver from the health facility, use of partograph by the health workers and further sstudies about the topic was also encouraged.

CHAPTER ONE

1.0 Introduction

This chapter includes the following; background information, problem statement, general and specific objectives of the study, research questions, justification, significance and scope of the study.

1.1Background

WHO defines puerperal sepsis as infection of the genital tract occurring at any time between the onset of the rupture of membranes or labor and the 42nd day postpartum in which fever and one or more of the following are present: pelvic pain, abnormal vaginal discharge, abnormal odour of discharge, and delay in the rate of reduction of size of the uterus(WHO, 2008)

Historically, puerperal sepsis was a common pregnancy-related condition, which could eventually lead to obstetric shock or even death. During the 19th century, it took on epidemic proportions, particularly in lying-in hospitals, where ignorance of asepsis prevailed. The efforts of Wendell Holmes and Semmelweis to improve asepsis during childbirth resulted in a striking decrease in mortality due to puerperal sepsis between 1846 and 1847(Adriaanse et al, 2007)

Most of the estimated 75,000 maternal deaths occurring worldwide yearly as a result of infections are recorded in low-income countries (van et al, 2010) Although the reported incidence in high-income countries is relatively low (between 0.1 and 0.6 per 1000 births), it is nonetheless an important direct cause of maternal mortality(Cantwell et al, 2011).

Apart from deaths and acute morbidities associated with infections during or following childbirth, long-term disabilities such as chronic pelvic pain, fallopian tube blockage and secondary infertility can also occur. Maternal infections around childbirth also have a considerable impact on newborn mortality, and an estimated 1 million newborn deaths are associated with such infections annually (Black et al, 2010)

Globally, In 2005, WHO reviewed that puerperal sepsis has been a public burden causing estimated maternal mortality ratio as 900 per 100 000 live births in sub-Saharan Africa, 100-

times the maternal mortality ratio of resource-rich countries (nine per 100 000 live births)(WHO.UNICEF.UNFPA, 2008)

WHO estimated the maternal mortality ratio as 900 per 100 000 live births in sub-Saharan Africa, 100-times the maternal mortality ratio of resource-rich countries (nine per 100 000 live births)(WHO.UNICEF.UNFPA, 2008) .

A 2006 WHO systematic review of the causes of maternal deaths worldwide, Khan et al., (2008) estimated that 9.7% (95% CI 6.3–12.6) of maternal deaths in Africa were due to puerperal sepsis. The datasets (since 1990) were selected to be representative of their populations and selected by methodological quality against predetermined criteria. Nine studies from Africa were included, and eight of these were from sub-Saharan Africa. All concerned a single country or region, retrospectively reviewing maternal deaths, Rutgers,(2011) except one, which was a multinational, prospective, population-based study in six countries in west Africa recruiting and following up 19 545 pregnant women(Bouvier-Colle et al, 2011). In this study, maternal deaths were followed up by analysis of medical records and by verbal autopsy. Six maternal deaths were attributed to sepsis, accounting for 10.9% of all maternal deaths or 33.9 (12.4–73.8) deaths per 100 000 live births(Bouvier-Colle et al, 2011)

In Uganda, there has been a slow decline in maternal mortality ratio (MMR) between 1990 and 2010 (from 550 in 1990 to 438 in 2012). Almost half of deliveries (52 %) in Uganda occur in health facilities and 59 % of all deliveries are assisted by a skilled birth attendant. The percentage of skilled attendance at birth has risen from 42 % to at least 59 % over the last 10 years. About 47 % of women attend at least 4 Antenatal Care (ANC) visits: while the adolescent birth rate is 134.5/1,000 births while the ANC HIV prevalence rate stands at 6.5 % (Uganda Bureau of statistics, 2012)

1.2 Problem statement

Puerperal sepsis are among the leading causes of maternal mortality worldwide, accounting for about one tenth of the global burden of maternal deaths(Say et al, 2014) While the number of deaths arising from these infections has decreased considerably in high-income settings, the situation has not improved in resource-limited settings. Most of the estimated 75,000 maternal

deaths occurring worldwide yearly as a result of infections are recorded in low-income countries(van et al, 2010`)

In sub-Saharan Africa, UNICEF, (2008) accounting for half of all maternal and child deaths worldwide. In all the countries reported in sub-Saharan Africa, except Eritrea, insufficient or no progress in reducing child mortality has been made between 1990 and 2005 to achieve MDG four (a two-thirds reduction in childhood mortality rates between 1990 and 2015). (Countdown Coverage Writing Group and on behalf of the Countdown to 2015 Core Group Countdown to 2015 for maternal, newborn, and child survival, 2008)

The causes of mortality vary and predictors of these maternal deaths in the Ugandan setting are largely unknown. For every woman who dies, about 30 women develop obstetrical near misses (Ebuehi et al, 2013). Programs focusing on increasing health facility deliveries need to ensure that pregnant woman within the facility have quality health care during the antepartum, intrapartum and postpartum periods. Some of these interventions include improving on the understanding, attitudes and skills of the health care providers, improved involvement of the women in quality of care processes, ensuring implementation of evidence-based care and improving the referral systems(Mathai, 2011).

