

CHALLENGES FACED BY HEALTH WORKERS IN MANAGEMENT OF

POSTPARTUM HAEMORHAGE ON MATERNITY WARD

KISORO DISTRICT HOSPITAL, KISORO DISTRICT.

A RESEARCH REPORT SUBMITTED TO UGANDA NURSES AND MIDWIVES

EXAMINATIONS BOARD

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF A

DIPLOMA IN MIDWIFERY.

ATUHEIRE BRENDAH

JAN22/U024/DME/002

MAY, 2023.

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ABSTRACT

The researcher aimed at identifying the challenges faced by health workers in management of postpartum hemorrhage on maternity ward Kisoro district hospital, Kisoro district to establish recommendations and possible solutions in order to reduce maternal deaths due to postpartum haemorrhage.

A descriptive cross sectional study design was used which included 30 health workers (doctors and midwives) on maternity ward that were selected using purposive sampling method. Data was collected using pre-tested semi structured questionnaires for the health worker.

Data analysis was done using statistical package for social science (SPSS) version 16.0 and presented in form of tables and figures using Microsoft excel version 2010.

It was found out that only 30% of the mothers who experience postpartum haemorrhage receive very good care from health workers and all (100%) the health workers expressed that there is a need for continuous medical education about management of postpartum haemorrhage.

Furthermore, it was established that the major health worker related challenges faced during management of postpartum haemorrhage include heavy work load on ward, lack of adequate equipment and drugs to use, inadequate knowledge on management of postpartum haemorrhage whereas the common institutional related challenges faced by health workers in management of postpartum haemorrhage include lack of blood in the hospital blood bank, low staffing on ward, inadequate ambulance vehicle for transfer of mothers and drug stock outs.

It should be noticed that more mothers have continued to die because of postpartum haemorrhage and others end up with complication such as anaemia. Therefore, there is a need for government of Uganda (ministry of health) to increase on staffing in hospital so that health workers are not overwhelmed by work overload on ward.

In addition, the hospital management should always emphasize and conduct continuous medical education among the health workers on maternity ward to equip them with updated knowledge and skills of managing postpartum haemorrhage.

There should always be prior procurement of blood for transfusion to avoid stockouts in blood bank

The health workers on maternity ward are encouraged to always be flexible in management and do timely referral of the mothers who get postpartum haemorrhage to save their life.

DECLARATION

I hereby declare that this research report titled “**CHALLENGES FACED BY HEALTH WORKERS IN MANAGEMENT OF POSTPARTUM HAEMORHAGE ON MATERNITY WARD KISORO DISTRICT HOSPITAL, KISORO DISTRICT.**” is entirely my own work and has not been presented anywhere for academic or other purposes.

Sign..... Date.....

ATUHEIRE BRENDAH

(RESEARCHER)

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AUTHORISATION.

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Author's Name. **ATUHEIRE BRENDAAH.**

Contact Address.....

Name of Supervisor. **Dr. MUGISHA JEROME**

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Date.....

Name of the Principal. **Sr. KEMIGISHA CATHELINE**

Signature.....

Date.....

DEDICATION

I dedicate this book to my mother Mrs. Tugume Prossy.

ACKNOWLEDGEMENT

I thank the almighty God for enabling me accomplish this study

Great thanks to my supervisor Dr. Mugisha Jerome for guiding me during the study

Special thanks to fellow students for cooperation during our studies

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OPERATIONAL TERMS

Antenatal care; Is the essential care given to a pregnant mother for the purpose of protecting health of unborn baby and the mother

Postpartum haemorrhage; Is the blood loss of 500milliliters or more after delivery or any amount of blood loss that deteriorates mothers' health.

Uterotonic agents: These are drugs used to prevent postpartum haemorrhage by uterine contraction.

LIST OF ACRONYMS

ANC: antenatal care

FANC: Focused antenatal care

PPH: Postpartum haemorrhage

SPSS: statistical package for social sciences

USAID: United States agency for international development

UNDHS: Uganda national demographic health survey

WHO: World Health Organization.

CHAPTER ONE: INTRODUCTION

1.0 Introduction.

This chapter covers the background of the study, problem statement, purpose of the study specific objectives, research questions and justification of the study.

1.1 Background of the study.

Postpartum haemorrhage is the blood loss of 500milliliters or more after delivery (Khan, 2014). Post-Partum Haemorrhage (PPH) remains the leading cause of deaths amongst women all over the world and accounts for 30% of maternal death which is equal to 86 000 deaths per year or ten deaths per hour (Weeks, 2015). Out of 275000 births that occur in sub-Saharan Africa, 3300 suffer heavy bleeding during third and fourth stage of labour (Rakotozanany *et al*, 2019).

The magnitude of postpartum haemorrhage in sub-Saharan Africa is high at 10.5 % and is associated with sub-standard care, poor management skills, lack of knowledge and delay in transferring women to the next level for appropriate management amongst many challenges encountered by midwives during the provision of obstetrical care (Braddick, Tuckey, Abbas, Lissauer & Ismail, 2016).

In Uganda, postpartum haemorrhage accounts for 25 % of all maternal deaths (Uganda Demographic and Health Survey, 2015). It is recommended that midwives should have acquired the necessary knowledge and skills to diagnose and manage postpartum haemorrhage. However, when resuscitation through medical interventions is not effective, surgical intervention may be required in order to save the life of a mother (WHO, 2012).

Regardless of the use of maternal health guidelines that outline the important aspects to follow during the provision of maternal health care services, pregnant mothers are still dying from obstetric haemorrhage (Schack, Elyas, Brew & Petterson, 2014).

It should be noticed that even if health workers are skilled enough, maternal deaths can still keep on rising if midwives are faced with challenges such as inadequate staffing that places work load, failure of pregnant mothers to disclose their previous history of postpartum due to fear of being transferred to expensive hospitals, shortage of resources such as ambulances, poor communication between the staff on duty and failure to disseminate information from workshops about postpartum haemorrhage management (Hinton, Locock & Knight., 2014)

Although the ministry of health emphasizes that midwives must identify the cause of postpartum haemorrhage and treat the mother accordingly, health workers have continuously executed their duties in scarcity of resources during the management of postpartum haemorrhage (Edhi, Aslam, Naqvi & Hashmi, 2013)

The need to conduct this study is based on this background for the researcher to determine the challenges faced by health workers in the management of postpartum haemorrhage on maternity ward Kisoro hospital Kisoro district.

1.2 Problem statement

Postpartum haemorrhage still remains the leading cause of maternal mortality in Uganda with a magnitude of 25% of all maternal death yet most of its causes are preventable (Kiwanuka, Ononge, Kiondo & Namusoke, 2017). Although the ministry of health has provided the necessary equipment suitable for emergency obstetrical care, recruited qualified midwives and doctors, mothers still die due to postpartum haemorrhage.

Kisoro district hospital has provided obstetrical care equipment in a well-established maternity ward and also recruited trained and skilled health workers to care for pregnant mothers and manage any possible complications and provision of ambulances for transfer pregnant mothers. Despite the above interventions, maternal deaths are still registered. For instance in the months of July to December 2022, 4 mothers died of postpartum haemorrhage as indicated in annual analytical report 2022. There is no documented data on the challenges faced by health workers in the management of postpartum haemorrhage on maternity ward Kisoro hospital, hence the study.

1.3 Purpose of the study.

1. To determine the challenges faced by health workers in management of postpartum hemorrhage on maternity ward Kisoro hospital, Kisoro district.

1.4 Specific objectives.

- 1.4.1 To assess health worker-related challenges faced by health workers in management of postpartum haemorrhage on maternity ward Kisoro hospital Kisoro district

- 1.4.2 To identify institutional related challenges faced by health workers in management of postpartum haemorrhage on maternity ward Kisoro hospital Kisoro district.

1.5 Research questions.

1.5.1 What are the health worker-related challenges by health workers in management of postpartum haemorrhage on maternity ward Kisoro hospital Kisoro district?

1.5.2 What are institutional related challenges faced by health workers in management of postpartum haemorrhage on maternity ward Kisoro hospital Kisoro district?

1.6 Justification

Despite availability of skilled health workers with adequate resources at Kisoro hospital, deaths due to postpartum haemorrhage are still high. There is a need to explore the challenges these skilled health workers face in management of postpartum haemorrhage in order to figure out the remedies to reduce mortality due to postpartum haemorrhage. These challenges certainly go beyond availability of both qualified human and material resources.

The results from this study may be a basis for the hospital administration, District health officer, and other stake holders to have awareness about the challenges faced by midwives in management of postpartum haemorrhage and thus identify ways to solve them.

Furthermore, the study findings will provide literature for future researchers on related study projects.

More so, the study will be a partial fulfillment of requirements for award of a diploma in midwifery

CHAPTER TWO: LITERATURE REVIEW

2.1: Introduction.

This chapter presents literature from acknowledged studies that included text books, medical journals and research reports. This will be reviewed in relation to specific objectives of the study that include health worker-related challenges and institutional related challenges faced by health workers in management of postpartum haemorrhage on maternity ward Kisoro hospital Kisoro district.

2.2: Health worker related challenges faced by health workers in management of postpartum haemorrhage on maternity ward.

An Epidemiologic profile of maternal deaths in two referral hospitals in Cameroon revealed that workload to midwives on duty prohibited them from providing all the necessary assistance needed during the management of mothers with postpartum haemorrhage. Midwives get overwhelmed by a lot of work to do and many patients to attend to on the ward thus do not give adequate attention to mothers in labour who later bleed excessively without urgent help (Pierre-Marie, 2015; Nana, 2016).

A study to determine psychosocial factors associated with postpartum psychological distress during the Covid-19 pandemic found out that failure of pregnant women to disclose their previous history of postpartum haemorrhage (PPH) due to fear of being transferred to a high-level clinic so that they don't incur travelling costs hindered the midwives from preparing adequately for management of postpartum haemorrhage (Ostacoli *et al*, 2020).

