EXPERIENCES OF WOMEN WITH OBSTETRIC FISTULA IN SEEKING HEALTH CARE IN ZAMBIA: A CASE OF EASTERN, LUAPULA, MUCHINGA AND SOUTHERN PROVINCES

PhD THESIS

BY

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A Thesis Submitted to the University of Zambia in Partial Fulfilment of the Requirements for the Degree of Doctor of Philosophy in Midwifery at the University of Zambia

LUSAKA

APRIL 2022

DECLARATION

I, Nchimunya Nambala Tembo, declare that this Thesis, apart from my supervisors' guidance, is my own original independent work, and that it has never been submitted for any other Degree at the University of Zambia or any other institution.

Candidates
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I, Associate Professor Joseph Mumba Zulu, having supervised and read this Thesis is satisfied that this is the original work of the author under whose name it is being presented. I confirm that the work has been completed satisfactorily and approve it for final submission.

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iii

CERTIFICATE OF APPROVAL

This Thesis of Nchimunya Nambala has been approved as the requirement for the award of Doctor of Philosophy in Midwifery by the University of Zambia

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iv

ABSTRACT

Introduction: Obstetric fistula has devastating effects on womens lives. Women affected with obstetric fistula have shown limited engagement with medical services despite the availability of treatment options. The factors associated with limited participation in treatment services are widely debated and continue to be an area worthy of further exploration. This study sought to explore experiences of women with obstetric fistula in seeking health care in Zambia.

Methods: Mixed methods concurrent explorative study design was used. Purposive sampling was used to select 16 women with obstetric fistula for the qualitative component and 216 for the quantitative component who were systematically selected over a twelve months period. In addition, 65 health care professionals participated in the quantitative component who were also systematically selected. The qualitative component of the study focused on experiences of women in seeking fistula repair services while the quantitative component facilitated identification of factors women experienced in seeking fistula repair services and views of health care professionals on associated factors. Data were analysed drawing on the Socio - Ecological Model. Thematic data analysis was ultilised for qualitative data while Statistical Package for Social Sciences (SPSS) Version 20 and STATA version 13 were used for quantitative data. Descriptive statistics were used to present frequencies, median and interquantile range while Chi–square and logistic regression were used to determine associations. The cut off point for statistical significance was set at 5% and only p - value less or equal to 0.05 were considered statistically significant.

Results: Findings from the qualitative component showed that the major themes that emerged as experiences of women with obstetric fistula in seeking health care were barriers to seeking fistula repair services, enablers to seeking fistula repair services, pregnancy, labour and postpartum experiences and stress. Additionally, results from the quantitative component showed that 75.5% (163) had sought fistula repair services. The median age was 31, IQR, 23-36, SD ± 10.4 for those that sought repair services while for those who did not seek care; it was 34 years, IQR, 26-40, SD ± 13.3. The univariate regression results showed that women who were Bemba by tribe were 0.53 times less likely not to seek fistula repair services (OR= 0.53, (p= 0.011, 95% CI=[0.33, 0.86]) compared to being Tonga. The women who had attained primary education were 2.07 times more likely not to seek fistula repair services (OR=2.07, (p=0.033, 95%CI= [1.06, 4.08]) compared to those with no education. The odds of having secondary education were 5.83 times more likely not to seek fistula repair services (OR=5.83, (p=0.026, 95%CI= [1.24, 7.27]) compared to those with no education. Further, for every one unit

increase in the number of children women had, it was associated with the odds of 1.26 times more likely not to seek fistula repair services (OR= 1.26, (p= 0.026, 95% CI=[1.03, 1.53]). Also, for every one unit increase in the number of fistula attempts at repair, it was associated with the odds of 0.68 times less likely not to seek fistula repair services (OR= 0.68, (p= <0.001, 95% CI=[0.03, 0.17]). Those women who used public transport to seek fistula repair services were 50.59 times more likely not to seek fistula repair services (OR= 50.59, (p= 0.001, 95% CI=[5.26, 486.88]) compared to those walked.

On factors women experienced in seeking fistula repair services, keeping all other factors constant women with obstetric fistula who stated that loss of dignity prevented them from seeking fistula repair services were 52.14 times more likely not to seek fistula repair services (OR=52.14, (P=<0.001, 95% CI [18.21, 149.26]. Those who stated that anxiety prevented them from seeking fistula repair services were 31.78 more likely not to seek fistula services (OR- 31.78, (P=<0.001, 95% CI [6.95, 145.39]). Women who indicated that lack of knowledge on the condition prevented from seeing fistula repair services were 14.31 times more likely not to seek fistula repair services (OR=14.31, (P=<0.001, 95%CI[2.90, 70.04]). Women who asked for permission to seek fistula repair services were 2.10 times more likely not to seek repair services (OR= 2.10, (p=0.021, 95% CI= [1.12, 3.93]). Those who asked for permission from family members were 0.172 times less likely not to seek fistula repair services (OR=0.172, (p=<0.001, 95% CI=[.075, 3.94]). Women who indicated that economic consequences prevented them from seeking repair services were 5.95 times more likely not to seek fistula services (OR - 5.95, (P=0.027, 95% CI [1.222, 28.95]). Those who stated that myths and misconception prevented them from seeking fistula repair services were 30.43 times more likely not to seek fistula repair services (OR=30.43, (P=<0.000, 95% CI=[10.72 - 86.34)

Those who indicated that fistula repair services were available were 0.22 times less likely not to seek fistula repair services (OR=0.22, (P=<0.001, 95% CI [0.105, 0.447). Women with obstetric fistula who indicated that they were received well by health care professionals when they sought repair services were 8.85 times more likely not to seek fistula repair services (OR= 8.85, (p=<0.001, 95% CI= [4.04, 19.39]). Those who stated that health care professionals had good attitude were 17.26 times more likely not to seek fistula repair services (OR=17.26, (p=value <0.001, 95% CI=[6.80, 43.81]). Women with obstetric fistula who stated that health systems barriers prevented them from seeking health care were 32.82 times more likely not to seek fistula repair services (OR=32.82, (p-value < 0.001, 95% CI=[11.57 – 93.11]). Those who indicated that financing for the procedure prevented them in seeking fistula repair services were 66.73 times more likely not to seek fistula repair services (OR=66.73, (p-value < 0.001, 95% CI=[130.09, 3422.54]). Multivariable regression revealed that socio demographic characteristics of secondary education (p- value 0.007), increase in the number of children women had (p-value 0.033), increase in the number of fistula repair attempt (p-value <0.001) were statistically

associated with not seeking repair services. Also, there was a statistical significant relationship between factors women experienced in seeking fistula repair services of health care professionals good attitude (p- value 0.007), myths and misconception (p - value <0.001), health systems barriers (p - value <0.001) and financing for the procedure (p - value <0.001) with not seeking fistula repair services. Further, health care professionals were of the view that government should provide free fistula services (100 %), sensitise women on myths and misconception regarding the condition (100%), spouses not abandoning their wives following development of a fistula (100%) so as to offer financial and emotional support, counselling of women including their families before and after surgical repair (86.2%),, transport refund for those who seek repair services (73.8%), building fistula repair centres in villages (73.8%), training fistula surgeons (72.3%), improving the tracking system of women (66.2%) and sensitising chiefs, community leaders, community based volunteers, religious leaders, local government official and non-governmental organisations on obstetric fistula (58.5%).

Conclusion: Applying the Socio Ecological Model to this study, evidence was found that when

multivariate test were done, individual factors (secondary education, number of children, number

of fistula repair attempts), community factors (myths and misconception), organizational factors (health care provider good attitude) and societal factors (health systems barriers, financing for the procedure) were significantly associated with not seeking repair services. This means that according to the constructs of the socioecological model, not seeking fistula repair services were influenced not only at the individual but at the community, organisational and societal levels also. Therefore, the study recommends use of an ecological approach to addressing the experiences of women with obstetric fistula in seeking health care.

Keywords: ***Obstetric fistula, women with obstetric fistula, Vesico- vaginal fistula, Recto - vaginal fistula, fistula repair services.***

DEDICATION

I dedicate this study to my husband Mr Bruno kalisa Tembo, the Nambala family and my two children Benson Malanji and Bruno Tembo for being supportive throughout my academic years. I also dedicate this study to my late father Mr. Alexander Mutanga Nambala and late mother Mrs. Ellie Mutinta Bwembelo Nambala who encouraged me to study hard in life.

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TABLE OF CONTENT

Contents Page

Declaration i

Copyright …….....……ii

Certificate of completion.....iii

Certificateofapproval.....iv

Abstract.....v

Dedication….....viii

Acknowledgements.....ix

Table of content x

List of tables xvi

List of figures.....xviii

List of Appendices..... .xix

Abbreviation and Acronyms.....xxi

Definition of terms .....,,,,,,,,.....xxiii

CHAPTER ONE: INTRODUCTION

1.0 Introduction……1

1.1 Background information.....1

1.2 Problem statement 8

1.3 Justification of the study 9

1.4 Theoretical Framework…….....10

1.5 Delimitation of the study.....11

1.6 Research questions.....11

1.7 Purpose of the study……12

1.8 Research objectives.....12

1.8.1 General objective 12

1.8.2 Specific objectives.....12

1.9 Research hypothesis…….12

1.10 Outline of the Thesis.....13

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction 14

2.2 Overview of obstetric fistula.....15

2.3 Health Care System in Zambia.....…….16

2.4 Experiences women experience in seeking fistula repair services ……..…….19

2.4.1 Physical conséquences…….……..19

2.4.2 Psychological conséquences…….……21

2.4.3 Social consequences…….……22

2.4.4 Economic consequences…….……23

2.4.5 Pre and post-surgery experience……..…..…….24

2.4.6 Re-integration of women after fistula repair..……..…….……25

2.5 Factors women with fistula experience in seeking health care……..25

2.6 Studies that have utilized the socio- ecological model …….....27

2.7 Conclusion……..28

CHAPTER THREE: METHODOLOGY

3.1 Introduction.....29

3.2 Philosophical underpining……29

3.3 Research design……..…..30

3.4 Study setting……....30

3.5 Study Population ……33

3.5.1 Study population for the qualitative component……..……...33

3.5.1.1 Inclusion Criteria……..33

3.5.1.2 Exclusion Criteria……..33

3.5.2 Study populations for the quantitative component……..……33

3.5.2.1 Inclusion Criteria…….33

3.5.2.2 Exclusion Criteria ……33

3.6 Sampling……34

3.7 Sample size…….……36

3.8 Data collection ……38

3.9 Data collection tools……39

3.10 Data collection technique …….....40

3.11 Recruitment and Training……..41

3.12 Pre-test…….41

3.13 Trustworthiness……..41

3.14 Validity of the Research instrument ……..……42

3.15 Reliability of the Research instrument ……43

3.16 Ethical issues……43

3.15 Summary……...43

CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 Introduction……..44

4.2 Objective 1 findings: To explore experiences of women with obstetric fistula in seeking health care ……..44

4.2.1 Demographic characteristics of women with obstetric fistula……..45

4.2.2 Data processing and analysis of qualitative data……45

4.2.3 Identified Themes ……..…….48

4.2.3.1 Theme 1: Barriers to seeking fistula repair services…….…..55

4.2.3.2 Theme 2: Enabling factors to seeking fistula repair services……..…..…….61

4.2.3.3 Theme 3: Pregnancy, childbirth and postpartum experiences…….....65

4.2.3.4 Theme 4: Stress…….……...69

4.3 Objective 2 Results: To assess factors women with obstetric fistula experience in seeking health care …….……74

4.3.1 Data processing and analysis of quantitative data……74

4.3.2 Demographic characteristics of the participants …….……74

4.3.3 Association between demographic, obstetric and fistula history not seeking fistula repair services……..……..……77

4.3.4 Univariate analysis between demographic, obstetric and fistula history and not seeking fistula repair services…….…….....80

4.3.5 Multivariate logistic analysis……..….82

4.3.6 Factors women with obstetric fistula experience in seeking fistula health care……83

4.3.7 Association between factors women experience in seeking fistula repair services and not seeking repair services……..…….87

4.3.8 Univariate association between factors women experience in seeking fistula repair services and not seeking care…….……...….92

4.3.9 Multivariate logistic regression…….93

4.4 Objective 3 Results: Views of health care professionals on factors women with obstetric fistula experience in seeking health care……..……....94

4.4.1 Demographic characteristics of Participants……94

4.4.2 Views of health care professionals on factors women with obstetric fistula experience in seeking fistula repair services…….……95

4.5 Summary……..…….97

CHAPTER FIVE: DISCUSSION OF RESULTS AND FINDINGS

5.0 Introduction……99

5.1 Discussion of objective 1 findings ……99

5.1.1Participants demographics, obstetric and fistula history characteristics …….……99

5.1.2Themes……100

5.2 Discussion of objective 2 results……...104

5.2.1 Women with obstetric fistulas socio-demographics, obstetric and fistula history characteristics……..……..…….. 104

5.2.2 Factors women with obstetric fistula experience in seeking health care……106

5.3 Discussion of objective 3 results……...….111

5.3.1 Demographic characteristics of study participants…….……111

5.3.1 Views of health care professionals on factors women with obstetric fistula experience in seeking health care……..111

5.4 Discussion of Intergrated qualitative and quantitative data……..…….114

5.5 Summary ……...…….117

CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion……...….118

6.2 Implications of the study……..118

6.3 Recommendations…….....119

6.3.1 Policy recommendations……...119

6.3.2 Recommendations for further study……120

6.4 Strength and limitations of the study…….120

References……122

Appendices……..…….……....143

LIST OF TABLES

Table 1: Deaths due to maternal complications in Zambia (Women with Obstetric Fistula) ……5

Table 2: Outcome of surgery by repair attempt at Monze Mission Hospital (n = 252 operations)….....6

Table 3: Task distribution of fistula care services by health care level in Uganda……8

Table 4.1 (a) Demographic characteristics of women with obstetric fistula (n=16)……....45

Table 4. 2: Findings from In-depth interviews with women with obstetric fistula ……....49

Table 4.3 Demographic characteristics of women with obstetric fistula (n=216……..75

Table 4.4. Obstetric and fistula history of women with obstetric fistula (n=216)……76

Table 4.4. (b) Obstetric and fistula history of women with obstetric fistula (n=216)……..76

Table 4.5 Demographic data for women with obstetric fistula and not seeking fistula repair services (n=216)……..78

Table 4.5 (b) Demographic data for women with obstetric fistula and not seeking fistula repair services (n=216)……...79

Table 4.6 Obstetric and fistula history of women with obstetric fistula and not seeking fistula repair services(n=216)…….....……...……79

Table 4.7 Univariate analysis between demographic variables and not seeking fistula repair services (n=216)……..81

Table 4.7 (b) Univariate analysis between demographic variables and not seeking fistula repair services (n=216)……..81

Table 4.8 Univariate analysis between obstetric and fistula history not seeking fistula repair services (n=216)……..82

Table 4.9 Multivariate logistic regression analysis showing demographic variable and obstetric and fistula history and not accessing fistula repair services |(n=216)…….....83

Table 4.10 Individual factors women experience in seeking fistula repair services (n=216)……84

Table 4.10 (b) Individual factors women experience in seeking fistula repair services (n=216) …….. 84

Table 4.11 Interpersonal factors women experience in seeking fistula repair services (n=216) …… 85

Table 4:12 Community factors women with obstetric fistula experience in seeking fistula repair services (n=216) ……..85

Table 4.13 Organisation factors women with obstetric fistula experience in seeking fistula repair (n=216) ……86

Table 4.14 Societal factors women with obstetric fistula experience in seeking fistula repair (n=216)...86

Table 4.15 Association between individual factors and not seeking fistula repair services (n=216)……88

Table 4.16 Association between interpersonal factors and not seeking fistula repair services (n=216)..89

Table 4.17 Association between community factors and not seeking fistula repair services (n=216)….90

Table 4.18 Association between organisational factors and not seeking fistula repair services (n=216)……..91

Table 4.19 Association between societal factors and not seeking fistula repair services (n=216)……92

Table 4.20 Association between factors women with obstetric fistula experience in seeking fistula repair services and not seeking care…….....…….92

Table 4.20 (b) Association between factors women with obstetric fistula experience in seeking fistula repair services and not seeking health care…….……..93

Table 4.21 Multivariate logistic regression analysis showing the association between factors women experience in seeking fistula repair services and not seeking (n=216) ……..95

Table 4.21 Demographic Data for health care professionals (n=65)…….95

Table 4.22: Health care professionals views on factors women with obstetric fistula experienced in seeking fistula repair services (n=65)……96

Table 4.22(b): Continuation of Health care professionals views on factors women with obstetric fistula experienced in seeking fistula repair services (n=65)……..97

LIST OF FIGURES

Figure 1: Socio- Ecological Model……10

Figure 3.1: Distribution of women with obstetric fistula by Province……..35

LIST OF APPENDICES

Appendix I: English Research study participant information sheet

Appendix II: Chinyanja Research study participant information sheet

Appendix III: Chibemba Research study participant information sheet

Appendix IV: Chitonga Research study participant information sheet

Appendix V: English Informed Consent Form

Appendix VI: Chinyanja Informed Consent Form

Appendix VII: Chibemba Informed Consent Form

Appendix VIII: Chitonga Informed Consent Form

Appendix IX : English Semi Structured in-Depth Interview for women with obstetric fistula

Appendix X: Chinyanja Semi Structured Interview for women with obstetric fistula

Appendix XI: Chibemba Semi Structured Interview for women with obstetric fistula

Appendix XII: Chitonga Semi Structured Interview for women with obstetric fistula

Appendix XIII: English Structured Interview Schedule for women with obstetric fistula on factors women experience in seeking fistula repair services

Appendix XIV: Chinyanja Structured Interview Schedule for women with obstetric fistula on factors women experience in seeking fistula repair services

Appendix XV: Chibemba Structured Interview Schedule for women with obstetric fistula on factors women experience in seeking fistula repair services

Appendix XVI: Chitonga Structured Interview Schedule for women with obstetric fistula on factors women experience in seeking fistula repair services

Appendix XVII: English Interview Schedule for health care providers views on factors women experience in seeking fistula repair services

Appendix XVIII: Research Budget and Justification

Appendix XVIX: Ethics Research approval to conduct a research in Muchinga, Eastern and Southern Provinces

Appendix XX: National Health Research Authority approval

Appendix XXI: Permission to conduct pilot study

Appendix XXII: Permission letter to conduct a study in Reproductive Health Unit (MoH)

Appendix XXIII: Authority to conduct a study from Reproductive Health Unit (MoH)

Appendix XXIV: Request to include Luapula Province as one of the research sites

Appendix XXV: Authority from National Health Research Authority to include Luapula as a research site

Appendix XXVI: Request to conduct research study in Muchinga, Eastern, Southern and Luapula Provinces

Appendix XXVII: Authority to conduct a research study in Muchinga, Eastern, Southern and Luapula Provinces

Appendix XXVIII: Request for renewal of Research Approval (2019, 2018, 2020, 2021)

Appendix XXIX: Permission to collect data from Eastern province on women with obstetric fistula

Appendix XXX: Permission to collect data from Eastern province on programme planners

Appendix XXXI: Permission to collect data from Eastern province on health care professionals

Appendix XXXII: Permission to collect data from Muchinga province on women with obstetric fistula

Appendix XXXIII: Permission to collect data from Muchinga province on programme planners

Appendix XXXIV: Permission to collect data from Muchinga province on health care professionals

Appendix XXXV: Permission to collect data from Southern province on women with obstetric fistula

Appendix XXXVI: Permission to collect data from Southern province on programme planners

Appendix XXXVII: Permission to collect data from Southern province on health care professionals

Appendix XXXVIII : Permission to collect data from Luapula province on women with obstetric fistula

Appendix XXXIX: Permission to collect data from Luapula province on programme planners

Appendix XXXX: Permission to collect data from Luapula province on health care professionals

Appendix XXXXI: Permission letter to conduct data from UNFPA

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ABBREVIATION AND ACRONYMS

AOR	Adjusted Odds Ratio
CBDs	Community- Based Distributors
CBO	Community- Based Organization
CBD	Community Based Distributors
CBVs	Community Based Volunteers
CH	Community Health
CHAs	Community Health Assistants
CHAZ	Church Health Association of Zambia
CHEWs	Community health extension workers
CHW	Community Health Workers
CHIs	Church Health Institutions
CI	Confidence Interval
EHT	Environmental Health Technologists
FGM/C	Female Genital Mutilation/Cutting
FIGO	International Federation of Gynecology and obstetrics
FTWG	Fistula Technical Working Group
GFC	Gitenge Fistula centre
GRZ	Government of the Republic of Zambia
HCC	Health Centre Committees
HCs	Health Centres
HIV	Human Imuno Deficiency Virus
HMIS	Health Management Information System
HPC	Health Post Committees
ICF	Intermediate Care Facility (various organisations)
IOWD	International Organization for Women and Development
LPHO	Lusaka Provincial Health Office
MoH	Ministry of Health
NHC	Neighbourhood Committees
NHRA	National Health Research Authority
N	Number
NORAD	Norwegian Agency for Development
NORHED	Norwegian Programme for Capacity Development in Higher Education and Research for Development

OF	Obstetric Fistula
OFWG	Obstetric Fistula Working Group
OR	Odds Ratio
PHC	Primary Health Care
PHD	Provincial Health Director
PHO	Provincial Health Office
RHC	Rural Health Centres
RVF	Recto Vaginal Fistula
SEM	Social Ecological Model
SMAGs	Safe Motherhood Action Groups
SPSS	Statistical Package for Social Science
STIs	Sexually Transmitted Infections
TBA	Traditional birth attendant
THPAZ	Traditional Healers Practitioners Association of Zambia
UHCs	Universal Health Coverage
UTH	University Teaching Hospital
UNFPA	United Nations Population Fund
UNZABREC	University of Zambia Biomedical Research Ethics Committee
USA	United States of America
USD	United States Dollars
WHO	World Health Organisation
ZDHS	Zambia Demographic and Health Survey
VVF	Vesico Vaginal Fistula

DEFINITION OF TERMS

Obstetric fistula - An abnormal opening between a woman's vagina and bladder and/or rectum through which her urine and/or faeces continually leak (WHO, 2006).

Vesico -Vaginal Fistula – An abnormal opening between a woman's vagina and bladder through which her urine continually leaks through the vagina (Wall, *et al*, 2004).

Recto - Vaginal Fistula - An abnormal connection between the lower portion of the rectum and vagina (Mayo clinic, 2018).

Delay in seeking treatment - if a woman has incontinence of urine and/or faeces and does not seek medical help for more than 3 months (WHO 2006).

Access to health services - the timely use of services according to need (Peters *et al.*, 2008).

Backlog - The number of women who are currently living with fistula and can be expected to attend repair services (Tuncalp *et al.*, 2014).

Failed repair – when a patient remained incontinent of urine or faeces and the surgical defect persist as before (Gumonoka *et al.*, 2010).

Stress incontinence - fistula was closed; but the patient remained partially incontinent of urine on straining, e.g. sneezing, coughing. Some include these in their success; but it is probably better to classify them separately (Gumonoka *et al.*, 2010).

Health care – is the maintenance or improvement of health via the prevention, diagnosis, treatment or cure of disease, illness, injury and other physical and mental impairments in people (WHO, 2019)

CHAPTER ONE

1.0 INTRODUCTION

This study focussed on experiences of women with Obstetric fistula in seeking health care in Zambia. The study was undertaken to explore experiences of women with obstetric fistula in seeking health care, assess factors women experience in seeking fistula repair services and determine health care professionals views on the factors women experience in seeking health care.

1.1 BACKGROUND INFORMATION

Fistula is a global problem, but it is most common in Africa. In 2003, the United Nations Population Fund (UNFPA) and partners started a global campaign to end fistula (UNFPA and Engender Health, 2003). In this initiative, partners included Columbia University's Averting Maternal Death and Disability Program, the International Federation of Gynecology and Obstetrics (FIGO), and the World Health Organisation (WHO). The official international partnership formed by the campaign to end fistula was named the Obstetric Fistula Working Group (OFWG) (Donnay and Ramsey, 2006). The OFWG improved awareness for prenatal and neonatal care and developed strategies for clinically managing obstetric fistula. The campaign highlights three main strategies in the management of obstetric fistula; prevention, treatment and social reintegration into society after surgical repair. In Zambia, the campaign has been supported by the government as well as local and international partners. These have committed technical and financial support to address challenges related to the development of obstetric fistula (UNFPA, 2015). Some of the interventions so far include, timely and sustained access to maternal care services (both prenatal and postnatal), increasing the number of skilled personnel to be responsible for deliveries, and empowering young girls through supporting their education (Singini, 2017). In addition, the government in 2013 launched a campaign to end child marriage and early pregnancies. Consequently, the Zambian government through the Ministry of Gender developed a 2016-2021 strategic plan to end child marriage (Ministry of Gender, 2016).

An obstetric fistula is defined as an abnormal link between a woman's genital tract and bladder or rectum, which results in the continuous leakage of urine and/or faeces (Barageine *et al.,* 2014). The hole occurring between the vagina and the urinary tract (usually the bladder) is referred to as a vesico-vaginal fistula (VVF), resulting in uncontrollable leakage of urine from the vagina; whereas the one occurring between the vagina and the rectum is called a recto-vaginal fistula or RVF, resulting in uncontrollable leakage of faeces through the vagina (UNFPA, 2010). Most obstetric fistulas precede obstructed labour which is, one of the major causes of maternal mortality and morbidity in Sub-Saharan Africa. During prolonged or obstructed labour, pressure from the baby's head restricts blood flow and damages the tissues between the vagina and the bladder or rectum leading to fistula

formation (Ryan, 2014). Other obstetric causes include destructive deliveries, caesarean section with or without hysterectomy, and symphysiotomy (Thomson, 2007). For more than 90% of the women who experience fistulae, the delivery is associated with stillbirth (Ahmed *et al.*, 2016).

Globally, the prevalence of obstetric fistulae differs between developed and developing countries. In the United States of America (USA) and Europe, obstetric fistula ceased to exist between 1935 and 1950, due to the high quality of obstetric care (Ahmed and Tunçalp, 2015a). While the prevalence of obstetric fistula in developed countries remains very low, studies have found that the condition is more common in low-income countries (Biadgilign *et al.*, 2013; Kasamba *et al.*, 2013). This difference may be attributed to the fact that obstructed labour still remains a major challenge in low-income countries (Neilson *et al.*, 2003).

Based on accessible statistics, the WHO (2010, 2005) estimate that more than 2 million girls and women worldwide live with obstetric fistula, with an additional 50,000–100,000 new cases occurring every year. The vast majority of these girls and women are in Africa and Asia (WHO, 2005). Fistula treatment is reported to reach only a fraction of fistula patients annually (approximately 14, 000 cases compared to the estimated 50,000 to 100,000 new cases each year) highlighting the need for intensifying resources to bridge the large gap (UNFPA, 2010). In Sub-Saharan Africa and South Asia up to 130,000 new cases occur each year (UNFPA, 2008).

In Zambia, there are few studies that have been conducted on obstetric fistula. Related studies that have been conducted at local level include, a study in the Southern province of Zambia that investigated obstetric fistulae among women managed at Monze Mission Hospital (Singini, 2017). The study reported that 259 obstetric fistula patients were treated between 2003 and 2005 (Holme *et al.*, 2007). The study found that the education levels for women with obstetric fistula was low, they were short with a height of about 148 cm, and 75% were married (Holme *et al.*, 2007). Another local study which was conducted at the University Teaching Hospital (UTH) in Lusaka reviewed urinary fistula and found that, out of the 61 fistula cases, 89% were as a result of prolonged obstructed labour, 25% were teenage mothers, and 38% were primipara (Wadhawan and Wacha, 1983). A study conducted at Chilonga, Monze and St Francis Mission Hospitals investigated the intention to prevent the recurrence of VVF among afflicted women. Findings revealed that approximately 69% of the women with VVF were between the ages of 12 and 20 years (Singini, 2017).

The UNFPA (2007) indicated that the prevalence of VVF was at 350 cases per 1,000,000 deliveries. The incidence of obstetric fistula is relatively high in Zambia (Holme *et al.*, 2007). A situation analysis revealed a prevalence of 0.46% per 1000 women with fistula, with exclusion of those women not reporting to the health care facility (Mkumba *et al.*, 2003). Equally, the 2013/14 Zambia Demographic and Health Survey (ZDHS)

included for the first time a module to measure the prevalence of symptoms of fistula in Zambia (UNFPA, 2016). The survey revealed that 5.9% of 16, 381 women aged 15-49 years were suffering from fistula like symptoms. While the true prevalence and incidence of fistula in Zambia are unknown, some progress have been made in the effort to better measure the scale of the problem through the fistula treatments occurring (UNFPA, 2014). Since 2005, about 1, 786 women in Zambia have received fistula treatment with support from UNFPA and partners (UNFPA, 2014). Estimates show that at least 2,000 fistula patients wait for surgery each year (UNFPA, 2015), and in the year 2016, only 208 women with obstetric fistula were repaired through static and outreach sites (UNFPA, 2016); thus restoring their dignity; while fistula tracking was undertaken at sub-national levels to ascertain post-operative outcomes (UNFPA, 2016).

Once an obstetric fistula occurs, it requires surgical repair as it usually cannot heal by itself. Without treatment, many women live with the constant and humiliating smell of urine and/or faeces. For women with obstetric fistula, the delay in seeking care is a critical component of their suffering (Ruder, 2012). Evidence has shown that most obstetric fistula patients are poor, uneducated and live in rural areas (Tebeu *et al.,* 2012; Muleta *et al.,* 2010; De Bernis, 2007; Melah *et al.,* 2007). Hence, accessing appropriate and quality obstetric care and services is one of the challenges in developing countries, such as Zambia. This is compounded by high levels of poverty, poor health systems, and costs related to obstetric treatment (Kelly and Winter, 2007). With high poverty levels in Zambia, most women, unfortunately, cannot access quality obstetric care services.

There are multiple factors contributing to delay in seeking treatment reported in literature. In low income countries, women have less access to appropriate surgical care for repair due to the low availability of health facilities with repair services and lack of surgical training for fistula repair. In addition, a variety of demand side factors affect women's care seeking for fistula repair such as great distances to health facilities, high cost of travel to facilities, and high cost of services (Bellows *et al.,* 2014).

At the individual patient's level, obstetric fistula results into a number of consequences broadly categorised into physical illness, psychological illness, social, and economic consequences (Mc Fadden *et al.,* 2011). Physically, some of the morbidities related to delay in seeking treatment are neurological damage in the lower limbs, such as foot drop, development of contractures, disuse atrophy, genitourinary infections, renal failure, and dermatitis (Wall, 2006). Also, women living with fistula experience anxiety, loss of dignity, and low self-worth (Mselle *et al.,* 2011). Further, afflicted women experience worry, sadness, fear, depression and some may even have suicidal ideation (Yeakey *et al.,* 2009). Furthermore, they experience a deep sense of shame, loneliness, loss of dignity due to stigma, lack of self-trust, and feelings of impurity (Siddle *et al.,* 2013; Mselle *et al.,* 2011). The stigma associated with fistula leads afflicted women to live in a state of denial and hiding from the public (Arora *et al.,* 2010). They are isolated and sleep in the corner of the compound, and are not given enough food (Alio *et*

al., 2011). They are also blamed by others and they blame themselves for their condition (Muleta *et al.,* 2008). Such experiences can inhibit women's agency and motivation for seeking treatment.

In societies where fertility is highly valued, obstetric fistula is considered devastating as women suffer from a high divorce rate (Weston *et al.,* 2011; Holme *et al.,* 2006), as well as abandonment by husbands which leaves them alone and unsupported (Yeakey *et al.,* 2009). Nevertheless, some women remain with their husbands; especially if they have children (Mwini-Nyaledzigbor *et al.,* 2013; Gharoro and Agholoro, 2009) and may thus, retain their social and emotional support (Yeakey *et al.,* 2009; Muleta *et al.,* 2008). Some women are only supported by their mothers and hence, lose any kind of social support; leaving them feeling ostracised and socially disgraced (Alio *et al.,* 2011). Social barriers may also contribute to financial barriers as women who are abandoned by husbands and families could find it more difficult to acquire funds for financing the procedure and transportation costs. Women with obstetric fistula often travel long distances to reach repair services and thus, they many live with the condition for numerous years (UNFPA, 2012; Bangser *et al.,* 2011). A review of literature has shown that (Aliyu and Esegbona, 2011; Mselle *et al.,* 2011) failure to seek care is as a result of not being accompanied to the treatment facilities by husbands, families, or communities. Women may have to travel alone for treatment, a difficult thing to do in some cultures, especially if one is incontinent (Yeakey *et al.,* 2009). In addition, women may not be aware that treatment is available, or they may lack decision power and attitudes for seeking care (Ramsey *et al,* 2007; Velez *et al.,* 2007; Wall *et al.,* 2005; Browning and Patel, 2004). If women with fistula lack decision making capacity or control over household funds, they may be unable to access treatment, even when facilities or transportation are readily available (Bellows *et al.,* 2014). Due to the large backlog of women requiring repair and limited available surgeons and personnel, women may experience long waits (Ramsey *et al*., 2007; Velez *et al.,* 2007; Wall *et al.,* 2005).