Knowledge of the common causes and factors associated with mortality and morbidity in these women will help in preventing and treatment measures so as to be able to contribute towards improved maternal health outcomes. The aim of the study was to find out the causes and factors that influence the death of mothers at Ishaka Adventist hospital.

1.3 Research Objective

1.3.1 General objective

To determine the burdens and associated factors of puerperal sepsis among mothers attending Ishaka Adventist hospital.

1.3.2 Specific Objectives

1. To determine the burden of puerperal sepsis among mothers attending Ishaka Adventist hospital

2. To assess the factors associated with puerperal sepsis among mothers attending Ishaka Adventist hospital.

3. To assess the management of puerperal sepsis among mothers attending Ishaka Adventist hospital.

1.3.3 Research Questions

1). what is the burden of puerperal sepsis among mothers attending Ishaka Adventist hospital?

2). what are the risk factors associated with puerperal sepsis among mothers attending Ishaka Adventist hospital?

3). what are the existing strategies use in the management of Puerperal Sepsis in Ishaka Adventist hospital?

1.4 Justification

The recognition of the important roles played by factors associated with Puerperal sepsis will lead to a realization that there is need to know the association between them in relation to the infection. The purpose of this study was therefore to provide detailed representative information on puerperal sepsis in Ishaka Adventist hospital, and assess the associated risk factors, establish the knowledge on puerperal sepsis and come up with the preventive measures as well as planning towards the management of morbidities resulting from puerperal sepsis in Ishaka Adventist hospital.

1.5 Significance of the study

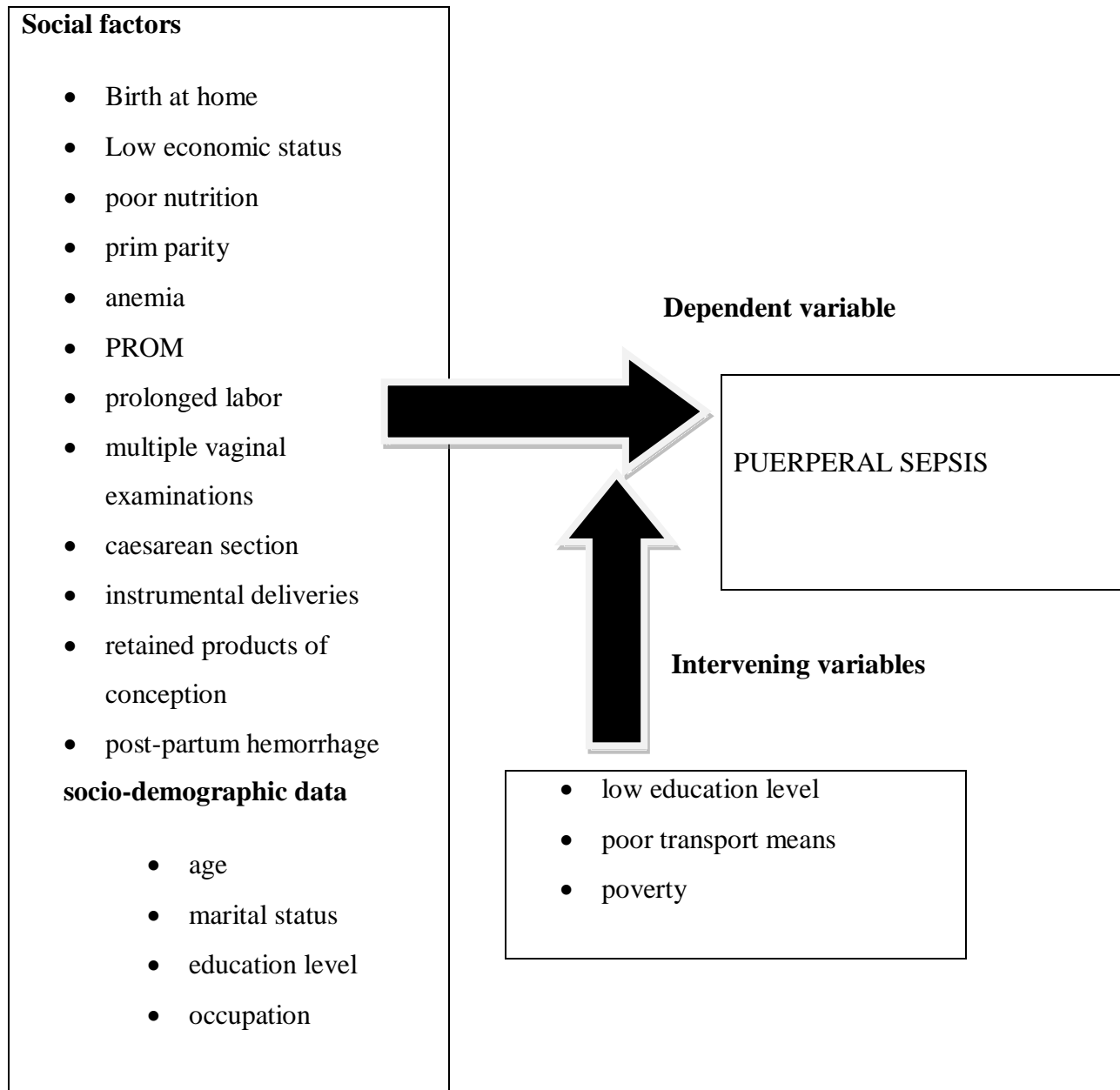
Results from the study identified the gaps in infection control measures and the information was forwarded to stake holders which will help to come up with the interventions to reduce the levels of infections and associated maternal morbidity