Lambert *et al*, (2020) in their study to establish evidence to support updated global recommendations on oxytocin for postpartum haemorrhage stated that lack of uterotonic agents

for the management of postpartum haemorrhage such as misoprostol (Cytotec) and oxytocin (Pitocin) made it hard for midwives to give appropriate care necessary for the mothers who had postpartum haemorrhage. In addition, a Turkish Journal of Obstetrics and Gynaecology written by Gungorduk, Olgac, Gulseren and Kocaer (2018) on active management of the third stage of labour explains that inadequate or unreliable emergency treatment medications and resuscitation equipment was the challenge faced by midwives in management of postpartum haemorrhage.

Poor communication was also another challenge faced by midwives in management of mothers with postpartum haemorrhage whereby there was no quickest means of seeking help from fellow midwives in other departments so that they can give a hand in management of mothers with postpartum haemorrhage (Thackrah & Wood 2020). This required them to move to every room looking for other health workers on duty so that they could assist them to manage mothers with postpartum haemorrhage.

A Comparative study of rectal misoprostol to oxytocin infusion in preventing post-partum haemorrhage in Nepal done by Adaniki, Orji, Adaniki and Olaniyan (2013) revealed that comorbidities and chronic illnesses of the pregnant mothers was a challenge while managing postpartum haemorrhage. These comorbidities for example anaemia rendered mothers very weak even if they had lost minimal amount of blood hence became a challenge in resuscitating such mothers during postpartum haemorrhage (Ope, 2020).

A study done by Sotunsa *et al*, (2019) on Maternity near-miss and death among women with postpartum in Britain highlighted that delayed ambulances in referral system was a big challenge faced by midwives whenever they decided to refer bleeding mothers to an advanced health facility. Yaya *et al*, (2018) in their study about increasing women's access to skilled pregnancy

care to reduce maternal and perinatal mortality in rural Edo State, Nigeria pointed out that ambulance vehicles delay putting mothers at risk of death before they are transferred to higher level hospitals.

2.3 Institutional related challenges faced by health workers in management of postpartum haemorrhage on maternity ward.

Kolb and Yolb, 2017 in their study about Principles and Practices of Experiential learning in united states of America (USA), it was highlighted that lack of emergency resources such as ambulances to rush mothers to a more developed health facility so that they can have appropriate care during postpartum haemorrhage was a challenge to most of the hospitals which had maternity wards. This makes it hard to timely have the needed care for the bleeding mothers which later results into death (Rogerson, 2017).

A study done to identify psychosocial factors that impact on midwives' confidence to provide bereavement support to parents who have experienced a perinatal loss revealed that failure of the hospital management personnel to disseminate guidelines for the management of mothers with postpartum haemorrhage to maternity departments made it hard for some midwives to recall all the core decision making steps while giving an emergency care to mothers who have postpartum haemorrhage (Agwu, Kalu, Coughlan & Larkin 2018). Furthermore, a study done Postpartum haemorrhage prevention with tranexic acid effectiveness and safety in comparison to placebo in Parkistan concluded that failure of the management to avail workshop updates on management of postpartum haemorrhage to midwives kept them continue using outdated and inappropriate techniques while caring for mothers who experience severe haemorrhage during delivery (Qayum, Ali & Waheed (2018).

Gul, Jabeen and Heema (2018) in their study about Frequency, causes and outcome of postpartum haemorrhage at Liaquat Memorial hospital, Kohat, Pakistan revealed that inadequate staffing of midwives was a challenge during management of postpartum haemorrhage especially when the cases are many on the ward yet it requires teamwork. In addition, a small number of midwives per shift on duty yet they have to attend to many mothers on ward did not give them adequate time to manage mothers with postpartum haemorrhage (Gaucher *et al*, 2019).

Shortage of blood units in blood bank was a great challenge faced by the hospitals during management of postpartum haemorrhage (Brenner, Shakur-Still, Chaudhri, Fawole, Arulkumaran & Roberts, 2018). In addition, some blood groups are not always readily available and this forces them to urgently look for blood donors who cannot easily be found in the shortest time possible to save the bleeding mothers (Evensen, Anderson, Fontaine, 2017).

A study done by Senturk, Kagtci, Balik, Arslan and Sahin (2016) revealed that most hospitals faced a challenge of having incompetent health workers (midwives) during management of postpartum haemorrhage. Most of these health workers(midwives) did not have adequate knowledge about management of postpartum haemorrhage and the emergency techniques used during management for example establishing intravenous line and resuscitating with fluids (Henriquez *et al*,2019).

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter describes the methods and techniques that the researcher used to investigate the problem. It comprises of the study design and rationale, study setting and rationale, study population, sample size determination, sampling procedure, inclusion criteria, definition of variables, research instruments, data collection procedures, data management and analysis, ethical consideration, limitations of the study and dissemination of results

3.2 Study design and rationale

The researcher adopted a descriptive cross sectional research design that employed both qualitative and quantitative methods of data collection to study the challenges faced by health workers in management of postpartum hemorrhage on maternity ward Kisoro hospital, Kisoro district. This type of study design was used because the study was done within a short period of time and there was no follow up of respondents who had participated in the study. Qualitatively, the participants were given opportunity to express their views about the challenges faced by midwives in management of postpartum hemorrhage and quantitatively some responses were recorded in numerical form.

3.3 Study setting and rationale

The study was conducted in maternity ward at Kisoro district hospital, a government hospital located in south western region, Kisoro district, 500km from Kampala capital city of Uganda. It offers a variety of outpatient and inpatient services in addition to maternal and child health services such as antenatal care, perinatal care and postnatal services. It receives an average number 460 pregnant mothers per month. The setting was chosen because the hospital receives

many pregnant mothers who come to deliver and therefore the researcher got adequate sample size of respondents during data collection. Additionally, the study area is very convenient and accessible to the researcher.

3.4 Study population

The study involved health workers with experience of managing postpartum haemorrhage on maternity ward Kisoro hospital, Kisoro district.

3.4.1 Sample size determination

The sample size consisted of 30 health workers (doctors and midwives) on maternity ward. This sample size was chosen because the researcher anticipated getting adequate information regarding the challenges faced in management of postpartum haemorrhage on maternity ward Kisoro hospital, Kisoro district.

3.4.2 Sampling procedure

The researcher used purposive sampling method where by the health workers on maternity ward were approached during their convenient time and requested to consent and participate in the study.

3.4.3 Inclusion criteria

The study included health workers who had an experience of managing postpartum haemorrhage on maternity ward at Kisoro hospital so long as they consented to participate in the study.

3.5 Definition of variables

3.5.1 Independent variable

Challenges faced by health workers in management of postpartum haemorrhage. These include health worker related challenges such as work overload, inadequate equipment to use, uncooperative patients during management, beliefs and institutional related challenges such as inadequate funds for procuring adequate delivery equipment, low competence among some health workers, lack of timely ambulances for referrals.

3.5.1 Dependent variable

Management of postpartum haemorrhage; This is the comprehensive care given to the mother who bleeds excessively shortly after giving birth.

3.6 Research instruments.

3.6.1: A questionnaire

The researcher used pre-tested semi structured questionnaires to collect data from required sample size. The questionnaires were in simple English for easy understanding by respondents.

3.7 Data collection procedure.

After approval of the research proposal by the research committee and permission granted to access surgical ward, informed consent was sought and signed by the respondents.

Pre tested questionnaires were administered to selected respondents to identify the challenges faced by health workers in management of postpartum haemorrhage on maternity ward Kisoro hospital Kisoro district. The respondents (midwives) were given questionnaires to answer on

their own since they knew how to read and write. The filled questionnaires were checked for completeness before leaving the place and the respondents were thanked for their participation.

3.7.1 Data management.

The researcher managed data herself to ensure security and confidentiality. Questionnaires were numbered prior to data collection for easy identification. Crosschecking of completed questionnaires was done before respondents left to confirm completeness.

Data editing and coding was also done to correct errors and ease entry into the computer for proper analysis.

3.7.2 Data analysis.

Quantitative data was analyzed using statistical package for social science (SPSS), Excel program and was presented in form of tables, and figures using a computer program of Microsoft excel software version 2010 for easy interpretation.

Qualitative data did not require the use of Excel, Data was sorted and listed. Clustering was done for related information especially the responses to some open-ended questions. This was manually presented by description of the situation.

3.8 Ethical consideration.

The study adhered to the ethical policy of the nursing schools and institutional research committee recommendations. Upon approval of the research proposal by school research committee, letter of introduction from the principal was given introducing the researcher to the medical director of Kisoro hospital who in turn introduced her to the in-charge maternity ward. The in-charge authorized her to have access to departments and participants. A written informed consent was sought from the respondents after explanation of the purpose of the study.

Respondents were assured of their right to consent or withdraw even when the study had commenced. Complete confidentiality to the respondents' information was ensured.

3.9 Limitations of the study.

The researcher encountered the challenge of inadequate time for interaction with the health workers on ward since in most cases they are busy on duty. However, the researcher tried to arrange and approach them during their convenient and free time.

Some health workers expected motivational rewards for their participation in the study but the researcher tried explaining for them the main purpose of the study and appreciated them after the session for their participation.

3. 10 Dissemination of the results.

The results of the study were disseminated as follows; three copies of dissertation were produced where one copy was submitted to school library, second copy to Uganda nurses and midwives examination board (UNMEB) and the third copy for the researcher.

CHAPTER FOUR: RESULTS

4.0: Introduction

This chapter shows presentation of data on the challenges faced by health workers in management of postpartum hemorrhage on maternity ward Kisoro hospital, Kisoro district. Pre tested questionnaires were used to collect data from the respondents and the study involved a sample size of 30 health workers who work on maternity ward. Their responses are presented in form of tables and figures arranged according to the study objectives

4.1: Socio-demographic characteristics of respondents.

Table 1: Showing socio-demographic data of the respondents.