Cultural misperceptions of the condition are some of the key factors that have contributed to delay in seeking fistula repair services (Yeakey *et al.,* 2009). Different cultural beliefs have negative impacts on women's health and have been found to be major contributory factors which hinder women from modern medical treatment. Some of the practices are: gender disparity (male societal dominance), women being forced to follow home based cares and, women being forced to pass different cultural and beliefs practices before seeking any modern medical care.

Zambia joined the campaign to end fistula in 2003 and since then, many surgical fistula camps have been conducted in different health sites. About 1,786 women in Zambia have received fistula treatment with more than 35 percent who have been reported as not completely healed (UNFPA, 2014). Further**,** according to the MoH, 2014, 600 women with obstetric fistula died in Zambia. It is not known whether these women were

repaired or not. Table 1 shows deaths that have occurred in Zambia due to obstetric fistula in the period 2013 to 2014.

Table 1: Deaths due to obstetric fistula in Zambia (Women with Obstetric Fistula)

PROVINCE	**2013**	**2014**	**TOTAL**
Central province	12	38	50
Copperbelt province	10	26	36
Eastern province	16	17	33
Lusaka province	3	10	13
Luapula province	10	23	33
Muchinga province	33	25	58
Northern province	8	19	27
North Western province	221	34	255
Southern province	9	59	68
Western province	2	25	27
TOTAL	**324**	**276**	**600**

Source: MoH, 2014.

The outcome of repair is not always successful. Table 2 shows the outcome of surgery on first and subsequent attempts. Unsuccessful repair underscores the need for women to continue seeking repair services. Repair after previous attempts to close the fistula is often technically difficult for the surgeon and exhausting for the woman (Maulet *et al.,* 2013; Gupta *et al.,* 2012).

Table 2: Outcome of surgery by repair attempt at Monze Mission Hospital (n = 252 operations)

	Outcome of surgery by repair attempt		
	Cured	**Not Cured**	**Stress incontinence**
First overall repair	139 75.5%	12 6.5%	33 17.9%
One or more previous repair	44 64.7%	13 19.1%	11 16.2%
Total	**183 72.6%**	**25 9.9%**	**44 17.5%**

Source: Holme *et al.*, 2006

It is unclear why women wait so long to seek treatment but some studies done in other African countries have documented that women lack the knowledge that treatment exists, others cannot afford the cost involved in both transport to a facility or the procedure itself, few hospitals provide repair services, women may lack decision power, and attitudes for seeking care (UNFPA, 2012; Turan *et al.*, 2007). However, women who remain untreated may not only face a life of shame and isolation, but also may face a slow premature death resulting from infection and kidney failure (UNFPA and Engender Health, 2003). Also, left untreated, obstetric fistula can lead to neurological conditions such as foot drop, development of contractures, disuse atrophy, genito urinary infections and dermatitis (Muleta *et al.*, 2008).

There are numerous measures that have been put in place to combat obstetric fistula in developing countries. According to Kalembo and Zgambo (2012), two community organisations (Delta Survive and Lamaneh Suisse) in Mali have experience in supporting women living with obstetric fistula. Delta Survie has been providing skills training in textiles, with the aim of improving the socio-economic situation of women, while Lamaneh Suisse has been involved in identifying and assisting women with fistula to access treatment services and following up after treatment to prevent recurrence in the next pregnancy (Kalembo and Zgambo, 2012). In Niger, there are organisations such as Dimol that accompany women with obstetric fistulae to their communities to conduct health education sessions and counsel their families. There is also, a network for fistula eradication in the country. The network focuses on synchronising interventions, monitoring and implementation of the national

strategy, advocacy and resource mobilisation for obstetric fistula, and emergency obstetric care, as well as reducing taboos surrounding fistula (Donnay and Ramsey, 2006).

Some studies have documented community based programmes such as the use of media, especially radio and social media, as a means of raising awareness on obstetric fistula (Baptiste *et al.*, 2010; Wegne *et al.*, 2007). In Burundi, there is engagement in extensive community awareness activities on obstetric fistula and its treatment, targeting and mobilising health facility staff and influential community members such as religious leaders, village chiefs and local health promoters (Alma *et al.,* 2013). Community obstetric fistula screening sessions for women with obstetric fistula symptoms are organised at specific health structures in different provinces. To encourage attendances at these sessions, specific messages are broadcast extensively two weeks prior to the sessions by way of radio, churches, administrative (village) leaders and staff at surrounding health structures (Alma *et al.,* 2013). Women attending these sessions are screened, examined, informed of the findings, referred in case of other gynaecological problems (in particular for severe uterine prolapse) and selected for surgery if found to have fistula. Provisional dates of admission are scheduled and transport arrangements made. Additionally, obstetric fistula telephone hotline was established in health facilities in Burundi to provide obstetric fistula-related information, advice and support (Alma *et al.,* 2013). Women calling with a suspected obstetric fistula are encouraged to go to Gitege Facility Centre (GFC), with the offer of reimbursement of transport costs once they arrive at the centre (Alma *et al.,* 2013). Women who are unable to afford transport are urged to attend the next scheduled obstetric fistula screening session in their region, from where they could be transported to GFC for free (Alma *et al.*, 2013).

In Uganda, the (MoH) has recognised obstetric fistula as a silent morbidity and put in place an obstetric fistula national strategy aimed at eliminating fistula. The fistula national strategy is being spearheaded by a National Fistula Technical Working Group (FTWG). Fistula care has been integrated into the reproductive health policy at all levels of care and specific roles based on the identified priorities have been assigned. Table 3 shows the task distribution of fistula care services by health care levels in Uganda

Table 3: Task distribution of fistula care services by health care level in Uganda

Level	Fistula care tasks
Health centre I (Village)	Case detection, awareness and community mobilization
Health Centre II, III, IV (Parish, Sub county, county)	Prevention, case detection, follow up, and referral.
General Hospital (District)	Simple fistula repairs, Monitoring
District Health Office	Building appropriate facility and administrative and multi-sectoral capacity to adequately address Obstetric fistula
Regional Referral Hospital	Complex fistula repairs, outreach, training, and technical supervision
National referral hospital	Repairs of very complex fistula, training and technical supervision
Ministry of Health	Set rights and Gender based policy framework, set standards of clinical care and training programmes, developing centres of excellence, input with supplies, equipment and training

Source: HSSIP III, UHSA, 2011

1. 2 STATEMENT OF THE PROBLEM

Obstetric fistula is one of the most hidden and preventable public health problems that afflict women and girls worldwide. There is a significant number of women who have suffered the condition and have lived with it for many years. In Zambia, two thousand fistula patients await surgery each year (UNFPA Zambia, 2015) and 5.9% of 16, 381 women aged 15-49 years were reported suffering from fistula like symptoms (ZDHS 2013/14). Clearly, this shows that many women are not seeking treatment in Zambia. Suffice it to say that these values may be underestimated since many affected women remain unidentified owing to social isolation by their partners and their communities (Kasamba *et al.,* 2013; Badlani and Wall, 2009). Consequences are multiple with physical, social, psychological and financial problems (Ahmed and Holtz, 2007). These consequences are interwoven as they interact consequently influencing each other in a complex manner that forms the women's life experiences.

From the available literature, little has been documented about the experiences women with obstetric fistula face of seeking health care in Zambia. Little is known on how these women seek to overcome the challenges, especially before surgical repair. However, women who remain untreated may not only face a life of shame and isolation, but also may face neurological conditions such as foot drop, development of contractures, disuse atrophy, and dermatitis (Muleta *et al.,* 2008) and a slow premature death resulting from infection and kidney

failure (UNFPA and Engender Health, 2003). It is therefore important that questions are asked to find out the experiences women with obstetric fistula face of seeking health care in Zambia. This study intended to fill this knowledge gap.

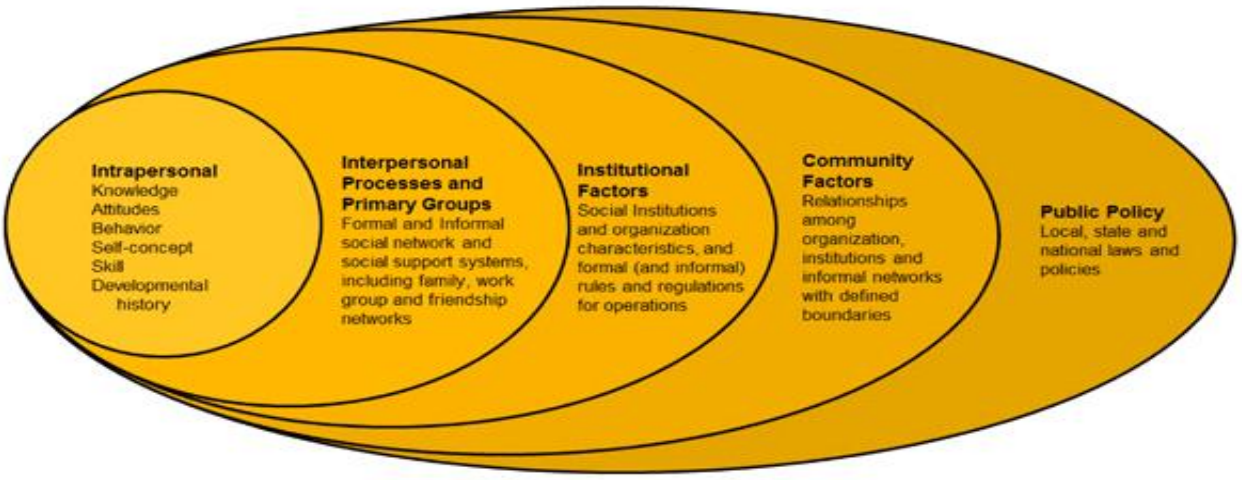
1.3 JUSTIFICATION OF THE STUDY

Few studies have been done on obstetric fitula in Zambia. Previous studies that looked at obstetric fistula in Zambia were descriptive in nature (Holme *et al.,* 2007). This study sought to explore women with obstetric fistula's experiences of seeking health care in Zambia and determine health care professionals views of factors women experienced of seeking health care. This study therefore aimed to fill the knowledge gap, by using a population-based study. Furthermore, the present study would provide additional information for evidence-based policy formulation and improvement in the design and implementation of obstetric fistula programmes at both national and local level.

1.4 THEORETICAL FRAMEWORK

The SEM was used as the guiding framework for this study. The framework is a theory-based on understanding the multifaceted and interactive effects of personal and environmental factors that determine behaviours (Dahlberg and Krug, 2002; Stokols, 1996). The SEM is composed of five nested, hierarchical levels; individual, interpersonal, community, organisational, and policy environment (Dahlberg and Krug, 2002). It recognises that health experiences and outcomes are often influenced by factors situated within and beyond the individual (Feldacker *et al.,* 2011; Stokols, 1996) in this case a woman with fistula. The second key concept of an ecological perspective suggests that people influence and are influenced by those around them (Kilanowski, 2017). It shows the advantages of multilevel interventions that combine behavioural and environmental components. Health promotion programmes are more effective when planners consider multiple levels of influence on health problems. Implicit within this model is the concept of a dynamic interaction between the various factors whose equilibrium ultimately defines the overall health experiences (Sallis *et al.,* 2002**).**

Figure 1: Socio- Ecological Model



Source: The Social Ecological Model: Adapted from Mc Leroy *et al.* (1988)

1.4.1 Application of the framework to this study

Five nested hierarchical levels of the socio-ecological Model

1.4.1.1 Individual: According to the SEM, individual characteristics that influence behaviour change include risk factors (Biological, socio-demographic and physical factors), knowledge, attitudes, skills, beliefs, gender, age, religious identity, marital status, economic status, values, stigma, coping, life goals and expectations (Nyakundi, 2018). For example, at the individual level, a woman with fistulars inaction may be due to lack of financial implication of the visit to the doctor or fear that she will be denied permission by the spouse or in-laws.

1.4.1.2 Interpersonal: Formal and informal social networks and social support systems can influence individual experience (Nyakundi, 2018). Interpersonal processes that can influence individual experience include family, spouse, friends, peers, religious networks, customs or traditions (Nyakundi, 2018)**.** This also extends to support, communication, resources and stigma influence. For example, at an interpersonal level, a woman with fistula may have a spouse who does not believe on the significance of fistula repair services.

1.4.1.3 Community: Community level include factors, social networks and norms, or standards, which exist as formal or informal among individuals, groups, and organisations **(**Nyakundi, 2018). In practice, addressing the community level require taking into consideration institutional and public policy factors, as well as social networks and norms. Each level of influence can affect health behaviour. For example, due to some community factors a woman may delay or may not go for fistula repair services early.

1.4.1.4 Organization: The organisations level or social institutions involves rules and regulations for operations that affect how, or how well, for example, reproductive health services are provided to an individual or group

(Nyakundi, 2018). For example, it may be hard for a woman with fistula to schedule an appointment, because the only health facility that conducts fistula repair services may be kilometers away.

1.4.1.5 Political environment: Political environment includes local, national and international policies on health (Nyakundi, 2018). These include local or state policies and laws that regulate or support healthy actions and practices for disease prevention, early detection, control, and management. For example, a woman with obstetric fistula may lack insurance coverage, and thus be unable to afford the fees. Thus, the outcome will be a woman's failure to go for fistula repair services.

1.5 DELIMITATION OF THE STUDY

The study used both the qualitative and quantitative approaches. The approach is supported by the many studies that have been done on experiences of women with obstetric fistula that have used mixed methods. Data for this study was collected from women with obstetric fistula in their homesteads in the four provinces and also from health care professionals from the MoH, UNFPA, PHOs in the four provinces and from fistula repair centres over a specific 12-month period from October, 2017 to September 2018.

In this study, women with obstetric fistulas experiences in seeking health care and views of health care professionals on factors women experience in seeking health care were solicited. One goal was to assess the factors women with obstetric fistula experience in seeking health care and determine views of health care professionals on factors women experience.

The Socio - Ecological Model (SEM) was used to guide this study. The SEM model is composed of five nested hierarchical levels: individual, interpersonal, community, organisational, and policy environment. The SEM was selected for the study because it targets multiple factors (individual, interpersonal, community, organisational and societal) that influence health seeking behavior. Barriers to care can come about either because of all the five levels.

1.6 RESEARCH QUESTIONS

1. What are the experiences women with obstetric fistula face in seeking health care?
2. What factors do women with obstetric fistula experience in seeking health care?
3. What are the views of health care professionals on factors women with fistula experience in seeking health care?

1.7 PURPOSE OF THE STUDY

Obstetric fistula treatment is critical to the health and survival of the women. It is a well-known factor that fistula repair improves the quality of life for women afflicted by the condition. Without treatment, many women live with the constant and humiliating smell of urine and /or faeces. Consequences of obstetric fistula, social and economic problems of the fistula contribute to decline in health and wellbeing of women. Delaying treatment has an impact on the prognosis and it may cost more money compared with treatment for women who come early for treatment (Raasen *et al.,* 2008). Hence, understanding the experiences women with fistula face of seeking health care will help generate useful information for shortening the time before surgery hence improve afflicted women's condition.

1.8 RESEARCH OBJECTIVES

1.8.1 General objective

To explore experiences of women with obstetric fistula in seeking health care and solicit health care professionals views on factors women experience in seeking health care.

1.8 .2 Specific objectives

1. To explore experiences of women with obstetric fistula in seeking health care.

2. To assess factors women with obstetric fistula experience in seeking health care.

3. To determine views of health care professionals on factors women with obstetric fistula experience in seeking health care.

1.9 RESEARCH HYPOTHESIS

There is a relationship between not seeking fistula repair services and

- Socio –demographic factors (age, age at fistula occurrence, tribe, religion, educational level, marital status, years in marriage, income, mode of transport, number of children, financial support, number of fistula sustained and number of fistula attempts at repair).
- Factors women with obstetric fistula experience in seeking fistula repair services (individual, interpersonal, community, organisational and societal).

1.10 OUTLINE OF THE THESIS

The thesis has six chapters. In order to provide the background to issues discussed in this thesis, this chapter outlines the introduction, background information, statement of the problem, justification of the study, Theoretical framework, delimitation of the study, research questions, purpose of the study, research objectives and, research hypothesis. The subsequent chapters will focuses on Literature review (Chapter 2), Resaerch methodology (Chapter 3), presentation of findings (Chapters 4), discussion (Chapter 5), conclusion, recommendations, implications and limitation of the study (Chapter 6).

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter provides a review of literature on the experiences of women with obstetric fistula in seeking health care in Zambia globally, regionally and nationally and the views of health care professionals on factors women experience in seeking repair services. The purpose of literature review was to analyse and synthesize sources to generate a picture of what is known about obstetric fistula management and challenges in seeking health care.

Liiterature review was organized into major topics. First, the researcher conducted a systematic review. Systematic reviews provide objective summaries of what has been written and found out about research topics (Lange, 2014). This is especially valuable in wide research areas, where many publications exist, each focusing on a narrow aspect of the field (Budgen and Brereton, 2006). Systematic reviews aim to provide a full overview of research conducted on a specific field until the present date. To conduct a systematic review, in the first stage, the researcher presented a description of the search strategy. In the second stage of conducting the review, search terms were formulated on the basis of scoping studies and discussions within the review panel (Lange, 2014). Search terms included; obstetric fistula, women with obstetric fistula, Vesico- vaginal fistula, Recto-vaginal fistula and fistula repair services. The keywords were used in various orders to gather as many relevant articles as possible that were less than 20 years old. A scoping study is a preliminary assessment of the research field aimed at mapping the scope and size of it. For formulating suitable search terms, the Centre for Reviews and Dissemination's (CRD) 2009 guideline for systematic reviews suggests to consult the main research question. For searching electronic databases, the guideline recommends to also consider "synonyms, abbreviations and spelling variants" (Lange, 2014). Bettany-Saltikov (2010) highlights that sources other than electronic databases should be searched, too, since even well-known research articles may not be enlisted in all databases. Both Bettany-Saltikov and the CRD guideline recommend utilization of articles' reference lists to detect relevant literature, hand searching important journals, contacting researchers on the field, as well as consulting citation analysis to discover articles that cite already included literature. Therefore, in addition to reviewing the papers identified by this initial topic search, the researcher scrutinized the references cited in the papers to find other papers relevant to the topic of this study. The researcher also conducted additional searches of the websites of reputable healthcare organizations, such as the UNFPA, the WHO, Fistula Foundation to obtain further details about obstetric fistula, cultural and political issues involved in this condition.

After the formulation of search terms, a search strategy was developed. The search strategy encompasses all measures taken to detect literature relevant to answer the research question and is thereby very critical to the success of the review and the validity of its findings (Bettany-Saltikov, 2010). The search databases included health sciences and multidisciplinary databases such as CINAHL & Medline, PubMed, EBSCOHost, ProQuest,

SAGE Journals, Academic Search Complete, Science Direct, Demographic and Health Survey publications, African Journal online and British National index and Google Scholar. In all cases, only papers published in peer-reviewed journals, or information from reputable professional and governmental sources, for inclusion in this literature review. The literature search revealed relatively few papers published on this topic within the past 5 years. For that reason, the researcher expanded the search to include papers published in the past 20 years. As a result, articles and seminal publications selected for inclusion in this literature review were published in 2003 or later, a year when the campaign to End fistula was launched worldwide. Studies that have used the SEM as the guiding framework were also reviewed. The researcher reviewed more than 100 pieces of literature to write this section of the research.

For the purpose of clear understanding of this chapter, the researcher presented this literature review as outlined; overview of obstetric fistula, health care system in Zambia, experiences of women with obstetric fistula, factors women experienced in seeking fistula repair services and studies that have ultilised the SEM.

2.2 OVERVIEW OF OBSTETRIC FISTULA

Obstetric fistula is a birthing injury (Irani, 2012) which is mainly caused by unrelieved obstructed labour (Abokaiagana, 2010).There are two main classification systems for obstetric fistula. The first classifies obstetric fistula according to the anticipated difficulty of surgical repair. A good prognosis includes a single fistula (VVF, less than 4 cm in size, with no urethral involvement, no scarring of the vaginal tissue, a minimal degree of tissue loss, and intact ureters (WHO, 2006). A complicated prognosis includes multiple fistulae, RVF or mixed VVF/RVF that involve the cervix, fistula greater than 4 cm in size, urethral involvement, vaginal scarring, complete separation of the urethra from the bladder, extensive tissue loss, ureteral drainage into the vagina, stones in the bladder, and/or failed surgical attempts (UNFPA, 2012). The second classification defines the fistula according to what surgery is necessary. A sub classification of this system describes the size of the fistula: small (< 2 cm), medium (2–3 cm), large (4–5 cm), and extensive (> 6 cm) (Semere and Nour, 2008).

Lack of access to appropriate emergency obstetric care has been highlighted as one of the main risk factor for obstetric fistula (Tebeu *et al.,* 2012) compounded by poverty, dynamics in the health care system due to the cost of a caesarean section and availability of service providers. Other risk factors such as first pregnancy, young mothers, and cultural practices have not been established to cause fistula in high income countries where emergency obstetric care is available. These factors might, however, be important in low-income countries where women lack access to quality obstetric care (Zheng and Anderson, 2009). Women with obstetric fistula deliver at home, are attended by family members or unskilled birth attendant or traditional midwives. Maternal age less than 20 years has been cited to increase the risk of development of fistula but this seems to vary from country to

country. Also most women with fistula are married at younger ages and without prenatal care **(**Zheng and Anderson, 2009). Malnutrition and early marriage are two examples and both are risk factors for obstetric fistula (Tsui, *et al.,* 2007). Malnourished women are more likely to experience ineffective contractions in labour, leading to unusually long labours and a risk of obstructed labour (Ahmed and Holtz, 2007). In addition, poor women often grow up undernourished, resulting in an even smaller than normal skeletal structure and pelvis (Ahmed and Holtz, 2007). Female genital mutilation (FGM), increase risk of fistulae. A full bladder during labour makes it more difficult for the uterus to contract efficiently and prevents the descent of the baby. Therefore, full bladder increases the risk of prolonged labour and fistulae as well.

Obstetric fistula symptoms include flatulence, urinary or foecal incontinence, which may be continual or only happen at night (Creanga and Genadry, 2007*),* foul-smelling vaginal discharge (Women's Health, 2012), repeated vaginal or urinary tract infections (Champagne *et al.,* 2010*),* irritation or pain in the vagina or surrounding areas and pain during sexual activity (Wong and Ozel , 2010). Effects of obstetric fistulae include stillborn babies due to prolonged labour, which happens in 85% to 100% of the time (Zheng, and Anderson, 2009; Ahmed and Holtz, 2007). Also, there are often other various co-morbidities associated with obstetric fistula such as obstetric palsy, renal failure, osteitis pubis, dermatitis, genital sores, infertility, vaginal stenosis, amenorrhoea and pelvic inflammatory disease (Weston *et al.,* 2011; Muleta, *et al.,* 2008).

Studies have reported the cost of fistula repair to be estimated at US$ 300-$450 per patient (Creanga *et al.*, 2007**).** Though the cost of surgical repair is only around US$350, this amount of money is completely not manageable for most of the women who suffer this complication (Wall, 2006**).** According to Muleta (2006), treatment of obstetric fistula can be conservative or surgical. Treatment is most successful when women receive immediate medical attention. A small fistulas (<2 cm in diameter) may even heal spontaneously following decompression of an overextended bladder and the prompt insertion of an indwelling catheter, which gives the bladder time to heal (Wall, 2012), while a large majority of women need surgical management. A minority of obstetric fistula survivors have such extensive tissue damage that the fistulas are irreparable or require complicated urinary diversions that transplant the ureters into the colon (Wall *et al.,* 2008). According to Gumodoka *et al.* (2010) in Tanzania**,** the cure rate for combined VVF and RVF repair declined to only 45%.

2.3 HEALTH CARE SYSTEM IN ZAMBIA

Health services in Zambia are provided by the public health sector with government owned and run facilities; faith - based not- for- profit providers; mine – owned health facilities; private - for – profit providers; Community - Based Organisations and traditional practitioners (National Community Health Strategy, 2019-2021).

Public health sectors are intended to provide promotive, curative, rehabilitative and palliative health services to the population (National Community Health Stratergy, 2019-2021). According to the National Community Health Strategy, 2019-2021, health services delivery is structured in a three - tier pyramidal referral system with primary health care (health posts, health centres and district hospitals); secondary health care (provincial referral hospitals); and tertiary health care (teaching hospitals). A total of about 2000 health facilities are found in Zambia (National Community Health Stratergy, 2019-2021).

Health posts are the lowest level of the Zambian health care system catering for a catchment population of about 3,500 persons in the rural areas and 1,000 to 7000 people in the urban setting (National Community Health Stratergy, 2019 - 2021). They are either positioned or earmarked to be set up within 5 km radius for sparsely populated areas (National Community Health Stratergy, 2019 - 2021). Health services offered are promotive, preventive, curative and rehabilitative care in nature. From the health posts, patients and clients are referred to health centres. There are two types of health centres in the national health care delivery system. These are; urban health centres serving a catchment population of between 30, 000 to 50, 000 people and rural health centres serving a population of about 10, 000 people (National Community Health Stratergy, 2019-2021). The health centres too offer promotive, preventive, curative and rehabilitative care services. From health centres, the next in the hierarchy are first level hospitals (district hospitals).

First level hospitals are the third largest levels of care. They serve a population of 80,000 to 200,000 people (National Community Health Stratergy, 2019-2021). The services provided are medical, surgical, obstetric, diagnostic, preventive and all clinical services in support of health centre referrals (National Community Health Stratergy, 2019 - 2021). There are 84 first level hospitals currently in Zambia (National Community Health Stratergy, 2019-2021).

Second level hospitals (Provincial/General hospitals) are intended to cater for a catchment population of 200, 000 people (National Community Health Stratergy, 2019 - 2021). They provide services in internal medicine, general surgery, paediatrics, obstetrics and gynaecology, dental care, psychiatry and intensive care (National Community Health Strategy, 2019 - 2021). The hospitals also serve as referral health facilities for first level institutions, including the provisions of technical back up and training functions. There are 21 second level hospitals in Zambia (National Community Health Stratergy, 2019 - 2021). One second level hospital offering fistula repair is Mansa General Hospital.

Third level hospitals are the highest referral level of healthcare in Zambia (National Community Health Strategy, 2019 - 2021). These have sub-specialisations in internal medicine, surgery, paediatrics, obstetrics, gynaecology, intensive care, psychiatry, training and research. Complicated cases not attended to at second level hospitals are referred to third level hospitals. There are currently six third level hospitals in Zambia (National Community

Health Stratergy, 2019 - 2021). Fistula repair services are offered routinely at the specialist hospital such as University Teaching Hospitals (UTHs) - Women and newborn Hospital.

In additions to the health facilities under the MoH, the Ministry of Home Affairs, Ministry of Mines and Ministry of Defence have health institutions that provide health services primarily for their own staff, but which can also be accessed by non-staff members at a minimal fee (National Community Health Strategy, 2019 - 2021). According to the recent Zambia Household Expenditure and Utilization Survey, (National Community Health Stratergy, 2019 - 2021), about 90% of patients seek care in Public owned health institutions.

Under the Faith – Based Not - For –Profit sector, the Catholic and Protestant Christian Missionary health workers from Church Health Institutions (CHIs) formed the Churches Health Association of Zambia (CHAZ) in 1970 (National Community Health Stratergy, 2019 - 2021). Churches Health Association of Zambia has 152 institutions - 36 hospitals, (11 of which have training schools), 84 Rural Health Centres (RHCs) and 32 Community Based Organizations (CBOs) (National Community Health Strategy, 2019 - 2021). The majority of these health institutions are located in rural and hard to reach areas and in all the ten administrative provinces of Zambia serving the poor and the underserved (National Community Health Strategy, 2019 - 2021). Faith- based health facilities also attend to patients from outside of their catchment area, district and provinces (National Community Health Strategy, 2019 - 2021). Churches Health Association of Zambia and its member units work closely with the Government of the Republic of Zambia (GRZ) through the MoH and within the National Health Framework. Under the private - for - profit facilities are clinics and private hospitals. They are estimated to provide care to approximately 3% of Zambian population (National Community Health Strategy, 2019 - 2021). Three mission hospitals; Chilonga, St Francis (Katete) and Monze offer fistula repair services.

There are still people who seek medical advice from traditional/alternative medicine prior to seeking care in orthodox health facilities (WHO, 2001). Hence, the Government recognises alternative and traditional medicine as part of the health sector in Zambia and instituted various national policies governing this sector. The Traditional Healers Practitioners Association of Zambia (THPAZ), established in 1978, serves as the national body for traditional healers and reviews and registers these practitioners for licensing (National Community Health Strategy, 2019 - 2021). The organisation has about 40,000 members nationwide.

The WHO (National Community Health Stratergy, 2019 - 2021) recommends a threshold of 22.8 clinicians per 10,000 persons. Meanwhile, Zambia has 12.4 Clinicians per 10,000 persons (MoH and MoCDMCH, 2014) which is significantly below the WHO threshold. While each of the country's health posts should be overseen by a nurse, currently 34% of nurse posts at health posts are vacant (National Community Health Strategy, 2019 - 2021). Where a nurse is not available to serve as a facility in - charge, Environmental Health Technologists (EHT) are meant to substitute; however, 24% of EHT posts are also vacant (National Community Health

Strategy, 2019-2021. As a result, 23% of all Community Health Assistants (CHAs) are acting as facility in-charges; bringing about a negative impact on their ability to work in the community (cf. Sector, A., 2017).

To continue to improve health outcomes for all Zambians, the GRZ has made community health a key part of its strategy. Community health services address the access problem to primary health facilities such as health posts, health centres and 1st level hospital in the districts. Community health services provide promotive, preventive, curative and rehabilitative health services to the general public anchored in the Primary Health care (PHC) strategy. The services are provided through the care, management and co-ordination structures of district hospitals, health centres, health posts, outreach posts, and Health Centre Committees (HCC) and Health Post Committees (HPC) that link PHC with the communities through Neighbourhood Health Committees (NHC).

In Zambia, Community Health Workers (CHWs) consist of two main groups: Community Based Volunteers (CBV) and CHA. Community Based Volunteers work hand in hand with implementing partners on a range of health projects across the country with several types of volunteers all working in different vertical programmes. These include Safe Motherhood Action Groups (SMAGs), Community – Based Distributors (CBDs), CHWs, Youth Peer Educators and others. Selection criteria are not always clearly stipulated, and there are no standard guidelines for incentives or working hours for volunteers, which differ depending on the funder, implementing partner and districts in which the work is implemented. This presents a number of challenges including high turnover rates of volunteers (National Community Health Strategy, 2019 - 2021). Community Health Assistants are employed by the MoH to act as the "eyes and ears" of the health system at the community level. They are selected by the communities in which they live and are trained for one year in basic healthcare; including the treatment and prevention of common illnesses. They are meant to spend only 20% of their time in the health facility and the remaining 80% of their time in the community conducting home visits and community mobilisation activities (National Community Health Strategy, 2019 - 2021). Health services are complemented by community based rehabilitation services offered at rehabilitation centres at community level.

2.4 EXPERIENCES OF WOMEN WITH OBSTETRIC FISTULA

Obstetric fistula is associated with a variety of severe physical, psychological and social sequelae (Siddle *et al.*, 2013; Roush, 2009; Browning and Menber, 2008; Ahmed and Holtz, 2007; Turan *et al.*, 2007) referred to as 'obstructed labour injury complex' to acknowledge pathologies endured across multiple organ systems. There are a number of consequences broadly categorised into physical, psychological, social and economic consequences that women with fistula experience. Pre and post-surgical experiences as well as re-integration of women after repair have also been reported among afflicted women.