1.6 scope of the study

The study was done in Ishaka Adventist hospital with focus on burden and factors contributing to puerperal sepsis on the maternity ward. The study was carried out among the post natal mothers in the period of two month from May to June.

1.7 Conceptual Frame Work

Independent variables



CHAPTER TWO; LITERATURE REVIEW

2.0 Introduction

This chapter reviews the work of other early writers to avoid the repetitions

2.1 Burden of puerperal sepsis

Maternal death is the death of a woman while she is pregnant or within 42 days of termination of pregnancy, irrespective of the duration and sites of the pregnancy, for any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes.

Direct maternal death is the death of a woman resulting from obstetric complications of pregnancy, labor and puerperium; from interventions, omissions or incorrect treatment; or from a chain of events resulting from any of the above while indirect maternal death is the death of a woman resulting from a previously existing disease or a disease that developed during pregnancy and was not due to direct obstetric causes but was aggravated by the physiological effects of pregnancy(WHO, 2013)

The global Maternal Mortality Ratio (MMR) is 210(WHO, UNICEF, 2012). Comparably, the MMR reported for low resource settings such as sub-Saharan Africa is 500 while the developed countries, the rates are 16 maternal deaths per 100,000 live births. Despite global reduction in the MMR since the year 1990; the MMR is 15 times higher in low- resource countries than the resource rich countries(United nations, 2012).

Apart from deaths and acute morbidities associated with infections during or following childbirth, long-term disabilities such as chronic pelvic pain, fallopian tube blockage and secondary infertility can also occur. Maternal infections around childbirth also have a considerable impact on newborn mortality, and an estimated 1 million newborn deaths are associated with such infections annually(Lawn, 2008) In addition, infection-related morbidities and prolonged hospitalization can interfere with mother–infant bonding in the first days after birth.

Several factors have been associated with increased risk of maternal infections, including pre-existing maternal conditions (e.g. malnutrition, diabetes, obesity, severe anemia, bacterial

vaginosis, and group B streptococcus infections) and spontaneous or provider-initiated conditions during labour and childbirth (e.g. prolonged rupture of membranes, multiple vaginal examinations, manual removal of the placenta, operative vaginal birth and caesarean section)(Acosta et al, 2014) Caesarean section is notably the most important risk factor for infection in the immediate postpartum period, with a five- to 20-fold increased risk compared to vaginal birth. As such, the strategies to reduce maternal and newborn infections and their short- and long-term complications have been largely directed at avoiding common risk factors and promoting good infection control practices both within and outside the hospital environment.

2.2 Risk factors of puerperal sepsis

Risk factors for puerperal sepsis described in resource-rich countries include: home birth in unhygienic conditions, low socioeconomic status, poor nutrition, primiparity, anemia, prolonged rupture of membranes (PROM), prolonged labour, multiple vaginal examinations (more than five), caesarean section, instrumental deliveries, retained products of conception, and postpartum hemorrhage(Maharaj, 2009). Widely accepted interventions to reduce the incidence of puerperal sepsis are the use of aseptic and sterile techniques (hand cleansing, and sterile drapes and instruments), and antibiotics targeted to deliveries by caesarean section, and those with PROM ,Maharaj,(2009) (which can be associated with *S agalactiae* carriage).(Regan et al.,2009Whilst high prevalence of HIV/AIDS, anemia, malaria, and under nutrition is widely reported,Lartey,(2008) their contribution to puerperal and maternal sepsis is largely unknown.

HIV/AIDS is, however, a well-recognized risk factor for maternal mortality and morbidity in sub-Saharan Africa. A population based, prospective study of 19 983 women in Rakai, Uganda,Sewankambo et al.,(2007) reported maternal mortality ratios of 1687 and 310 per 100 000 births in HIV-positive and HIV-negative mothers respectively(Sewankambo et al, 2007). This finding is supported by the autopsy study in Mozambique, where HIV/AIDS-related conditions were the most common non-obstetric cause of death (12·9% due to opportunistic infection (bacterial, fungal, and viral]) and the confidential enquiry into maternal deaths in South Africa—HIV/AIDS-related conditions accounted for 20·1% of all maternal deaths(MoH, 2008) Operative or instrumental delivery is likely to be an association although five of 18 cases (28%) of puerperal sepsis cases followed caesarean section, this represented a relatively low (1·5%)

postoperative infection rate(Pruhal, 2011) The authors attribute this result to widespread and systematic antibiotic use in study areas.