S/No	Variable	Frequency (N=30)	Percentage (%)
1	Professional cadre		
	Enrolled midwife	19	63
	Registered midwife	6	20
	Senior midwife	3	10
	Doctor	2	7
	Total	30	100
2	Working experience		
	1-2years	2	7
	3-4years	9	30
	5years and above	19	63
	Total	30	100

Table one shows that more than half 19(63%) of the respondents were enrolled midwives, 6(20%) were registered midwives, 3(10%) were senior midwives and 2(7%) of the respondents were doctors. In addition, majority 19(63%) of the respondents had a working experience of more than 5years, 9(30%) of the respondents had worked for 3-4years and 2(7%) of the respondents had a working experience of 1-2years.

4.2: Health worker related challenges faced by health worker in management of postpartum haemorrhage on maternity ward.

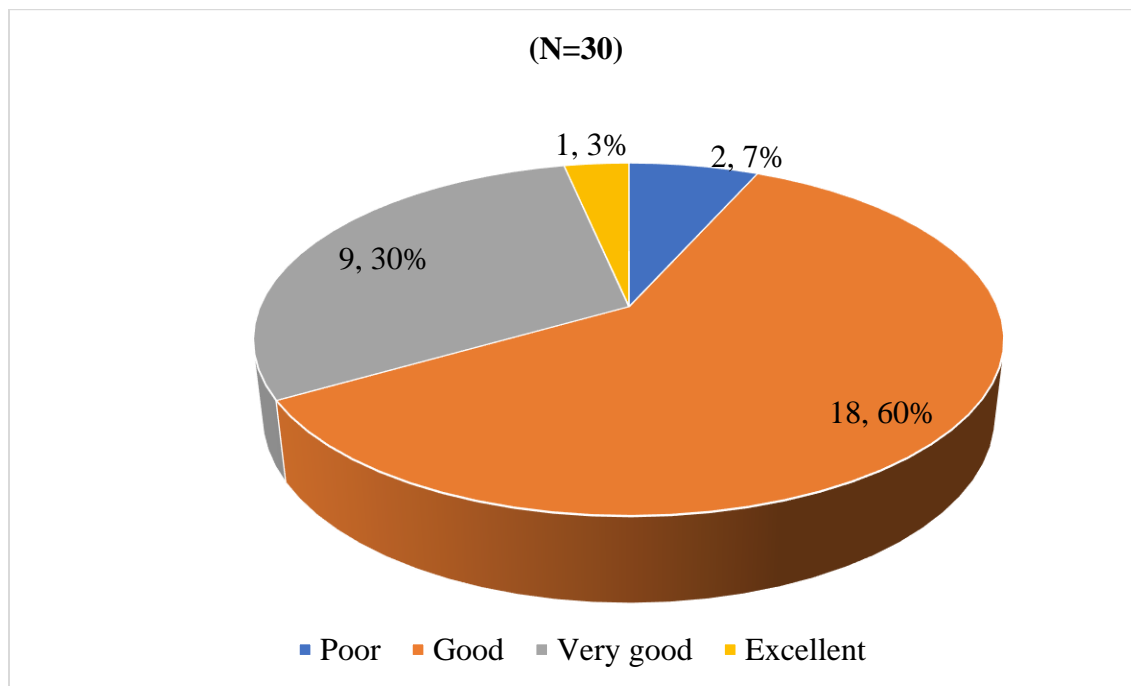


Figure 1: A pie chart showing rating of care given to mothers who get postpartum haemorrhage.

Figure 1 above shows that more than half 18(60%) of the respondents rated the care given to mothers who get postpartum haemorrhage to be good, 9(30%) rated it to be very good, 2(7%) said it poor and 1(3%) rated the care to be excellent.

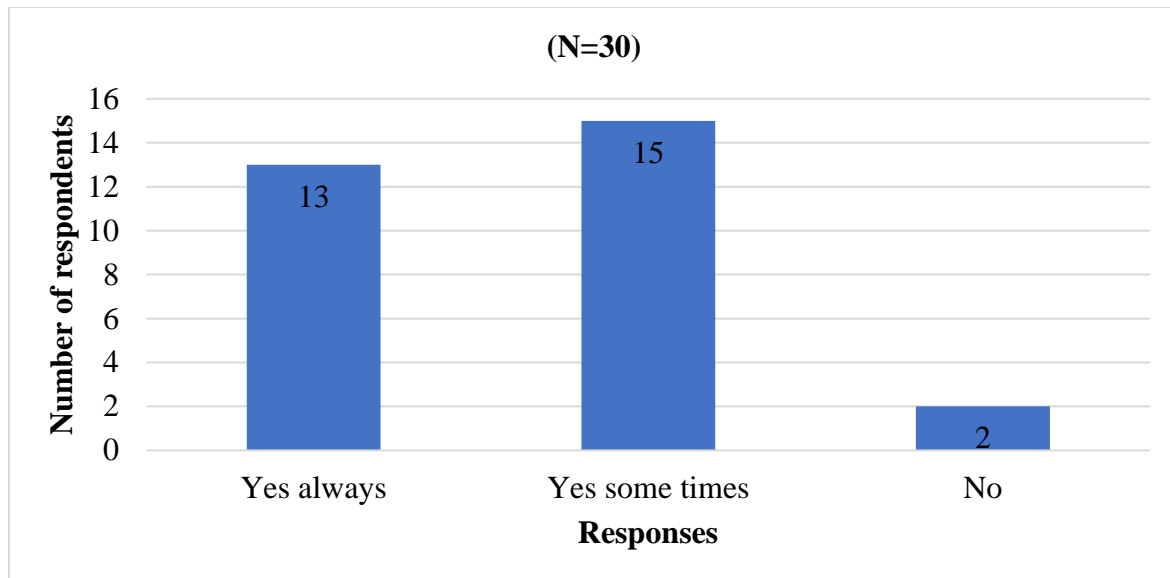


Figure 2: A bar graph showing whether health workers get help from colleagues on duty during management of mothers with postpartum haemorrhage.

The figure above shows that half 15(50%) of the respondents mentioned that they sometimes get help from colleagues on word during management of postpartum haemorrhage, 13(43%) said that they always get help and 2(7%) mentioned that they don't get help.

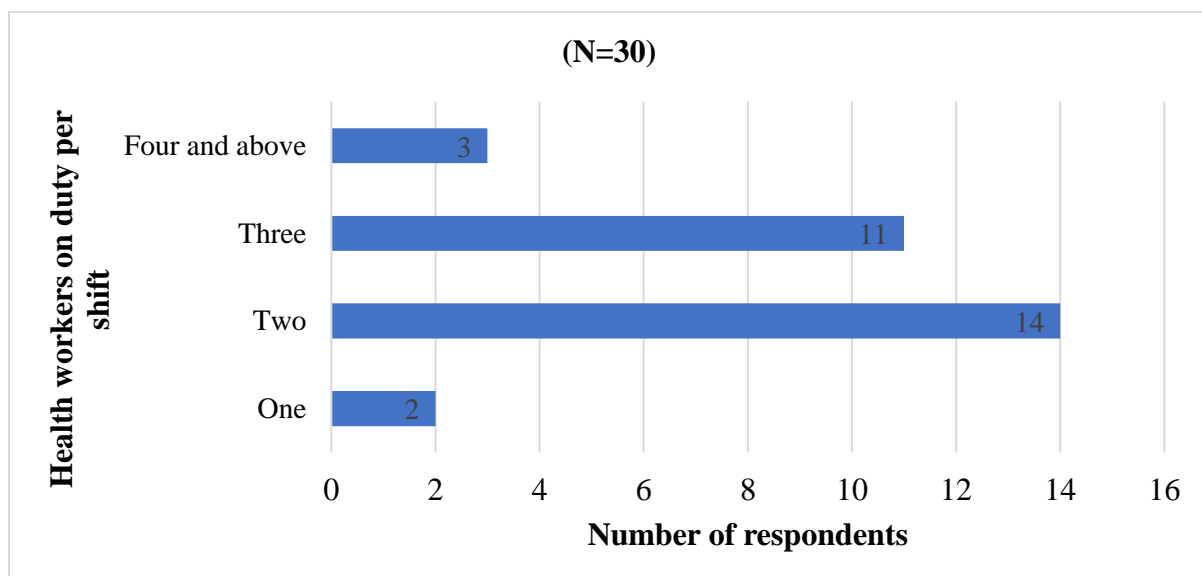


Figure 3: A bar graph showing average number of health workers usually on duty.

When the respondents were asked the average number of health workers always on duty per shift, 14(47%) mentioned that averagely, 2 health workers are usually on duty per shift, 11(37%) said they are usually 3healthworkers, 3(10%) said they are usually four and above while 2(7%) of the respondents mentioned that one health worker can be found on duty.