2.4.1 Physical consequences

The many challenges facing girls and women living with fistula go far beyond the disease and the loss of the baby. Empirical studies inform that girls and women affected with obstetric fistulas often get physical

complications that result from the condition (Cook *et al.,* 2004). Barageine *et al.* (2015) in a study done in Uganda revealed that fistula survivors reported having experienced the bad smell of strong urine, which was even worse for those who leaked faeces in addition to urine. Afflicted women also often felt ashamed; feeling that the situation of bad smell would drive away anybody they came across. To lessen the physical effects of leakage and the smell, some women used herbal medication to treat the burns (Barageine *e t al.,* 2015). In the same study, afflicted women were also reported to have drunk less to reduce being constantly wet and hence produced concentrated and smelly urine. Other women with fistula reported that herbs also helped to reduce the leakage of urine. However, most women reported that they did not achieve the anticipated benefits from drinking less or taking herbs and that they continued leaking (Barageine *e t al.,* 2015). As a result, afflicted women suffered from recurrent urinary tract infections (UTIs), dermatitis, pain and genital sores (Weston *et al.*, 2011). In another study, women mentioned that the wounds resulting from wetness and rubbing of thighs sometimes became infected, due to the perpetual state of being wet and constant rubbing, making them susceptible to vaginal infections (Engender Health, 2012).

Kay et *al.* (2015) and Abokaiagana (2010) in their studies found that with regards coping with odour and leaking, women made diapers from cloth, which were washed every time, though they could got old quickly because of the frequent washing. Similarly, a study done by Engender Health in Bangladeshi in 2012 found that the only relief was to change the cloth frequently, or when intolerable, not to wear it. Sometimes afflicted women used nicely scented soap to wash the rags and bathed whenever they could afford (Abokaiagana, 2010). Whether with family or non-kin, women always kept a distance to avoid the detection of urine on their clothes or an odour. It was also reported that some women employed using plastic bags to prevent urine from leaking. Some discarded their underwear and wore flowing skirts, which allowed the urine to drip freely. Wearing of flowing skirts was also reported to have permitted them to work in fields with relative comfort. Women who wore napkins indicated that removing the napkin restricted their movement as they could not leave the house or spend time with visitors (Engender Health, 2012). Further, afflicted women avoided events that required long stretches outside the homestead. Engender Health's (2012) study also reported that most women limited their movement because it was difficult and painful to travel. Travelling was done when necessary; such as to seek treatment, visit a market to sell or buy goods, or participate in special ceremonies, such as a family marriage or funeral, where they felt obligated to pay their respects.

According to Gebresilase (2014) women with obstetric fistula complained of weight loss, loss of bodily control, pain around the pelvis, physical exhaustion and inability to walk or work. Similarly, in a study by Bomboko *et al.* (2019), some women with obstetric fistula lost their ability to participate in activities which required a lot of strength in fear of re-occurrence of the fistula and/or experiencing a lot of pain especially in the lower abdomen due to the weakened muscles. Due to the weakened muscles, others were unable to hold urine for a long time

thus ensuring that they passed it out as soon as need arose. Also, women with fistula complained of rashes, boils, and ulcers that developed around the vulva and thighs, causing itching and severe burning, leading to vaginal infections (Engender Health, 2012). Secondary amenorrhoea (Ezegwui and Nwogu-Ikojo, 2005; Browning, 2004) was also reported among afflicted women. Other common complaints included interrupted sleep caused by the wet beddings, anxiety, lack of confidence and weakness (Engender Health, 2012).

2.4.2 Psychological consequences

In a study by Barageine *et al.* (2015) most participants reported ridicule, scorn, verbal abuse and non-verbal mockery from their families and communities. What seemed to hurt afflicted women most was the abuse from relatives and parents who voiced that women with a fistula were a disgrace and deserved to suffer from the condition. In a study by Drew *et al.* (2016), it was reported that some women appeared to have confusion about their fertility and ability to bear children. One quarter of women did not know if their uterus had been removed and some women were very distraught because they knew little about their reproductive health. History of hysterectomy, absence of menstruation, and difficulty conceiving contributed to those concerns. Problems with fertility were coupled with fears about partner abandonment and concerns that they would never find a supportive husband. Many women expressed feelings of living in fear related to their concern that their husbands would eventually remarry (Mutambara *et al.,* 2013).

In a study by Bangser *et al.,* (2011), 67% of the women in Tanzania and 99% of those in Uganda experienced isolation. Women with fistula either withdrew from their communities due to shame or were isolated by others as a result of the stigma (Mselle et *al.,* 2010). In the same study, fewer than half of the women appeared to have been treated well by their community and did not isolate themselves. It was also reported that the majority of the women with fistula isolated themselves from other community members, remaining in their homes as much as possible and forgoing public activities such as funerals, celebrations, meetings, and social visits. This isolation was caused by a strong sense of shame about their condition and by a strong desire not to soil themselves in front of anyone or to smell badly (Gebresilase, 2014; Women's Dignity Project and Engender Health, 2006).

In the Women's Dignity Project and Engender Health in partnership with Health Action Promotion Association, Kivulini Women's Rights Organization, and Pecramiho Mission Hospital (2006) study, 40% of the women were most concerned about the financial challenges that continued after fistula repair. These challenges affected their ability to return to the fistula care centre for their follow-up appointments and surgeries. The timing of another operation also affected some women financially; specifically farmers who would be unable to work during the season (Drew *et al.,* 2016). Another study done by Women's Dignity Project and Engender Health (2006) revealed that women with fistula acknowledged having greater feeling of stress in their lives due to their inability to attend church and/or mosque, and being unable to marry again and to have a child. Denied family support, poverty and malnutrition were frustrating; and some afflicted women availed themselves of earnings through;

begging, commercial sex and comparable stigmatising employment (Cook *et al.,* 2004). The grief of losing a child and becoming disabled exacerbated the pain.

2.4.3 Social consequences

Beyond the medical conditions, the social consequences are severe, and afflicted women are often ostracized from their communities, divorced, abandoned, remain childless, left alone and unsupported (Yeakey *et al.,* 2009; Turan ***et*** *al.,* 2007). On the other hand, some women still remained with their husbands especially if they had children (Mwini-Nyaledzigbor *et al.,* 2013; Gharoro and Agholoro, 2009) and retained their social support (Yeakey *et al.,* 2009; Muleta *et al.,* 2008) economic and emotional support (Muleta *et al.,* 2008). Childbearing influenced husbands' decisions to stay with their afflicted wives. In some cases, it was reported that men who chose to stay with their wives also provided the funds for the women to receive obstetric fistula treatment (Mselle *et al.,* 2011; Pope *et al.,* 2011; Neilson *et al.,* 2009; Roush, 2009; Yeakley *et al.,* 2009; Muleta *et al.,* 2008). Not only did women report their partners as being supportive after developing the fistula, they also explained that decisions regarding labour and obstetric care were largely made in conjunction with their husbands (Mwini-Nyaledzigbor *et al.,* 2013; Pope *et al.,* 2011; Muleta *et al.,* 2008). Similarly, the analysis of a social mapping exercise conducted with Tanzanian women who had accessed surgical repair treatment revealed that women identified husbands as one of the key individuals who helped them access obstetrical care and treatment (Pope *et al.,* 2011). Equally, Dennis *et al.* (2016) in their study, stated that about half of the women with fistula described their partners as supportive caregivers, who provided sympathy and encouragement before fistula repair, during treatment, and throughout recovery. However, the majority of women's marital histories included polygamous relationships (75%) and most of the afflicted women became second wives after fistula development (80 %). Other studies reported that some women were only supported by their mothers since they lost any kind of social support, leaving them feeling ostracised and socially disgraced (Alio *et al.,* 2011).

Sexual intercourse was reported to be putting a strain on marital relationships and increasing rates of divorce (Ahmed and Holtz, 2007). Challenges with intercourse, specifically urine leakage, often stressed women's relationships. For those whose marriages remained intact, women often doubted their relationships would continue to survive the challenges of having a fistula (Drew *et al.,* 2016). Notably, Muleta *et al.* (2008) in their study revealed that fistula patients did not share a bed with their husbands or have sexual intercourse with them because their husbands refused to let them get closer to them. Equally, findings from Mutambara *et al*. (2013) study revealed that although women were married, they felt that they failed to fulfil their marital roles as wives, and tended to view themselves as worthless, incomplete and not worthy. Women reported having failed sex lives, and were no longer able to provide sex or experience intimacy with their husbands due to the inability to control

their bodily functions and smell (Mutambara *et al.,* 2013). In the same study, women were worried that because they were no longer able to fulfil their duties as wives particularly in engaging in intercourse and bear the children, their husbands would start to look for other clean women who were able to engage in intercourse, bear children and not leak urine. In another study, it was reported that afflicted women had to sleep in the corner of the compound (Alio et *al.,* 2011).

The 2013 - 2014 ZDHS showed that women who developed fistula were often socially rejected (CSO, MOH, ICF International, 2015). Some women reported that unkindness was shown to them often by their friends, neighbours and other community members (Siddle *et al.,* 2013). In a study by Abokaiagana (2010), it was reported that afflicted women lost their customers and co - traders due to odour. This social antagonism forced most of the women to recoil in their jobs. Further, most women did not receive visitors in their household. Similarly, Kay *et al,* (2015) in their study entitled "Giving Voices to the Experiences of Rwandan Women with Urogenital Fistula," revealed that the women could not participate in activities they were culturally supposed to enjoy, such as entertainment and cooking for visitors for they feared wetting themselves as they participated. Notably, Muleta *et al.* (2008) also reported that fistula patients were not allowed to perform household chores such as cooking and washing of bowls due to the odour they had. As in other findings, women suffering from obstetric fistula were often not allowed to cook and lived in a separate house or room (Mwini-Nyaledzigbor *et al.,* 2013). Consequently, they were prevented from serving their husbands meals or washing their clothes.

2.4.4 Economic consequences

Fistula victims often suffered economic hardships. Apart from being abandoned by people that they depended on for livelihood, fistula victims found it difficult to engage in economic activities because of the physical problems imposed by their condition. Afflicted women who were otherwise fit for work before the onset of the condition found themselves unable to work because they were leaking all the time. In a study by Dennis *et al.* (2016), family members provided women with food, shelter, household chores, and provision of care for the patients and their children. Additionally, a few women described receiving tangible or financial support from their partners before or after surgery. In the same study, husbands were also reported as helping their wives clean their clothes prior to surgery and buying whatever was needed during recovery and providing women with capital to restart their businesses once they were fully recovered. Also, relatives promised to loan them capital to start a business or helped them find a job. In addition, in Engender Health"s (2012) study, it was revealed that women who had small businesses either sent family members or only went to the market for short periods due to the leakage of urine.

However, all of the women in Sullivan"s (2014) study had not been able to work after developing a fistula. This loss of their livelihood forced women to rely solely on their families for economic support. At the same time,

many families were already experiencing financial strain and often did not have funds to meet their basic needs. Similarly, Abokaiagana (2010) revealed that obstetric fistula had a negative toll on the victims' family as it left afflicted women with few opportunities to earn a living. It affected women's ability to work or work to their capacity, and limited their ability to work or access jobs due to stigma. Also, substantial costs were incurred in seeking treatment and purchasing essential supplies such as soap, sanitary pads and perfumes to mask the odour and maintain personal hygiene on a daily basis. As a result, a significant number of women reported not having the means to afford soap and clothes to stay clean (Abokaiagana, 2010). In Bangser *et al.* (2011), approximately 85% of the women stated that fistula rendered them unable to perform household chores, work on the farm, or engage in other income-generating activities. Further, in the Women's Dignity Project and Engender Health (2007) study, about half of the afflicted women stated that they could not provide for themselves and /or their families as a result of not being able to work.

2.4.5 Pre and Post surgery experience

Khisa and Nyamongo (2012) in an exploratory study of the experience of women with obstetric fistula following corrective surgery in West Pokot, Kenya, revealed that afflicted women reported serious problems of the pre-surgery period which included loss of relationships, infertility and stigma (Holtz and Ahmed, 2007; WHO, 2006). In the same study, on average, afflicted women stayed in the hospital for about three months, with some staying for as long as seven months depending on the magnitude of one's problem and her ability to settle her hospital bills. This affected fistula victims and their families greatly as some of them went through some difficulties before settling the hospital bills (Abokaiagana, 2010). Khisa and Nyamongo (2012) revealed that some women interviewed in their study had unsuccessful repairs. With an unsuccessful repair, the family and community did not accept the woman back. Instead, blame was placed on her. Similarly, Women's Dignity Project and Engender Health in partnership with Health Action Promotion Association, Kivulini Women's Rights Organization, and Pecramiho Mission Hospital (2006) revealed that of the women who had sought fistula repair, fewer than half had a successful repair. Of the women who sought fistula repair, fewer than half went to only one facility. In addition, fewer than half went either to multiple places, including traditional healers, or to the same facility multiple times seeking repair. In the same study, many of the women had unsuccessfully sought help from traditional healers in the past, while others had been unable to receive care through health facilities.

Multiple studies have documented challenges, including persistent post-repair fistula-related symptoms such as residual incontinence (Bangser, 2007; Women's Dignity Project and Engender Health , 2007), pain and weakness (Donnelly *et al.,* 2015; Pope *et al.,* 2011) and sexual and fertility complications (Anzaku *et al.,* 2017; Khisa and Nyamongo, 2012; Pope *et al.,* 2011; El-Gazzaz *et al.,* 2010; Turan *et al.,* 2007). Women

experienced lingering physical problems such as being less able to resume their previous roles and less likely to consider themselves recovered (Landry *et al.*, 2013; Nielsen *et al.*, 2009; Browning and Menber, 2008).

2.4.6 Re-integration of women after fistula repair

There is limited information available on women's experience with reintegration. However, Women's Dignity Project and Engender Health (2006) study revealed that following a successful fistula repair, women resumed normal lives and were able to work together freely with their families, friends and communities. They could attend social gatherings and took active roles in economic activities. However, observed in the same study was the fact that some women still faced stigma even after successful fistula repair as people in the community could not believe that they had healed. It was also reported that stigma was more vivid when the fistula repair was unsuccessful (Women's Dignity Project and Engender Health, 2006)

2.5 FACTORS WOMEN WITH OBSTETRIC FISTULA EXPERIENCE IN SEEKING FISTULA REPAIR SERVICES

A number of factors have been cited to delay afflicted women in seeking fistula repair services. According to Muriithi (2020) in Kenya, a number of socio- demographic factors have been cited to delay women with obstetric fistula in seeking fistula repair services, for example his study showed that an increase in the number of children had a higher likelihood of a women with fistula to delay treatment than the one who had no children. Gebremedhin and Asefa, (2019) revealed that treatment-seeking was constrained by multiple reasons including financial and geographical inaccessibility to treatment centres, lack of awareness about the existence of treatment and feeling of embarrassment. In low-income countries, women had less access to appropriate surgical care due to the limited availability of health facilities with repair services and lack of surgical training for fistula repair (Rushwan *et al.,* 2012; Bangser *et al.,* 2011). In Uzoma"s (2014) study, it was revealed that women who did not seek surgical repair explained that it was largely because they were unaware that repair was possible. Lack of understanding of the nature of the condition and its causes delayed women from seeking treatment from formal health care system.

Barriers such as lack of transport and unfamiliar environment were also reported by some victims (Lyimo and Mosha, 2019) for example, it was reported that distance from healthcare facilities played a role in the delay to seeking fistula treatment. Fistula patients lived far from all-weather roads and hence had great difficulty to access transportation (Muleta, 2008). The study also found out that long distances to health facilities and the costs involved while travelling to reach care contributed to delay in accessing health care centres. The distance between medical facilities that provided treatment for fistulas and the rural communities where the women lived was another factor that contributed to delayed treatment. In Lyimo and Mosha (2019) study, some women however, stated that distance was not a problem as they could easily get transport and reach a health facility within a relatively short time. The majority of women used motorcycles and buses from their home to the

treatment centre. For those who used motorcycles and boarded a minibus, it was not easy for them due to wetness and bad smell. For others, use of a tractor to reach a nearby main road to access other means of transport was a factor. This is because most women were from rural areas, and needed to reach an urban area for treatment. Women often travelled long distances to reach repair services and many lived with the condition for numerous years (UNFPA, 2012; Bangser *et al.,* 2011). Also, several studies have revealed failure to seek care as a result of women with obstetric fistula not being accompanied to the treatment facilities by their husbands, families, or communities (Aliyu and Esegbona, 2011; Mselle *et al.,* 2011) a difficult thing to do in some cultures, especially for women who are incontinent (Yeakey *et al.,* 2009).

In some communities fistula is believed to be a curse or a punishment from God (Muleta *et al.,* 2008; Naidu and Donnay 2003). When fistula is believed to be inflicted by God or by a doctors action, a woman living with the condition is unlikely to be interested in seeking treatment at a health facility (Bellows *et al.,* 2014; Muleta *et al.,* 2008; Naidu and Donnay, 2003). Further, women may not be aware that treatment is available, or they may lack decision power and attitudes for seeking care (Ramsey *et al,* 2007; Velez *et al.,* 2007; Wall *et al.,* 2005; Browning and Patel, 2004).

In a study by Gondwe and Maharaj (2019), it was reported that human resource were the most frequently reported factors impacting timely treatment of obstetric fistulas. Severe shortage of trained fistula surgeons have been reported as a hindrance in seeking fistula repair services (Rushwan *et al.,* 2012; Bangser et *al.,* 2011; Yeakey *et al.,* 2009; Turan *et al.,* 2007). Due to the large backlog of women requiring repair and limited available surgeons and personnel, women experience long waits (Velez *et al.,* 2007; Wall *et al.,* 2005; Ramsey *et al.,* 2007). Therefore, there is need for formal training of surgeons to enable them conduct successful repairs.

Khisa and Nyamongo (2011) investigated the association of income and treatment seeking behaviour of women with obstetric fistula in different countries of Africa. The studies identified that obstetric fistula affects mainly poor women and girls who cannot pay for a skilled birth attendant at a health facility. Fistula patients were found to have significantly lower monthly income than non fistula patients from the same region and comparable age group. About 43% of fistula patients were getting less 11.6USD per month which hindered them from seeking the service.

In a study conducted by Pierre *et al.,* (2011) in West Pokot to identify the characteristics of the girls and women admitted with obstetric fistula, it was revealed that of the women who presented in hospital, the age had been a hinderance to seeking health care for fear of embarrassment by the health workers leading to delayed fistula treatment. Furthermore, a quantitative study by Tebekaw (2010) investigated the association of obstetric fistula and education status of women. The research concluded that there was a relationship between educational status and obstetric fistula, regardless of socio-economic characteristics like region, age, religion, and place of

residence. The study also concluded that the lesser the woman was educated, the higher the chance of getting a fistula and the little the chances of understanding of the problem. In the same study, it was noted that illiteracy detered women from seeking modern medical treatments.

Women living with fistula experience anxiety, loss of dignity, and low self-worth (Mselle *et al.* (2011). Other factors include a disproportionately high prevalence of depression (Siddle *et al.,* 2013, Alio *et al.,* 2011; Mselle *et al.,* 2011, Weston *et al.,* 2011; Goh *et al.,* 2005;). Such psychological symptoms can inhibit women's agency and motivation for seeking treatment. Furthermore, some of the morbidities related to delay in seeking treatment are neurological damage in the lower limbs, such as foot drop, development of contractures, disuse atrophy, genitourinary infections, renal failure, and dermatitis (Wall, 2006).

2.6 STUDIES DONE ON OBSTETRIC FISTULA THAT HAVE UTILISED THE SOCIO-ECOLOGICAL MODEL

Evidence showed that there are few studies that have ultilised SEM in studying obstetric fistula for example, Nyakundi (2018) study on dynamics of social re-integration of women after obstetric fistula repair in Kenyatta National hospital in Nairobi. The study reported on the effects of fistula on the survivors social life and how they coped. The study also aimed to assess the challenges encountered in the process of reintegration. The results showed the existence of reintegration efforts through post-operative services that were offered in the facility although their implementation was constrained by inadequate specialized personnel which in turn limited survivors knowledge of the existence of such services. The study further concluded that for the successful social reintegration of fistula survivors, different players who included the survivors, professionals, family members and the community had different roles to play to help the survivor regain their social functioning.

Another study by Gebresilase (2014) on the experience of obstetric fistula survivors in Addis Ababa, Ethiopia ultilised the SEM. Factors that were interpreted in light of an ecological model of health behavior, distinguished by its multilevel nature included Individual factors such as perceiving obstetric fistula as a curse, an evil spirit, or a punishment from God; poor knowledge about pregnancy and the associated risks; being illiterate; being powerless at the household level; and not utilizing antenatal care. Family factors included encouraging early marriage and cultural practices. Societal factors included social acceptance of early marriage, cultural practices, and home delivery, as well as societal views towards antenatal and emergency obstetric care. Environmental factors included a delay in or lack of diagnosis, treatment, or follow-up, failure to refer, long distance from a health center, and a lack of well-equipped health centers, skilled health personnel, and transport. The study concluded that obstetric service initiatives should bring together different concerned bodies at different levels.

These initiatives should be family-based and ensure men's participation and women's empowerment. Also, such initiatives further needed to treat the woman as a whole person, ie, as an individual, a family member, and a community member, with equal attention paid to her physical, socioeconomic, psychosocial, and spiritual well-being.

2.7 CONCLUSION

Studies that have been done on obstetric fistula have mainly focused on experiences of women with obstetric fistula and not mainly their experiences in seeking fistula repair services. However, quite a number of studies have reported factors hindering and facilitating women in seeking repair services. Besides that, few studies have reported health care professionals view on factors hindering women in seeking repair services. However, literature search showed that afflicted women experience physical, psychological, social and economic consequences. There are barriers women face that hinder them from seeking fistula repair services such as lack of knowledge that repair services exist, feeling of embarrassment to seek repair services, financial challenges, distance to health facility that offer repair services, lack of fistula surgeons, and transportation challenges. Views of health care professionals on factors women experience in seeking repair services have not been researched widely. Further, studies that have ultilised the Socio ecological model in studying obstetric fistula are few. Revealed literature show two studies; a study on dynamics of social re-integration of women after obstetric fistula repair in Kenyatta National hospital in Nairobi and another one on experience of obstetric fistula survivors in Addis Ababa, Ethiopia. Therefore, conducting this study which was guided by the SEM was essential as it would fill the gap. The next chapter discusses the methodology that was used for the study.

CHAPTER THREE

METHODOLOGY

3.1 INTRODUCTION

Methodology is the stratery, plan of action, process or design lying behind the choice and use of particular methods and linking the choice and the use of methods to the desired outcomes. It focuses on how the researcher gains knowledge about the social world (Robson, 2002; Denzin and Lincoln, 2000). This chapter discusses the methodology that was used in this study. The chapter begins by introducing the philosophical assumptions applied in this study, study design, study setting, study population, sampling procedures, pretesting, threats to validity and reliability of instruments, data collection, data analysis and ethical considerations. Three objectives that could help address the research problem were;

1. To explore experiences of women with obstetric fistula in seeking health care.
2. To assess factors women with obstetric fistula experience in seeking health care.
3. To determine views of health care professionals on factors women experience in seeking health care.

3.2 PHILOSOPHICAL UNDERPINING

The research paradigm called pragmatism guided this study. Pragmatism is open to different methods, worldviews, assumptions, data collection and analysis, (Creswell, 2013). It is a worldview that arises out of actions, situations, and consequences rather than antecedent conditions. According to pragmatism research philosophy, research questions is the most important determinant of the research philosophy. In this study three research questions were developed to answer the reaserch problem. Also, pragmatism research philosophy can integrate more than one research approaches and research stratergies within the same study. In this study, both qualitative and quantitative methods were employed in fully investigating the problem. The reality was women with obstetric fistula not seeking health care. The interest was to explore experiences of women with obstetric fistula in seeking health care, assess factors women experience in seeking health care, determining health care professionals views on factors women experience in seeking health care.

3.3 RESEARCH DESIGN

Mixed methods, concurrent research design was used in the study. Teddlie and Tashakkori (2009) reports that a concurrent design implies the collection of data at exactly the same time. This design was chosen because data was to be collected in the four provinces of Zambia and the researcher intended to keep trace of the data collection process in all provinces. The mixed methods provided a thorough understanding of experiences of women with obstetric fistula in seeking health care through triangulation. While the flexibility of the qualitative methodology provided opportunities to explore new ideas that were not anticipated in the planning of the study but were relevant to the purpose of the study, the quantitative methodology established the distribution of patterns on experiences of women in seeking fistula repair services.

3.4 STUDY SETTING

The settings for the research were Eastern, Luapula, Muchinga and Southern Provinces of Zambia as well as MoH, UNFPA, Provincial Health Offices for the four provinces as well as fistula repair centres

3.4.1 Eastern Province

Eastern province lies between the Luangwa river and border with Malawi. The administrative centre for the province is Chipata. The province has nine districts namely Chandiza, Chipata, Katete, Lundazi, Mambwe, Nyimba, Petauke, Sinda and Vubwi. The province has one fistula repair centre at St Francis mission hospital in Katete District. St Francis mission Hopital is a first level hospital. The services provided are medical, surgical, obstetric, diagnostic, preventive and all clinical services in support of health centre referrals (National Community Health Strategy, 2019 - 2021). The mission hospital is run by the Anglican and Catholic Churches. The repairs are conducted by visting doctors from Lusaka, Kabwe and Chinsali. There is no specialized nurse taking care of fistula patients. Fistula repairs are routinely done but also there are fistula repair camps conducted at least twice a year. The hospital has a surgical ward where women with obstetric fistula are nursed. St. Francis mission hospital repairs 50-60 cases each year with a success rate of 60-70% (Mkumba *et al.,* 2003). According to MoH, HMIS 2016, the province had a total number of 57 women with obstetric fistula in 2016.

3.4.2. Luapula Province

Luapula province is located in the northern part of the country and has an international border with the Democratic Republic of the Congo (DR Congo). The administrative centre for the province is Mansa. The province is divided into eleven districts namely Chembe, Chiengi, Chipili, Kawambwa, Lunga, Mansa, Milengi, Mwansabombwe, Mwense, Nchelenge and Samfya.

The fistula repair centre is situated at Mansa General hospital in Mansa District. Mansa General hospital is a first level hospital. The services provided are medical, surgical, obstetric, diagnostic, preventive and all clinical services in support of health centre referrals (National Community Health Strategy, 2019 - 2021). There is one resident doctor conducting fistula repairs. Fistula repairs are routinely done but fistula repair camps are conducted at least twice a year. There is no specialized nurse taking care of fistula patients. The hospital has a ward where women with obstetric fistula are nursed. According to MoH, HMIS 2016, the province had a total number of 184 women with obstetric fistula in 2016.

3.4.3 Muchinga Province

Muchinga province is one of the ten provinces of Zambia. It is located in the northeast of the country and borders with Tanzania in the north, Malawi in the east, Eastern province in the south, Central province in the southwest, Luapula province in the west, and Northern province in the northwest. The administrative centre for the province is Chinsali. Muchinga province has ten districts namely Chama, Chinsali, Chilinda, Isoka, Kachibiya, Mafinga, Mpika, Nakonde, Shiwangandu and Lavushimanda.

There is one fistula repair centre in the province situated at Chilonga mission hospital in Mpika district. The mission hospital is run by the Catholic Church. It is a first level hospital. The services provided are medical, surgical, obstetric, diagnostic, preventive and all clinical services in support of health centre referrals (National Community Health Strategy, 2019 - 2021). There is one resident doctor conducting fistula repairs. Also, fistula repair camps are conducted twice a year in March and December where visiting doctors from Lusaka, Kabwe and chinsali are invited to conduct repairs. There are two nurses who have been oriented in nursing women with obstetric fistula. Failed repair cases from the centre are referred to the UTHs or Monze mission hospital (Mkumba *et al.,* 2003). The hospital repairs 16 cases per year (Mkumba *et al.,* 2003). According to MoH, Health Management Information System (HMIS) 2016, the province had a total number of 78 women with obstetric fistula in 2016.

3.4.4 Southern Province

Southern province shares boarders with Zimbabwe in the south, Central province in the north, Western province in the west and Lusaka province in the northeast. The administrative centre for the province is Choma. The province has thirteen districts namely Chikankata, Choma, Gwembe, Kalomo, Kazungula, Livingstone, Mazabuka, Monze, Namwala, Pemba, Siavonga, Sinazongwe and Zimba. The province's fistula repair centre is situated at Monze mission hospital in Monze district. It is a first level hospital. The services provided are medical, surgical, obstetric, diagnostic, preventive and all clinical services in support of health centre referrals (National Community Health Strategy, 2019 - 2021). Currently, there is no resident doctor conducting fistula repairs despite the availability of patients requiring fistula repairs. There are also no specialized nurses oriented to nurse women with obstetric fistula. The centre used to carry out regular fistula repairs and women travelled

from all over the country for treatment (Mkumba *et al.,* 2003). About 70- 75 repairs were carried out annually with a success rate of 60-70% (Mkumba *et al.,* 2003). According to MoH, HMIS 2016, the province had a total number of 176 (including women with obstetric fistula from all provinces) women with obstetric fistula in 2016.

3.4.5 Ministry of Health- Zambia

The MoH Headquarters is located in Lusaka. The MoH holds the central responsibility for medical care and preventive care services through its wide network of the public health institutions countrywide. The MoH undertakes a package of basic health care services through its 11 programme area namely epidemic preparedness, provision of 1st level referral services, Roll back malaria, HIV/AIDS/STIs, Tuberculosis, integrated reproductive health services, child health, environmental health, mental health, oral health and nutrition www,aho.afro.who.int/profile-information/index.php/Zambia:organization-and-functions-of-the-ministry-of –health.

3.4.6 Provincial Health Office

The Provincial Health Office (PHO) was one of the research sites. The Provincial Health Office mandate is embedded in the vision of the MoH which states "A Nation of Healthy and Productive people." The mission statement states, " to provide equity of access to cost effective, quality health care as close to the family as possible"(Lusaka Provincial Health Office (LPHO), Action Plan 2017-2019). Provincial Health Office provides the link between the Central level and other levels in the Health Sector be it Public, Private, Non –Governmental Organisation, Civil Society including Faith Based Organizations. The PHO core functions are to provide leadership, co-ordination, supervision and technical support to the districts, hospitals, Training Institutions and other levels in the Province (LPHO, Action Plan 2017-2019). Apart from providing Health Services in terms of planning, Implementation, Monitoring and Evaluation, PHO act as a bridge between implementing health facilities and MoH in providing quality health care services to all the citizens in the province.

3.4.7 United Nations Population Fund

United Nations Population Fund, Zambia was one of the research sites. As part of the global Campaign to End Fistula, UNFPA provides medical supplies, training and funds for fistula prevention, treatment and social re-integration. UNFPA also strengthens reproductive health and emergency obstetric care to prevent fistula from occurring in the first place. Support has been rendered to the Ministry of Health (MoH) to conduct fistula camps at Tertiary, Central and General Hospitals in various locations.

3.5 STUDY POPULATION

3.5.1 Study Population for Women with obstetric fistula for the qualitative component

The study population for the qualitative component were women living with obstetric fistula. The target population were women diagnosed with obstetric fistula by a gynaecologist and advised to wait for the fistula camps in the province or come for routine fistula repair at the fistula repair centres.

3.5.1.1 Inclusion Criteria

Women with obstetric fistula were included in the study if they were;

- Living in Muchinga, Eastern, Southern and Luapula provinces at the time of data collection.
- Women with fistula who have never been for fistula repair services, have been for fistula repair once, twice, thrice or four times.
- Available in their homestead during the time of data collection.
- Consented to participate in the study.

3.5.1.2 Exclusion Criteria

Women with obstetric fistula were excluded if they were;

- Very ill or mentally unstable at the time of data collection.
- Had been for fistula repair five or more times.
- Had other illnesses apart from fistula.

3.5.2 Study population for women with obstetric fistula in the quantitative component

The study population for the quantitative component were women living with obstetric fistula. The target population were women diagnosed with obstetric fistula by a gynaecologist and advised to wait for the fistula camps in the province or seek routine fistula repair services at the fistula repair centres.

3.5.2.1 Inclusion Criteria

Women with obstetric fistula were included in the study if they were;

- Living in Muchinga, Eastern, Southern and Luapula provinces at the time of data collection.
- Available in their homestead during the time of data collection.
- Consented to participate in the study.

3.5.2.2 Exclusion Criteria

Women with obstetric fistula were excluded if they were;

- Very ill or mentally unstable at the time of data collection.

- Had other illnesses apart from the fistula.