Episiotomy is another potential risk factor. Other risk factors similar to resource-rich settings were reported from this study, and PROM and increased number of vaginal examinations were significantly associated with puerperal sepsis(Sebitloane et al, 2008) Other simple interventions, identified in the community study in Mwanza, Tanzania, (Winani et al, 2007)significantly reducing the prevalence of puerperal sepsis, were bathing and shaving before delivery.

Genital-tract bacterial carriage might also predispose to (clinically defined) puerperal sepsis. A hospital based study in Zimbabwe reported increased prevalence of *N gonorrhoeae*, *Bacteroidesspp*, *Chlamydia*spp, and *Gardnerellavaginalis* among mothers who developed puerperal sepsis,(Mason et al, 2011) similar to isolates from cases of puerperal sepsis in the Kenyan study described(Temmerman et al, 2013) and supported by a separate study in Zimbabwe associating maternal colonization with *N gonorrhoeae*, *S agalactiae*, and *Bacteroidesspp* with PROM(Mason, 2011)

2.3 Management of puerperal sepsis

Puerperal sepsis results from infection contacted during child birth and this is one of the commonest causes of maternal mortality in the developing countries. Despite the discovery of antibiotics over eighty years ago, there is still a strong need for their proper and prophylactic utilization. Some developing countries have experienced increased use of health facilities for labour and delivery care but there is a lack of proper monitoring or checks and balances and there is a possibility that this trend could lead to rising rates of puerperal sepsis. Drug and technological developments needs to be combined with effective health system intervention to reduce infection including puerperal sepsis(Hussein, 2011)

This highly important maternal issue requires special attention. There should be no excuse for delaying targeted, global action to implement and evaluate infection control measures during labour and delivery for the prevention and reduction of puerperal sepsis and other related conditions. The choice of the specific combination of components to be evaluated could be informed by what is known from the wider infection control literature, from exciting information

on ways to improve quality in maternity care and by tailoring strategies to address underlying problems of infection control(Allhabe, 2008)

Considering important maternal health issues, more recent studies have been conducted to establish the optimal knowledge and skills of infection prevention specialists and of staff to bed ratios but clear recommendations on effective organization of staff have not yet emerged(Stone, 2009)Some guidelines such as those on hand hygiene are highly specific and have been developed using quality assessed evidence meticulously gathered from reviews of literature. These have been the product of work done as part of the global patient safety challenge which targeted hand hygiene as a flagship campaign(Allergranzi, 2007)

CHAPTER THREE; METHODOLOGY

3.0 Introduction.

This chapter includes the method used in the study, study population, study design, sample size determination, sampling procedure, etc.

3.1 study design

A quantitative and qualitative cross sectional study was conducted where by the questionnaires was availed to Mothers in maternity ward to fill. The health workers involved in the management of these patients was also requested to fill the questionnaire.

3.2 study area

The study was carried out in Ishaka Adventist hospital in Bushenyi district, 5km from Bushenyi district Headquarters along Kasese highway.

3.3 study population

The study targeted all women of reproductive age (15-44 years) who visited the hospital for health care services during the time of study. The study also targeted all women who were diagnosed with puerperal sepsis. The health care providers in charge of these patients were also included in the study.

3.3.1 Inclusion Criteria

Women who participated in the study are those who were diagnosed with puerperal sepsis and other mothers in the postnatal ward who are not diagnosed with puerperal sepsis but consented to take part in the study.

3.3.2 Exclusion Criteria

The study excluded eligible women who were not willing to participate, those in critical conditions and those not mentally sound.

3.4 Sample size determination.

$$N = \frac{ZX^2P(1-P)}{d^2} \quad (\text{swinscow, 1997})$$

Where; N=sample required, P=prevalence of maternal sepsis which is 10%, Z_X=level of significant (1.96) for confidence interval 95% and d=standard error of deviation (0.05).

$$N = \frac{1.96^2 \times 0.1(1-0.1)}{0.05^2}$$

N=138.2972, Therefore the 138 participants was used as the sample size for the study

3.5 Sampling procedure

Convenience sampling method was used to obtain participant's responses by the use of questionnaires. The questionnaires contained both open ended and closed questions. The participants were visited at the hospital and whoever was present at the hospital in the post natal ward at the time of visit was requested to fill the questionnaire.

3.6 Data collection

Data was collected by the use of questionnaire and writing materials like pens and papers.

3.7 Data collection methods

The interviewer questionnaires were filled during interview with women who were diagnosed with puerperal sepsis. This was used to establish the occurrence of puerperal sepsis among women of reproductive age 15-44 in Ishaka Adventist hospital. It consists of socio demographic characteristic section, risk factors and knowledge status section of PS among the respondents. The interview was done to each respondent individually and in a private space to ensure privacy and confidentiality. Questions was translated to the respondent in the language they understood for more accurate answers

3.8 Data quality and control

To ensure that the result of the study was valid, Irrelevant/ ambiguous questions were left out from the list. The researchers also further consult study supervisors who gave advice on how to develop appropriate questions that met all the objectives of the study.