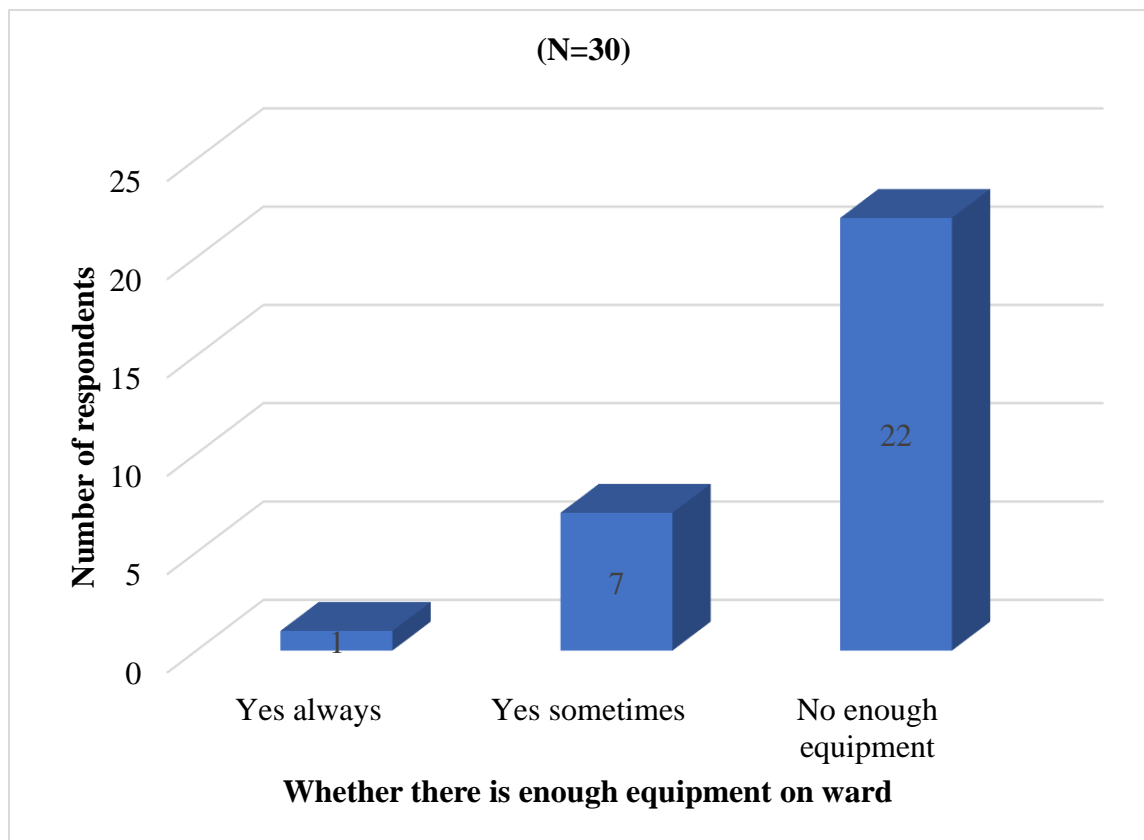


Figure 4: A bar graph showing whether there is always enough equipment to use during management of mothers with postpartum haemorrhage

Data shows that most 22(73%) of the respondents highlighted that there is no enough equipment to use on ward during management of postpartum haemorrhage while 7(23%) mentioned that equipment to use are sometimes available.

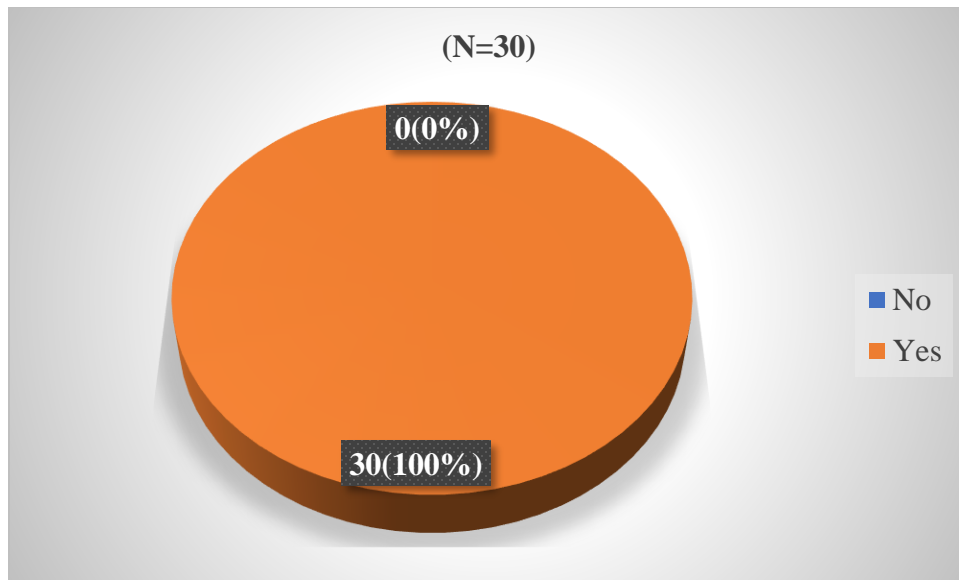


Figure 5: A pie chart showing whether there is a need to always conduct continuous medical education among health workers on postpartum haemorrhage.

Data results show that all 30(100%) of the respondents reported that there is a need for continuous medical education among health workers on management of postpartum haemorrhage.

Table 2: Showing common challenges faced during management of mothers with postpartum haemorrhage on maternity ward.

Variable		Frequency(N=30)	Percentage (%)
Lack of drugs to use			
	Yes	23	77
	No	7	23
	Total	30	100
Poor preparation of mothers for labour			
	Yes	21	70
	No	9	30
	Total	30	100
Few staffs on duty for help			
	Yes	24	80
	No	6	20
	Total	30	100
Failure to detect the cause of haemorrhage			
	Yes	19	63
	No	11	37
	Total	30	100
Lack of adequate resuscitation equipment			
	Yes	21	70
	No	9	30
	Total	30	100

Note: Respondents gave multiple answers

From the table above, when respondents were asked the common health worker related challenges faced during management of postpartum haemorrhage, 23(77%) mentioned lack of drugs to use, 21(70%) mentioned that pregnant mothers do not have enough preparedness for labour which delays care, 24(80%) mentioned being a few staffs on duty thus being overwhelmed, 19(63%) mentioned that they sometimes fail to detect the cause of postpartum haemorrhage and 21(70%) mentioned that they lack enough equipment to use in resuscitation of mothers.

Table 3: showing other challenges faced by health workers in management of postpartum haemorrhage on maternity ward

Variable		Frequency(N=30)	Percentage (%)
Work load			
	Yes	26	87
	No	4	13
	Total	30	100
Failure of mothers to disclose relevant history			
	Yes	11	37
	No	19	63
	Total	30	100
Lack of medications to use			
	Yes	25	83
	No	5	17
	Total	30	100
Comorbidities and illnesses of mothers			
	Yes	7	23
	No	23	77
	Total	30	100
Delay of ambulances			
	Yes	13	43
	No	17	57
	Total	30	100
Lack of blood in the bank			
	Yes	27	90
	No	3	10
	Total	30	100
Lack of guidelines on management of postpartum haemorrhage			
	Yes	5	17
	No	25	83
	Total	30	100

Note: Respondents gave multiple answers

Table above shows that when respondents highlighted more on challenges faced in management of postpartum haemorrhage, 26(87%) mentioned work overload, 11(37%) mentioned failure of pregnant mothers to disclose their history about postpartum haemorrhage, 25(83%) mentioned

lack of medications to use, 7(23%) mentioned comorbidities and other illnesses that renders mothers weak, 13(43%) mentioned delay of ambulance vehicles, 27(90%) mentioned lack of blood in the blood bank,

4.3: Institutional related challenges faced by health workers in management of postpartum haemorrhage on maternity ward

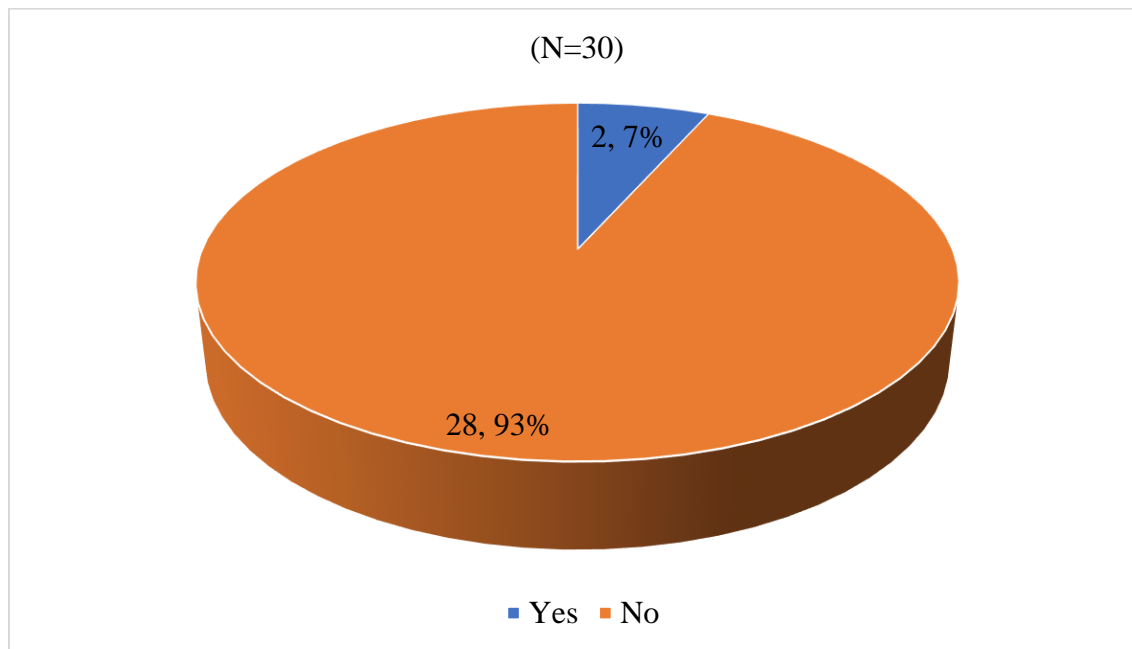


Figure 6: A pie chart showing whether there is always enough blood for transfusion in hospital blood bank

Figure 6 above shows that majority 28(93%) of the respondents reported that there is always no enough blood in the hospital blood bank for transfusing mothers who get postpartum haemorrhage.