3.5.3 Study population for health care profesionals in the quantitative component

The study population included health care professionals (policy makers, programme planners and programme implementers). The policy makers were those working at the MoH in the reproductive Health Units, programme planners were those working at UNFPA dealing with obstetric fistula and at the PHO in the four provinces. The program implementers were those working in gynecological ward and/or surgical wards nursing women with obstetric fistula in the four fistula repair centres.

3.5.3.1 Inclusion Criteria

Health care proffessionals were included in the study if they were;

- Working in reproductive Health Unit at the MoH, UNFPA, PHO and fistula repair centres in gynaecological and surgical wards at the time of data collection.
- Available at their working place/station during the time of data collection.
- Consented to participate in the study.

3.5.3.2 Exclusion Criteria

Health care proffessionals were not included in the study if they were;

- Not working in reproductive Health Unit at the MoH, UNFPA, PHO and fistula repair centres in gynaecological and surgical wards at the time of data collection.
- Not available at their working place/station at the time of study.
- Did not consent to participate in the study.

3.6 SAMPLING

Sampling method is the process of selecting elements that are representative of the target population (Grove *et al.,* 2012). It comprises such aspects as defining the target population and determining the sample size. Sample selection involves choosing a group of people, events, behaviours or other elements with which to conduct a study (Burns and Grove, 2009).

3.6.1 Sampling in the qualitative component

Purposive sampling which is a non-probability type of sampling was used. Purposive sampling involves identification and selection of individuals or groups of individuals that are knowledgeable about or experienced with a phenomenon of interest (Cresswell and Plano Clark, 2011). Purposeful sampling method was used to select the women with obstetric fistula who participated in the study in order to include women who had obstetric fistula in the four provinces of Zambia. From the fistula repair centres a list of eligible participants in the province (including all the districts) with their physical addresses and phone numbers were compiled in readiness for sampling. A variety of women with obstetric fistula was required in order to better understand how women in Zambia experienced obstetric fistula. Four women with obstetric fistula were sampled from each study sites (province) based on never been for fistula repair services, been for repair services once, twice, either thrice or four times without successfully being repaired.

3.6.2 Sampling in the quantitative component

3.6.2.1 Women with obstetric fistula

Systematic random sampling was used to obtain the sample of women with obstetric fistula. In this technique, the sampling frame is structured according to some criterion and elements are chosen at regular intervals through that structured list. This procedure involves a random start and then progress with the selection of every k element from that point onwards where k= N/n, where k is the ratio of sampling frame size, N and the desired sample size n, and is formally called the sampling ratio (Black, 2004). A list of women with obstetric fistula was compiled from each fistula repair centre with their physical adddresses. The starting point was randomly chosen from within the first k element on the list. Individuals were chosen at regular intervals from the sampling frame. This process was repeated until the sample size for each province was achieved.

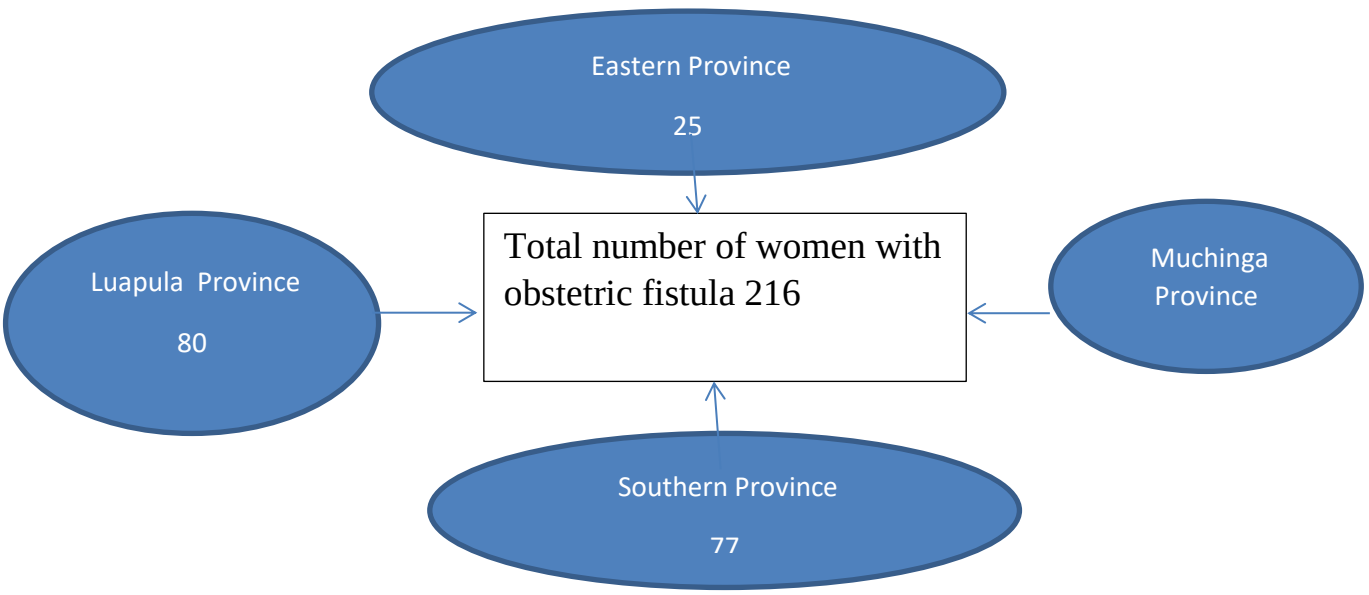


Figure 3.1 Distribution of women with obstetric fistula by Province

3.6.2.2 Health care professionals

To select health care professionals working at the MoH in reproductive health units, UNFPA, PHOs in four provinces and fistula repair centres working in gynaecological wards or surgical wards, systematic random sampling was done**.** In this technique, the sampling frame is structured according to some criterion and elements are chosen at regular intervals through that structured list. This procedure involves a random start and then progress with the selection of every k element from that point onwards where k= N/n, where k is the ratio of sampling frame size, N and the desired sample size n, and is formally called the sampling ratio (Black, 2004). A list of health care professionals was compiled from each research setting. The starting point was randomly chosen from within the first k element on the list. Individuals were chosen at regular intervals from the sampling frame. This process was repeated until the sample size was achieved.

3.7 SAMPLE SIZE

A sample size is the number of study participants in a sample (Polit and Beck, 2012). Sample size was calculated using power, significance level and effect size.

3.7.1 Sample size in the qualitative component

Sample Size for women with obstetric fistula was guided by saturation. Saturation was reached at sixteen women with obstetric fistula.

3.7.2 Sample size in the quantitative component

To determine the sample for each province, the MoH report of 2016 was taken into consideration. According to the report, the number of women with obstetric fistula in Muchinga province were 78, Eastern province 57, Southern province 176 (women coming from all provinces of Zambia) and Luapula Province 184. Therefore, the population size for women with obstetric fistula in four provinces was 495.

The sample size was calculated using the following formula

$$S = \frac{\mathbf{x^2NP\ (1-P)}}{d^2\ (N-1) + x^2P\ (1-P)}$$

Where S = required sample size;

x = Z – Score of 95% confidence level (1.96)

N = Population size (419)

P = Population proportion (assumed to be 0.5)

d = Degree of accuracy expressed as a proportion (0.05)

The sample size was therefore calculated as follows:-

$$S = \frac{x^2NP\ (1\text{-}P)}{d^2\ (N\text{-}1) + x^2P\ (1\text{-}P)}$$

$$\frac{1.96^2\ x\ 495\ x\ 0.5(1-0.5)}{0.05^2(495-1) + 1.96^2 x\ 0.5(1-0.5)}$$

$$\frac{3.8416\ x\ 495\ \ x\ 0.5\ x\ 0.5}{0.0025\ x\ 494\ \ + 3.8416\ x\ 0.5\ x\ 0.5}$$

$$\frac{476398}{1.235 + 0.9604}$$

$$\frac{476398}{2.1954}$$

= 216

The following formula was used to determine the final sample size possible for data collection.

Eastern provinces 57 divide by 475 x 216 = **25**

Luapula Province 184 divide by 475 x 216 = **80**

Muchinga Province 78 divide by 475 x 216= **34**

Southern Province 176 divide by 475 x 216 = **77**

3.7.3 Sample size for Health care professionals

The total numbers of health care professionals who were actively working at MoH, UNFPA, PHOs and fistula repair centres where data was collected were as follows: Mansa General Hospital (15), Monze Mission Hospital (15), Chilonga Mission Hospital had (13), St Francis Mission Hospital (13), MoH (4), UNFPA (2), PHOs (4 each Province). The total the population size was 78. The sample size was calculated using the following formula;

$$S = \frac{x^2 NP\,(1-P)}{d^2\,(N-1) + x^2 P\,(1-P)}$$

Where S = required sample size;

x = Z – Score of 95% confidence level (1.96)

N = Population size (419)

P = Population proportion (assumed to be 0.5)

d = Degree of accuracy expressed as a proportion (0.05)

The sample size was therefore calculated as follows:-

$$S = \frac{x^2 NP\,(1-P)}{d^2\,(N-1) + x^2 P\,(1-P)}$$

$$\frac{1.96^2 \; x \; 78 \; x \; 0.5(1-0.5)}{0.05^2(78-1) + 1.96^2 x \; 0.5(1-0.5)}$$

$$\frac{3.8416 \; x \; 78 \; x \; 0.5 \; x \; 0.5}{0.0025 \; x \; 77 + 3.8416 \; x \; 0.5 \; x \; 0.5}$$

$$\frac{74.9112}{0.1925 + 0.9604}$$

$$\frac{74.9112}{1.1529}$$

= 64.976305829

=65

3.8 DATA COLLECTION

Data collection for the three provinces (Eastern, Muchinga and Southern) commenced on 27th October, 2017 and ended on 9th December, 2017 while for MoH and UNFPA data was collected between 11th December, 2017 and 31st January, 2018. With the inclusion of Luapula as one of the research site, data collection for the province commenced on 20th August, 2018 up to 26th September, 2018.

3.8.1 Data collection in the qualitative phase

The researcher visited the study site following approvals from the National Health Research Authority (NHRA), University of Zambia Biomedical Research Authority Committee (UNZABREC) and PHO. Prior to meeting the

women with fistula in their homestead, permission was sought from the PHO in that particular province. With the aid of contact addresses taken at the fistula repair centres, the women with obstetric fistula were traced in their individual villages and communities. The Provincial Health Director (PHD) was contacted for the date scheduled for the visit to fistula patients homes. In –depth interviews were conducted with women with obstetric fistula in their homestead in a private room with the afflicted woman alone, at their convenience to enable them describe their thoughts and express themselves freely. Women with obstetric fistula were asked to sign a consent form for the indepth interviews if they were willing to participate. The researcher conducted interviews in the main local languages. The interviews followed a semi structured interview guide while the researcher moderated. The interviews were tape recorded while the moderator and the assistant took field notes. Demographic data was obtained from each woman with obstetric fistula before commencing to find out their experiences in seeking health care. The discussions lasted about an hour. At the end of the interview, the women with obstetric fistula were allowed to make any comments pertaining to the subject of obstetric fistula and to ask any questions. The researcher gave health education on the questions asked. At the end of the interview, the researcher thanked the women with obstetric fistula and reassured her of confidentiality.

3.8.2 Data collection in the quantitative phase

The researcher visited the study site following approvals from the NHRA, UNZABREC, PHO and fistula repair centres. For women with obstetric fistula, with the aid of contact addresses taken at the fistula repair centres, the women with obstetric fistula were traced in their individual villages and communities while for health care professionals, they were traced at their working places/station. Structured interview schedules were conducted with women with obstetric fistula in their homestead and health care professionals in a private room individually, at their convenience to enable them give responses freely. Women with obstetric fistula and health care professionals were asked to sign a consent form if they were willing to participate. The researchers or research assistants signed 2 copies of the informed consent form, one of which was retained by the researchers or research assistants for filing. Thereafter, the researcher or research assistant asked questions from the structured interview schedules for women with obstetric fistula and health care professionals and recorded responses. At the end of the interview, the women with obstetric fistula and health care professionals were allowed time to ask any questions. Health education was given on the questions asked. The women with obstetric fistula and health care professiinals were thanked by the researcher or research assistants. The process was repeated in all the reseach sites until the required sample size of 216 was reached for women with obstetric fistula and 65 for health care professionals.

3.9 DATA COLLECTION TOOLS

The researcher formulated the interview question in consultation with the supervisors, obstetricians and midwives. The in- depth interviews for women with obstetric fistula were divided into 2 sections namely;

Section A: Demographic data and Section B: Experiences of women with obstetric fistula in seeking health care while the structured interview schedule was also divided inti 2 sections namely; Section A: Demographic characteristics and Section B: Factors women with obstetric fistula experienced in seeking health care. For Health care professionals, the structured interviews were also divided into 2 sections namely; Section A: Demograohic data and Section B: Views of Health care professionals on factors women with obstetric fistula experience in seeking fistula repair services. The structured interview schedule was used for health care professionals because their strength is that they provide reliable data for quantitative methodologies while many respondents may be engaged efficiently.

3.10. DATA COLLECTION TECHNIQUE

3.10.1 Data collection technique for qualitative data

Upon reaching the homestead of a woman with fistula, the researcher introduced herself and briefed her on the study. The researcher explained the purpose, objectives and benefits of the study to her using the Participant Information Sheet (Appendix II, III, and IV). The interview guide was used as a checklist to ensure that same questions were posed to all participants to ensure consistency of the data. However, other probes were used to collect rich data. One on one interviews were done. Where an interesting theme had arisen, follow up of such issue was done. This was done in order to have an in-depth understanding of the issues. However, where participants were giving similar information (data saturation) the researcher stopped collecting data on such themes and concentrated on themes that were not clear or partially responded to in the previous interviews (Finlay, 2003). Each interview took about 30 to 60 minutes.

3.10.2 Data collection technique for quantitative data

Upon reaching the homestead of a woman with fistula, the researcher or research assistants introduced themselves and briefed the women on the study. The researcher or research assistants explained the purpose, objectives and benefits of the study to each woman with obstetric fistula using the Participant Information Sheet (Appendix II, III, and IV). The structured interview was used as a checklist to ensure that same questions were posed to all women with obstetric fistula to ensure consistency of the data. Each interview took about 30 to 40 minutes.

For health care professionals, the researcher administerd the structured interview schedule. The researcher and research assistants explained the purpose, objectives and benefits of the study to each health care professional using the Participant Information Sheet (Appendix I). This took about 30 to 40 minutes.

3.11 RECRUITMENT AND TRAINING

The study recruited research assistants who helped with data collection and processing. The study recruited four data collectors (all females) with social science background and experienced in conducting quantitative data. Among the four research assistants, two were also able to analyse qualitative data. The study also recruited one data entry clerk.

After the recruitment, all the research assistants were trained by the researcher. The training took place from 31st August, 2017 to 2nd Septenmber, 2017. The training focused on the review, piloting, field protocols, rules and responsibilities of research assistants, administration of the questionnaire (how to pose questions and how to check if the responses given matched with the questions etc). The data entry cleck underwent a one days training (8th September, 2017). The training focused on accurency of data entry. The training was done by the researcher.

3.12 PRE-TEST

The pilot study comprised 10% of the actual study. A pre-testing of the data collection instruments were carried out on 22 women with obstetric fistula in Lusaka Province and 7 health care professionals at Lusaka PHO and UTHs –Women and Newborn hospital to test the practicability of the tools. The questionnaires were pre-tested using the same procedures and with a similar target group. Conducting the pilot study assisted the researcher in identifying existence of problems if any or omissions, determine the time spent on gathering information and coding of questions. Questions found to be ambiguous or unclear were revised or removed Pre-testing results revealed that the data collection instruments were appropriate and actual collection was manageable by the data collectors. The women with obstetric fistula and health care professionals involved in pre-testing did not participate in the actual study.

3.13 TRUSTWORTHINESS

Trustworthiness of a research study is important to evaluating its worth and it parallels reliability and validity in quantitative research (Polit and Beck, 2012). Trustworthiness encompasses the credibility, transferability, confirmability and dependability of a study (Polit and Beck, 2012)

3.13.1 Credibility

Credibility is ensured through choosing the appropriate method to answer the research question, spending enough time in the field to investigate the phenomenon, verifying data and eliminating researcher biases (Mayan, 2001; Streubert and Carpenter, 1995; Polit and Hungler, 1993). Credibility involves prolonged engagement, persistent observation, note taking, peer briefing and member checking. To ensure credibility, the researcher reported the truth, explored meanings, clarified issues, produced accurate report of the experiences of women

with obstetric fistula in seeking health care and made segments of the raw data available to her supervisors. The researcher also cross checked and confirmed information with the women with obstetric fistula. Peer review was done to provide the opportunity for colleagues to evaluate the research process and the data. The data and all procedure employed was monitored by supervisors to provide external checks on the research process.

3.13.2 Dependability

Dependability or consistency of qualitative data refers to the extent to which, data from a qualitative study is stable over time and conditions (Polit and Hungler, 1993). Dependability involves decision trail (interaction with participants), detailed descriptive information of the process of data collection and analysis. To ensure dependability of this research, the researcher's work was audited by the supervisors whose feedback indicated that consistency had been supported even though the criterion and could continuously be tested over time. Dependability was also ensured by careful transcription and analysis of the data. Additionally, careful description of the decisions during analysis of the data was made.

3.13.3 Transferability

Transferability involves thick description of the context, study participants and themes (analytic generalization). This was done as part of reporting the data.

3.13.4 Confirmability

Lincoln and Guba (1985) defined confirmability as “the degree to which the researcher can demonstrate the neutrality of the research interpretations, through a “confirmability audit.” This implies that two or more independent people must agree on the data’s relevance (Polit and Hungler. 1995). Confirmability involves note taking, tape recording, reflection of self and others. The audit inquiry allows for verification of the research process by thesis supervisors. Also, the recordings, transcripts, field notes, journals and memos were kept for reviewers to evaluate.

3.14 VALIDITY OF THE RESEARCH INSTRUMENT

Content validity was achieved by having the data collection tools reviewed by a panel of experts that included Supervisers, obstetricians and midwives and made comments on the content, wording of the items and its format. For women with obstetric fistula, the data collection tools were translated into four local languages and back translated into English by experts working at the Linguistic Department of the University of Zambia to maintain the proper meaning of items on the questionnaire. Face validity was achieved by consulting supervisors and experts to determine relevance and accurency of questions.

3.15 RELIABILITY OF THE RESEARCH INSTRUMENT

Reliability comprised equivalence, stability and internal consistency. Inter-rater reliability for this study was .72 or 72%. Stability involves administering the same instrument to the same individuals under the same conditions after some period of time. The computed Cronbach alpha as a measure of internal consistency for this study was .70 meaning that the instruments were a good measure of factors women experience in seeking fistula repair services as well as views of health care professionals on factors women experience in seeking fistula repair services.

3.16 ETHICAL ISSUES

Ethical approval was provided by the University of Zambia Biomedical Research Ethics Committee (UNZABREC) and the National Health Research Authority (NHRA). Written permission was also provided by the Permanent Secretary- Ministry of Health, Provincial Medical Officers from the four provinces (Muchinga, Eastern, Southern and Luapula) and Medical Superintendents from the four fistula repair centres (Chilonga, Katete, Monze and Mansa hospitals).

Written informed consent was obtained from each participant before their participation. Participants were briefed about objectives and procedures of the study and that they had the right to agree or object to participation, or withdraw from the study at any time if they so wished. Participants were also assured of anonymity and confidentiality during the interview as they were interviewed in privacy and there were no forms of identity. Participant's names were not written on the questionnaires and no other person apart from the researcher was allowed to access the research data. No participants suffered psychological distress. Special permission was obtained from informants to tape-record information they provided during the in-depth interviews. It was also made clear that the information they provided whether orally or in writing, were treated strictly confidential and information collected were only to be used for research purposes.

3.17 SUMMARY

From this chapter, it evident that for a study to have valid results which should reflect the reality of the worlds being studied, consideration of pragmatism and methodological stance should be spelt out clearly. Pragmatism, methodology and methods guided the whole research process. The next chapter presents findings from both the quantitative and qualitative component of the study.

CHAPTER FOUR
DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 INTRODUCTION

This chapter present results and findings from both the qualitative and quantitative components of the study. The chapter uses data from the in-depth interviews conducted with women with obstetric fistula on their experiences with seeking health care as well as structured interview schedules conducted with women with obstetric fistula and health care professionals. Obstetric fistula remains a major public health problem (Wall, 2006). Women affected with obstetric fistula have shown limited engagement with medical services (Kavai, *et al.*, 2010). Using the SEM, this chapter drawn insight from interviews with different women with obstetric fistula as well as health care professionals.

The first section presents data from objective 1 of the study which was to explore experiences of women with obstetric fistula in seeking health care. The second section presents data on factors women with obstetric fistula experienced in seeking health care and the last section presents data on views of health care professionals on factors women experienced in seeking health care.

4.2 OBJECTIVE 1 FINDINGS: TO EXPLORE EXPERIENCES OF WOMEN WITH OBSTETRIC FISTULA IN SEEKING HEALTH CARE

4.2.1 DEMOGRAPHIC CHARACTERISTICS OF WOMEN WITH OBSTETRIC FISTULA

Women with fistula were aged between 19-87 years. Four out of sixteen women with obstetric fistula had no children. Eight women were married. Three had never been for fistula repair services.

Table 4.1 Demographic characteristics of women with obstetric fistula (n=16)

Participant number	Age	Number of children	Marital status	Province	Number of fistula repair attempts
P1	33	3	Divorced	Southern	1
P2	64	10	Widowed	Luapula	4
P3	87	0	Widowed	Luapula	1
P4	19	0	Single	Muchinga	2
P5	37	4	Married	Southern	3
P6	33	3	Married	Eastern	4
P7	37	1	Married	Southern	2
P8	33	0	Divorced	Muchinga	3
P9	36	1	Married	Eastern	4
P10	52	3	Divorced	Eastern	2
P11	45	6	Married	Muchinga	1
P12	37	2	Married	Luapula	3
P13	26	1	Divorced	Eastern	3
P14	32	3	Married	Muchinga	0
P15	37	6	Married	Luapula	0
P16	42	0	Divorced	Southern	0

Key= P- participant

4. 2.2 DATA PROCESSING AND ANALYSIS OF QUALITATIVE DATA

Data analysis began in the field as an iterative process together with data collection. The interviews were audiotaped and detailed notes were also taken. Prior to the start of the analysis, the tape-recorded interviews were transcribed precisely word for word (verbatim) in local languages, where non-verbal cues were also considered in the transcriptions and after each interview the detailed notes were read several times. The analysis started with listening to tapes, reading and re-reading of the informants' experiences, and extracting important statements from the description. Thereafter, the researcher formulated meanings to these statements. Furthermore, informants' statements were divided into meaning units, which were condensed into more abstract forms of text that would create codes, categories, and themes (open coding, axial coding and selective/theoretical coding). Data was organised into retrievable sections that corresponded to questions on the interview guide and

the objectives of the study. Participants were referred to by a key informant number and a secured file with key informant numbers was devised. All identifiable data was not included in the transcripts. Below is the detailed description of the analysis.

Qualitative data analysis was undertaken using thematic analysis. Thematic analysis is an approach to dealing with data that involves the creation and application of codes to data (Gibson, 2006). The data were analysed manually in which transcripts were read and reread numerous times by qualitative data analysis team that comprised of the researcher and two social scientist.

The team members coded the data. The use of the team members improved the reliability of the codes as they were discussed prior to being used. This helped to compare the meaning and interpretations of the data and eventually improved the reliability of the results as the codes and their descriptions were discussed and conclusions were reached before endorsing them (Aronson, 1994).

Data analysis was done through the process of coding. Coding is the process which represents the operations by which data are broken down, conceptualized, and put together in new ways (Strauss and Corbin, 1990). Coding was based on inductive processes. Inductive coding was based on the meaning or constructs grounded in the data. The open coding involved identifying, naming, conceptually categorizing, labeling and describing phenomena found in the text through the process of construct comparative methods (Miles and Huberman, 1994). Comparative methods involved the asking of questions and the making of comparisons between transcripts. Data were initially broken down by asking simple questions such as what do the data say, where was that said, how was that said, when was it said and how much emphasis was put on the said point.

During open coding process, each of the members were reading a transcript of one participant. As they read through the transcript, each identified common theme as well as other atypical observations (Miles and Huberman, 1994). Coding was based on the repetition of keywords, phrase or statements in the transcript (D'Andrade, 1995). The identified themes were highlighted using different colours to colour code them so that they can be retrieved at a later stage for further comparison and analysis (ibid.). Moreover, each time a theme was identified, remarks or identification tag was written in the margin of the transcript.

However, to ensure that there was no bias in the analysis of the data, some non-repetitive words, phrases or statements that appeared to bring in new dimensions to the understanding of experiences of women with obstetric fistula in seeking health care were also critically analysed for theme identification. Each identified theme was written on a post-it pad and then posted on flip chart stuck on the wall.

After reading and re reading of the transcripts, the analysis team members compared their understandings of contents in terms of major themes, point of agreement, and areas where there was dissention and disagreement. Numerous discussions among members refined these first impressions of the data into agreed themes, around

which further thinking and writing were structured. In the initial analysis, the focus of the questions on the research tools suggested the codes such as when women with obstetric fistula sustained an obstetric fistula and how, cause of fistula, who was informed first, informants reaction, effects of fistula physically, social consequences, emotional consequences and financial consequences, relationship with husband, family, relatives, friends and community after sustaining a fistula, reaction from significant others, knowledge of obstetric fistula and repair services, barriers and facilitators to seeking fistula repair services. Subsequently, the themes/data were compared and similar incidents were grouped together and given the same more abstract conceptual label in the process called categorizing (Miles and Huberman, 1994).

Unlike open coding which broke the data into concepts and categories, axial coding involved putting those concepts back together in new ways by making connections between them as categories and sub - categories. Thus, axial coding involved making relationships between the codes and developing the main categories and their sub-categories (Miles and Huberman, 1994). During the axial coding, the group reorganized the concepts identified in the open coding to make conceptual and to finalise the definitions of the themes.

Axial coding was based on causal relationships between the concepts (Scott and Howell, 2008), and aimed to fit the data on experiences of women with obstetric fistula in seeking fistula repair services. The casual relationship matrix/guide identifies the relationships and interactions of the categories one with the others. Thus, axial coding linked and organised categories by relationships (Strauss and Corbin, 1990). The causal relationship facilitated the comparative and investigative questioning about experiences of women with obstetric fistula in seeking health care. The emergence of key properties, dimensions and modes of understanding the experiences was the indicator that the analysis reached theoretical saturation (Glaser, 1978).

Lastly, selective coding involved group reflection and interpretation to uncover the meanings implied in each identified statements/themes and to determine the central theme in the data.Selective coding was done using reflective coding. Reflective coding was designed to paint a picture of the central issue which was experiences of women with obstetric fistula in seeking health care, defining and describing them in a manner sufficient to account for the collected data holistically as a narrative or a story explaining the above central theme (Strauss and Howell, 2008). During this phase, the analysis took a more holistic constructive perspective of the data to identify the essential processes, sub-categories related to the descriptors of the central themes in order to come up with a more abstract core category. This process was rather like putting a jigsaw puzzle together trying a piece at a time through multiple interactions until all the pieces formed a narrative picture that fits the data in order to generate a story or story –line. A story can be described as a narrative about a central theme of the study while a story line is the conceptualization of the story in abstract way (Scott and Howell, 2008). A story line led to the core category (central category).

In the final phase of data analysis, the experiences of women with obstetric fistula in seeking health care were catergorised into four main themes**;** Barriers to seeking fistula repair services, enabling factors to seeking fistula repair services, pregnancy, childbirth and postpartum experiences and stress.

Moreover, during all the phases of coding, comparison of text from one transcript to another was done in order to develop conceptualisations of possible relations between various pieces of data (Thorne, 2000). This comparative analysis processes helped to develop ways of understanding experiences of women with obstetric fistula in seeking health care within the context in which they were experienced. To foster the creation of a conceptual understanding of experiences of women with obstetric fistula in seeking health care, the codes were logically organised through a group process of examining the codes and linkages among the codes from the transcripts.

However, the qualitative data analysis was not unproblematic. Some of the themes and subthemes were related to more than one category and that made it difficult to assign them to one category. However, the themes were assigned after the analysis team had discussed and agreed on the category each theme was to be attached to. In some cases, one sub theme could also belong to several categories.

4.2.3 IDENTIFIED THEMES

This section focuses on presenting the analysis of findings from the in-depth interviews with women with obstetric fistula. The four themes that attempted to address the objective of interest (To explore experiences of women with obstetric fistula in seeking health care) were barriers to seeking fistula repair services, enabling factors to seeking fistula repair services, pregnancy, childbirth and postpartum experiences and stress. Each theme and subtheme is presented with evidence from statements made by women with obstetric fistula. These are reflected in the following text in this section.

Table 4.2: Findings from In-depth interviews with women with obstetric fistula

CODES	SUBTHEMES	THEMES
Lack of knowledge on fistula and repair services I did not heal the first time so I got discouraged No surgeons to conduct repairs Failed appointments I was repaired but it was not a successful repair No proper referrals to facilities that offer repairs Fellow fistula patients who come back home from the hospital continued leaking I fear that the Doctor will make another mistake that would worsen my condition Fistula repair should not be done during rainy season when we are busy in the fields The hospitals and clinics should be able to refer us where we can go for continuity of care because we do not know where to go Hospitals where repair is done need to do follow ups to see how we are coping Payment for investigation before repair is a must	Inadequate health care services	Barriers to seeking fistula repair services

Challenges in changing pads throughout the way to the treatment facility Using public transport to seek repair services and no one wants to sit next to me My family complained that the disease is expensive so they took me to traditional healers Undergoing surgical repair is very scaring There is a camp but most of the women with obstetric fistula will not manage to go because of other commitments. Like now women are going to fetch caterpillars to earn a living There should be a schedule well spelt out. I did not know whether doctors were available who would treat fistula that is one of the reasons why I have not been to the hospital to seek the service	Non adherence to reviews and treatment	
Repair centres are very far Distance to treatment facilities No money for transportation Roads are bad My relatives told me to seek traditional medicine before going for surgical repair Repair centres are not available in the community	Lack of facilities to cater for women with obstetric fistula	Enabling factors to seeking fistula repair services

My family gave me money to seek fistula repair services I heard from my friend about fistula repair services. I was told that I should not just waste money searching for other treatments from other hospitals but should go to Mansa hospital for repair services Staying in the hospital after sustaining a fistula until repair is done The community assisted me with OX- cat to take me for repair services because they did not have money to give me Family supported me My sister and mother supported me Health care professionals told us when doctors that conduct repairs were coming and we went for Repair Those who were given money by fistula foundation and UNFPA found it easy to seek repair services Some are given transport refund and it makes seeking the service easy	Spouse , family, community ,health facility and non governmental support	
Repairs are conducted free of change The hospital that conducts repairs gave	Availability of health care	

me money to come for another repair since I did not heal completely at first and they asked me to go home and come back after some months They got my cell phone number and gave me money for transport and called me when the doctors come to conduct repairs Transport come to pick us from the clinic and we went for fistula repair	services	
Attended antenatal care three times during the pregnancy that led to fistula I went to the clinic actually more than three times during the pregnancy that caused fistula During Antenatal Care we are not given any information on obstetric fistula and repair centres. We are quickly attended to and told to go home. Labour symptoms started Delivered by caesarean section They cut my vagina to increase the opening so that I could deliver	Antenatal care services Labour and delivery experiences	Pregnancy, childbirth and postpartum experiences

I went the following day for hospital delivery I was referred from the clinic to the hospital for delivery When I woke up I discovered that I was leaking urine and my beddings were wet At the clinic I was examined and was told to wait for delivery. I refused to stay at the clinic. I decided to go back home without the permission of health care professionals I started leaking urine after a week I started leaking faeces after 2weeks Coping strategies (frequent washing of clothes used for padding, frequent body bath, use of perfumes)	Post-partum experiences	
Pain comes and goes, urine and or stool leakage is the order of day, and the smell of urine is persistent Ever since I sustained a fistula, I experience dizziness, blurred vision, air like sound come from the vagina, sores all over my thighs and painful legs. Sores come on and off I feel bad, I feel sick, I always have backaches and sleep almost all the time. The body feels cold, very cold and weak. Sometimes I would feel as if I have	Pain and discomfort	Stress

something sitting on my back I could not walk properly after sustaining a fistula I could no longer ask him to have intercourse, and he also did not want it anymore Social isolation/ostracism No more sex Divorced in disguise Some people stigmatize me My parents chased me from their home Coming to the people I stay with, some were telling me that the disease is incurable Wherever I sit, flies are around me because of the smell of urine When you are chatting. People you chat with would start saying "It is smelling here I attend funerals, I choose where to sit. The best place is to sit in a corner I was married but after he noticed that I was leaking urine, he left me. Another man married me but we do not sleep together as husband and wife I do not go to going to church not even attending social gatherings like weddings, funerals. I just sit at home	Pyschological/ Emotional trauma Discrimination and isolation	

Most of the times I stay in the bedroom because I get wet easily and need to change my pad I remarried because “he” my second husband said he could not divorce me despite my condition. It did not take long; he divorced me like my first husband I do not go for work and my husband is not formally employed No washing powder to wash my clothes and beddings No bathing soap Most of the times I just rinse the “chitenges” I use for padding I am using pieces of clothes (Chitenge) No money to buy pads	Economic hardship/ poverty	

4.2.3.1 Theme 1: Barriers to seeking fistula repair services

This theme depicts inadequate health care services, non adherence to reviews and treatment and lack of facilities to cater for women with obstetric fistula. There are six fistula repair centres in Zambia which includes; Chilonga Mission Hospital, Chitokoloki Mission Hospital, Mansa General Hospital, Monze Mission Hospital, St Francis Mission Hospital (Katete) and University Teaching Hospitals - women and Newborn Hospital. Fistula repair services are conducted routinely and also during repair camps.