3.9 Pre-testing of the questionnaire

Questionnaires was given to few chosen individuals to assess the acceptability of data collection tool before administering the questionnaire to the participants and Necessary adjustments was done to ensure adequate data collection.

3.10 Data Analysis and presentation

Data collected was entered in a computer and analyzed using computer software programs like Microsoft excel and presented in frequency distribution table, pie charts and graph.

3.11 Study Ethics

Ethical approval letter was obtained from Kampala International University, western campus, school of allied health sciences. Thereafter permission was obtained from the management of the Ishaka Adventist hospital. The study also obtained informed consent from the participants. Confidentiality was ensured by interviewing the respondents in a private place and none of their personal information (for example; name and contact details) was recorded.

3.12 Limitations of the study

The following challenges were met during the study; insufficiency of fund, language barrier as most respondents were banyankole who don't know English and shortage of time to collect the data because the hospital received a small number of patient which require enough time for data collection to meet the proposed sample size.

CHAPTER FOUR: DATA ANALYSIS.

4.0 INTRODUCTION.

This chapter includes analysis of data which was collected; it involves the use of diagrams like pie chart, bar graph and tables. Data was analyzed manually using calculator.

4.1 SOCIODEMOGRAPHIC CHARACTERISTICS.

TABLE SHOWING SOCIO DEMOGRAPHIC CHARACTERISTIC OF MOTHERS OF CHILD BEARING AGE ATTENDING ISHAKA ADVENTIST HOSPITAL.

In the study, most participants were aged between 25-29(31.4) who stopped the level of their education in primary 21(30%), farmers 25(35.7%), and are married 37(52.9%) as shown in the table below.

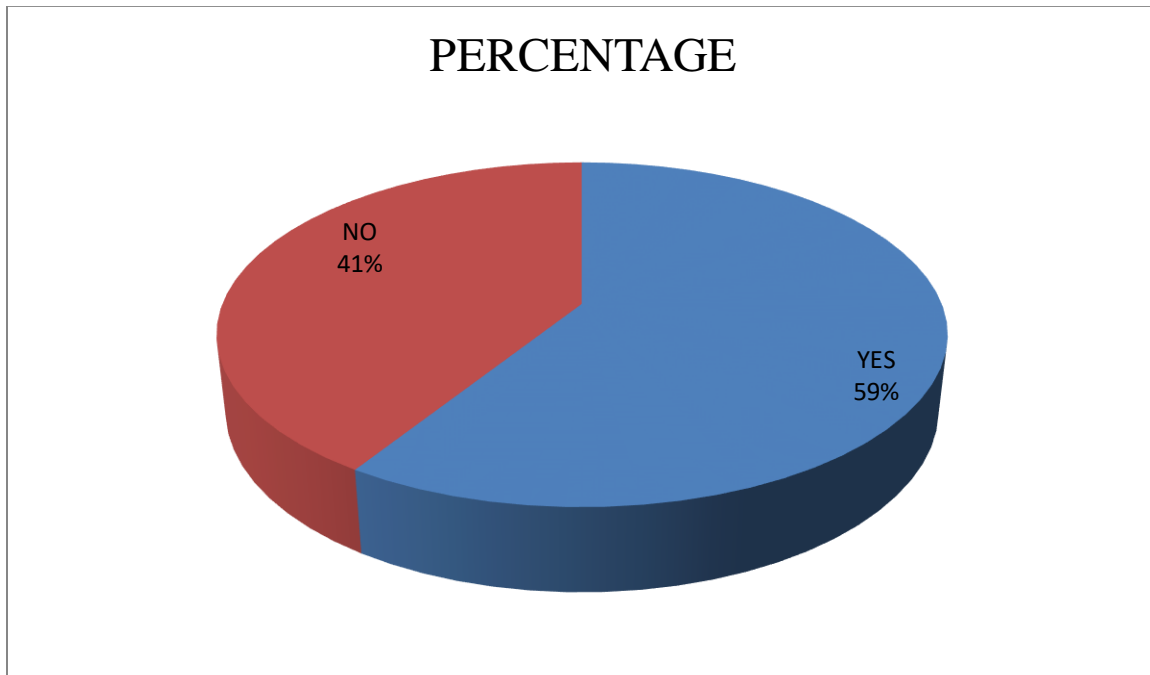
VARIABLES	FREQUENCY	PERCENTAGES, (%)
AGE DISTRIBUTION		
15-19	8	11.4
20-24	12	17.1
25-29	22	31.4
30-34	18	25.7
35-39	6	8.6
40-44	4	5.7
LEVEL OF EDUCATION		
None	14	20
Primary	21	30

Secondary	19	27.1
tertiary/college	16	22.9
OCCUPATION		
civil servant	14	20
self-employed	18	25.7
Farming	25	35.7
others,(specify)	3	4.3
MARITAL STATUS		
Single	20	28.6
Married	37	52.9
Others	3	4.3

4.2 BURDENS OF PUERPERAL SEPSIS.

A PIE CHART SHOWING BURDEN OF PUERPERAL SEPSIS IN WOMEN OF CHILD BEARING AGE AMONG MOTHERS ATTENDING ISHAKA ADVENTIST HOSPITAL.