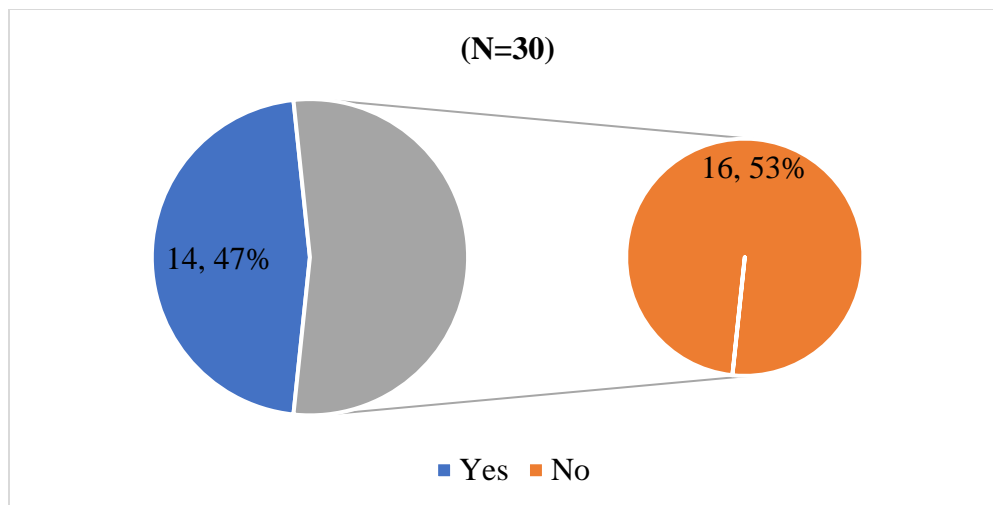


Figure 7: A pie chart showing whether the hospital ambulance vehicles are usually available to transfer mothers to other health facilities for emergency care

Data results show that 16(53%) of the respondents mentioned that hospital ambulances are not always available to timely transfer mothers

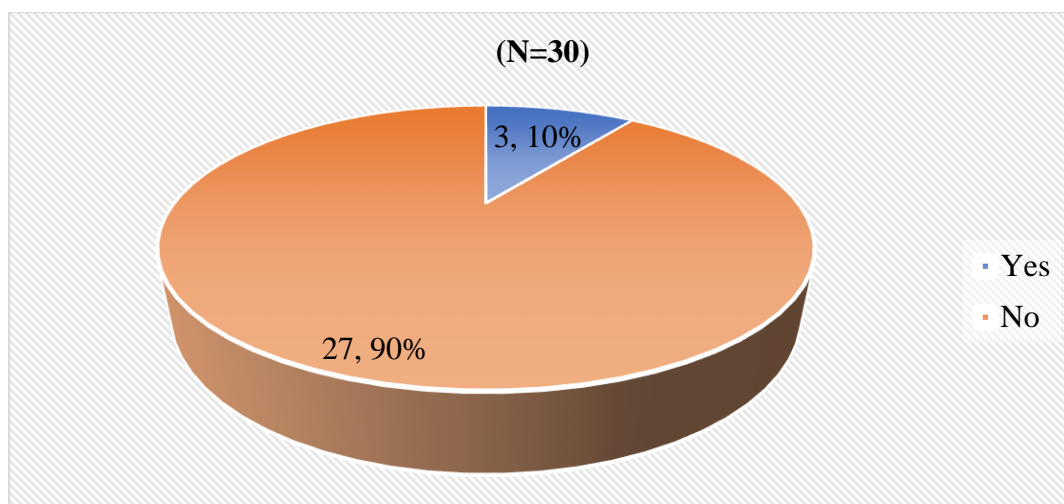


Figure 8: A pie chart showing whether the hospital management conducts continuous medical education sessions among health workers on management of postpartum haemorrhage.

The figure above shows that most 27(90%) of the respondents mentioned that the hospital does not conduct continuous medical education about management of postpartum haemorrhage.

Table 4: Showing institutional related challenges faced by health workers in management of postpartum haemorrhage on maternity ward.

Variable		Frequency(N=30)	Percentage (%)
Shortage of blood in the bank			
	Yes	26	87
	No	4	13
	Total	30	100
Lack of adequate ambulances for referral of mothers			
	Yes	13	43
	No	17	57
	Total	30	100
Law staffing on ward			
	Yes	24	80
	No	6	20
	Total	30	100
Unreliable electricity during operations			
	Yes	3	10
	No	27	90
	Total	30	100
Inadequate emergency trays			
	Yes	23	77
	No	7	23
	Total	30	100

Note: Respondents gave multiple answers

Data results show that the institutional related challenges faced by health workers in management of postpartum haemorrhage, 26(87%) of the respondents mentioned shortage of blood for transfusion, 13(43%) mentioned lack of adequate ambulances for timely referral, 24(83%) mentioned low staffing on ward, 23(77%) mentioned lack of equipped emergency trays on ward.

Table 5: Showing suggestions by health workers for saving mothers who suffer from postpartum haemorrhage

Variable		Frequency(N=30)	Percentage (%)
Continuous medical education to health workers			
	Yes	22	73
	No	8	27
	Total	30	100
Early notification for timely blood supply			
	Yes	19	63
	No	11	37
	Total	30	100
Alarming for help from other staff on duty			
	Yes	18	60
	No	12	40
	Total	30	100
Timely referral of mothers			
	Yes	17	57
	No	13	43
	Total	30	100
Provision of enough equipment to use on ward			
	Yes	23	77
	No	7	23
	Total	30	100

Note: Respondents gave multiple answers

When the respondents were asked the suggestions for saving mothers who suffer from postpartum haemorrhage, 22(73%) suggested for continuous medical education among health workers, 19(63%) suggested for timely notification in case of shortage of blood in the back for supply, 18(60%) suggested that health workers should always alarm for help in ward for

assistance during management of postpartum haemorrhage, 17(57%) suggested for timely refers of mothers in case the care necessary is not available at the hospital, 23(77%) suggested for having enough equipment on ward to use during management of postpartum haemorrhage.

CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.0: Introduction

This chapter presents discussion in relation to the literature review on the challenges faced by health workers in management of postpartum hemorrhage on maternity ward Kisoro hospital, Kisoro district. The research findings are discussed according to the specific objectives. It also shows the conclusion and recommendations made according to the study findings.

5.1: DISCUSSION

5.1.1: Socio-demographic characteristics of the respondents

The study findings revealed that most 19(63%) of the respondents were enrolled midwives. This is because the government of Uganda commonly recruits enrolled midwives in large numbers than other cadres and therefore it is many enrolled midwives who were found on ward during data collection. In addition, 19(63%) of health workers had worked for more than 5years on maternity ward. This implies that a good number of the health workers had some experience in management of postpartum haemorrhage on maternity ward.

5.1.2: Health worker related challenges faced by health workers in management of postpartum hemorrhage on maternity ward

The study results revealed that half 15(50%) of health workers sometimes get assistance from fellow health workers on ward during emergency management of postpartum haemorrhage. This shows sometimes there is enough assistance at hand and the health workers end up being overwhelmed. This results in poor management of postpartum haemorrhage and related complications. The study results are in line with an epidemiologic profile study done on maternal deaths in two referral hospitals in Cameroon which revealed that workload to midwives on duty

prohibited them from providing all the necessary assistance needed during the management of mothers with postpartum haemorrhage (Pierre-Marie, 2015).

Nearly half 14(47%) of the respondents mentioned that there are always 2health workers on duty per shift. These staffs per shift are few to attend to emergencies and therefor get overwhelmed during management of mothers with postpartum haemorrhage. The study findings are related to those in a study done by Nana (2016) which found out that midwives get overwhelmed by a lot of work to do and many patients to attend to on the ward thus do not give adequate attention to mothers in labour who later bleed excessively without urgent help.

Furthermore, majority 22(73%) of the health workers on ward mentioned that the equipment to use in management of postpartum are not enough. This lack of equipment to use renders the midwives of ward less help because they cannot give care without what to use. The study results are related with findings in a Turkisk Journal of Obstetrics and Gynecology written by Gungorduk *et al*, (2018) on active management of the third stage of labour which explained that inadequate or unreliable emergency treatment medications and resuscitation equipment was the challenge faced by midwives in management of postpartum haemorrhage.

All 30(100%) of the respondents said that there is a need for continuous medical education among health workers on maternity ward about management of postpartum haemorrhage. This implies that they feel there is what they lack in terms of knowledge and skills on management of postpartum haemorrhage. In a related study done by Senturk *et al*, (2016), it was revealed that most hospitals faced a challenge of having incompetent health workers (midwives) during management of postpartum haemorrhage. Most of these health workers(midwives) do not have adequate knowledge about management of postpartum haemorrhage and the emergency

techniques used during management for example establishing intravenous line and resuscitating with fluids and therefore continuous medical education was necessary to save the lives of pregnant mothers (Henriquez *et al*,2019).

The study results shows that 23(77%) of respondents mentioned lack of drugs to use as a challenge met during management of postpartum haemorrhage. This forces them to refer mothers and thus delay of care to the bleeding mothers. Relatedly, a study done by Lambert *et al*, (2020) to establish evidence to support updated global recommendations on oxytocin for postpartum haemorrhage stated that lack of uterotonic agents for the management of postpartum haemorrhage such as misoprostol (Cytotec) and oxytocin (Pitocin) made it hard for midwives to give appropriate care necessary for the mothers who had postpartum haemorrhage.

5.1.3: Institutional related challenges faced by health workers in management of postpartum hemorrhage on maternity ward.

Results from the study revealed that majority 28(93%) of the respondents reported that there is always no enough blood in the hospital blood bank for transfusing mothers who get postpartum haemorrhage. As a result, the health workers do not appropriately give the care necessary. Similarly, Shortage of blood units in blood bank was a great challenge faced by the hospitals during management of postpartum haemorrhage (Brenner *et al*, 2018). In addition, some blood groups are not always readily available and this forces them to urgently look for blood donors who cannot easily be found in the shortest time possible to save the bleeding mothers (Evensen *et al*,2017).

More than half 16(53%) of the respondents reported that the hospital ambulances are not always readily available to transfer mothers who get postpartum haemorrhage for further management in

higher level facilities. This delays the necessary care to be offered to mothers and they end up with complications or others die due to postpartum haemorrhage. The same findings were reported in a study done by Kolb and Yolb, (2017) about Principles and practices of experiential learning in united states of America (USA), which highlighted that lack of emergency resources such as ambulances to rush mothers to a more developed health facility so that they can have appropriate care during postpartum haemorrhage was a challenge to most of the hospitals which had maternity wards.