4.2.3.1.1 Inadequate health care services

Women with obstetric fistula indicated that inadequate health care services were barriers to seeking fistula repair services. The inadequate health services mentioned were; lack of knowledge on obstetric fistula and repair services by the health care professionals, poor referral system, lack of resident fistula surgeons at fistula repair centres, lack of fistula surgeons to conduct repairs, poor timing of surgical repairs, unsuccessful repairs, complicated treatment regimen and fear of surgery. Regarding lack of knowledge by the health care professionals on obstetric fistula and repair services, this is what some women said;

> ***"****When I sustained a fistula, health care professionals just put a urinary catheter on me without telling me why the catheter was put on me. What they just said is that all those who had a caesarean section were fine apart from me. So I was discharged home without knowing anything about my condition and whether I needed any treatment."(P15)*

Another one said;

> *"I thought it was normal that a woman after delivery leaks faeces and/or urine. At the hospital no one talked about it even health care professionals. I went home thinking leakage was normal."(P11)*

Poor referral system was mentioned as a barrier to seeking fistula repair services. Women with obstetric fistula wondered from clinic to clinic and hospital to hospital in search of fistula repair services. Some women with obstetric fistula mentioned that there were no proper referral systems from the local health facilities or hospitals to the repairing hospitals. This is what women said;

> "*The clinics and hospitals should be able to refer us where we could successfully be repaired from because we do not know where to go. That is the more reason among other reasons why we do not seek surgical repair." (P4, P5).*

Some women with fistula who have been for repair services mentioned that there were no resident fistula surgeons at the fistula repair centres. Also, a few women with obstetric fistula indicated that there was no proper communication system about the availability of fistula surgeons. This is what one woman said;

> *"I have been for fistula repair six (6) times but I have had only three (3) repairs done. Each time I went for the service, I was told that the doctor was not around because he stayed in another province. I kept on going home and back to hospital. Sometimes when I went for the service, I was told that it was not the right time the surgeon was coming to conduct repairs although at times I was just missing him." (P8)*

Lack of fistula surgeons was also cited as one of the barriers women experienced in seeking fistula repair services. Some women with obstetric fistula who had never been for fistula repair services indicated that they did not know that there were doctors who could offer fistula repair services in the country. One woman had this to say;

> "*I did not know whether doctors were available who could treat fistula that is one of the reasons why I have not been to the hospital to seek the service." (P16)*

Some women with obstetric fistula reported that as a result of shortage of fistula surgeons, they were given appointment after appointment. Further, women with obstetric fistula indicated that appointments were not honoured. This is what women said,

> *"I was given an appointment when to seek repair services just because there were no fistula surgeons. The appointment given was for several months. " (P5, P6).*

Most women with obstetric fistula also reported that the timing of surgical repair was a barrier to seeking the service. Fistula repair camps were planned by UNFPA and Fistula Foundation working with the Government of Zambia in ensuring that fistula repairs were conducted while women with obstetric fistula had to comply with the fistula schedule made at national level. This resulted in women not seeking repair services. This is what one woman said;

> *"The timing for fistula repair services is bad. Like now women are supposed to go for repair. There is a camp but most of fistula patients have decided to go "kufishimu" (fetch caterpillars) so that they could sustain themselves and their families. We need to be consulted so that we can agree on when to have fistula camps." (P8)*

Another one said;

> *"There is a camp but most of fistula patients will not manage to go because of other commitments. There should be a schedule well spelt out. And..... if we are engaged in the planning of when repair camps could be conducted then most of us could go for repair services." (P8)*

Others said;

"We are called for fistula repair mostly during the rainy season. During the rainy season women go to the fields. Most of the women with fistula opt not to seek the service because what would they feed their families with if they go for fistula repair." (P9, P11)

Furthermore, most women with obstetric fistula also reported unsuccessful repairs as a barrier to seeking the fistula repair services. This is what they said;

I was repaired but it was not a successful repair. Repair services should be accurate. How many times will I seek the services? I would rather stay with the condition." (P5, P6)

Another one said;

"I fear that the Doctor would make another mistake which would worsen my situation. I am scared *in the sense that I have had three repairs done and the doctor made mistakes during each one of them. So, I have not gone back to the hospital to date." (P12)*

Also participant number 10 had this to say;

"I did not go for a third repair because I did not heal after surgery and I got discouraged."

Furthermore, women with obstetric fistula who had never been for fistula repair services had this to say concerning unsuccessful repairs;

"Fellow fistula patients who have been for surgical repair have come back leaking. This means repair services are not successful and safe for us." (P14, P16)

Some of the women with obstetric fistula indicated that the treatment regimen for obstetric fistula was complicated. Undergoing surgical repair was very painful, uncomfortable and scary. Some mentioned that each time they underwent surgical repair they thought they would die on the theatre table. This is what women said;

"Undergoing surgical repair is very scaring. Some of my fellow women with obstetric fistula think that they could die during surgical repair. "(P8)

Another one said

"After surgical repair, one has to stay in hospital for up to 14 days. This is indeed a long time. The doctors so inserts a catheter which is also uncomfortable." (P6)

4.2.3.1.2 Lack of facilities to cater for women with obstetric fistula

The delay to seeking treatment was also related to the inaccessible nature of women with obstetric fistulas communities to the hospitals that offer repair services. There were gravel roads linking the women with obstetric fistulas communities with the major towns where they could get into another vehicle to reach the hospitals that offer repair services. In some cases, one would have to travel very long distance to reach the hospital that does repair. In some villages, only booking a vehicle would enable a woman with obstetric fistula to reach the hospital that does repairs. In such instances, and where drivers were ready to go, they charged exorbitant fares making it difficult for the women with obstetric fistula to seek fistula repair services. Two woman highlighted inaccessibility to repair services as a barrier in seeking repair services as follows;

"The road from my village to the main road is bad. I cannot walk and you get to find a vehicle once in a while because most of drivers are worried about the tear and wear of their cars. The transport charges are too much. This is the major reason why I have never been for fistula repair services." (P14)

Another woman had this to say;

"We started off from the home on a bicycle. The bicycle was not being ridden but it was just pushed because the road network is poor. We took 12 hours to reach the road where we could get another transport to the hospital that offers repair services."(P9)

Some women with obstetric fistula also indicated that fistula repair centres were very far hence they suffered from transportation challenges. This included money for transport and/or money to hire transport. Women with obstetric fistula had this to say in the following excerpts;

"Repair centres are very far. Where can I get money to enable me travel that far? Without money one cannot travel for the service." (P1, P13)

Two women with obstetric fistula also had this to say*;*

"I will only go for fistula repair again when I will have the money for transport though it is not easy to find money for transport."(P7, P12)

Although some women with obstetric fistula appreciated the importance of surgical repair, sometimes families and communities pressured them into consulting faith and traditional healers. Few women with obstetric fistula reported that they sought help from faith healers because of lack of facilities in their villages and that their disease was believed to be linked to witchcraft and generational curses. Consulting traditional and faith healers was cheaper or free in some instances and this appealed to some families especially when the woman had no income. This implies that women will never get better because of wrong treatment. This is demonstrated in the following excerpts:

> *"My family complained that my disease is expensive, transport challenges are not exceptional, and so my family took me to the traditional healer as this was much cheaper. They believe the herbs he gives work better. The traditional healer said someone (witch) took my clothes and threw them in water and that is the water I am leaking to date. The witchdoctor also told me that I will recover after finishing the whole course of traditional medicine. We did not pay anything. Services are free. "(P9, P11, P12)*

Another one said;

> *"Repair services are not available in this community and my family believes that my illness is a punishment from God for the wrongs I have been committing in my life. Therefore, I consulted a religious healer because I also thought that it was a punishment from God for the wrongs I had done in my life and since there is no clinic nearby. The religious healer used to conduct prayers each time I went to him. I have continued going for prayers. One day God will answer my prayers." (P15)*

4.2.3.1.3 Non adherence to reviews and treatment

Some women with fistula mentioned that lack of follow up by health care professionals following fistula repair as a barrier to seeking subsequent fistula repair services. This is what women with obstetric fistula said;

> "*Hospitals where fistula repair is done need to conduct follow ups to see how we are coping. The same way they call us to seek fistula repair services is exactly the same way they should follow us in our homes since they get our home addresses. Since they want us to continue following them, even if we continue leaking because leakage is minimal after repair, we just continue staying at home because it is manageable to do so. " (P8, P9)*

In addition, some women with obstetric fistula mentioned that they were very anxious of travelling alone to seek fistula repair services. They indicated that their families needed to escort them to the hospitals that offered repair services. This is what women said;

"I am anxious to travel alone to seek repair services that is why I have just been once for repair services. You have no one to talk to all the way to the hospital that offer repair services."(P3)

Some women with fistula indicated that the use of public transport was a barrier to seeking fistula repair services. As a result women opted to staying at home than seeking the service. This is what women had to say;

"Private transport is needed as when leakage is too much; you need private vehicles to take you to the hospital. Use of public transport is a big challenge. It is not even possible to sit around people in a bus." (P1, P2)

Another one had this to say;

It is a big sacrifice to use public transport especially that urine smells and people look at you with bad eyes." (P3).

Some women with obstetric fistula also narrated how they struggled to change their pads while travelling to seek repair services. This is what they said;

"When the bus stopped, I could quickly go and change my pads which were wet and put in the bag I carried. I did that the whole way until I arrived at the fistula repair centre. It is a sacrifice that is why I cannot continue seeking repair services." (P7)

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4.2.3.2 Theme 2: Enabling factors to seeking fistula repair services

The theme "Enabling factors to seeking fistula repair services" is what women with obstetric fistula thought would make them seek repair services. Most of the women with obstetric fistula indicated that getting social support was a facilitator to seeking fistula repair. Women with obstetric fistula mentioned that spousal, family; health facility and community support enabled them to seek repair services. The married women with obstetric fistula seemed to be receiving more support from their partners compared to those that were single or divorced.

4.2.3.2.1 Spousal, family, community, health facility and non- governmental organisation support

Some women with obstetric fistula who remained married indicated that their husbands supported them in seeking repair services. This is what one woman said;

"My husband has given me money to seek repair services. I will go any day from now." (P7)

Most women with obstetric fistula received support from their family members to seek repair services. This is what they said;

> "*The family gave me money to enable me seek fistula repair services since I could not afford to go using my own resources and I went for surgical repair." (P3)*

Another one said;

> *"My mother helps me. She does some piece works. She goes in other people's fields to work and they give her money. Although she cannot work the way she used to before because she is very old. So far I have been to seek repair services from the money she gives me. " (P11)*

Further, some women with obstetric fistula indicated that health facility support was a facilitator to seeking repair services. The health facility support mentioned was in terms of health education on the condition and repair services, informing them on the availability of the fistula surgeon and fistula repair schedule. This is what they said;

> *"Health care proffessionals should educate us on the condition and repair services either during pregnancy or when they discover that we have fistula so that we can be motivated to seeking the service." (P14, P15)*

Others said;

> *"The health care proffessionals should assist us by telling us when the fistula doctors are coming to conduct repairs so that we do not miss the service." (P5, P8, P10)*

Few women indicated that they received some money from fistula repair centres for transport to enable them seek repair services. This is what one woman had to say;

> " *I was using my own money to seek repair services but thereafter Chilonga mission hospital has been helping me with transport money to and from the fistula repair centre that is how I have been managing to go for repair services." (P8)*

Some women with obstetric fistula were being assisted by the community to seek repair services. This is what they said;

> *"The community assisted us with transport to seek fistula repair services. Some community members provided us with their own cars, OX cat, bicycles name it, since they did not have money to give us for transport to seek repair services. With free transport we sought repair services."(P2, P6)*

Some of the women with obstetric fistula mentioned that they were being supported by non –governmental organisations such as Fistula Foundation and UNFPA. Most women with fistula who mentioned such support where those living in provinces where such organisations existed such as Muchinga and Luapula provinces of Zambia. The women were being supported in terms of being transported to repair centres, given transport money or transport refund upon seeking the service. Travelling in vechiles arranged by non-governmental organisations implies that feelings of sadness and shame by fellow passengers on public transport were avoided.

This what women said;

> *Non- governmental organisation helps us with transport or transport refund in order for us to seek fistula repair services. This is how we have managed to seek repair services. "* (P12)

Others said;

> "*Transport was arranged by Fistula Foundation to come and pick us from the clinic. That way, it is good because it becomes automatic to seek repair services and no passages go along with us." (P4, P5).*

4.2.3.2.2 Availability of health care services

Some women with obstetric fistula mentioned that having treatment centres near where they live was a facilitator to seeking treatment**.** This is what women said,

> *"Hospitals that offer repair services should be near our doorsteps. Really, it is easy to seek treatment like that." (P1).*

Another one said;

"I was leaving very far away from the fistula repair centre where I could travel for a day because of the distance. Those who can walk or travel for few hours are able to seek repair services in good time."(P7)

A few women also mentioned that staying in hospital that offer repair services after sustaining a fistula is an enabling factor to seeking fistula repair services. One woman with fistula reported how she stayed in hospital after delivery, had her fistula repaired and was only discharged after almost six months of staying in hospital. This is what she said;

"I sustained a fistula following caesarean section. Having delivered at a hospital that also offers repair services, I was not discharged home. I stayed in hospital for almost six months. I had my fistula repaired. It is better to wait in the hospital until you are repaired, even if it takes months before being considered for repair. It is good to go home after repair because coming back for repair is a big challenge." (P3)

Few women with obstetric fistula also reported that there were referred to fistula repair centres by their peers. This is what one woman had to say;

"I heard from my friend about fistula repair centres. I was told that I should not just waste money searching for other treatments from other hospitals but should go to Mansa hospital for repair services." (P11)

Some women with obstetric fistula also indicated that there were few repair centres that they knew could conduct repair service. This is what women said,

"The doctor wrote me a letter to go to Lusaka for surgical repair. He told me that University Teaching hospital conducts surgical repair. I went for repair services." (P14)

Another one said;

I was leaving in another province but I was told to go to Monze Mission Hospital (Southern Province) for fistula repair services." (P7)

Further, women with obstetric fistula notice the fistula problem either soon after delivery, within a week after delivery and at most within two weeks of after delivery. In view of this, women stated that there was need for the government to put a time frame for all those who sustained a fistula to be repaired. This would motivate women to seek the service. This is what women said;

"Government should put a time frame when everyone who sustains a fistula should be repaired. The timeframe should be mandatory."(P7, P8)

4.2.3.3 Theme 3: Pregnancy, childbirth and postpartum experiences

The theme "pregnancy, childbirth and postpartum experiences" describes what women with obstetric fistula experienced during pregnancy, delivery and following delivery of the baby that caused a fistula.

4.2.3.3.1 Antenatal care services

Antenatal care (ANC) services are an entry point to safe motherhood. The study explored experiences that women went through during pregnancy that could have resulted into fistula and if the kind of experiences faced could have contributed to the occurrence of obstetric fistula. Some of the women with obstetric fistula indicated that they attended antenatal care but there were variations in the responses with regards the number of times they attended ANC. The findings show that obstetric fistula development occurred on both women who attended antenatal visits and those who did not implying that ANC is not only the sole determinant of fistula occurrence, nevertheless it also stands as a preventive measure. Women was quoted saying;

> *"I attended antenatal care at a local clinic three times during the pregnancy that caused fistula." (P15)*

Another one said,

> *"I went to the antenatal clinic actually more than three times during the pregnancy that caused fistula. I had no problems during the pregnancy. I do not know what happened following giving birth."* (P4)

One of the women with obstetric fistula also said;

> *"I did not attend antenatal care during the pregnancy that resulted in fistula. " (P1)*

Regarding being given any information by the health care professionals on what obstetric fistula was and repair services, all women indicated that they were not given any information on the same. Some of women with obstetric fistula did not even understand what they were suffering from and the kind of treatment they needed to seek. To reduce the risk factors that could lead to obstetric fistula development, health education on the condition was important in order to bring about the desired change. This is what women were quoted saying;

> *"During ANC we are not given any information on obstetric fistula and repair services. We are quickly attended to and told to go back home." (P4)*

Another one said;

> *"I attended antenatal care at a local clinic three times during the pregnancy that caused fistula but no health care provider educated us on obstetric fistula." (P15)*

4.2.3.3.2 Labour and delivery care

Considering how women with obstetric fistula sustained a fistula, most women indicated that delay took place at home as most of them first tried to labour at home before they could seek medical care. Women had similar experiences during labour. Almost all exxperienced some difficulties during labour. Most of them reported that they were in labour for more 24 hours during the pregnancy that lead to development of a fistula, implying that they went into prolonged labour before getting into the clinics or hospitals where most deliveries happened. On average, women laboured for at least three days, with some labouring for as long as four days or more. Most of the women delivered live babies while a few had stillbirths. One woman also reported that upon reaching the clinic and told that she was far from giving birth by health care professionals, she left against medical advice and only come back when she was in severe pain, implying that she did not access skilled obstetric care which is a major tool to combat maternal morbidity and mortality This is what the woman said;

> *"When labour started, I went to the clinic. At the clinic I was examined and was told to wait for delivery. I refused to stay at the clinic. I decided to go back home without the permission of health care professionals and come to the clinic only when I was in severe labour pains. The nurse managed to deliver me through the vaginal, I had a live baby but within two weeks of giving birth, I started leaking urine." (P5)*

Women with fistula also reported that they sustained a fistula following an episiotomy. Episiotomy is a surgical cut made at the opening of the vagina during childbirth, to aid a difficult delivery and prevent rupture of tissues. This is what women said;

> *"Yes, the nurse made a cut (operation) in my vagina and ended up having a fistula" (P5, P6)*

Also a 34 years old woman with obstetric fistula narrated how she developed a fistula following caesarean section. Emergency caesarean section is required when obstructed labour occurs without which the mother may lose the baby and develop obstetric fistula at the same time. Even though prolonged labour often preceded the birth, some women attributed their problem to the intervention by skilled personels at the hospital. This is what she said;

"The problem started like this. Labour started at around 11:00 hours but, I decided not to go for delivery at the hospital. I slept at home that particular day without going to the hospital. The next day, when I was being taken to the hospital, I had no strength and I did not know what was happening to me, but I could see that my aunt was there with me. I noticed that I was being wheeled to the theatre. When I woke up, I asked my aunt where we were. My aunt responded to me that "Just sleep". When I regained consciousness that is when she started telling me that we came to Chilonga Mission hospital after failing to deliver at home. I was operated on to remove the baby. After two week, I started leaking urine. "(P8)

Another one said;

"When we reached at the hospital, the doctor did a caesarean section. The caesarean section which was done is what caused me to sustain a fistula "(P9)

4.2.3.3.3 Post-partum care experiences

Most of the women with fistula narrated their postnatal experiences. During this period, some women with obstetric fistula experienced physical and emotional challenges.There were variations reported on when women noticed leakage of urine and/or stool following development of an obstetric fistula despite that some women thought urine leakage and/or stool was normal. Most of the women indicated that they noticed leaking immediately following delivery, a few indicated after a week while the rest reported within two weeks of delivery. Noticing urine and/or stool leakage afforded women with obstetric fistula the opportunity for early treatment as the problem was discovered promptly but alas no health care professionals told them anything about what condition they had developed though a few did not attempt to find out what problems they had encountered implying a delay in knowing and consequently seeking treatment . This is what women said;

"I noticed that I was leaking immediately following delivery" (P1, P2, P3, P9, P10, P11, P12, P15)

Others said;

"I noticed the leakage within one week after delivery."(P4, P6, P7, P13, P14, P16)

From the findings, there was a mix of feelings towards whom to reveal the fistula condition to following development of a fistula and the reasons for revealing the condition. Some women with obstetric fistula stated that the person who escorted them for delivery was the first one to be informed; others informed their mother's

first, biological father and sisters. A few women with obstetric fistula indicated informing their husbands and health care professionals first while only three indicated relatives. One woman revealed that she did not inform anyone implying that women had self-stigma which could result in not social support. The verbatim quotes supporting this subtheme are as follows;

> *"I told my husband and sister because they were the ones who were available with me when fistula occurred. I explained to them that the Doctor made a mistake while operating me and told me that I will be leaking urine through the vagina. I also told them that the doctor said he will discharge me after a few days and that I should go for repair after few months." (P9, P11)*

Another one had this to say.

> "*I told my mother since the fistula was giving me problems. I told her because I knew she was very understanding*."*(P3)*

Some women with obstetric fistula told more than one person. They told parents, friends, relatives and doctors. This is what they had to say;

> *"At first I told my friends and family about my fistula problem. Then I told one of the Doctors at a local clinic.* " *(P1, P2, P12)*

One woman with obstetric fistula who did not tell anyone about the condition despite realizing that she was leaking urine had this to say;

> *"I was with my mother at the hospital. That time I was ignorant. I did not even know what was happening. I had no idea. I was very sick. I was being feed through the tube which the nurse passed through my nose. I just knew that after a women delivers she goes back home. We were discharged home and I just saw that the problem was continuing day in and out."*(P14)

Most women narrated that upon revealing that they had fistula, their husbands, family members and the community had varied responses and reactions. The following is what they said;

> *"When I told my relatives that I had an obstetric fistula, I was told that in the village, treatment for such a condition could not be sought except at the hospital." (P6)*

Another one had this to say;

> *"When I told my relatives about my condition, they were very disappointed. They wondered how the doctor made such a big mistake which resulted into having a fistula.. They asked me if the doctor was really a trained personnel who knew his jobs. I told them that I did not know whether or not the doctor*

knew his job. My relatives told me that the doctor who made that mistake should ensure that I get healed". (P12)

Also one of the women with obstetric fistula said;

"They told me that what had happened to me was a mystery. They had never heard of such a condition happening to anyone and they had never seen such a person with such a condition. (P13)

One of the women with obstetric fistula indicated that her parents did not take it lightly and chased her from their home. Sadly this is what she said;

"My parents - both my father and mother chased me from their home. I went to my aunt's place. Fortunately, the first time I went to visit my aunt, I made friends. I told one of my friends I trusted so much about my fistula condition so that she could inform my aunt about my situation. My friend did so without hesitation. After telling my aunt, she also told my uncle." (P4)

4.2.3.4 Theme 4: Stress

Following development of fistula women reported that they experienced stress due to the constant leakage of urine and/or faeces including the constant odour. Women with obstetric fistula recounted their experiences in the following sub themes;

4.2.3.4.1 Pain and discomfort

This sub theme is about the pain and discomfort women with obstetric fistula experienced after sustaining a fistula. All women reported some form of discomfort such as pain from the fistula wound, persistent leakage of urine and/or stool, smell of urine and/or stool, blurred vision, backache, body malaise, fever and weight loss. Urine leakage was reported to have been more during the night and when they drunk a lot of water. Some of the women with fistula frequently contracted urinary tract infections owing to the constant leakage of urine and poor hygiene. This resulted in some of them experiencing intermittent abdominal pain. Apart from the abdominal pain which was associated with the frequent urinary tract infection, women with obstetric fistula complained of pain due to constant irritation of the genital sores. This is what they said;

"*I feel bad, I feel sick, I always have backaches, abdominal pains and sleep almost all the time. The body feels cold, very cold and weak. Sometimes I would feel as if I have something sitting on my back. This is the feeling always."(P5)*

A few women with fistula also said;

"Ever since I sustained a fistula, I experience dizziness, blurred vision, air like sound come from the vagina, sores all over my thighs, sores around and inside the vagina, and painful legs. Sores come on and off. This makes walking and travelling very difficult." (P5, P13)

Another one said;

"Fistula is a bad condition. It is a painful condition. The effects are long lasting. Pain comes and goes, urine and/or stool leakage is the order of day, and the smell of urine is persistent."(P11)

Some women with obstetric fistula also reported about menstrual problems such as dysmenorrhea and complete cessation. This is what women said;

"Sometimes my menses flows with the urine and pain. " (P8)

Another one said;

"Ever since I sustained a fistula, my monthly periods do not occur." (P4)

4.2.3.4.2 Psychological/Emotional trauma

This subtheme is about the number of psychological and emotional trauma that women with obstetric fistula experienced following sustaining a fistula. Some women reported the psychological problems that they experienced on daily basis including worry about their condition as a result of the smell of urine and /or faeces, mocking remarks from associates and other people, insults, stigmatization, isolation, separation, divorce, ostracism and rejection by their spouses, families and community. Women with obstetric fistula also experienced abandonement by their husbands and families which made it more difficult to acquire funds for financing the procedure and/or transportation costs to repair centres. With regards isolation, most women with obstetric fistula remained in their homes as much as possible and forgoing public activities such as funerals, celebrations, meetings, and social visits. This isolation was caused by a strong sense of shame about their condition and by a strong desire not to soil themselves in front of anyone or to smell badly. Further, some women also experienced pain during intercourse with affected their conjugal rights. With regards emotional trauma, some women were very emotional about the way other people treated them, especially their loved ones. These issues impacted greatly on women with obstetric fistulas lives in that their abilities to continue to do things that they previously did was affected. The consequence of the stigma was self – isolation in order to avoid embarrassment and humiliation. A few women also experienced stressful events such as suicidal thoughts. The following narratives summarize what most of the women with obstetric fistula reported;

"Wherever I sit, flies are around me because of the smell of urine. This worries me very much. That is why I am alone most of the time." (P2)

Two women with obstetric fistula said;

> *"When you are chatting. People you chat with would start saying "It is smelling here, I cannot be here. Can you sit with people like that? Can you even use public transport? Otherwise, staying freely with others, I cannot manage. It is not even possible to sit around people. " (P1, P8)*

Others said;

> *"Some people stigmatize me, telling other people that even when you see her like that she leaks urine. That is the reason why I do not mix with people in the community." (P5, P12)*

Some women with obstetric fistula indicated that even family members were a problem and continued causing psychological trauma on them. This is what women had to say;

> *"To make matters worse, my family members were telling other people in the community about my condition. People they were telling were coming back to me to inform me what they were saying. I later left home for the village where my uncle stays but the situation was the same."(P4)*

Most women with obstetric fistula also narrated that they avoided their peers and family members by isolating themselves. This is what women said;

> *"Most of the times I stay in the bedroom alone because I get wet easily and need to change my pad. Otherwise, staying freely with others I cannot manage." (P1)*

Another one said;

> *"I do not go to church not even attending social gatherings like weddings, funerals. I just sit at home."(P7)*

Some of the women with obstetric fistula remained while a few were windowed. Also, a few women who were married ended up being divorced. Those who remarried faced similar problems of being abandoned, separated and eventually divorced. This is what women said;

> *"I was married but after he noticed that I was leaking urine, he left me. Another man married me but we do not sleep together as husband and wife." (P7)*

Another one also said;

"I remarried because "he" my second husband said he could not divorce me despite my condition. It did not take long; he divorced me like my first husband." (P10)

Some women with fistula also reported experiencing pain during sexual intercourse. This is what they said;

"With my husband, we have been having sexual intercourse but it is very painful each time we do that. Because of the pain I am experiencing I can no longer ask him to have intercourse with me, and he does not ask me anymore." (P7)

A few women reported having a dead future, the fact that they had to change pads frequently, reduced their chances to interact with friends. Some of the women with obstetric fistula were contemplating suicide because they could not handle the pressure associated with the condition. This is what they said;

"The future is not good because I am poor and I have fistula. Wherever I am going, I carry pads and clothes to change. Within one (1) hour, I change three (3) times. I am not free. Even when I am moving around the village, I feel like people are

laughing at me. Better I die…." (P9)

Another one said;

"With this condition, I will kill myself. I am old and I do not hope for the better. "*(P13)*

One woman with obstetric fistula was also quoted saying;

"It is not easy. At last I was just thinking that I should kill myself because people laugh at me too much. If there is no cure then it is better I kill myself because people know that I am leaking urine and they talk about it." (P7)

4.2.3.4.3 Economic hardship/ poverty

Most of the women with obstetric fistula narrated how living with a fistula was economically challenging for them especially that they were not working. Some women reported that their economic status was insufficient to meet their basic needs or treat their conditions. Most of the women reported that they lost their sources of livelihood as a result of the incontinence of urine. Those who remained in business did mainly farming. Most women with obstetric fistula complained that in an attempt to stay odourless, each of them resorted to various means to stay clean and free from smell. Some of their activities included constant washing and buying of detergents. Some wanted to use scented soaps (perfumed) and body sprays to mask the foul odour. To cope up with this situation, some women narrated that they had to change pads they made from clothes or diapers at least 3 to 8 times a day. They also mentioned that they did not have money to procure pads hence they made rags from

old clothes or Chitenge (wrapper). The beddings got wet and required to be washed on a daily basis. Money to buy soap and detergent was a big challenge too. All these requirements demanded a constant supply of funds. A few women also reported not having money to send their children to school or seeking fistula repair services and/or subsequent repairs or pay for investigations. Most of the women who experienced family support indicated that their conditions brought some hardships to their families as some family finances had to be spent on their treatment. This is what women with obstetric fistula said;

> *"The leakage is continuous. I am using pieces of clothes (Chitenge). In some instance I use diapers that is, if my relatives buy for me. I also use soap whenever it is available at home for bathing. Detergent is another issue. In most cases, I just rinse the pieces of clothes that I use as pads and hug them."(P8)*

Another one said;

> *"I know that I should pad because of my condition. Sometimes, I do not have money to buy pads. Pads are very expensive. Old rappers (Chitenges) are easier to make and is a cheaper way because they can be washed and reused compared to pads." (P1)*

Some women with fistula who were not working had this to say;

> *"I am not working. That is why I cannot not even manage to buy pads. Family members are not supportive. They cannot even help me send my children to school not even giving me money to seek fistula repair services anymore because they say they do not have the money too." (P1)*

Most of the women with obstetric fistula mentioned that they did not have money to travel to repair centres to seek the service. They also mentioned that they did not have money to pay for investigations that were required before surgical repair. This is expressed in the following excerpts.

> *"I do not work and my husband is not formally employed. He does totally nothing. As a result, our financial income is not okey. Even though I was repaired more than once, I cannot afford to continue seeking repair services because of lack of finances." (P 7, P12)*

Another one said;

> *"I was told to pay for investigations before fistula repair. D*oing *investigations prior operation is good. Fistula treatment does not attract a fee, but other services such as laboratory examinations do. I did not have money to pay while at the hospital. I struggled to ask if the hospital could help me free of change but they could not. I cannot go to the hospital since I did not heal because they will ask me to pay for other services such as laboratory investigations." (P13)*

4.3 OBJECTIVE 2 RESULTS: TO ASSESS FACTORS WOMEN WITH OBSTETRIC FISTULA EXPERIENCE IN SEEKING HEALTH CARE

4.3.1 DATA PROCESSING AND ANALYSIS OF QUANTITATIVE DATA

Data from the questionnaires were checked for completeness. Responses from closed ended questions were coded while those which were open ended were catergorised then coded. Whenever there was a problem with the completion of the questionnaires, research assistants were asked to verify or complete the questionnaire with the informant. After verification, the completed questionnaire were handed over for the data entry. However, if there were any errors in the questionnaires, they were returned for call-backs to verify the data provided.