Majority of mothers (59%) had complication like infertility, fallopian tube blockage, chronic pelvic pain, acute morbidities and death and 41% did not have.



4.3 RISK FACTORS OF PUERPERAL SEPSIS.

A TABLE SHOWING FACTORS RESPONSIBLE FOR PUERPERAL SEPSIS IN WOMEN OF CHILD BEARING AGE AMONG MOTHERS ATTENDING ISHAKA ADVENTIST HOSPITAL

According to the table below, the study showed that majority of women 39(55.7%) deliver from home by spontaneous vaginal delivery 66(94.3%) due to lack of money to pay for service in the health facility 26(37.1%) with several vaginal examination done 43(61.4%), prolonged labor 50(71.4%) and the person who assisted in the delivery used gloves 27(38.6%).However, majority of women also did not have adequate food 49(70%) during pregnancy.

VARIABLES	FREQUENCY	PERCENTAGES (%)
PLACE OF DELIVERY		
Home	39	55.7
Health facility	31	44.3
MODE OF DELIVERY		
Spontaneous vaginal delivery	66	94.3
Caesarean delivery	3	4.3
Instrumental/assisted delivery	1	1.4
SOCIO-ECONOMIC FACTORS		
No money to pay for service	26	37.1
Not aware of such services	4	5.7
Cultural belief	10	14.3
Hospital are far	19	27.1

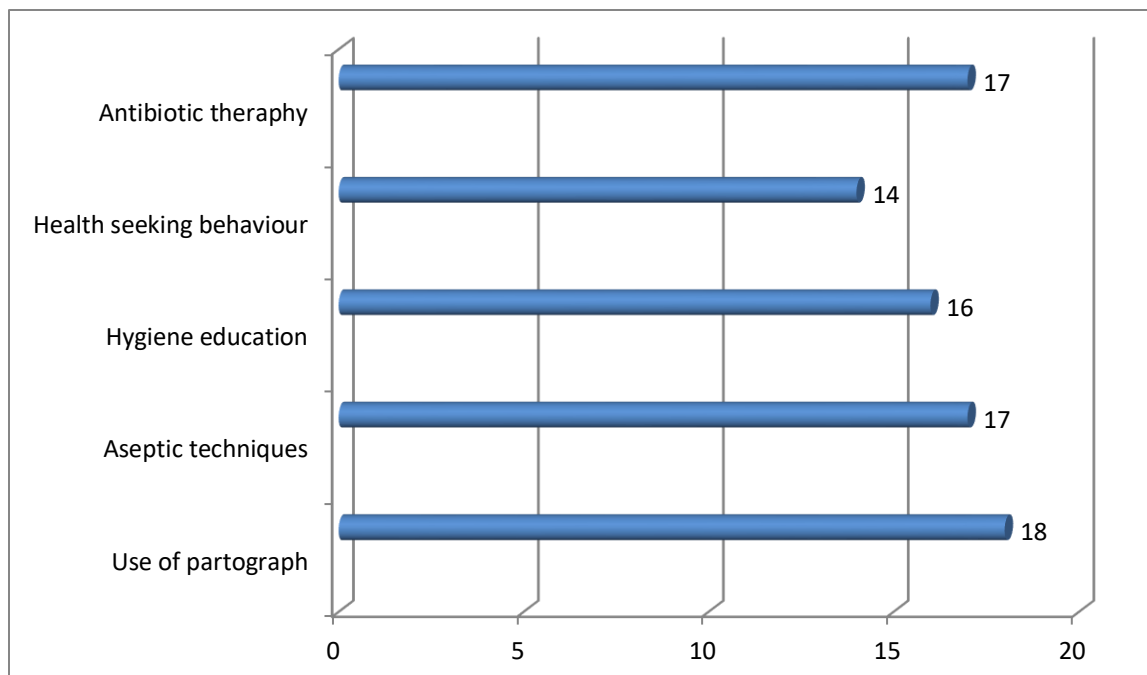
No vehicle	7	10
Fear	3	4.3
Others	1	1.4
NUMBER OF VAGINAL EXAMINATION DONE		
Ones	9	12.9
Twice	12	17.1
Several	43	61.4
None	2	2.9
Don't know	4	5.7
HYGIENIC PRACTICES		
Washing hands before assisting	22	31.4
None	8	11.4
Used gloves	27	38.6
Don't know	13	18.6
ASSISTED DELIVERY		
Family member	6	8.6
Traditional birth attendant	10	14.3
Health worker	39	55.7
Other	15	21.4