The study findings shows that most 27(90%) of the respondents mentioned that the hospital management does not carry out continuous medical education about postpartum haemorrhage to health workers on maternity ward. This does not update the health workers about new knowledge in management of postpartum haemorrhage. Similar results were found out in a study done to identify psychosocial factors that impact on midwives' confidence to provide bereavement support to parents who have experienced a perinatal loss which revealed that failure of the hospital management personnel to disseminate guidelines for the management of mothers with postpartum haemorrhage to maternity departments made it hard for some health workers to recall all the core decision making steps while giving an emergency care to mothers who have postpartum haemorrhage (Agwu *et al*, 2018). Furthermore, a study done Postpartum haemorrhage prevention with tranexic acid effectiveness and safety in comparison to placebo in Parkistan concluded that failure of the management to avail workshop updates on management of postpartum haemorrhage to midwives kept them continue using outdated and inappropriate techniques while caring for mothers who experience severe haemorrhage during delivery (Qayum *et al*, 2018).

It was found out that 24(80%) of the respondents stated that there is low staffing on ward and this creates work overload among on staff who are on duty. In addition, it was reported that by majority of the respondents that averagely, about 2 health workers are on duty per shift. Therefore, a lot of work to do on ward overwhelms them and end up not caring for mothers who get postpartum haemorrhage appropriately. The same results were found out by Jabeen and Heema (2018) in their study about Frequency, causes and outcome of post-partum haemorrhage at Liaquat Memorial hospital, Kohat, Pakistan which revealed that inadequate staffing of midwives was a challenge during management of postpartum haemorrhage especially when the cases are many on the ward yet it requires teamwork. In a related study, it was found out that few midwives per shift on duty yet they have to attend to many mothers on ward did not give them adequate time to manage mothers with postpartum haemorrhage (Gaucher *et al*, 2019).

5.2: CONCLUSION

The study established that 18(60%) of the health workers on maternity ward mentioned that the care given to mothers with postpartum haemorrhage on maternity ward is not very good. This is attributed the many challenges faced by health workers during management

It was concluded that the health worker related challenges faced by health workers during management of postpartum haemorrhage on maternity ward are lack of equipment to use (77%), no continuous medical educations on postpartum haemorrhage(90%), work load(47%) and lack of drugs to use(77%) while the institutional related challenges faced by health workers during management of postpartum haemorrhage on maternity ward include lack of blood for transfusion (93%), inadequate ambulances for referral of mothers to higher level facilities (53%) and low staffing (80%).

5.3: RECOMMENDATION

There is a need for ministry of health to recruit more health workers on maternity ward to stop the problem of work overload so that pregnant mothers who get postpartum haemorrhage may get necessary care required

In addition, the hospital management should reinforce on the routine of continuous medical education among health workers (doctors and midwives) on management of postpartum haemorrhage to update them on new knowledge and skills of managing postpartum haemorrhage.

There should always be prior procurement of blood units and stock in the hospital blood bank to avoid lack of blood for transfusion

The health workers on maternity ward are encouraged to be self-motivated and committed to work with flexibility to handle the large numbers of mothers who may need their assistance on maternity ward. Moreover, the health workers are advised to do timely referral of the mothers who may need higher level management to avoid risks associated with delayed care.

5.4 IMPLICATION TO THE MIDWIFERY PRACTICE

Postpartum hemorrhage remains the leading cause of maternal mortality and morbidity. Therefore there is need to have enough adequate staffing with continuous medical education, procurement of oxytocic drugs, blood and other equipment to use in management of postpartum hemorrhage and timely referral of mothers who need further management to reduce maternal mortality and morbidity due to postpartum hemorrhage.

REFERENCES

- Adaniki A.I, Orji E., Adaniki P.O. & Olaniyan O. (2013) Comparative study of rectal misoprostol to oxytocin infusion in preventing post-partum haemorrhage. *Nepal Journal of Obstetrics & Gynaecology* 2(16), 34–37.
- Agwu Kalu F, Coughlan B, Larkin P (2018). A mixed methods sequential explanatory study of the psychosocial factors that impact on midwives' confidence to provide bereavement support to parents who have experienced a perinatal loss. *Midwifery*; 64:69–76
- Braddick L, Tuckey V, Abbas Z, Lissauer D, Ismail K, Manaseki-Holland S, Ditai J, Stokes T. (2016). A mixed-methods study of barriers and facilitators to the implementation of postpartum haemorrhage guidelines in Uganda. *International Journal of Gynecology & Obstetrics*, 132(1), pp.89-93.
- Brenner A., Shakur-Still H., Chaudhri R., Fawole B., Arulkumaran S. & Roberts I. (2018) The impact of early outcome events on the effects of tranexamic acid in post-partum haemorrhage: an exploratory subgroup analysis of the WOMAN trial. *BMC Pregnancy and Childbirth* 18:215, <https://10.1186/s12884-018-1855-5>
- Crofts J, Mukuli T, Murove BT, Ngwenya S, Mhlanga S, Dube M, et al., (2015). Onsite training of doctors, midwives and nurses in obstetric emergencies, Zimbabwe;93(5):347–
- Dadipoor S, Mehraban M, Ziapour A, Safari-Moradabadi A (2017). Causes of maternal mortality in Iran: a systematic review. *Int J Pediatr*;5(12):6757–70
- Edhi MM, Aslam HM, Naqvi Z, Hashmi H., (2013). Postpartum Haemorrhage: causes and management. 6(1), p.236.

- Evans CL, Johnson P, Bazant E, Bhatnagar N, Zgambo J, Khamis A (2014). Competency-based training “helping mothers survive: bleeding after birth” for providers from central remote facilities in three countries. *126*:286–90.
- Evensen A, Anderson JM, Fontaine P (2017). Postpartum hemorrhage: Prevention and treatment. *American Family Physician*; (95): 442–449.
- Fawcus S., (2019). Practical approaches to managing postpartum haemorrhage with limited resources. *Best Practice & Research Clinical Obstetrics and Gynaecology*; <https://doi.org/10.1016/j.bpobgyn.2019.03.009>. Accessed 26 April 2021.
- Gaucher L, Occelli P, Deneux-Tharaux C, Colin C, Gaucherand P, Touzet S, Dupont C., (2019). Non-clinical interventions to prevent postpartum haemorrhage and improve its management: A systematic review. *European Journal of Obstetric & Gynaecology and Reproductive Biology*; (240): 300– 309.
- Gul F., Jabeen M. & Heema (2018). Frequency, causes and outcome of post-partum haemorrhage at Liaquat Memorial hospital, Kohat, Pakistan. *Khyber Medical University Journal* 10(2), 90–94.
- Gungorduk K, Olgac Y, Gulseren V. and Kocaer M., (2018). Active management of the third stage of labour: A brief overview of key issues. *Turkish Journal of Obstetrics and Gynaecology*. 15(3): 188–192.
- Henriquez DCA, Bloemenkamp KWM, Loeff RM, Zwart JJ, van Roosmalen JJM, Zwaginga JJ, van der Bom JG., (2019). Fluid resuscitation during persistent postpartum haemorrhage

- and maternal outcome: A nationwide cohort study. *European Journal of Obstetric & Gynaecology and Reproductive Biology*; (235): 49–56..
- Hinton L, Locock L, Knight M. (2014). Partner experiences of “near-miss” events in pregnancy and childbirth in the UK: A qualitative study. *PloS One*, 9(4), p.e91735.
- Kanchan MI, Chattopadhyay A, Anand A, Naskar TK, Chakraborty S., (2018). Analyzing the etiology behind maternal mortality associated with antepartum, intrapartum, and postpartum cases in a tertiary care teaching hospital of West Bengal. *Journal of the Turkish-German Gynecological Association*;doi: 10.4274/jtgga.2017.0136.
- Kebede BA, Abdo RA, Anshebo AA, Gebremariam BM., (2019). Prevalence and predictors of primary postpartum hemorrhage: An implication for designing effective intervention at selected hospitals, Southern Ethiopia.14(10):e0224579. <https://doi.org/10.1371/journal.pone.0224579>.
- Kolb DA, Yolb AY., (2017). *The Experiential Educator: Principles and Practices of Experiential learning*. EBLS Press; Kaunakakai, HI USA.
- Lambert P, McIntosh MP, Widmer M, Evans L, Rausher M, Kuwana R, Theunissen F, Yeager B, Petach H., (2020). Oxytocin quality: evidence to support updated global recommendations on oxytocin for postpartum haemorrhage. *Journal of Pharmaceutical Policy and Practice*; 13, 14. <https://doi.org/10.1186/s40545-020-00205-7>.
- Nana PN., et al. (2016), “Epidemiologic profile of maternal deaths in two referral hospitals in Cameroon”. *Open Journal of Obstetrics and Gynecology* 06.06:365–372

- NDoH, (2014). Saving Mothers 2011-2013: Sixth Report on Confidential Enquiries into Maternal Deaths in South Africa, NCCEMD, Pretoria.
- Niflot LT, Sandven I, Stray-Pederson B, Pettersen S, Al-Zirgq I, Rosenberg M., Jacobsen AF, Vangen S., (2017), Risk factors for severe postpartum hemorrhage: a case-control study. BMC Pregnancy and Childbirth; 17:17.
- Okonofua F, Imosemi D, Igboin B, Adeyemi A, Chibuko C, Idowu A, Imongan W., (2017). Maternal death review and outcomes: An assessment in Lagos State, Nigeria. PLOS ONE; <http://doi.org/10.1371/journal.pone.0188392>. Accessed 11 October 2018.
- Okonufua F, Ntoimo L, Ogungbangbe J, Anjorin S, Imongan W, Yaya S., (2018). Predictors of women's utilization of primary health care for skilled pregnancy care in rural Nigeria. BMC Pregnancy and Childbirth; 18:106, doi:10.1186/s12884-018-1730-4
- Onyema OA, Cornelius AC, Ejelonu ET, Duke OA, (2015). Primary postpartum haemorrhage in Federal Medical Centre, Owerri, Nigeria: A six-year review. *Nigeria Journal of Medicine*; 24(3):242–5.
- Ope B W., (2020) Reducing maternal mortality in Nigeria: addressing maternal health services' perception and experience. *Journal of Global Health Reports*;4:e2020028. Doi.10.29392/001c.12733 Page 20/21
- Ostacoli L, Cosma S, Bevilacqua F, Berchialla P, Bovetti M, Carosso AR, Malandrone F, Carletto S, Benedetto C., (2020), Psychosocial factors associated with postpartum psychological distress during the Covid-19 pandemic: a cross-sectional study. BMC