Data on women with obstetric fistula was analysed using a Statistical Package of Social Science (SPSS) computer programme (version 20). Descriptive statistics were run in SPSS 20. Descriptive and inferential statistics were employed. Means and median with ranges were used for continuous variables. Counts with percentages were used for categorical variable. Chi-square was used to study association between categorical variables. Data was then exported to STATA. Univariate and Multivariate analysis was done. The researcher used Crude Odds Ratio (OR) and Adjusted Odds Ratio (AOR) to test the association between the outcome and independent variables. The inclusion criteria to the adjusted odds ratio were made on those variables with pvalue less than 0.2 in the crude odds ratio. This is because some variables that were insignificant in the OR may come to be important factors in the AOR. Multivariate logistic regression modelling was undertaken to see the net effect of predictor variables over the dependent one. The alpha level of 0.05 or less was considered for the level of significance, and 95% Confidence interval.

Data on health care professionals was analysed using SPSS computer programme (version 20). Data were expressed as descriptive summary measures.

4.3.2 DEMOGRAPHIC CHARACTERISTICS OF THE PARTICIPANTS

4.3.2.1 DEMOGRAPHIC CHARACTERISTICS FOR WOMEN WITH OBSTETRIC FISTULA

Table 4.3 presents the demographic variables of women with obstetric fistula. The age of women ranged between 18 and 87 years. About 86 (39.8%) were aged between 25 and 34 years. The majority 138 (63.9%) were Bemba speaking people. Almost all 208 (96.3 %) were Christians. Majority 137 (63.4%) had primary education. Almost all 208 (96.3%) were not employed. Majority 181 (83.7%) were married before sustaining a fistula and 128 (59.3%) were still married at the time of interviews. More than one –third 49 (38.3%) had

been married for 6 - 10 years. Majority 160 (74.1%) had a monthly income of below K500.00 (USD $50). Slightly more than one –third 74 (34.3%) used public transport to seek fistula repair services.

Table 4.3 Demographic characteristics of women with obstetric fistula (n=216)

Variable	Category	Frequency	Percentage (%)
Age	15-24	53	24.5%
	25-34	86	39.8%
	35-44	49	22.7%
	45 and above	28	13%
Tribe	Tonga	13	6.0%
	Bemba	138	63.9%
	Nyanja	52	24.1%
	Lozi	11	5.1%
	Luvale	2	0.9%
Religion	Christian	208	96.3%
	Non-Christian	8	3.7%
Educational Level	None	57	26.4%
	Primary	137	63.4%
	Secondary	22	10.2%
Employment Status	Employed	8	3.7%
	Not employed	208	96.3%
Table 4.3 (b) Demographic characteristics of women with obstetric fistula (n=216)			
Marital status before fistula occurrence	Married	181	83.7%
	Not married	35	16.2%
Marital status at the time of study	Married	128	59.3%
	Not Married	88	16.2%
Years in Marriage	0- 5 years	42	32.8%
	6-10 years	49	38.3%
	11-15 years	20	15.6%
	16 years and above	17	13.3%
Income per month	None	32	14.8%
	Below K500.00	160	74.1%
	K500.00 and above	24	11.1%
Mode of transport	Own transport (Walking, ox-cart)	26	12.1%
	Public Transport	74	34.3%
	Ambulance	63	29.2%
	Never been for repair	53	24.5%

4.3.2.2 OBSTETRIC AND FISTULA HISTORY OF WOMEN WITH OBSTETRIC FISTULA

Table 4.4 shows that about 131 (60.7%) of women with obstetric fistula were aged between 15 and 24 years at the time they sustained a fistula. Almost half (49.1%) had between 1-3 children. More than half 126 (58.3%) financially supported themselves and only 2 (0.9%) were on the governments social cash transfer. Majority 163 (75.5%) had been for fistula repair services. Out of the 163 who had been for fistula repair services, more than one – third 98 (45.4%) stated that they have had one fistula attempt at repair.

Table 4.4. Obstetric and fistula history of women with obstetric fistula (n=216)

Variable	Category	Frequency	Percentage (%)
Age at fistula occurrence	Below 15	15	6.9%
	15-24	131	60.7%
	25-34	53	24.5%
	35 and above	17	7.9%
Divorced when sustained a fistula	Yes	45	25%
	No	96	75%
Number of children	None	70	32.4%
	1-3	106	49.1%
	4.6	30	13.9%
	7 and above	10	4.6%
Financial support	Self	126	58.3%
	Family	88	40.7%
	Social cash transfer	2	1%
	No	53	24.5%
Number of fistula sustained	One	183	84.7%
	Two	19	8.8%
	Three	8	3.7%
	Four	1	0.5%

	Five	5	2.3%
Table 4.4. (b) Obstetric and fistula history of women with obstetric fistula (n=216)			
Number of fistula attempts at repair	Never	53	24.5%
	One	98	45.4%
	Two	40	18.5%
	Three	17	7.9%
	Four	7	3.2%
	Five	1	0.5%

4.3.3 ASSOCIATION BETWEEN DEMOGRAPHIC CHARACTERISTICS, OBSTETRIC AND FISTULA HISTORY OF WOMEN WITH OBSTETRIC FISTULA AND NOT SEEKING FISTULA REPAIR SERVICES

4.3.3.1 Association between demographic characteristics of women with obstetric fistula and not seeking fistula repair services

Table 4.5 shows that the sociodemographic factors of age (p-value 0.090), religion (p-value 0.723), marital status (p-0.072), employment status (p - value 0.124) ,), marital status before sustaining a fistula (p-value 0.074) and number of years in marriage (p-value 0.060) were all not statistically signicant with not seeking fistula repair services. However, there was a statistical signicance between not seeking fistula repair services and tribe (p-value 0.011), educational level (P-value 0.018), income per month (p-value 0.008) and mode of transport ((p-value <0.001).

Table 4.5 Demographic data for women with obstetric fistula and not seeking fistula repair services (n=216)

Variable	Seeking Yes	Not seeking No	P-Value
Age			
15-24	45 (84.9%	8 (15.1%)	0.090
25-34	62 (72.1%)	24 (27.9%)	
35-44	41 (83.7%)	8 (16.3%)	
45 and above	17 (60.7%)	11 (39.3%)	
Tribe			
Tonga	7 (53.8%)	6 (46.2%)	0.011
Bemba	120 (86.9%)	18 (13.1%)	
Nyanja	33 (63.5%)	19 (36.5%)	
Lozi	3 (27.3%)	8 (77.7%)	
Luvale	0 (0%)	2 (100%)	
Religion			
Christian	161 (75.6%)	52 (24.4%)	0.723
Non Christian	2 (66.7%)	1 (33.3%)	
None	36 (63.2%)	21 (36.8%)	0.018
Primary	107 (78.1%)	30 (21.9%)	
Secondary	20 (90.9%)	2 (9.1%)	
Employment Status			
Not employed	155 (74.5 %)	53 (25.5%)	0.124
Marital status before fistula occurrence			
Yes	134 (74%)	47 (26%)	0.074
No	29 (82.9%)	6 (17.1%)	
Marital status at the time of interview			
Not married	72 (81.8%)	16 (18.2%)	0.072
Married	91 (71.1%)	37 (28.9%)	

Table 4.5 (b) Demographic data for women with obstetric fistula and not seeking fistula repair services (n=216)

Variable	Seeking	Not seeking	P-value
Years in marriage			
0-5	23 (54.8%)	19 (45.2%)	0.060
6-10	26 (53.1%)	23 (46.9%)	
11-15	11 (55%)	9 (45%)	
16 and above	15 (88.2%)	2 (11.8%)	
Income per month			
None	27 (84.4%)	5 (15.6%)	0.008
Below K500.00	112(70%)	48 (30%)	
K500.00 and above	24 (100%)	0 (0%)	
Mode of transport			
Walking	26 (100%)	0 (0%)	<0.001
Public transport	74 (100%)	0 (100%)	
Ambulance	63 (100%)	0 (100%)	
Never been	0 (0%)	53 (100%)	

4.3.3.2 Association between obstetric and fistula history of women with obstetric fistula and not seeking fistula repair services

Table 4.6 shows that obstetric and fistula history factors of age at fistula occurrence (p-value 0.578), financial support (p-value 0.425), number of times women sustained a fistula (p-value 0.326) were all not statistically signicant with not seeking fistula repair services. However, there was a statistical significance between not seeking fistula repair services and number of children (p-value 0.026) and number of fistula repair attempts (p-value <0.001).

Table 4.6 Obstetric and fistula history of women with obstetric fistula and not seeking fistula repair services (n=216)

Variable	Seeking Yes	Not seeking No	P- Value
Age at fistula occurrence			
Below 15	12 (80%)	3 (20%)	**0.578**
15-24	100 (76.3%)	31 (23.7%)	
25-34	38 (71.7%)	15 (28.3%)	
35 and above	13 (76.5%)	4 (23.5%)	
Number of children			
None	48 (68.6%)	22(31.4%)	**0.026**
1- 3	80 (75.5%)	26 (24.5%)	

4-6	27 (90%)	3(10%)	
7 and above	8 (80%)	2 (20%)	
Financial support			
Self	94 (74.6%)	32 (25.4%)	**0.425**
Family	67 (76.1%)	21 (23.9%)	
Social cash transfer	2 (100%)	0 (0%)	
Number of times one has sustained a fistula			
One	135 (73.8%)	48 (26.2%)	**0.326**
Two	16 (84.2%)	3 (15.8%)	
Three	8 (100%)	0 (0%)	
Four	1 (100%)	0 (0%)	
Five	3 (60%)	2 (40%)	
Number of fistula attempts			
Never	0 (0%)	53 (0%)	**<0.001**
One	98 (100%)	0 (0%)	
Two	40 (100%)	0 (0%)	
Three	17 (100%)	0 (0%)	
Four	7 (100%)	0 (0%)	
Five	1 (100%)	0 (0%)	

4.3.4 UNIVARIATE ANALYSIS BETWEEN DEMOGRAPHIC, OBSTETRIC AND FISTULA HISTORY AND NOT SEEKING FISTULA REPAIR SERVICES

4.3.4.1 Univariate analysis between demographic variable and not seeking fistula repair services

Table 4.7 shows that four demographic variables of tribe, education, income and mode of transport were statistically significant with not seeking fistula repair services. The women with obstetric fistula who were Bemba by tribe were associated with the odds of 0.53 times less likely not to seek fistula repair services (OR= 0.53, (p = 0.011, 95% CI=[0.33, 0.86]) compared to being Tonga by tribe. Also those women who had attained primary education were 2.07 times more likely not to seek fistula repair services (OR=2.07, (p=0.033, 95%CI=[1.06, 4.08]) and those who had secondary education were 5.83 times more likely not to seek fistula repair services (OR=5.83, (p=0.026, 95%CI=[1.24, 7.27]) compared to those with no education respectively. Those with income of K500.00 and above were 0.43 times less likely not to seek repair services OR=0.43, (p=0.008, 95%CI= [0.16 - 1.19]) compared to those who had no income. In a similar way, women who used public transport to seek fistula repair services were 50.59 times more likely not to seek fistula repair services (OR= 50.59, (p= < 0.001, 95% CI=[5.26 - 486.88]). compared to those walked.

Table 4.7 Univariate analysis between demographic variables and not seeking fistula repair services (n=216)

Variables	Odds ratio	Confidence Interval	P- Value
Age	0.98	0.95 - 1.00	**0.090**
Tribe (Ref: Tonga) Bemba	0.53	- 0.33 - 0.86	**0.011**
Religion (Ref: None Christian) **Christians**	0.65	0.06 – 7.3	**0.723**
Education (Ref: None)			
Primary	2.07	1.06 -4.08	**0.033**
Secondary	5.83	1.24-7.27	**0.026**

Table 4.7 (b) Univariate analysis between demographic variables and not seeking fistula repair services (n=216)

Occupation (Ref: Not employed) Employed	1.37	0.58-3.23	**0.124**
Marital Status (Ref:Not married) Married	5.47	0.28-1.06	**0.072**
Years in marriage (Ref: 6-10 years) 0-5 years	1.07	0.99-1.15	**0.060**
Income per month (Ref: No income) K500.00 and above	0.43	0.16-1.19	**0.008**
Mode of transport (Ref: Walking) Public transport	50.59	5.26-486.88	< **0.001**

4.3.4.2 Univariate analysis between obstetric and fistula history and not seeking fistula repair services

Table 4.8 shows that two obstetric and fistula variables of number of children women had and number of fistula attempts at repair were statistically significant with not seeking fistula repair services. For every one unit increase in the number of children that women with obstetric fistula had, it was associated with the odds of 1.26 times more likely not to seek fistula repair services (OR= 1.26, (p=0.026, 95% CI=[1.03 - 1.53]). In a similar way, for every one unit increase in the number of fistula attempts at repair, it was associated with the odds of 0.68 times less likely not to seek fistula repair services (OR= 0.68, (p= <0.001, 95% CI=[0.03 - 0.17]).

Table 4.8 Univariate analysis between obstetric and fistula history not seeking fistula repair services (n=216)

Variables	Odds ratio	Confidence Interval	P- Value
Age at fistula occurrence	0.98	0.96-1.03	**0.578**
Number of children	1.26	1.03-1.53	**0.026**
Financial support (Ref: none)	1.06	0.56-2.00	**0.849**
Number of times sustained fistula(Ref: one)	1.17	0.738-1.86	**0.504**
Number of fistula attempts at repair	0.68	0.03- 0.17	**<0.001**

4.3.5 MULTIVARIATE LOGISTIC ANALYSIS

Table 4.9 presents not seeking fistula repair services and the demographic, obstetric and fistula history variables which remained statistically significant after adjusting for odds. Covariates which were significant at p- value less than 0.2 were included in multivariable logistic regression model. This is because some variables which were insignificant in the univariate model could be important factors in the multivariable model. Considering women who had no education as a reference catergory and keeping all other factors constant, the adjusted odds for secondary education was 12.82 times more likely not to seek fistula repair services [AOR: 12.82, (p=0.007, 95% CI: (2.01 - 81.96)]. For every one unit increase in the number of children women with fistula had, it was associated with the odds of 1.29 times more likely not to seek fistula repair services [AOR: 1.29, (p=0.03, 95% CI: (1.02 - 1.64)]. In the similar way, for every one unit increase in the number of fistula repair attempt, it was associated with the odds of 0.49 times less likely not to seek fistula repair service [AOR: 0.49, (p=<0.001, 95% CI: (0.39- 0.64)].

Table 4.9 Multivariate logistic regression analysis showing demographic variable and obstetric and fistula history and not accessing fistula repair services |(n=216)

Variables	Adjusted Odds ratio	Confidence Interval	P-Value
Age	0.98	0.95- 1.01	**0.270**
Tribe	5.47	0.40-1.20	**0.078**
Education (Ref: None)			
Primary	1.89	0.76 - 4.70	**0.170**
Secondary	12.82	2.01- 81.96	**0.007**
Mode of transport	0.64	0.05 -7.96	**0.726**
Number of children	1.29	1.02 -1.64	**0.033**
Fistula repair attempts	0.49	0.39 - 0.64	**<0.001**

AOR- Adjusted Odds Ratio; CI= Confidence Interval

4.3.6 FACTORS WOMEN EXPERIENCE IN SEEKING FISTULA REPAIR SERVICES

This section presents results on factors women with obstetric fistula experience in seeking fistula repair services. Using the SEM, factors women with obstetric fistula experienced in seeking fistula repair services attempted to address the objective of interest. The factors include; individual, interpersonal, community, organisational and societal. Some of the individual factors were presented as demographic, obstetric and fistula history variables.

4.3.6.1 Individual factors women with obstetric fistula experience in seeking fistula repair services

Table 4.10 shows the percentage distribution of individual factors women experience in seeking fistula repair services. More than half 127 (58.8%) stated that economic consequences prevented them in seeking fistula repair services. Majority 177 (81.9%) indicated that loss of dignity, anxiety 201 (93.1 %) and lack of knowledge 194 (89.8 %) prevented them from seeking fistula repair services respectively.

Table 4.10 Individual factors women experience in seeking fistula repair services (n=216)

Variable	Frequency	Percentage
Whether economic factors prevented women with obstetric fistula in seeking fistula repair services		
Yes	127	58.8%
No	89	41.2%
Whether loss of dignity prevented women with obstetric fistula in seeking repair services		
Yes	177	81.9%
No	39	18.1%
Whether anxiety prevented women with obstetric fistula in seeking repair services		
Yes	201	93.1%
No	15	6.9%
Whether lack of knowledge on condition and fistula repair services prevented women in seeking repair services		
Yes	194	89.8 %
No	22	10.2%

4.3.6.2 Interpersonal factors women experience in seeking fistula repair services

Table 4.11 shows the percentage distribution of interpersonal factors women with obstetric fistula experience in seeking fistula repair services. Almost two- thirds 135 (62.5%) of the women with obstetric fistula asked for permission to seek repair services and less than half 99 (45.8 %) sought permission from their family members. Less than two - thirds 133 (61.6%) indicted that they did not openly discuss matters related to obstetric fistula with their families and communities. About 154 (71.3%) of women with fistula indicated that the media was the most effective channel of communication to them to enable them seek repair services.

Table 4.11 Interpersonal factors women experience in seeking repair services (n=216)

Variable	Frequency	Percentage
Women ask for permission to seek fistula repair services		
Yes	135	62.5%
No	81	37.5%
Where permission was sought from		
Family	99	45.8 %
Non family member	36	16.7%
Did not	81	37.5%
Whether women with obstetric fistula openly discussed matters related to obstetric fistula		
Yes	83	38.4%
No	133	61.6%

4.3.6.3 Community factors women with obstetric fistula experience in seeking fistula repair services

Table 4.12 shows the percentage distribution of community factors women with obstetric fistula experience in seeking fistula repair services. Majority 185 (85.6%) of women with obstetric fistula indicated that myths and misconception prevented them in seeking fistula repair services. Less than one –third 53 (24.5%) stated that repair services were not accessible.

Table 4:12 Community factors women with obstetric fistula experience in seeking fistula repair services (n=216)

Variable	Frequency	Percentage
Whether myths and misconceptions on obstetric fistula prevented women with obstetric fistula in seeking fistula repair services		
Yes	185	85.6%
No	31	14.4%
Whether non accessibility of obstetric fistula services prevented women with obstetric fistula in seeking fistula repair services		
Yes	53	24.5%
No	163	75.5%

4.3.6.4 Organisational factors women with obstetric fistula experience in seeking fistula repair services

Table 4.13 shows the percentage distribution of organisational factors women with obstetric fistula women experience in seeking fistula repair services. Majority 191 (88.4%) of women with obstetric fistula indicated that fistula repair centres were available. Of the 163 women with obstetric fistula who have been for fistula repair services, majority 142 (87.1%) stated that the attitude of health care professionals was good and 132 (81%) stated that they were well received. Less than one- thirds 39 (23. 9%) indicated that health care professionals gave them education on obstetric fistula.

Table 4.13 Organisation factors women with obstetric fistula experience in seeking fistula repair (n=216)

Variable	Frequency	Percentage
Whether non availability of obstetric fistula services prevented women with obstetric fistula from seeking fistula repair services		
Yes	191	88.4%
No	25	11.6%
Whether women with obstetric fistula were received well by health care professionals		
Yes	132	81%
No	31	19%
Health care professionals attitude towards women with obstetric fistula		
Good	142	87.1%
Bad	21	12.9%

4.3.6.5 Societal factors women with obstetric fistula experience in seeking fistula repair services

Table 4.14 shows the percentage distribution of societal factors women experience in seeking fistula repair services. Majority 184 (85.2%) of women with fistula indicated health systems barriers and financing for the procedure 157 (72.7%) prevented them in seeking repair services respectively.

Table 4.14 Societal factors women with obstetric fistula experience in seeking fistula repair (n=216)

Variable	Frequency	Percentage
Whether health systems barriers prevented women with obstetric fistula in seeking fistula repair services		
Yes	184	85.2%
No	32.	14.8%
Whether financing for the procedure prevented women with obstetric fistula in seeking fistula repair services		
Yes	157	72.7%
No	59	27.3%

4.3.7 ASSOCIATION BETWEEN FACTORS WOMEN EXPERIENCE IN SEEKING FISTULA REPAIR SERVICES AND NOT SEEKING REPAIR SERVICES

4.3.7.1 Individual factors women experience in seeking fistula repair services and not seeking fistula repair services

Table 4.15 presents results of the association between individual factors women experience in seeking repair services and not seeking fistula repair services. About two-thirds 77 (66.1%) of women with obstetric fistula who indicated that loss of dignity prevented them from seeking fistula repair services did not seek care. .Majority 180 (89.6%) of those who stated that anxiety prevented them from seeking repair services did not seek. Majority 140 (72.2%) of those who indicated that lack of knowledge on fistula and repair services prevented them from seeking repair services did not seek care.

Table 4.15 Association between individual factors and not seeking fistula repair services (n=216)

Variable	Seeking	Not seeking	Total
Whether economic consequences prevented women with obstetric fistula in seeking fistula repair services			
Yes	98 (77.2%)	29 (22.8%)	**127 (100%)**
No	65 (73%)	24 (27%)	**89 (100%)**
Whether loss of dignity prevented women with obstetric fistula in seeking fistula repair services			
Yes	60 (33.9%)	117 (66.1%)	**177 (100%)**
No	29 (74.4%)	10 (25.6%)	**39 (100%)**
Whether anxiety prevented women with obstetric fistula in seeking fistula repair services			
Yes	21 (10.4%)	180 (89.6%)	**201 (100%)**
No	8 (53.3%)	7 (46.7%)	**15 (100%)**
Whether lack of knowledge prevented women with obstetric fistula in seeking fistula repair services			
Yes	54 (27.8%)	140 (72.2%)	**194 (100%)**
No	14 (63.6%)	8 (36.4%)	**22 (100%)**

4.3.7.2 Interpersonal factors women experience in seeking fistula repair services and not seeking fistula repair services

Table 4.16 resents results of the association between interpersonal factors women experience in seeking fistula repair services and not seeking fistula repair services. Majority 114 (84.4%) of those who asked for permission sought repair services. In the same vain, majority 95 (96%) of those who asked for permission from family members sought repair services. About two-thirds 77 (66.1%) of women with obstetric fistula who experienced loss of dignity did not seek fistula repair services. Majority 64 (77.1%) of women with obstetric fistula who stated that they openly discussed matters related to obstetric fistula sought fistula repair services.

Table 4.16 Association between interpersonal factors and not seeking fistula repair services (n=216)

Variable	Seeking	Not seeking	Total
Whether women asked for permission to seek fistula repair services			
Yes	114 (84.4%)	21 (15.6%)	**135 (100)**
No	28 (34.6%)	53 (65.4%)	**81 (100)**
Whom women asked for permission from to seek fistula repair services			
Family	95 (96%)	4 (12.9 %)	**99(100%)**
Non family members	19 (52.8%)	17(47.2%)	**36 (100%)**
Whether women with obstetric fistula openly discussed matters related to obstetric fistula			
Yes	64 (77.1%)	19 (22.9%)	**83 (100%)**
No	99 (74.4%)	34 (27%)	**133 (100%)**

4.3.7.3 Community factors women experience in seeking fistula repair services and not seeking fistula repair services

Table 4.17 shows that majority 150 (81.1%) of women with obstetric fistula who indicated that myths and misconceptions prevented them in seeking fistula repair services did not seek care. All 53 (100%) of those who indicated that non accessibility of obstetric fistula services prevented them from seeking fistula repair did not seek repair services.

Table 4.17 Association between community factors and not seeking fistula repair services (n=216)

Variable	Seeking	Not seeking	Total
Whether myths and misconceptions prevented women with obstetric fistula in seeking fistula repair services			
Yes	35 (18.9%)	150 (81.1%)	**185 (100%)**
No	13 (41.9%)	18 (58.1%)	**31 (100%)**
Whether obstetric fistula services were accessible			
Yes	0 (0%)	53 (100%)	**53 (100%)**
No	163 (100%)	0 (0%)	**163 (100%)**

4.3.7.4 Organisational factors women experience in seeking fistula repair services and not seeking fistula repair services

Table 4.18 shows that almost two-thirds 123 (64.4%) of women with obstetric fistula who stated that obstetric fistula services were available sought repair services. Majority 102 (77.3%) of women with obstetric fistula who stated that they were well received by health care professionals did not seek repair services. Majority 110 (77.5%) of women with obstetric fistula who stated that health care professionals attitude was good did not seek repair services.

Table 4.18 Association between organisational factors and not seeking fistula repair services (n=216)

Variable	Seeking	Not seeking	Total
Whether obstetric fistula services were available			
Yes	144 (75.4 %)	47 (24.6%)	**191 (100%)**
No	0 (0%)	25 (100%)	**25 (100%)**
Whether women with obstetric fistula were received well by health care professionals			
Yes	30 (22.7%)	102 (77.3%)	**132 (100%)**
No	13 (41.9%)	18 (58.1%)	**31 (100%)**
Health care professionals attitude towards women with obstetric fistula			
Good	32(22.5%)	110(77.5%)	**142 (100%)**
Bad	13 (61.9%)	8 (38.1%)	**21 (100%)**

4.3.7.5 Societal factors women experience in seeking fistula repair services and not seeking fistula repair services

Table 4.19 shows that .Majority 119 (64.7%) of women with fistula who indicated that health systems barriers prevented them in seeking fistula repair services did not seek repair services. Almost two-third 100 (63.7%) of women who indicated that financing for the procedure prevented them from seeking fistula repair services did not seek repair services.

Table 4.19 Association between societal factors and not seeking fistula repair services (n=216)

Variable	Seeking	Not seeking	Total
Whether health systems barriers prevented women with obstetric fistula in seeking fistula repair services			
Yes	65 (35.3%)	119 (64.7%)	**184 (100%)**
No	20 (62.5%)	12 (37.5%)	**32 (100%)**
Whether financing for the procedure prevented women with obstetric fistula in seeking fistula repair services			
Yes	57 (36.3%)	100 (63.7%)	**157 (100%)**
No	40 (67.8%)	19 (32.2%)	**59 (100%)**

4.3.8 UNIVARIATE ASSOCIATION BETWEEN FACTORS WOMEN EXPERIENCE IN SEEKING FISTULA REPAIR SERVICES AND NOT SEEKING CARE

Table 4.20 shows that all factors women with obstetric fistula experience in seeking fistula repair services were statistically significant except for openly discuss matters related to obstetric fistula (p-value = 0.349).

Table 4.20 Association between factors women with obstetric fistula experience in seeking fistula repair services and not seeking care

Variable	Odds Ratio	Confidence Interval 95%	P-value
Ask permission to seek fistula repair (Yes)	2.10	1.12-3.93	**0.021**
Ask permission from family members (Yes)	0.17	0.075- 0.394	<**0.001**
Economic factors preventing women in seeking repair services (Yes)	5.95	1.222-28.95	**0.027**
Loss of dignity (Yes)	52.14	18.21- 149.26	<**0.001**
Anxiety (Yes)	31.77	6.95- 145.39	<**0.001**
Table 4.20 (b) Association between factors women with obstetric fistula experience in seeking fistula repair services and not seeking care			
Lack of knowledge on obstetric fistula and repair services (Yes)	14.31	2.92- 70.04	<**0.001**
Openly discuss matters related with obstetric fistula (Yes)	0.72	0.37- 1.42	**0.349**
Channels of communicating with women (other sources)	0.28	0.084-0.993	**0.043**
Myths and misconception (Yes)	30.43	10.72-86.34	<**0.001**
Non accessibility of fistula repair services (Yes)	44.53	15.63- 126.86	<**0.001**
Non availability of fistula repair services (Yes)	0.216	0.105-0.447	<**0.001**
Well received by health care providers (Yes)	8.85	4.04- 19.39	<**0.001**
Health care professionals attitude (Good)	17.26	6.80-43.81	<**0.001**
Health systems barriers (Yes)	32.82	11.57-93.11	<**0.001**
Financing for the procedure (Yes)	66.73	130.09- 3422. 54	<**0.001**

4.3.9 MULTIVARIATE LOGISTIC REGRESSION

Table 4.21 presents not seeking fistula repair services (outcome variable) and factors women with obstetric fistula experience in seeking fistula repair services which remained statistically significant at p-value less than 0.2 in multivariable logistic regression model. According to the multivariate logistic regression analysis, those who indicated health care professionals good attitude were 25.74 times more likely not to seek fistula repair services [AOR; 25.74, (p value =0.007, 95% CI: (3.83- 4126. 31)] compared to those who indicated bad. Those who stated that myths and misconception prevented them those seeking fistula repair service were 1.03

times more likely not to seek repair services [AOR; 1.03, (p value =<0.001, 95% CI: (4.19-09- 2.51-06) compared to those who stated no. Those who stated that they experienced health systems barriers were 33.86 times more likely not to seek repair services [AOR; 33.86, (p value =<0.001, 95% CI: (478232.4- 2.40e+07) compared to those who stated no. Those who indicated that financing for the procedure prevented them from seeking fistula repair services were 606.59 times more likely not to seek repair services [AOR; 606.59, (p value =<0.001, 95% CI: (92.52454-3976.92) compared to those who stated no.

Table 4.21 Multivariate logistic regression analysis showing the association between factors women experience in seeking fistula repair services and not seeking (n=216)

Variables	Adjusted Odds Ratio	Confidence Interval 95%	P- Value
Health care provider attitude (Good)	25.74	3.83 -4126.31	**0.007**
Myths and misconception (Yes)	1.03	4.19-09-2.51-06	**<0.001**
Health systems barrier (Yes)	33.86	478232.4- 2.40e+07	**<0.001**
Financing for the procedure (Yes)	606.59	92.52454 -3976.92	**<0.001**

AOR- Adjusted Odds Ratio; CI= Confidence Interval

4.4 OBJECTIVE 3 RESULTS: VIEWS OF HEALTH CARE PROFESSIONALS ON FACTORS WOMEN WITH OBSTETRIC FISTULA EXPERIENCE IN SEEKING HEALTH CARE

4.4.1 DEMOGRAPHIC CHARACTERISTICS OF HEALTH CARE PROFESSIONALS

Table 4.21 shows demographic characteristics of health care professionals. Slightly more than half 35 (53.9%) were aged between 20 to 35 years. Majority 51 (78.5%) were female. Majority 53 (80%) were working in surgical/gynecological wards while 13 (20%) were working from MOH, PHO, UNFPA. About 50 (76.9%) had been working in the same departments for 0-5 years.

Table 4.21 Demographic Data for health care professionals (n=65)

Variable	Frequency	Percentage
Age		
20-35 years	35	53.9%
36 and above	30	46.1%
Sex		
Females	51	78.5%
Males	14	21.5%
Marital status		
Married	42	64.6%
Not married	23	35.4%
Religion		
Christians	64	98.5%
Non-Christians	1	1.5%
Qualification		
Degree	10	15.4 %
Diploma	37	56.9%
Certificate	18	27.7%
Department working from		
Surgical Ward/ Gynecological Ward	52	80 %
MOH/ PHO/UNFPA	13	20%
Number of years working in that department		
0 - 5years	50	76.9 %
6 years and above	15	23.1%

4.4.2 VIEWS OF HEALTH CARE PROFESSIONALS ON FACTORS WOMEN WITH OBSTETRIC FISTULA EXPERIENCE IN SEEKING FISTULA REPAIR SERVICES

Table 4.22 presents results on views of health care professionals views on factors women experience in seeking fistula repair services. On lack of knowledge on the condition and fistula repair services, majority 48 (73.8%) that fistula centres should be built in villages to easy education on the condition and fistula repair services. Regarding anxiety, about half 33 (50.8%) viewed that families of women with obstetric fistula should be targeted and given information on obstetric fistula. Concerning loss of dignity, majority 56 (86.2%) indicated

that women with obstetric fistula and their relatives should be counselled before and and after fistula repair so as to avoid a recurrence. However, on stigma, about two-thirds 43 (66.2%) viewed improving the tracking system of the women with obstetric fistula by government as beneficial. Concerning transportation challenges, majority 48 (73.2%) stated the need for transport refund for those who seek repair services using their own resources. Regarding financing for the procedure, all 65 (100%) were of the view that government should provide free fistula services and that husbands to women with obstetric fistula must not abandon their wives following development of a fistula respectively. In the same vain, on myths and misconception, all 65 (100%) were of the view that communities needed to be sensitised on the known myths and misconception regarding the condition. On health systems barriers, majority 47 (72.3%) were of the view that government should train fistula surgeons as unsuccessful repairs had an impact on womens decision to seek fistula repair services.