LABOR DURATION		
6-12 hrs	13	18.7
12-24 hrs	50	71.4
24-30 hrs.	7	10
ADEQUACY OF FOOD		
Yes	21	30
No	49	70

4.4 MANAGEMENT OF PEUERPERAL SEPSIS

THE BAR GRAPH BELOW SHOW VARIATION IN MANAGEMENT OF PEUERPERAL SEPSIS EXECUTED BY DIFFERENT HEALTH WORKING STAFFS IN MATERNITY WARD

The bar graph below show the number of working staff interviewed in relation to the management of puerperal sepsis, the tallying frequency showed that out of eighteen staffs, (18) staffs found to be using partograph,(17),staffs used aseptic techniques, hygiene education to the mother (16), health seeking behavior of mothers (14) and use of antibiotic therapy (17)



CHAPTER FIVE: DISCUSSION OF RESULTS, CONCLUSION AND RECOMMENDATION.

5.0 INTRODUCTION.

This chapter includes discussion of the study findings as per each specific objectives, conclusion, recommendations as well as strength and weakness encountered during the study.

5.1 DISCUSSION

5.1.1 BURDEN OF PUERPERAL SEPSIS.

41(59%) respondents out of 70 had complications like chronic pelvic pain, infertility, and fallopian tube blockage. These complications are due to poor management of these patients, irrational use of antibiotics, and poor health seeking behaviors of the mothers. However these complications are similar according to the study done by Lawn, 2008.

5.1.2 RISK FACTORS OF PUERPERAL SEPSIS.

Among the risk factors, home birth 39(55.7%), socio economic factors i.e. No money 26(37.1%), inadequacy of food during pregnancy 49(70%) and repeated vaginal examination 43(61.4%) are the major factors which contributed to puerperal sepsis .However in comparison with the study done by maharaj, 2009 he also further suggested that the major risk factors for puerperal sepsis in resource-rich countries are home birth in unhygienic conditions, low socioeconomic status, poor nutrition, prim parity, anemia, prolonged rupture of the membranes, prolonged labor, multiple vaginal examination, caesarean section, instrumental deliveries, retained product of conception, and postpartum hemorrhage. Most mothers delivers from home due to lack of money with the help of traditional birth attendants who observed poor aseptic technique during time of delivery and they come to the hospital after getting the infection. However greater percentage of the infection was contributed by inadequate food during pregnancy which leads to poor general health like malnutrition and anemia predisposing them to the infection.

5.1.3 MANAGEMENT OF PUERPERAL SEPSIS.

Eighteen health workers who consented and are involved in the management these patient was interviewed and most of them gave their views that management of puerperal sepsis involves a multidisciplinary collaboration to achieve a good prognosis such as observing aseptic technique

during delivery, antibiotic therapy, improving health seeking behavior of the mothers, use of partograph to monitor the progress of labor, and giving health education to the mothers. Their intervention to reduce the incidence of puerperal sepsis was similar to the study suggested by Allergranzi, 2007.

5.2 STRENGTH AND WEAKNESS.

The number of mothers interviewed did not meet proposed sample size because the hospital receive a small number of patient which require much more time than the one stipulated in the study to meet the proposed sample size. However, the dependent variables was captured and during data collection the matron was available from time to time and also with the great effort of my supervisor who tirelessly guided me in the analysis and presentation of the data collected, this make this dissertations to be valid and forwarded for consideration.

5.3 CONCLUSION

According to the study; majority of the respondents agreed that puerperal sepsis lead to the complication like chronic pelvic pain, infertility, acute morbidities, long term disabilities and death.

The major risk factor for puerperal sepsis was home delivery, inadequacy of food, socio economic factors and prolonged labor.

Health workers also agreed that management of puerperal sepsis involved a multidisciplinary approach to achieve a good outcome.

5.4 RECOMMENDATIONS.

- ✓ Mothers should be encouraged to deliver from the health facility.
- ✓ The ministry of health through the health service provider should provide health education to mothers about the importance of health care and observing personal hygiene after delivery.
- ✓ Health workers should be encouraged to use partograph in the management of labor and observing aseptic technique during delivery.
- ✓ Further study should be encouraged about the condition.

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APPENDICES

APPENDIX ONE: CONSENT FORM

KAMPALA INTERNATIONAL UNIVERSITY

FACULTY OF ALLIED HEALTH SCIENCE KIU-WC

I am, Ayen Felix a student of KIU-WC perusing diploma in clinical medicine and community health, hereby do request you to participate in the study on burdens and associated factors of puerperal sepsis which is purely academics.

Your cooperation towards answering these questions will be highly appreciated and all the information provided will be treated with utmost confidentiality

Signature;

THANK YOU.

RESPONDENT

Signature.....date/...../...../2017.....