- Pregnancy and Childbirth; 20, 703. <https://doi.org/10.1186/s12884-020-033995>. Accessed on 8 June 2021.
- Pembe A. B., Paulo C., D'Mello B. S., &Roosmalen J. V. (2014) Maternal mortality at Mulimbi national hospital in Dar-es-salaam, Tanzania in the year 2011. BMC Pregnancy & Childbirth 14:320, <http://www.biomedcentral.com/1471-2393/14/320>.
- Pierre-Marie T., et al. (2015) "Maternal mortality in Cameroon: a university teaching hospital report". *Pan African Medical Journal*. 21:16.
- Qayum M., Ali W. &Waheed N. (2018) Post partum haemorrhage prevention with tranexic acid is effective and safe in comparison to placebo. *Pakistan Armed Forces Medical Journal* 68(4), 908– 913.
- Rakotozanany, B. et al, (2019). "Maternal mortality related to post- partum hemorrhage: a case-control study at the Befelatanana maternity of Madagascar," *International Journal of Reproduction, Contraception, Obstetrics and Gynecology* 8(1): 121–126. doi: 10.18203/2320-1770.ijrcog20185406
- Rakotozanany, B. et al., (2019). "Maternal mortality related to postpartum hemorrhage: a case-control study at the Befelatanana maternity of Madagascar," *International Journal of Reproduction, Contraception, Obstetrics and Gynecology* 8(1): 121–126. doi: 10.18203/2320-1770.ijrcog20185406
- Rogerson SJ., (2017). Management of malaria in pregnancy. *Indian Journal of Medical Research*; 146(3): 328–333.

- Say, L. et al., (2014). "Global causes of maternal death: a WHO systematic analysis," *Lancet Global Health* 2(6): e323–e333. doi:10.1016/S2214-109X(14)70227-X
- Schack SM, Elyas A, Brew G, Petterson KO. (2014). Experiencing challenges when implementing active management of third stage of labour AMTSL; A qualitative study with midwives in Accra, Ghana
- Senturk S., Kagtci M., Balik G., Arslan H. & Sahin F. K. (2016) The effects of combined use of methyergonovine and oxytocin during caesarean section in the prevention of postpartum haemorrhage. *Basic & Clinical Pharmacology & Toxicology* 118,338–343.
- Sotunsa JO, Adeniyi AA, Imaralu JO, Fawole B, Adegbola O, Aimakhu CO, Adeyimi AS, Hunyinbo K, Dada OA, Adetoro OO, Oladapo OT (2019). Maternity near-miss and death among women with postpartum Page 19/21 haemorrhage: a secondary analysis of the Nigeria Near-miss and Maternal Death Survey; *British Journal of Obstetrics and Gynaecology*. 126 (S3):19–25.
- Thackrah RD, Wood J, Thompson SC. (2020), Cultural respect in midwifery service provision for Aboriginal women: longitudinal follow-up reveals the enduring legacy of targeted program initiatives. *International Journal of Equity in Health*; 19, 210 <https://doi.org/10.1186/s129-020-01325-x>. Accessed on 8 June 2021.
- UNICEF. 2014. *State of the World's Children 2015*. Geneva: UNICEF.
- Vallely LM, Homiehombo P, Walep E, Moses M, Tom M, Kelly-Hanku A, et al., (2016) Feasibility and acceptability of clean birth kits containing misoprostol for self-administration to prevent postpartum hemorrhage in rural Papua. 133:301–6.

- Weeks A. (2015). The prevention and treatment of postpartum haemorrhage: what do we know, and where do we go to next. *BJOG: An International Journal of Obstetrics & Gynaecology*, 122(2), pp.202-210.
- WHO, (2012). WHO recommendations for the prevention and treatment of postpartum haemorrhage: evidence base.
- Yaya S, Okonufua F, Ntoimo L, Kadio B, Deuboue R, Imongan W, Balami W., (2018). Increasing women's access to skilled pregnancy care to reduce maternal and perinatal mortality in rural Edo State, Nigeria: a randomized controlled trial. *BMC Global Health Research and Policy*; 3:12. doi:10.1186/s41256-018-0066-y

APPENDICES.

APPENDIX I. CONSENT FORM.

Dear respondent, I am **ATUHEIRE BRENDAAH** a student Midwife at Mutolere School of nursing and midwifery offering a diploma in Midwifery. I am conducting a study on ‘**Challenges faced by health workers in management of postpartum hemorrhage on maternity ward Kisoro district hospital, (Kisoro district)**. By participating in this study, you will have greatly contributed to the success of this study. Information obtained from you during this study will be kept confidential and be accessed by the researcher only. There are no risks anticipated in the study and you are free to participate or voluntarily withdraw from the study at any time. By signing below, it indicates that you have understood the information above concerning the study and you voluntarily agree to participate in the study.

Respondent’s signature.....

Date

Name of the researcher **ATUHEIRE BRENDAAH**

Signature

Date

APPENDIX II. A QUESTIONNAIRE FOR HEALTH WORKERS

My name is **ATUHEIRE BRENDAAH** a student of Mutolere School of nursing and midwifery conducting a study to determine **challenges faced by health workers in management of postpartum hemorrhage on maternity ward Kisoro district hospital, (Kisoro district)**. This questionnaire is to guide researcher to collect data for the above-mentioned study. All the information collected will be kept confidential

Instructions;

1. Your names should not appear anywhere on this questionnaire.
2. Answer all questions.
3. Circle the right objective or write in the spaces provided.

SECTION A: Bio demographic data of the respondent.

1. What is your professional cadre?
 - A. Enrolled midwife
 - B. Registered midwife
 - C. Senior midwife
 - D. Doctor
2. What is your working experience?
 - A. 1-2years
 - B. 3-4 years
 - C. 5years and above

SECTION B: Health worker related challenges faced by health workers in management of postpartum hemorrhage on maternity ward Kisoro district hospital, (Kisoro district).

3. How do you rate the care given mothers who get postpartum haemorrhage?

- A. Poor
- B. Good
- C. Very good
- D. Excellent

4. Do you get help/support from fellow health workers while managing mothers with postpartum haemorrhage

- A. Yes always
- B. Yes sometimes
- C. No

5. Averagely, how many health workers are usually on duty per shift

- A. One
- B. Two
- C. Three
- D. Four and above

6. Do you always have the enough equipment to use during management of mothers with postpartum haemorrhage

- A. Yes always
- B. Yes sometimes
- C. No enough equipment

7. Do you feel that there is a need to always conduct continuous medical education among health workers on postpartum haemorrhage?

A. Yes

B. No

8. From your experience, what has been the common challenges faced during management of mothers with postpartum haemorrhage on maternity ward?

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.....

9. What are the possible health worker related challenges faced by midwives in management of postpartum haemorrhage on maternity ward? (Circle all the appropriate)

A. Work load

B. Failure of mothers to disclose their history of postpartum haemorrhage

C. Poor communication on ward

D. Lack of medications to use

E. Comorbidities and illnesses of mothers

F. Delay of ambulances

G. Lack of blood in the bank

H. No guidelines on management of postpartum haemorrhage

SECTION C: Institutional related challenges faced by midwives in management of postpartum hemorrhage on maternity ward Kisoro district hospital, (Kisoro district).

10. Do you always have enough blood for transfusion in the hospital blood bank

A. Yes

B. No

11. Are the hospital ambulance vehicles usually available to transfer mothers to other health facilities for emergency management

A. Yes

B. No

12. Does the hospital conduct continuous medical education sessions among health workers especially postpartum haemorrhage?

A. Yes

B. No

12. What are the possible institutional related challenges faced in management of mothers with postpartum haemorrhage on maternity ward? (Circle all the appropriate)

A. Shortage of blood in blood bank

B. Lack of adequate ambulances for referral system

C. Low staffing on ward

D. Unreliable electricity

E. Lack of emergency trays

13. What do you feel should be implemented so that mothers who suffer postpartum haemorrhage can be saved from dying?

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.....

.....

Thanks for your participation

APPENDIX III. A PROPOSED BUDGET FOR RESEARCH STUDY

ITEM	QUANTITY	UNIT COST	TOTAL COST
Stationary			
Reams of ruled papers	1	15,000	15,000/=
Folder file	1	1500	1,500/=
Calculator	1	12000	12,000/=
Pens	4	500	2,000/=
A pencil	1	200	200/=
Flash disk	1	35000	35,000/=
		Sub total	65700/=
Communication			
Air time		20,000	20,000/=
Transport	10days	5000	50,000/=
		Sub total	60,000/=
Secretarial services			
Typing and printing proposal	40 pages x2	500	40,000/=
Printing questionnaires	3 pages x 36	500	54,000/=
Binding proposal	2 copies	3500	7,000/=
Printing dissertation	60 pages x 3	500	90,000/=
Binding dissertation	3 copies	3500	10,500/=
Research supervisor	1	200,000	200,000/=
Internet		50,000	50,000/=
Miscellaneous		10000	10,000/=
		Sub total	461,500/=
GRAND TOTAL			588,200/=

APPENDIX IV: WORK PLAN

<div>Month</div> <div>Activity</div>	OCT 2022	NOV 2022	DEC 2022	JAN 2023	FEB 2023	MARCH 2023	APRIL 2023	MAY 2023	Responsible person
Topic identification and approval									Researcher and Supervisor
Proposal writing									Researcher
Proposal defense and submission									Researcher and research committee
Data collection									Researcher
Data entry and analysis									Researcher
Report writing									Researcher
Research report approval and submission									Researcher, supervisor and school administration

APPENDIX V: PROPOSAL APPROVAL FORM

Name of the student: **ATUHEIRE BRENDAH**

Title of the research study: **CHALLENGES FACED BY HEALTH WORKERS IN MANAGEMENT OF POSTPARTUM HAEMORRHAGE ON MATERNITY WARD KISORO HOSPITAL, KISORO DISTRICT.**

I hereby accept this proposal for the above research study and approve it for submission to Mutolere School of nursing and midwifery and other concerned organization's institution Review board.