Table 4.22: Health care professionals views on factors women with obstetric fistula experienced in seeking fistula repair services (n=65)

Views

	Yes		**No**	
	n= 65	**%**	**n=65**	**%**
Lack of knowledge on condition and repair services				
Build fistula centres in villages	48	73.8	17	26.2
Sensitise chiefs, community leaders, community based volunteers, religious leaders, local government officials and Non-governmental	38	58.5	27	41.5
Educate all pregnant women during Antenatal clinics on obstetric fistula	22	33.3	43	66.2
Mobile clinics to include obstetric fistula repair	24	36.9	41	63.1
Anxiety				
Target families of afflicted women and give them information on obstetric fistula	33	50.8	32	49.2
Families to escort the afflicted woman for fistula repair	22	33.8	43	66.2
Loss of dignity				
Counselling to afflicted women and their relatives pre- and post-fistula repair on obstetric fistula	56	86.2	9	

Table 4.22(b): Continuation of Health care professionals views on factors women with obstetric fistula experienced in seeking fistula repair services (n=65)

Stigma				
Formulation of fistula support groups in the community	6	9.2	59	90.8
Government to improve on the tracking system	43	66.2	22	33.8
Transportation challenges				
Afflicted women should be recruits on social cash transfer	21	32.3	44	67.8
Transport refund for those who seek repair services using own resources	48	73.8	17	26.2
Government to build proper road networks	12	18.5	53	81.5
Keeping women who sustain a fistula until repaired	2	3.1	63	96.9
Financing for the procedure				
Government to provide free fistula services	65	100	0	0
Educate men not to abandon their wives after sustaining a fistula so as to support their wives financially	65	100	0	0
Myths and misconceptions				
Sensitise the communities on myths and misconception on obstetric fistula	65	100	0	0
Engage Ministry of traditional affairs	5	7.7	60	92.3
Health systems barriers				
Train surgeons on how to repair afflicted women	47	72.3	18	27.7

4.5 SUMMARY

This chapter presented findings from both the qualitative and quantitative components of the study. The qualitative component generated four themes that attempted to unveil issues surrounding experiences of women with obstetric fistula in seeking health care. The themes were barriers to seeking fistula repair services, enablers to seeking fistula repair services. pregnancy, childbirth and postpartum experiences as well as stress. These findings were derived from in-depth interviews conducted with women with obstetric fistula. Most women with obstetric fistula did not know what fistula was, whether the condition was treatable, or where to get treatment. The findings also expressed, having no income affected the health seeking behavior of women as

receiving surgical repair was facilitated through financial support from the spouse, family, health facility and partnerships with the government. Long distances to health facilities, lack of and cost of transport, fear of travelling alone were contributory factors in delay seeking surgical repair. Women with obstetric fistula also faced referral and repair challenges and shortages of fistula surgeons implying a significant delay in seeking fistula repair services

The quantitative component revealed that age of women with fistula ranged from 18-87 years. More than half (60.7%) sustained a fistula between 15 and 24 years old. Almost two-thirds 137 (63.4%) had primary education and almost all 209 (96.3%) were not employed. There was a statistical significance between not seeking repair services and tribe (p value- 0.011, education level (pvalue-0.018), income (p-value 0.008) and mode of transport (p value – 0.001), number of children (p value 0.026) and number of fistula repair attempts (p value- 0.001). Multivariate analysis showed that secondary education [AOR: 12.82, (p=0.007, 95% CI: (2.007-81.96)], increase in the number of children [AOR: 1.29, (p=0.033, 95% CI: (1.0203- 1.638)] and increase in the number of fistula repair attempt [AOR: 0.4984, (p=<0.001, 95% CI: (0.3876- 0.6411)] had a bearing in not seeking fistula repair services.

Factors women with obstetric fistula experienced in seeking repair services were analysed using the SEM; individual, interpersonal, community, organisational and societal. Univariate analysis showed that there was a statistical significant association between factors women with obstetric fistula experienced in seeking fistula repair and not seeking repair services. Multivariate analysis showed health care professionals bad attitude [AOR; 25.74, (p value =0.007, 95% CI: (3.83- 4126. 31)], myths and misconception [AOR; 1.03, (p value =<0.001, 95% CI: (4.19-09- 2.51-06), health systems barriers [AOR; 33.86, (p value =<0.001, 95% CI: (478232.4-2.40e+07) and financing for the procedure [AOR;606.59, (p value =<0.001, 95% CI: (92.52454-3976.92) had a bearing in not seeking fistula repair services.

Further, health care professionals provided their views on factors women with obstetric fistula experience in seeking health care. Some of the views received the highest scores while others the lower scores. Health care professionals were of the view that government should provide free fistula services (100 %), sensitise women on myths and misconception regarding the condition (100%), spouses not abandoning their wives following development of a fistula (100%) so as to offer financial and emotional support, counselling of women including their families before and after surgical repair (86.2%), , transport refund for those who seek repair services (73.8%), building fistula repair centres in villages (73.8%), training fistula surgeons (72.3%), improving the tracking system of women (66.2%) and sensitising chiefs, community leaders, community based volunteers, religious leaders, local government official and non-governmental organisations on obstetric fistula (58.5%).

CHAPTER FIVE

DISCUSSION OF RESULTS AND FINDINGS

5.0 INTRODUCTION

The purpose of the study was to explore experiences of women with obstetric fistula in seeking health care in order to develop strategies that would encourage women with obstetric fistula to access fistula repair services promptly. The study utilised a mixed methods concurrent design which involved collection and analysis of qualitative and qualitative data simultaneously. In- depth interviews were conducted with women with obstetric fistula as well as structured interview schedule with women with obstetric fistula and health care professionals. The qualitative phase was to explore experiences of women with obstetric fistula. The quantitative data sought to determine assess factors women with obstetric fistula experience in seeking health care and health care professionals views on factors women experienced.

5.1 DISCUSSION OF OBJECTIVE 1 FINDINGS

5.1.1 PARTICIPANTS DEMOGRAPHICS, OBSTETRIC AND FISTULA HISTORY CHARACTERISTICS

The study showed that the age of women with obstetric fistula in the in-depth interviews ranged from 18 to 87 years. This could be attributed to the barriers women experience in seeking fistula repair services. Similarly, this finding is supported by Egziabher *et al.* (2015) who reported that despite prevention efforts and free treatment of obstetric fistula, many women in communities delay seeking treatment and continue to live with fistula. Half of the women with obstetric fistula were married at the time of interviews. This means that not all women who sustain a fistula are divorced. This is in line with many studies conducted in Africa regarding divorce, for example, a study conducted in seven administrative regions of rural Ethiopia, found out that 69.2% of women were divorced after developing an obstetric fistula (Muleta *et al.,* 2010). Four (4) out of sixteen women with obstetric fistula had no children. This could mean that women did not access delivery services in good time during the pregnancy that resulted in sustaining a fistula. This finding is supported by Kabayambi *et al.* (2014) who reported that delayed labour quite often leads to the death of the woman and the baby, and in the event that the woman survives, she may experience uncontrollable leakage of urine and /or faeces. Thirteen (13) had one or more attempts at fistula repair. This could be attributed to health care proffessionals skill in repairing fistula or nurse's failure to provide adequate nursing care for repaired women. This calls for the great need of successful repair during the first fistula attempt as most women are eager to be repaired.

5.1.2 THEMES

Qualitative interviews with women with obstetric fistula revealed experiences of women in seeking heath care as well as their experiences living with a fistula. Experiences in seeking health care addressed the barriers to seeking fistula repair services as well as enablers to seeking health care. Women with obstetric fistula reported that they were not given health education on obstetric fistula and repair services by health care professionals which hindered them from seeking health care. This finding is in agreement with a study by Yeakey *et al.* (2011) conducted on women with fistula which revealed that health care providers did little to increase women's understanding of the condition. Also, Were (2015) in his study further revealed that none of the health facilities had any IEC materials on obstetric fistula and that accounted for the inability of the health service providers to effectively educate the community members about obstetric fistula. Further, some women with obstetric fistula indicated that upon sustaining a fistula, a urinary catheter was inserted without any explanation on why that was done. Further, women with obstetric fistula indicated that they were not referred by the local clinics, hospitals where they delivered from to hospitals that offered repair services. This could mean that the health care professional did not know where repair services could be sought from. This finding is supported by Ruder (2012) who reported that fistula survivors described receiving minimal information from medical personnel. In the same study, fistula patients also reported that others received inaccurate information; they were told that it was not urine, but water they were leaking, that the leaking was normal, or that it would heal over time. This calls for health care professionals to be educated on obstetric fistula so that they could provide good guidance to women with fistula. Women with obstetric fistula also complained about the appointments which were not honoured by the repairing hospitals which further discouraged them from seeking fistula repair services. This could be attributed to the few hospitals that offer repair services and also to lack of fistula surgeons in the country. Furthermore, women with fistula mentioned of unsuccessful repairs which discouraged them in seeking fistula repair services. This finding is supported by Ruder (2012) who revealed that several women reported undergoing surgery multiple times without receiving any explanation as to what was happening to their body or why the surgery was unsuccessful. There is need to offer specialized training in fistula repair. Proper training can equip practitioners with the necessary skills to improve care as well as access. Women with obstetric fistula also had an experience of being called for fistula repair camps during the rainy season and/or according to the preference of the repairing hospital. This discouraged them from seeking repair services as they opted to work in their fields in order to sustain their living. This finding is supported by Group Health, (2011) which reported that treatment thresholds needed to be negotiated together with the patient. Women also reported seeking repair services from traditional healers first before seeking repair services. This could be attributed to the fact that traditional healers were within their vicinity and cheaper. It could also be due to the fact that women believed having a fistula was a punishment from God and that health care professionals caused it. If women hold such beliefs, it could really hinder them in seeking fistula repair services. This finding is supported by Woldaemanuel (2012) study who revealed that traditional and religious treatments were significantly cited by the women with

fistula as the right method to be cured from an obstetric fistula. Similarly, Mc Clure *et al.* (2007) in their study stated that hospitals were a last resort, as costs and logistics concerning care and transport were forbidding.

Enablers identified generally addressed the barriers to seeking fistula repair services. Women with obstetric fistula reported social support as an enabler to seeking fistula repair services. Social support reported was in terms of family, community, health facility and non-governmental organisation support since women with obstetric fistulas economic status were insufficient to meet their basic needs or have their condition corrected. Some women reported that they were supported with transport money to and from fistula repair centres that is how they had been managing to go for repair services. Further, those who indicated health facility support stated that health care professionals needed to inform them about the fistula repair schedule and how to avoid a recurrence. In terms of non- governmental support, women with obstetric fistula were aware of co-operating partners supporting government regarding obstetric fistula repair services such as Fistula Foundation and UNFPA working in their communities. The partners' refunded women with obstetric fistula who sought surgical repair using their own transport money because the biggest challenge was money for transport. This finding is in line with a study by Yeakey *et al.* (2011), who indicated in their study that women repaired through the UNFPA intervention had an easier time, in many ways, finally getting treatment. They were identified through community contacts, invited to participate in the repair surgery and provided with transportation. Women with obstetric fistula also mentioned that the local clinics needed to play a center stage in ensuring that they were transported to the hospitals that conducted repair services. Further, women with obstetric fistula opted to be transported to the hospitals that offered repair services by non – governmental organizations. This could be attributed to the fact that being picked by arranged transport made it easier to seek fistula repair services. Woman also narrated that staying in hospital after sustaining a fistula until repaired was an enabling factor. This was perceived as a good idea bearing in mind the issues to do with transport money and/or transportation challenges to seek repair services. Keeping all those who sustained a fistula could be an expensive venture but is worth considering looking at the dehumanizing effect of the condition.

Women also reported their general experiences living with an obstetric fistula. Out of the sixteen women interviewed only two (2) women with obstetric fistulas had the experience of not attending the antenatal clinic during the pregnancy that resulted into sustaining a fistula. This may mean that in general women attend the antenatal clinic. This finding is consistent with a study that was conducted by collaborative efforts of a number of institutions, including the Women's Dignity project and Engender Health, together with partners in Tanzania: Bugando Medical Centre; Health Action Promotion Association (HAPA); Kivulini Women's Rights Organisation; and Peramiho Mission Hospital in three districts in 2006 where nearly all the women with obstetric fistula had visited the antenatal clinic. Further, study findings showed that those who attended the antenatal clinic, they did so three or more times during the pregnancy that led to obstetric fistula. However, for those who did not attend antenatal clinic, it was attributed to living far away from the clinic. In the same study, those who

did not attend the antenatal clinic, it was due to the fact that distance to services was too large and that most women did not have the decision-making power to seek health care.

Regarding place of delivery for the pregnancy that resulted into fistula, some women with obstetric fistula indicated that they delivered from the hospital while others delivered either at home or at the clinic. Women with obstetric fistula mentioned that delay took place either at home and at the hospital. The reasons given for not going to deliver at the hospital were that they were young, distance to the health facility was too large and that some women have had spontaneous vaginal delivery at home before. Similarly, Mselle *et al.* (2011) reported that health facilities were frequently far away from where many women lived and women had to walk for many hours, or spend money on transport to get to them**.** Equally in the in depth interviews, women with obstetric fistula mentioned that caesarean section and episiotomy was the cause of their fistula. This could mean that women had varied knowledge on the causes of obstetric fistula and therefore needed to be educated on the causes of obstetric fistula. Similar findings were reported in a study by Tanzania Women's Dignity project and Engender Health (2006) which revealed that some women with fistula attributed their fistula to hospital procedures or to the provider.

Women with obstetric fistula experienced a mix of feelings towards whom to reveal the condition to first after sustaining a fistula. Some reported to the person who escorted them for delivery, others reported to their mothers, husbands, health care professionals, relatives, sisters and their biological fathers. Only one woman revealed that she did not inform anyone. This shows that women at least share their experiences with others either immediately or later in life. However, this presents an opportunity for involvement of the families and communities in the care of women with obstetric fistula. Further, the person they informed first either told them that treatment could not be sought in the village except at the hospital, others were told that the doctor who made that mistake of causing a woman to sustain a fistula should ensure that the woman gets healed, some were told that they had never heard of such a condition and they had never seen any woman with such a condition while some were chased from their home by their families. This calls for continuous awareness of women with obstetric fistula, their families and communities on obstetric fistula so that the truth about obstetric fistula and repair services could be known.

Women with obstetric fistula also reported that upon reaching home from the hospital with an obstetric fistula, some spouses, family members, community members stigmatised them mainly as a result of leaking urine and/or faeces. Some women were told bad things by people around them; others who knew their condition (including their family members) started telling other people in the community about their condition. Others were laughing, spitting saliva in their presence and shunning away from them. This finding is supported by Uzoma *et al.* (2014) study who reported that the condition came with a lot of discrimination and stigmatisation.

Some husbands upon realizing that their wives had a fistula problem started complaining that they could not live with them and eventually run away and remarried. Some women with obstetric fistula were being mocked that they pea on themselves, smell urine and that flies were all over them. Women reported that being mocked made them to isolate themselves. This finding is supported by Barageine *et al.* (2015) who revealed that most afflicted women were ridiculed, scorned, verbally abused and non-verbally mocked. Some women with obstetric fistula reported stopping attending social gatherings like church services and funerals because of the leakage and smell of urine. This finding is consistent with a study by Kay *et al.* (2015) in their study entitled "Giving Voice to the Experiences of Rwandan Women with Urogenital Fistula," where it was reported that afflicted women avoided events that required long stretches outside their homestead, due to concerns that they could not be able to manage the flow of urine. In the same study, it was reported that whether afflicted women were with their family or non-kin, they always kept a distance to avoid the detection of urine on their clothes or an odour. Further, some women reported that they attended funerals but stated sitting in a corner alone and those who went to church reported sitting at the back where most people could not notice the leakage. This finding is supported by Barageine *e t al.* (2015) who revealed that those who attended social and religious functions had to develop some behaviour modifications for example, women avoided standing up or raising their voices when singing.

Women with obstetric fistula also reported having experienced divorce, abandoned and not supported by their families and communities after sustaining a fistula. This finding is consistent with Weston *et al.* (2011) study who found out that women living with obstetric fistula suffered from a high divorce rate as well as abandonment by husbands which left them alone and unsupported (Yeakey *et al.,* 2009). Further, some women with obstetric fistula decided not to remarry while others remarried. Those who remarried faced similar problems of being abandoned, separated and eventually divorced. This means that social consequences are unavoidable with regards obstetric fistula.

Women with obstetric fistula also reported experiencing fistula wound pain which impaired their physical activities. Other discomforts felt by women included backache, body feeling weak and cold. Other reported symptoms were dizziness, blurred vision, air like sound coming from the vagina, sores all over thighs and painful legs. Also, women with obstetric fistula reported experiencing weight loss, loss of bodily control, pain around the pelvis, physical exhaustion, inability to walk or work, foul smell which caused embarrassment and humiliation. This finding is in agreement with Mselle *et al.* (2011) study who revealed that obstetric fistula was a physically and socially disabling obstetric complication. Further, due to the constant leakage of urine and/or stool, women with obstetric fistula narrated how they had to change pads they made from clothes, diapers at least 3 to 8 times a day. According to Kay *et al.* (2015), several women with obstetric fistula discussed their daily struggle of their condition such as the daily chores of making diapers from cloth and the frequently changing and cleaning their clothes. Women with obstetric fistula further indicated that clothes were to be washed every time though they could get old because of the washing. Money to buy soap and detergent was a big challenge too

especially for those who were not working and had no source of income/no support systems. This finding is in agreement with Turan *et al.* (2007) who revealed that afflicted women needed to wash and change pads frequently.

Women with obstetric fistula further reported that after living with fistula for some time, they ended up accepting their situation. This led to them interacting with their families and peers concerning seeking fistula repair services. Similar findings were reported by Gumodoka (2010) in his study that the source of information regarding the availability of fistula treatment was from friends mostly (27%) and the family (24%). Further, those who were abandoned by their loved ones started associating with their communities. Also, some women with fistula started attending social gatherings. Through interaction, women with obstetric fistula were informed where repair services could be obtained from. Family members were also asked by women with obstetric fistula to find out from the nearest clinic where fistula repair services could be obtained from. Some women with obstetric fistula also asked to be escorted to the hospital that offered repair service by their family members. Also as time went by, women who sought traditional medicine ended up seeking fistula repair services from the hospital**.** This finding is supported by Maulet *et al.* (2015) who reported that a few afflicted women initially consulted witchdoctors before turning to modern health care.

Women with obstetric fistula also reported that they experienced pain during intercourse. Some reported leaking urine during intercourse which discouraged their husbands from having sex and later divorced them. Other women reported cleaning their vagina before intercourse. Further, women reported that their partners left them because they could not continue having sex. Those that remarried had the same experiences. This finding is supported by Lewis and Bernis (2008) who reported that fistula lead to sexual problems and frequent divorce.

5.2 DISCUSSION OF OBJECTIVE 2 RESULTS

5.2.1 WOMEN WITH OBSTETRIC FISTULAS SOCIO-DEMOGRAPHICS, OBSTETRIC AND FISTULA HISTORY CHARACTERISTICS

The study showed that the age of women with obstetric fistula ranged from 19 to 87 years. This shows that in general women with obstetric fistula live with the condition for years. This is in line with many studies conducted in African countries where similar age range for women with obstetric fistula have been reported except that for Zambia even those above 80 years have been reported in the current study for instance, Drew *et al.* (2016) revealed the age range of 19 - 76 years among the women with obstetric fistula in Malawi while Abokaiagana (2010) in his study conducted in Ghana reported the age range to have been between 20 to 70 years. Majority 138 (63.9%) were Bemba speaking people while the lowest group were Luvale 2 (0.9%). This may be due to the fact that two study sites (Luapula and Muchinga Province) has their main tribal grouping as

Bemba. It could also probably be that more women with obstetric fistula are Bemba. The finding of the current study is similar to a study conducted by Holme *et al.* (2006) in Zambia who revealed that 52.3% of the women with obstetric fistula were Bemba speaking people. Almost all 208 (96.3 %) were Christians. This could be attributed to the fact that Zambia is a Christian nation. It could also be due to the fact that over 90% of the populations worldwide are Christians.

Of the 216 interviewed women with fistula, less than two-thirds 137 (63.9%) had primary education, secondary education 22 (10.2%) and 57 (26.4%) had never been to school. According to ZDHS of 2018, 16 percent of females had never been to school, 46 percent had some primary education, 11 percent had completed primary school, 19 percent had some secondary education, 4 percent had completed secondary education, and 3 percent had more than a secondary school education. The low numbers of education among women with obstetric fistula poses a big challenge as education presents an opportunity for effective health education because people are able to internalize information given. Almost all 208 (96.3%) of women with obstetric fistula were not employed. Further, in the 2013-14 ZDHS, findings show that the agricultural sector remains the primary employer in Zambia with 48 percent of women engaged in agricultural occupations. It is important to note that being self-employed could be attributed to the fact that majority of women who participated in the study had never been to school or had only attained primary education hence could not be in formal employment because of their little or no education. This means that women with obstetric fistula especially those who were still married could have depended on their husbands and relatives for support. Majority 181 (83.3%) of the women with obstetric fistula were married at the time they sustained a fistula and 128 (59.3%) were still married at the time of interviews**.** This means that not all women who sustain a fistula are divorced after sustaining a fistula. This is in line with many studies conducted in Africa regarding divorce. For instance, a study conducted in seven administrative regions of rural Ethiopia, found out that 69.2% of women were divorced after developing an obstetric fistula (Muleta *et al.,* 2010) while in another study done by Neilson *et al.* (2009) only 5% of women were divorced after developing an obstetric fistula. Further, of those who were still married after sustaining a fistula, less than one- third 72 (32.8%) had been in their marriage for 0 - 5 years. About 32 (14.8%) had no source of income. This could be attributed to the fact that most women were not employed. Majority 160 (74.1%) had a monthly income of below K500.00 (USD $50). In the study conducted by Muleta (2008) in Ethiopia, it was found out that fistula patients had a significantly lower monthly income than non fistula patients from the same region with comparable age group. In the same study, about 43% of fistula patients were getting less than 11.6 USD per month which is about 1/3rd of a dollar a day. Slightly more than one –third 76 (34.3%) used public transport to seek repair services and only 26 (12.6%) walked. This could mean that the main source of transport for fistula patients to seek repair services is public transport. Gebrasilase (2014) study revealed that of the six women

with obstetric fistula interviewed, three used public transport and two travelled in a car facilities arranged by non-governmental organizations to seek repair services.

Majority 131 (60.7%) sustained a fistula between 15- 24 years. This could be attributed to the fact that most women develop fistula during their first pregnancy. According to the 2013-14 ZDHS, childbearing begun early in Zambia with more than one-third of women giving birth by the age of 18 and more than half giving birth by age 20. The study showed that less than half 106 (49.1%) of the women with obstetric fistula had between 1-3 children. The limited number of children could be attributed to the fact that after sustaining fistula women did not want to get pregnant again for fear of having a recurrence. It could also be that women developed infertility or were divorced or abandoned. Hsiung and Savback (2014) revealed that the women who had children before had between three to four children. More than half 126 (58.4%) of the women with obstetric fistula financially supported themselves and only 2 (0.9%) were on the Governments social cash transfer. Majority 163 (75.5 %) had been for fistula repair services. This could be attributed to the fact that only surgical repair can correct a fistula. Majority 183 (84. 7%) had sustained a fistula for the first time. This could be attributed to the fact that there are many women who sustain a fistula during delivery. It could also mean that most women who seek fistula repair are those who sustain a fistula for the first time. Of those women with obstetric fistula who had fistula attempt at repair, less than half 98 (45.4 %) stated that they had one fistula attempt at repair. This could mean that most women with obstetric fistula who sought fistula repair services had sustained a fistula for the first time. It could also mean that women with obstetric fistula were discouraged from seeking repair services because repairs were unsuccessful. Similarly, a study conducted in rural Bangladesh revealed that 69% of women with obstetric fistula underwent surgery only once and 31% had undergone repeated surgery (Imoto *et al.,* 2015). This calls for the great need of successful repair during the first fistula attempt at repair as most women are eager to be repaired. There is also need for continuous awareness of women with obstetric fistula on the possibilities of repair so that if it is unsuccessful, they could still seek fistula repair services.

5.2.2 FACTORS WOMEN WITH OBSTETRIC FISTULA EXPERIENCE IN SEEKING HEALTH CARE

There are a number of factors women with obstetric fistula experience in seeking fistula repair services. The factors are discussed according to the SEM under the following heading: Individual, interpersonal, community, organisational and societal factors.

5.2.2.1 Individual factors

Majority 177 (81.9%) of the women with obstetric fistula indicated that loss of dignity prevented them from seeking fistula repair services while 201 (93.1%) reported that anxiety prevented them in seeking fistula repair services. Evidence show that women living with fistula experience loss of dignity, anxiety and low self-worth (Inbaraj, 2004: Mselle *et al.*, 2011; Narcisi *et al.*, 2010). Anxiety and loss of dignity, requires more awareness and counselling as women who may not achieve complete healing of their fistula fail to continue seeking repair services and live with continued consequences of fistula. The study also showed that about two- thirds 117 (66.1%) of those who indicated that loss of digmity prevented them from seeking repair services did not seek care. Further analysis show that women with obstetric fistula who stated that loss of dignity prevented them from seeking fistula repair services were 52.14 times more likely not to seek fistula repair services (OR=52.14, (P=<0.001, 95%CI [18.21, 149.26] compared to those who did not. With regards anxiety 180 (89.6%) of those who stated that they experienced anxiety did not seek care. Further analysis show that women with obstetric fistula who stated that anxiety prevented them from seeking fistula repair services were 31.78 more likely not to seek fistula services (OR- 31.78,(P=<0.001, 95% CI [6.95, 145.39]) compared to those who did not. Also, majority 194 (89.8%) who reported that they lacked knowledge on the condition and fistula repair services did not seek care. This finding is supported by Ruder (2012) who reported that fistula survivors described receiving minimal information from medical personnel. The study also showed that majority 140 (72.2%) of those who indicated that lack of knowledge prevented them from seeking fistula repair services did not seek care. Further analysis showed that women with obstetric fistula who indicated that lack of knowledge on the condition prevented from seeing fistula repair services were 14.31 times more likely not to seek fistula repair services (OR=14.31, (P=<0.001, 95%CI[2.90, 70.04]) compared to those who did not.

5.2.2.2 Interpersonal factors

About 135 (62.5%) of women with obstetric fistula requested for permission to seek fistula repair services. This is a clear indication that women who sustain a fistula ask for permission in order to seek health care. Similarly, according to ZDHS 2013- 2014, when women with fistula like symptoms were asked whether or not they got permission to seek surgical treatment only 3 percent of women perceived getting permission to go for treatment as a problem. Majority 114 (84.4%) of those who asked for permission to fistula repair services sought care while 53 (65.4%) of those who did not ask for permission did not seek care. Further analyses showed that women with obstetric fistula who asked for permission to seek fistula repair services were 2.10 times more likely not to seek repair services (OR= 2.10, (p=0.021, 95% CI= [1.12, 3.93]) compared to women who did. Also, majority 99 (73.3%) of women with obstetric fistula asked for permission from their families while 36 (26.7%) asked from non-family members. Majority 95 (96%) of those who asked for permission from family members sought care while 17 (47.2%) of those who asked for permission to seek care from non-family members did not seek care. This is in agreement with Woldaemanuel (2012) study which reported that finances and support from the families were also crucial in seeking treatment. Further analysis show that those who asked

for permission from family members were 0.172 times less likely not to seek fistula repair services (OR=0.172, (p=0.000, 95% CI=[.075, 3.94]) compared to those who asked for permission from none family members. Woldaemanuel (2012) in his study reported that most women (65.1 percent) required the permission of others to seek treatment. More than half 127 (58.8%) of women with obstetric fistula indicated that economic consequences prevented them from seeking repair services. This findings is in agreement with Bangser (2011) study which revealed that other factors as well as economic obstacles getting to the hospital prolonged the time to fistula treatment. Further analysis showed that women with obstetric fistula who indicated that economic consequences prevented them from seeking repair services were 5.95 times more likely not to seek fistula services (OR - 5.95, (P=0.027, 95% CI [1.222, 28.95]). This is supported by Mohammed (2008) study who reported that poverty played a major role particularly as it reduced the chance of women with obstetric fistula in getting medical help when need arose.

More than one- third 83 (38.4%) of the women with obstetric fistula stated that they discussed issues related to obstetric fistula with their peers and communities. This could mean that some women still associate with their communities. The study findings are consistence with a study done by Yeakey *et al.* (2011) which showed that women with obstetric fistula readily shared their positive experience of surgical repair with other members of their community. The study also showed that majority 99 (74.4%) of those who indicated that they did not discuss issues related to obstetric did not seek repair services. This finding is in agreement with the study done by Woldaemanuel (2012) who revealed that women who shared their problem had a better chance of attending health institutions and seeking medical help for their problem compared with those who did not share their problem with others.

5.2.2.3 Community factors

Majority 185 (85.7%) of the women with obstetric fistula mentioned that myths and misconception about obstetric fistula prevented them from seeking fistula repair services. This finding is in agreement with a study done by Yeakey *et al.* (2009) who indicated that cultural misperception of the condition are some of the key factors that have contributed to delay in seeking fistula repair services. Further, majority 150 (81.1%) of those who indicated that myths and misconceptions prevented them from seeking fistula repair services did not seek care. The study also showed that women with obstetric fistula who stated that myths and misconception prevented them from seeking fistula repair services were 30.43 times more likely not to seek fistula repair services (OR=30.43, (P=<0.001, 95% CI=[10.72 - 86.34). Further analysis also showed that women with obstetric fistula who indicated that myths and misconception prevented them from seeking fistula repair services were 1.03 times more likely not seek fistula repair service [AOR;1.03, (p –value <0.001,95% CI: 4.19-09 - 2.51.06] compared to those who stated no.

The study showed that majority 163 (75.5%) of women with obstetric fistula indicated that fistula repair services were accessible. All women 53 (100%) who indicated that fistula repair services were not accessible did not seek care. Finding of this current study are similar to a study conducted by Muleta (2004) where it was reported that access to health institutions was a major problem for fistula patients, chiefly because of the long distances to reach care, poor transportation networks, and lack of money. Similarly, Woldaemanuel (2012) study also revealed that more than half (51.8 percent) of the fistula patients reported that the main constraint which contributed to their late going for treatment was the lack of a treatment centre closer to their village or town. In the same study, distance and limited availability of fistula treatment facilities and poor road infrastructure were substantial barriers preventing women with obstetric fistula who delayed in seeking early medical help for their fistula.

5.2.2.4 Organisational factors

The study revealed that majority 191 (88.4%) of women with obstetric fistula indicated that fistula repair services were available. Further, majority 144 (75.4%) of those who stated that fistula repair services were available accessed care. Further analysis showed that those who indicated that fistula repair services were available were 0.216 times less likely not to seek fistula repair services (OR=0.216, (P=<0.001, 95% CI= [0.105, 0.447). This finding is in agreement with Women's Dignity project and Engender Health (2006) study which revealed that one reason that was identified as a cause of delay in seeking care was a lack of knowledge about the availability of treatment. Similarly, Kalembo and Zgambo (2012) study also reported that many women with fistula were unaware of the availability of treatment and that 80% of women with fistulas never sought treatment.

Majority 132 (81%) of the women with obstetric fistula indicated that they were received well by health care professionals when they sought repair services while 31 (19%) indicated not. Further analysis showed that majority of those who indicated that they were received well by health care professionals sought repair services. More than half 18 (58.1%) of those who indicated that they were not well received did not seek care. The study further showed that women with obstetric fistula who indicated that they were received well by health care professionals were 8.85 times more likely not to seek fistula repair services (OR= 8.85, (p=<0.001, 95% CI= [4.04, 19.39]).

Of the 163 women with obstetric fistula who had been for fistula repair services, 142 (87.1%) stated that the attitude of health care professionals were good. However, majority 110 (77.5%) of those who indicated that the attitude of health care providers were good did not seek fistula repair services. Further analysis showed that women with obstetric fistula who stated that health care professionals attitude was good were 17.26 times more likely not to seek fistula repair services (OR=17.26, (p=value 0.000, 95% CI=[6.80, 43.81]). Multivariate logistic regression analysis showed that women with obstetric fistula who stated that health care professionals attitude was good were 25.74 times more likely not to seek fistula repair services [AOR: 25.74, (p=0.007, 95%

CI: (3.831-4126.305)]. This finding is consistent with a study done by Mselle *et al.* (2013), who reported that sometimes when women with fistula went to the health facilities for checkups, they did not find health providers to attend to them, and if available, they did not attend to their needs to their satisfaction. This could be the more reason why women with obstetric fistula did not seek care despite the good attitude of health care professionals. However, it is important to conduct more studies on health care professionals attitude towards women with obstetric fistula in order to find ways of correcting the situation.