APPENDIX TWO: QUESTIONERS

PART ONE: SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS

Tick as appropriate in the box, ☐

1. What is your age?

- (A) 15-19 ☐ (B) 20-24 ☐ (C) 25-30 ☐
(D) 31-35 ☐ (E) 40-44 ☐

2. What level of education did you complete?

- (A) None ☐ (B) Primary ☐ (C) Secondary ☐
(D) Tertiary/College ☐

3. What is your occupation?

- (A) Civil servant ☐ (B) Self-employed ☐
(C) Farming ☐ (D) others (specify).....

4. What is your marital status (A) Single ☐ (B) Married ☐ (C) other, (specify).....

PART TWO; BURDENS OF PUERPERAL SEPSIS.

5. Do you think there are any complications associated with puerperal sepsis?

- A) Yes ☐ B) No ☐

6. If yes, which one are they?

PART THREE: RISK FACTORS.

7. Where do you normally have your deliveries done? (A) Home ☐ (B) Health care facility ☐

8. What was the mode of your last delivery? (A) Spontaneous vaginal delivery ☐

(B) Caesarean delivery ☐ (C) Instrumental/assisted delivery ☐

9. What was the duration of labor in your last delivery? (A) 6-12 hrs. ☐ (B) 12-24 hrs. ☐
(C) 24-30hrs ☐ 10. ☐

10. How long did the rupture of the membrane take? (A) ≥ 24 hrs. ☐ (B) ≥ 36 hrs. ☐ (C)
 ≥ 48 hrs. ☐ (D) ≥ 72 hrs. ☐

11. Were you assisted during delivery? (A) Yes ☐ (B) No ☐ (if No, Proceed to question 13)

12. A). If Yes, Who assisted you?

(A) Family member ☐ (B) Traditional birth attendant ☐

(C) Others..... (D) Health worker ☐

b). what kind of hygienic practice did you observe from the person assisting you. (Tick any that you observed)

(A) Washed hands before assisting. ☐ (B) None ☐

(C) Used gloves ☐ (D) Don't know ☐

13. Did you have adequate food throughout your last pregnancy period? (A) Yes
(B) No ☐

14. Did you go for antenatal care before delivery?

(A) Yes ☐ (B) No ☐

15. If No, why?

(A) No money to pay for services ☐ (B) Not aware of such services ☐ (C) religious issues ☐

(D) Cultural beliefs/taboo ☐ (E) Hospitals are far ☐ (F) No vehicles ☐ (G)
Fear ☐

(H) Others, specify-----

16. How many vaginal examination did you have before delivery? (A)One ☐
(B) two ☐ (C) several ☐ (D) none ☐ (E) don't know ☐

PART FOUR: MANAGEMENT OF PUERPERAL SEPSIS (BY HEALTH WORKERS)

17. Do you use partograph to monitor the progress of labor for every woman? -----

18. Do you observe aseptic technique during labor and delivery? -----

19. Do you have hygiene lessons for patients who seek ANC services in this facility? -----

20. Which antibiotics do you use in the management of women who develop this condition?.....

21. Do you encourage women to have their deliveries conducted in the health facilities?.....

[illegible]

[illegible]

APPENDIX FIVE: INTRODUCTORY LETTER



School of Allied Health Sciences (SAHS) Ishaka,
P.O. BOX 71 Bushenyi,
Tel: 0703786082/0773786082
Email: christinekyobuhaire@gmail.com

OFFICE OF THE ADMINISTRATOR –SAHS

The Hospital Director Ishaka Adventist
BUSHENYI DISTRICT.

Dear Sir/Madam,

SUBJECT: DATA COLLECTION

Academic research project is an Academic requirement of every student pursuing a 3 year Diploma in Clinical Medicine & Community Health (DCM) of Kampala International University- Western Campus (KIU-WC). DCM program is housed in the School of Allied Health Sciences (SAHS).

The students have so far obtained skills in Proposal writing especially chapter one, Three & Questionnaire design. The student's topic has been approved by SAHS Research Unit and is therefore permitted to go for data collection alongside full proposal & dissertation writing. As you may discover the student is in the process of full proposal development. However, the student MUST present to you his questionnaire and his research specific objectives that he wishes to address. We as academic staff of Allied Health Sciences are extremely grateful for your support in training the young generation of Health Professionals. I therefore humbly request you to receive and allow the student **AYEN FELIX** Reg. No. **DCM/0104/143/DU** in your area to carry out his research. His topic is hereby attached. Again we are very grateful for your matchless support and cooperation.

Topic: **BURDEN OF PUERPERAL SEPSIS AND ASSOCIATED FACTORS AMONG MOTHERS ATTENDING MATERNITY WARD IN ISHAKA ADVENTIST HOSPITAL IN BUSHENYI DISTRICT.**

Sincerely yours,

Christine Kyobuhaire, Administrator- SAHS

CC: Dean SAHS
CC: Associate Dean SAHS
CC: Coordinator, Research Unit- SAHS
CC: H.O.D Dept. Public Health
CC: H.O.D Laboratory Sciences
CC: Coordinators; TLC & DEC

"Exploring the Heights"



25th April 2017

Admin - IAH
Receive & support Felix during his proposal shd
Dr. J. Mwangi E
29/6/2017