Name of supervisor: **Dr. MUGISHA JEROME**

Signature *M. Mugisha Jerome*

Date *27.03.2023*


Approved by

Principal Tutor

Name: **Sr. KEMIGISHA CATHELINE**

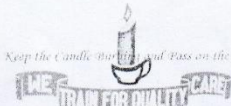
Signature *Kemigisha Catheline*

Date *27/03/2023*



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APPENDIX VI: INTRODUCTORY LETTER

**MUTOLERE SCHOOL OF NURSING
AND MIDWIFERY**
P.O. BOX 26, KISORO
Email: mutolerehti@ucmb.co.ug

Your Ref:
Our Ref: NMT/023

DATE: 03/4/2023

TO:
THE MEDICAL DIRECTOR
KISORO DISTRICT HOSPITAL
P.O BOX 268,
KISORO.

In charge Maternity
Please help her in
her research
work. *Chabwen*
6/4/2023

Dear Sir,

RE: RESEARCH PROJECT FOR DIPLOMA MIDWIFERY EXTENSION:

This is to introduce **AHUEIRE BRENDAH** who is a student midwife at Mutolere school of Nursing and Midwifery in her final year of study.

She is required to prepare an individual research project as part of the requirements for the award of Diploma in Midwifery Extension. She has written her research proposal and is at the stage of data collection. She is interested in the area of **"CHALLENGES FACED BY HEALTH WORKERS IN THE MANAGEMENT OF POST-PARTUM HEMORRHAGE ON MATERNITY WARD KISORO DISTRICT HOSPITAL, KISORO DISTRICT.**

She seeks to collect data in your health facility/Department and therefore requests for your support.

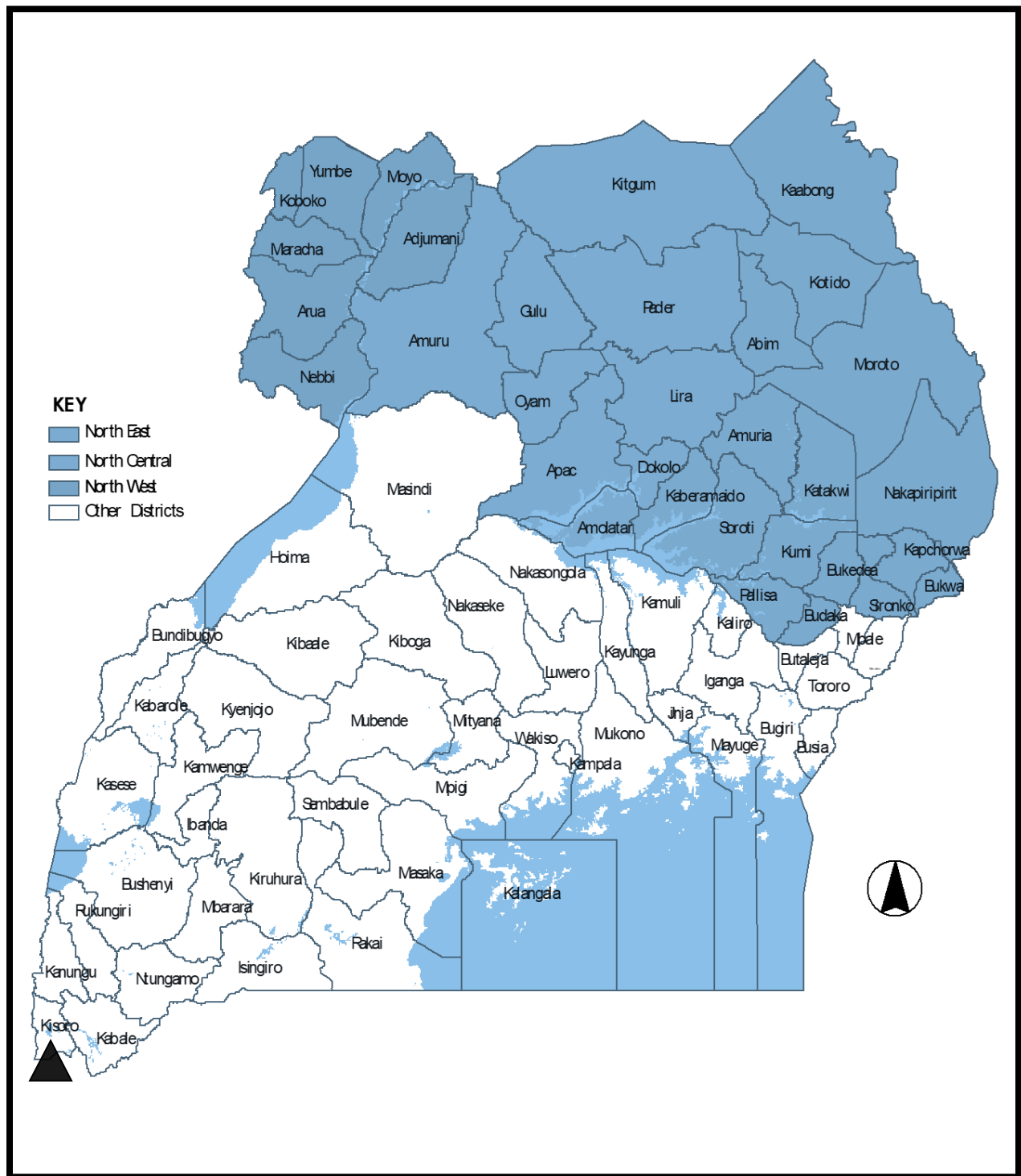
I will be grateful for any relevant support you shall accord her regarding her research study.

Thank you.

Yours Sincerely,

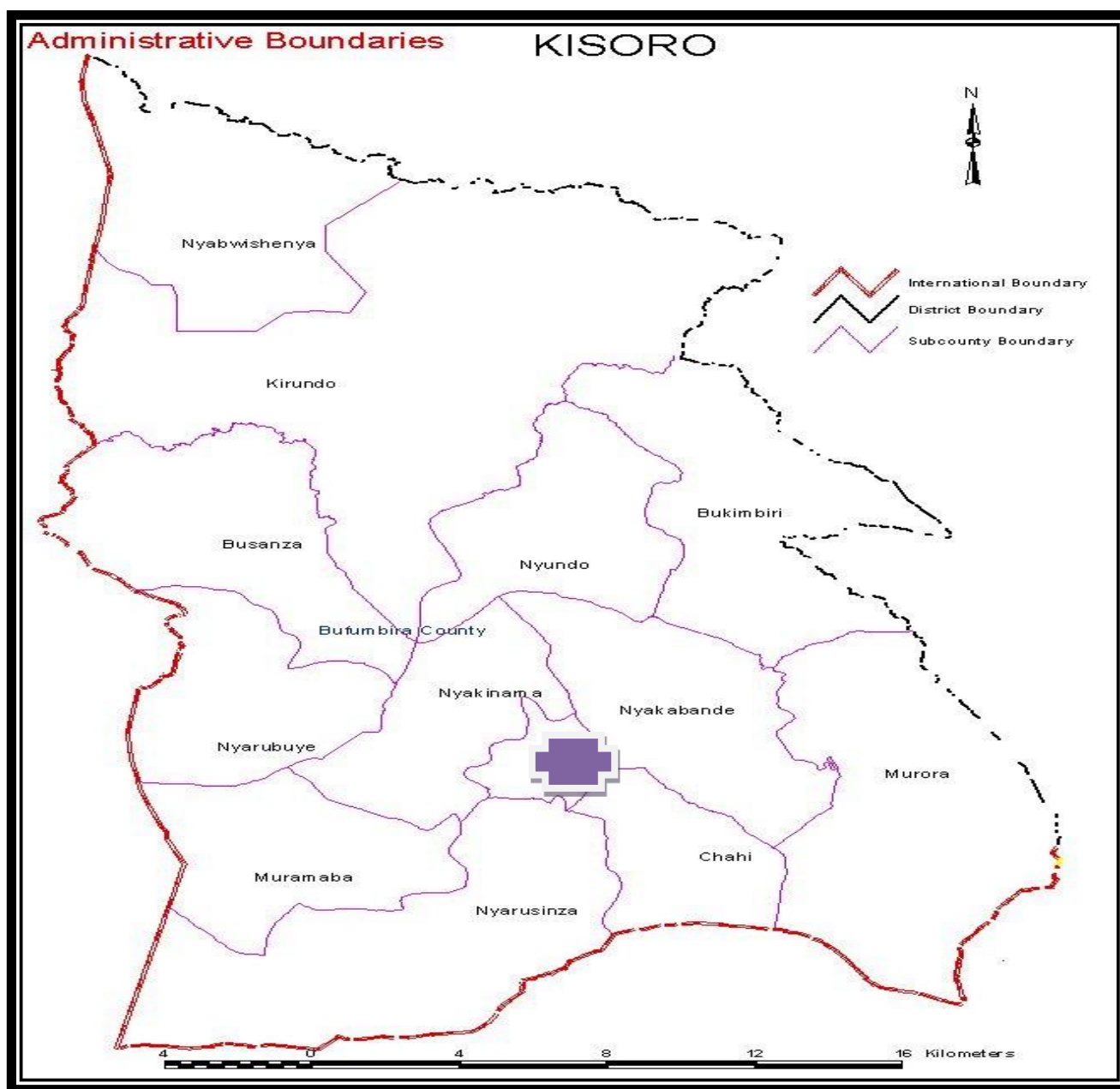

SR. KEMIGISHA CATHELINE
PRINCIPAL


APPENDIX VII: A MAP OF UGANDA SHOWING LOCATION OF KISORO DISTRICT.



KEY. Location of Kisoro District.

APPENDIX VIII: A MAP OF KISORO DISTRICT SHOWING LOCATION OF KISORO DISTRICT HOSPITAL.



KEY  Location of Kisoro District Hospital.