5.2.2.5 Societal factors

Majority 184 (85.2%) of the women with obstetric fistula reported that health systems barriers prevented them from seeking fistula repair services. Further analysis showed that women with obstetric fistula who stated that health systems barriers prevented them from seeking health care were 32.82 times more likely not to seek fistula repair services (OR=32.82, (p-value < 0.001, 95% CI=[11.57 – 93.11]) compared to those who did not. This finding is consistent with the study done by Yeakey *et al.* (2011), where it was reported that most of the women with fistula were frustrated due to multiple referrals which discouraged them from pursuing surgery. Further analysis showed that those who stated that health systems barriers prevented them in seeking fistula repair services were 33.86 times more likely not to seek repair services [AOR: 33.86, (p- value<0.001, 95% CI: (478232.4 – 2.40e+07)].

Majority 157 (72.7%) of women with obstetric fistula reported that financing for the procedure prevented them from seeking fistula repair services. This finding is consistent with Nielson *et al.* (2012) study who reported that health services and systems in low and middle income countries can be disorganized and inadequately financed and can work as barriers for achieving specific health related outcomes. Also, further analysis showed that women with obstetric fistula who indicated that financing for the procedure prevented them in seeking fistula repair services were 66.73 times more likely not to seek fistula repair services (OR=66.73, (p-value < 0.001, 95% CI=[130.09, 3422.54]) compared to those who did not. This finding is in agreement with Mc Clure *et al.* (2007) study who revealed that hospitals were a last resort, as costs and logistics concerning care and transport were forbidding. Further analysis showed that women with obstetric fistula who stated that financing for the procedure prevented them in seeking fistula repair services were 606.59 times more likely not to seek repair services [AOR: 606.59, (p – value <0.001, 95% CI: (92.52454 – 3976.92)]. This study therefore proposes free investigations and treatment for fistula repair services in order to effectively address this problem.

5.3 DISCUSSION OF OBJECTIVE 3 RESULTS

5.3.1 DEMOGRAPHIC CHARACTERISTICS OF STUDY PARTICIPANTS

Majority 35 (53.8%) of the health care professionals were aged 20 to 35 years while those aged above 35 were 30 (46.2%). This may mean that alot of health care professionals are in the range of 20 to 35 years. Further, majority 51 (78.5%) were females. This may be due to the fact that majority of the health care professionals are nurses and most nurses are females. It could also mean that they are high numbers of female employees in health care system. The results are comparable to the claim by WHO that women form the majority of the health care workforce and that most of the health care workers are nurses (Boniol *et al.*, 2019). Majority 42 (64.6%) were married. This could mean that not all health care professionals are married. In the ZDHS (2018), it was reported that the majority of women (55%) and men (50%) were currently married. Almost all 64 (98.5%) were Christians. This could be attributed to the fact that Zambia is a Christian nation. Majority 37 (56.9%) were diploma holders. This is attributed to the fact that many health care professionals were nurses whose highest qualification is a diploma since certificates are slowly being phased out. Majority 52 (80%) were working in gynaecological/surgical wards. This may mean that women with obstetric fistula are nursed in the gynaecological/surgical wards in fistula repair centres. Majority 50 (76.9%) of health care professionals were working in the same departments for 0-5 years. This could mean that change lists are not frequently done in the health sector.

5.3.1 VIEWS OF HEALTH CARE PROFESSIONALS ON FACTORS WOMEN WITH OBSTETRIC FISTULA EXPERIENCE IN SEEKING HEALTH CARE

Health care professionals were asked to give their views on factors reported by women with obstetric fistula (objective 2) as preventing them in seeking fistula repair services. Factors reported by women were; lack of knowledge on obstetric fistula and repair services, anxiety, loss of dignity, stigma, transportation challenges, financing for the procedure, myths and misconception and health systems barriers. Regarding lack of information on the condition and fistula repair service, majority (73.8%) of the health care professionals stated that fistula centres needed to be built in villages in order to facilitate education on the condition and also to conduct fistula repairs. This view is in agreement with Woldaemanuel (2012) study which revealed that more than half (51.8 percent) of the fistula patients reported that the main constraint which contributed to their late treatment was the lack of treatment centres closer to their village or town. On the same factor, more than half 38 (58.5%) of the health care professionals felt that there was need to sensitise chiefs, community leaders, community based volunteers, religious leaders, local government officials and non-governmental organisations on obstetric fistula and fistula repair services so that they could in turn assist in informing their communities on the condition and repair services. Further, slightly more than one –third 24 (36.9%) of the health care

professionals stated that mobile clinics needed to include obstetric fistula repair services and about one - third 22 (33.3%) were of the view of educating all pregnant women during antenatal care on the condition. This could be a good idea as pregnant women could have an idea on the condition and would seek hospital delivery once they experience prolonged labour. This view is consistent to studies by (Gundani and Gandanga, 2011; Mohammed, 2008; Muleta *et al.,* 2008) who summarised that women needed to be informed about obstetric fistula at the time of their prenatal visits including its prevention.

On anxiety as a factor, about half 33 (50.8%) of health care professionals were of the view of targeting families of women with obstetric fistula and give them information on the condition. This view is supported by Mselle *et al.* (2011) who indicated that women and their families needed to be given comprehensive information on the medical nature, symptoms, and management of fistula as soon as it was diagnosed. On the same factor, about one –third (33.8%) stated that families needed to escort women with obstetric fistula for fistula repair. This finding is supported by Bangser (2007) who reported that if women with fistula had never travelled out of their villages, they might want to be accompanied by a relative to seek the service.

Regarding loss of dignity, majority 56 (86.2%) of health care professionals indicated that women with obstetric fistula and their relatives needed to be counseled pre- and post-fistula repair on obstetric fistula in order to prevent a recurrence. This is supported by a study done by Tinuola and Okau (2009) that reported health education, especially on reproductive health issues, as highly needed. Furthermore, according to Shittu *et al.* (2007), women should be given psychosocial counselling and skills training before leaving the health facility. Surgical repair without psychosocial and other programmatic support addresses only the physiological injury. Further, women treated for obstetric fistula are usually advised to wait for 3–6 months before resuming sexual intercourse (Khisa *et al.,* 2016; Delamou et *al.,* 2015). On stigma as a factor, only 6 (9.2%) of the health care professionals indicated the need to formulate fistula support groups in the community. According to the ACQUIRE Project/Engender Health (2005), women who had their fistulas repaired served as ambassadors to their communities, sharing information and organizing resources for women who were pregnant or who, too, needed a repair. In the same study, it was also reported that because of the extreme social isolation (and, often, ostracism) experienced by women with obstetric fistula, ambassadors might be the most important persons in their lives as they could speak with them, dismantle their shame, and facilitate their social reintegration once the fistula is closed. Furthermore, on the same factor about two- thirds 43 (66.2%) mentioned that Government needed to improve on the tracking system of women with obstetric fistula. This view could have been as a result of the fact that there was no system for tracking women with fistula in the country. According to Vangeenderhuysen et *al.* (2001), most obstetric fistula cases remain undetected in the communities and that the burden was far greater than has been estimated previously. Therefore, tracking women could enable more

women with obstetric fistula to seek the service. Also, it could be easy to manage obstetric fistula as a clear pathway to treatment could be developed.

On transportation challenges, slightly less than one- third 21(32.3%) of health care professionals were of the view that women with obstetric fistula needed to be recruited on the social cash transfer while majority 48 (73.2%) indicated that transport refund could ease seeking repair services. Also on the same factor, few 12 (18.5%) health care professionals were of the view that Government needed to build proper road networks to easy access to fistula repair centres. The low numbers of health care professionals proposing this view could be attributed to the fact that there was already infrastructure development taking place in the country. However, Woldaemanuel (2012) reported in his study that distance and poor road infrastructure were substantial barriers preventing those women who delayed in seeking medical help for their fistula. Furthermore, on the same factor, only 2 (3.1%) viewed keeping women who sustain a fistula following delivery without discharging them until repaired as a better alternative to avoid transportation challenges. Wall (2006) identified that when a woman presents with the problem in the first three months after injury, prompt initiation of conservative treatment can allow spontaneous closure of fistula, particularly if it is small size.

On financing for the procedure as a factor, all 65 (100%) of the health care professionals were of the view that government needed to provide free fistula services and that husbands to women with obstetric fistula needed not to abandon their wives following development of a fistula respectively. This finding is supported by Woldaemanuel (2012) study who reported that majority of the husbands (67.4 percent) of the fistula patients were willing to send their wives to the treatment centres as early as possible which had a significant impact for early attendance at treatment centres (p value 0.039, 95% CI 0.339, 0.973). On myths and misconception as a factor all 65 (100%) viewed sensitisation of the communities with regard myths and misconception as cardinal. This finding is consistent with a study done by Lyimo and Mosha (2019), which revealed that families and communities around women with obstetric fistula had different understandings about the causes and treatment of obstetric fistula. Hence sensitization about the condition would dispel these myths and misconception regarding obstetric fistula. On the same factor, few 5 (7.7%) health care professionals stated that Ministry of traditional affairs needed to be engaged in making women with obstetric fistula seek care. The low numbers of health care professionals proposing this view could be attributed to the fact that the Ministry of traditional affairs was a new ministry in the country and its roles and responsibilities were not well known.

On health systems barriers, majority 47 (72.3%) of the health care professionals stated that government needed to train fistula surgeons as unsuccessful repairs had an impact in seeking fistula repair services. This could be attributed to the fact that there were few surgeons trained in fistula repairs in the country. Hence, lack of skill in fistula repair has a negative effect as women continue to leak urine and/or stool. This finding is supported by Drew *et al.* (2016) study, which revealed that nine out of the twenty women continued to experience varying levels of urinary incontinence 1–2 years after operation(s). Similarly, it was reported that repair after previous

attempts to close the fistula was often technically difficult for the surgeon and exhausting for the woman (Gupta *et al.,* 2012; Maulet *et al.,* 2013). Hence, the need to offer specialized training in surgical repair in order to improve care and reduce poor surgical outcomes.

5.4 DISCUSION OF INTERGRATED QUALITATIVE AND QUANTITATIVE DATA

Applying the socioecological model to this study, evidence was found that when multivariate test were done, individual factors (secondary education, number of children, number of fistula repair attempts), community factors (myths and misconception), organizational factors (health care provider good attitude) and societal factors (health systems barriers, financing for the procedure) were significantly associated with not seeking repair services. This means that according to the constructs of the socioecological model, not seeking fistula repair services were influenced not only at the individual but at the community, organisational and societal levels also.

Women with obstetric fistula who had secondary education were more likely not to seek repair services than those with lower education. Literature shows that the level of education has a positive effect on a womans health seeking behaviour. A more educated woman has more understanding about her health and is more likely to seek medical attention at the earliest opportunity. According to Murrithi (2020) most of the women who delayed seeking fistula treatment had zero or primary education. Evidence supports that knowledge and awareness on fistula amongst young women who had attained post-primary education was better than women who had no education or only primary education (Banke-Thomas, *et al.,* 2013). However, it is different in this study probably due to the non-fatality nature of the condition; most women with secondary education delayed seeking treatment or chose to live with the condition for the rest of their lives. It could be due to the fact women lacked knowledge on the condition and repair services as reflected in in-depth interviews. Lack of information about obstetric fistula meant that women failed to make decisions about seeking fistula treatment, which delayed treatment (Lyimo and Mosha, 2019). Futher, it could be attributed to unsuccessful repairs and women with secondary education did not want to waste resources. Further analysis showed that women who indicated that myths and miscoceptions prevented them from seeking fistula repair services had a higher likelihold of not seeking repair services. According to Kavai *et al.,* (2010) most women with obstetric fistula found it difficult to seek modern treatment because of their beliefs and cultural practices. Equally, in – depth interviews, a few women thought their fistula was due to witchcraft and instrumental delivery. Such beliefs affected the behaviour of women seeking obstetric fistula treatment and often meant that they sought traditional medicines (Lyimo and Mosha, 2019). Worse still it was reported that even after fistula repair, a handful of women continued to express their belief that fistulas were due to bewitching practices within their communities (Drew *et al.,* 2016).

Study findings show that for every one unit increase in the number of children women with obstetric fistula had, it was associated with the higher probability of not seeking repair services. Studies have shown that an increase in the number of children surviving showed a higher likelihood for women with obstetric fistula to delay treatment than those who had no child surving (Murrinthi, 2020). This could be attributed to the fact that less time was devoted to seeking treatment having to care and nurse children combined with household chores. Additionally, one with more surviving chidren has more financial needs hence seeking health care for fistula is not a priority. In the indepth interviews, women reported that they did not have the finances to even support their children and that they relied on financial support from their spouses, family, community, health facility and non –governmental organisation in order to seek repair services.

Also, for every one unit increase in the number of fistula repair attempts, it was associated with a lower likelihood of not seeking fistula repair services. It is noted that in some studies conducted on women with obstetric fistulas, woman who had gone for 2 (two) treatment had a higher likelihood to delay in seeking treatment (Murrithi, 2020). Failed fistula repairs make a woman lose confident and stop seeking repair services. However, in this current study, the more attempts at repair, the more women were willing to continue seeking health care. This perhaps could be explained by the fact that the only treatment for fistula is reconstructive surgery. It is worth noting that women in the in-depth interviews reported wanting to be healed completely due to the dehumanising effects of the condition. It could also be that women realised that surgical treatment was safe despite its unfavourable outcome. Evidence suggests that women consider surgery a positive intervention, even when it does not repair the condition completely (Turan *et al.* 2007). Therefore, there is need to venture in training fistula surgeons so that repairs could be successful as viewed by health care professionals. Further, fistula nurses should be trained so that they are able to nurse women properly following surgical repair. Nurse training is supported by Sullivan (2014) who revelaed that from the perspectives of the nurse midwives, nurses, physicians and other staff, they did not feel like they received adequate training in regards to caring for clients and families affected by obstetric fistula. Nurses at the clinic reported that they had not been exposed to information about obstetric fistula during their nurses training.

Further, women with obstetric fistula who indicated that financing for the procedure preventing them seeking health care were more likely not seek repair services. In the indepth interviews, women complained about paying for investigations prior to fistula treatment as a hinderance to seeking repair services. Equally health care professionals had a view of free fistula services and non abandonment of women by their husbands. This finding is in agreement with Pope *et al. (*2011) study who showed in their study that the influence of an obstetric fistula on a woman's financial situation was particularly pronounced for women who were abandoned by husbands or partners. Further evidence show that men who chose to stay with their wives often provided economic support to ensure that the women's basic needs were met and also provided the funds for the women to receive obstetric fistula treatment (Hsiung and Savback, 2014; Mselle and Kohi, 2011; Nsemo, 2014). Financial

and emotional support from partners enables women to seek treatment earlier compared to others who have only one stream of income and many competing needs. In response to unaffordable medical costs, some countries have introduced exemption policies to make certain health care services free for example Ghana's Ministry of Health introduced an exemption policy that includes repair of vesico-vaginal and recto-vaginal fistulas.

However, those who indicated that health systems barriers prevented them from seeking health care e had a more likelihood of not seeking health care. In the in - depth interviews, women complained about the inaccessibility nature of hospitals were fistula repairs were conducted, lack of resident fistula surgeons, poor referral systems, lack of fistula surgeons and no follow up care among others. Evidence show that approximately 6–8% of women with obstetric fistula do return for further treatment of incontinence, but it is also known that some do not return, but stay in their remote villages because of the absence of detailed follow up due to the inaccessibility nature of their villages (Browning 2004). Further, Drew *et al*. (2016) revealed in their study that a small number of women also expressed gratitude for the home visit. Some women felt the visit had encouraged them to advocate fistula repair to others. One woman also felt the home visit were beneficial because of their poor health. With regards unsuccessful repairs, health care professionals were of the view of training fistula surgeons. Therefore, adequate training of health care professionals on fistula management is required to equip them with the correct skills and knowledge on how to handle a woman with fistula. Lack of skill in fistula repair has a negative effect as women continue leaking urine and/or stool even after repair. Hence, there is need to offer specialized training in surgical repair in order to improve care and reduce poor surgical outcomes.

Women with obstetric fistula who indicated that health care provider's attitudes were good were more likely not to seek fistula repair services compared to those who stated that their attitude was bad. It is worth noting that in the indepth interviews, women with obstetric fistula indicated that health care professionals just inserted the urinary catheter without explaining why that was done. While it is true that the initial hospital intervention was mainly catheterization after delivery and medications given against infection and to relief pain (Abokaiangana, 2010), it was important to inform women what their problem was. Also, some women indicated that they discovered urine leakage whilest in hospital but nothing was done about it. Further, women in the indepth interviews also complained that appointments were not honoured in some cases and no follow up visits were done after surgical repair. This discouraged women from seeking repair services. The findings of this current study are supported by Turan *et al.* (2007) who found out that those women with obstetric fistula who discovered the problem at a health facility received very limited information about the problem which discouraged them from seeking repair services. Hence, health care providers' attitude towards women with obstetric fistula should be improved in order to encourage women seek repair services.

5.5 SUMMARY

All in all, the evidence from this chapter show that experiences women face in seeking health c are better implemented by use of the SEM. The effective use of the socioecological constructs in obstetric fistula management could potentially improve seeking health care across all different individuals.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.0 CONCLUSION

This study aimed to explore experiences of women with obstetric fistula in seeking health care. Overall, the Thesis concludes that the way fistula repair services are being implemented in Zambia is not effective for ending fistula. Obstetric fistula is managed in a way that fails to address the experiences women face in seeking repair services. The study however provides new knowledge on the understanding of experiences of women with obstetric fistula repair in seeking health care in Zambia.

1. Women with obstetric fistula live with the condition for years despite fistula repair services being offered in the country.
2. Factors women with obstetric fistula experience in seeking fistula repair services have been identified in many African countries. Thus, the study offers a new understanding on factors women experience in seeking repair services in Zambia.
3. Women with obstetric fistula experience challenges which are social, physical, psychological and economical. The challenges have an impact on seeking fistula repair services.
4. Health systems barriers exist. Some women with fistula have been repaired more than once with some women not achieving a successful repair. Also, women are not being given review dates after repair and repair schedules are made at the national level without the consultation of women with obstetric fistula.

All in all, the Thesis concludes that unless the SEM is used to address the fistula problem, women with obstetric fistula will continue to live with the condition for years.

6.2 IMPLICATIONS OF THE STUDY

There is an urgent need to establish the magnitude of obstetric fistula in Zambia through an epidemiological study. This is important because the findings could be used as justification for advocating for upward adjustment of financial resources to obstetric fistula services. One of the reasons why the MoH allocate inadequate resources for obstetric fistula services is because there is absence of epidemiological information regarding the magnitude of obstetric fistula in the country to guide and justify the allocation.

Further, the amount of research being conducted on obstetric fistula in Zambia forms a small percentage of health research and is disproportionate with the disease burden arising from obstetric fistula problems. Literature review has recorded only very few studies done in Zambia on obstetric fistula. The 2013-14 Demographic and

Health Survey also included for the first time, a module to measure the prevalence of symptoms of fistula in Zambia. However, only 5.9% of women aged 15-49 years reported ever experiencing symptoms consistent with fistula. The survey did not proceed to tabulate the findings because it was not possible to carry out a further breakdown and analysis by treatment sought and timing of treatment due to very small numbers of women with fistula-like symptoms reported in the survey. Therefore, this study proposes that the next census should capture women with obstetric fistula since the 2013-2014 ZDHS did not yield good results. Also, to effectively address the prevalence and incidence of fistula, it is critical to know how many women and girls are in need of fistula repairs and where they live.

6.3 RECOMMENDATIONS

The following recommendations are made in order to make obstetric fistula programme more effective.

6.3.1 POLICY RECOMMENDATIONS

1. Given the significance of health education, all pregnant women should receive health education on obstetric fistula and repair services during ANC. Further, there should be formulation of educational materials on obstetric fistula which should be put in all clinics/ hospital department to enable people read on obstetric fistula and repair services. These educational materials should even be interpreted in local languages so as to improve knowledge on obstetric fistula and repair services.
2. Counselling services should be offered to all repaired women following discharge so as to prevent future recurrences.
3. Obstetric fistula programmes should consider follow up visits and review dates. Follow up visits should be planned and be conducted by health facilities in conjunction with the communities as well as non governmental organisation to ensure the needs of the repaired women are addressed promptly.
4. There is need to create a database to capture information on women with obstetric fistula. Further proper record keeping at all levels of the health facility is needed. Policy makers should ensure that development of tools and registers are done. Complete documentation of physical addresses of women with obstetric fistula as well as their phone numbers are essential in tracking women with obstetric fistula.
5. Policy makers should advocate for formulation of obstetric fistula clinic in all district hospitals to encourage afflicted women in seeking the service.
6. Mass sensitization programme on obstetric fistula and repair services should be done in order to improve awareness to commnunities if the goal to End fistula is to be achieved.
7. Policy makers should advocate for the review of policies related to obstetric fistula for example, the policy on management of obstetric fistula in Zambia.

8. Policy makers should also ensure adequate resource mobilization for obstetric fistula services in order to carry out fistula camps in provinces of Zambia.
9. Training of surgeons on fistula repair is cardinal to achieve successful repairs. Further fistula nurses should be trained in order to provide quality fistula care.
10. Given the significance of the SEM in obstetric fistula, programmes should be conceptualised and designed to move from the current way of managing obstetric fistula to use of the model in order to improve seeking fistula repair services.
11. Community participation should be ensured in obstetric fistula programme planning, designing and implementation in order to ensure that planned interventions have community support. Programmes should also consider women with obstetric fistula as partners in obstetric fistula management and not as recipients of their service.
12. Building of fistula hospital whose main objective would be conducting fistula repair services only is a neccessity. Also as part of the services offered, survival skills should also be taught to empower women with obstetric fistula.

6.3.2 RECOMMENDATIONS FOR FURTHER STUDY

1. There is need to conduct a research on knowledge of health care professionals on obstetric fistula
2. A research study should also be conducted on prevention of obstetric fistula in Zambia. This is in order to prevent the occurrence of new cases.
3. A further study should be conducted on the key causes of failure in fistula treatment in order to address issues of failed repairs and increase success rates.
4. Considerable ethnographic research is needed to better understand obstetric fistula in Zambia. This can have a potential for alternative venues to provide obatetric fistula education and services and ways in which the services could be expanded or scaled up.

6.4 STRENGTH AND LIMITATIONS OF THE STUDY

6.4.1 Strength of the study

This study has contributed in identification of the experiences of women with obstetric fistula in seeking health care. Additionally, it has highlighted the importance of training more fistula sugeons so as to improve on the success rate of fistula repairs which would encourage women in seeking repair services. Further, it has proposed an increase in the number of health facilities with the capacity to carry out fistula repairs and where possible build a national fistula hospital.

6.4.2 Limitation of the study

1. This was a population based study though only four provinces out of the ten provinces of Zambia were sampled for the study.

2. The Thesis has used a concurrent study design to explore experiences of women with obstetric fistula experience in seeking health care and health care professionals views on factors women experienced in seeking fistula repair services. Despite the inherent limitation of a concurrent study design, the study yielded better results.

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APPENDICES

APPENDIX I: ENGLISH RESEARCH STUDY PARTICIPANT INFORMATION SHEET

Note that the eligible participants are women with obstetric fistula, policy makers, program planners and program implementers from Eastern, Luapula, Muchinga, and Southern Provinces.

INTRODUCTION

I, Nchimunya Nambala Tembo, a PhD student under the **NORHED PROJECT QZA -0484 NORHED 2013** at the University of Zambia is kindly requesting for your participation in the research study entitled Experiences of women with obstetric fistula in seeking health care in Zambia. This form gives you information about the study in which you are being requested to participate. To make sure that you have all the facts about the study, you must read this form or have someone read it to you. Before you decide whether or not to participate in this study, I would like to explain to you the purpose of the study, any risks or benefits and what is expected of you. Your participation in this study is entirely voluntary. You are under no obligation to participate; you may choose to participate or not to participate. If you decline to participate, no privileges will be taken away from you. If you agree to participate, you will be asked to sign this consent in front of someone or put finger prints in the space provided on the form. You will get a copy of this form to keep. Discuss any unclear section on this form with the interviewer who will interview you. You are also at liberty to withdraw or not answer questions you deem sensitive. Agreement to participate will not result in any immediate benefits.

PURPOSE OF THE STUDY

This study is being carried out by the school of Nursing Sciences of the University of Zambia. We would like to ask you questions on obstetric fistula. The answers you and others will give will assist policy makers find ways and means of helping women with obstetric fistula.

PROCEDURE

After you have signed the consent form, and have had a chance to ask questions, you will be asked questions concerning obstetric fistula. You will also be given a chance to make suggestions on what you think could be done to improve your situation.

RISK AND DISCOMFORTS

No risks or discomforts are involved apart from the use of your time in answering questions and the presence of the witness. Answering questions will take approximately 35 - 60 minutes.

BENEFITS

By taking part in this study, you will be able to provide us with information that will help relevant authorities and policy makers to come up with ways on how to help women with obstetric fistula regarding seeking health care. No monetary favours will be given in exchange for information obtained.

CONFIDENTIALITY

Your research records and any information you will give will be confidential to the extent permitted by law. You will be identified by a number, and personal information will not be released without your written permission except when requested by law. The Ministry of Health, the University of Zambia, Research Ethics committee or the School of Nursing Sciences may review your records again; this will be done with confidence.

APPENDIX II: CHINYANJA RESEARCH STUDY PARTICIPANT INFORMATION SHEET

KULAMBULA BWALO.

Ine, Nchimunya Nambala, amene ndili kucita maphunziro pa sukululalikulu la University of Zambia kupyolera mu NORHED PROJECT QZA -0484 NORHED 2013 ndi kukupemphani kuti mutengeko mbali mu kafuku-fuku amene tanenapamwambapo,chifukwa cakutindicoyenenerakudziwa za zimene mumakumananazopamene mulikusakilathandizo ya zaumoyo. Musanapange ciganizo chotengako mbali mwina ai, ndifuna kuti ndikudziwiseni za colinga, kuipa, ndi ubwino wakafuku-fukuuyu. Ndifunaso kukudziwitsani za zimene ndiyembezera kwainu. Kutengako mbali kwanu mukafuku-fuku umenewu ndi cosankhacanu. Simuliokakamudzidwa kutengako mbali; mungasankhe kutengako mbali kapena ai. Ngati mwasankha kusatengako mbali, kulibe ufuluumene uzacotsedwa kwainu. Ngati mwasankha kutengako mbali, muzayenera kulemba cilolezo canupamaso pa anthu. Siyapo pokha ai, muli ndi ufulu wo sayankhamafunso ena amene mukuona sayenera kuyankhidwa. Cipangano cotengako mbali mkafufuku-fukuumenewu, sicibweretsa ubwino uli onsepambuyo pace.

COLINGA CA KAFUKU-FUKU.

Kafuku-fukuu yuuzatengankhani pa zomwe azimai amene anapangika njira yosayenera cifukwa ca kubeleka mobvutikira, amapitamo pamene alikusakilathandizo ya zaumuyo. Ici ndi caphindu kwambiri cifukwa cakuti zimenezi zizathandizira amene alikupanga malamulo kuonamwamene angathandizire azimai a bvutolotero.

NDONDOMEKO

Mutamalidza ku filinga ci pepala ca cilolezo ndi kufunsamafunso, mudza yenera kufunsidwa mafunso pa zimene mudziwako pa azimai amaneali ndi bvuto ya njira imene imapangika ngati ali kubeleka mobvutikira. Muzapansidwanso mpata wonena zimene muganiza kuti ziyenera kucitika pofunakucepesa bvutolimeneli.

ZOOPSYA NDI ZOWAWA.

Palibe zo opsyamwina zowawa zina zilizonse zimene muzakumanana zo kupatulilako nthawi imene muzagwiritsa nchito kuyankhamafunso ndi kukhalapo kwamboni. Kuyankha mafunso kuzatengamphindi makumi anai chabe.

UBWINO WACE

Pa kutengako mbali mu kafuku-fukuu menewu, muzakwanitsa kutipasa maganizo anu amene azathandizira amene alimumaudindo a ulamuliro ndi ena amene apanga malumulo kuti apeze njira yokuthandizirani

mumapezedwe a samaloya zaumoyo. Kulibe ndalama zimene zizapelekedwa pofuna kutengako nkhani kapena ndemanga kucokera kwainu.

ZACISINSI

Zakafuku-fuku ndi zina zonse zimene muzanenazizakhala za cinsinsikulingana ndi lamulo. Muzazi ndikilidwa ndi nambala ndipo zonena za inuno khasizizapelekedwa Kwa wina popanda lamulolo lembedwa kucokera kwainu, pokhapo ngati lamulo litanena tero. Unduna wa zaumoyo, sukululalikulu ya University of Zambia, a kabungweka za kafuku-fuku, mwina a sukulu la unamwino, angathe kupitamo mu zonena zanu kaciwiri, ndipo izi zizacitika mwa cinsinsindi mobvomere zanipakati pa inu ndi iwo.

APPENDIX III: CHIBEMBA RESEARCH STUDY PARTICIPANT INFORMATION SHEET

ICHAPAKUBALA

Ine, Nchimunya Nambala Tembo, Njikatilo wa kuskulu ikalamba ya University of Zambia mukubombela pamo na NORTHED PROJECT QZA- 0484 NORTHED 2013 ndelomba ubwafwilisho bwa kungafwilishako mukufwalishako ichilengo chabulwele ubu muli banamayo. Ndefwaya ukulondolola ichilengo chaipepala. Ukwasuka amepusho muli ipepala kusala `ngalefwananguiyo. Kuti mwasala ukwasukananguiyo. Ngamwasumina ukwasuka, balamipusha ukubikapo signature yenu ninshi palina ndubulwila wenu.

ICHILENGO CHA IYI PEPALA

Iyi pepala yalasenda amafyaayo banamayo bapitamo kubulwele bwa obstetric fistula. Ichikankala mukutila kwafwilishako bakalemba baimilandu mukwafwishako bana mayo no bulwele bwa obstetric fistula**.**

UBUTANTAMIKO

Panuma yakusinapa chipepala, namukwata ubuntungwa bwakwipusha ifipusho nangula palamipusha amepusho pal iubulwele bwa obstetric fistula. Balamipela inchende yakupela ubwilu nangula ifyomwingachita pakufumyapo ubuubulwele.

IFILAMBO

Mukuchita ifilefwaikwa ukulemba muchipepala ichi, muleyafwilisha bakapekanya nangula bakateka ukukwataa mano yakwafwilishako uyoonse ulefwayaukuya kuchipatala.

INKAMA

Fyonse mule tupela muli iyipepala fyakwishiimwena ifwefye. Ninkama yenu. Ba ministry of health, ba University of Zambia, ba research ethics committee nangula isukulu lyabu nurshi bakalanga ifyo mwapitamo nomba munkama.

APPENDIX IV: CHITONGA RESEARCH STUDY PARTICIPANT INFORMATION SHEET

MATALIKILO

Mebo nde Nchimunya Nambala Tembo, ndili sicikolo kucikolo cipati ca University of Zambia mu NORHED PROJECT QZA- 0484 NORHED 2013 ndamulomba kuti mutole lubazu mukuvwuntauzya kwaambwa mujulu, nkaambo cilayandika kapati kuzyiba zyicitika mukuyandaula kusilikwa. Nomutana kusala kuti naa mulatola lubazu mubuvwuntauzi oobu naa peepe, ndiyanda kumupanduluda muzeezo wa buvwuntauzi oobu, bubi naa abubotu alimwi acilangilwa kuzwa kuli ndinywe. Kusala kwanu kutola lubazu mubuvwuntauzi oobu mbwakulyaaba. Kwiina mulawo umusinikizya kuti mutole lubazu mubuvwuntauzi alimwi inga mwasala kutola lubazu naa peepe. Kuti mukake kutola lubazu kwiina ncomutinyangwe pe. Kuti muzumine kutola lubazu mulalombwa kudinta cidinto cakuzumina kumbele lyamuntu. Alimwi mwazuminizyigwa kucileka naa kutavwiila mibuzyo njomutayandi kuwviila. Kuzumina kutola lubazu takutitonezye bubotu mpoona mpoona.

MUZEEZO WA BUVWUNTAUZI

Buvwuntauzi oobu bulajana luzyibo mbuli zyicitika kubamakaintu balaa tupulo tujatikizya cizyalilo acisubilo naa cizyalilo acaambukilo mukuyandaula kusilikwa. Eeci cilayanika kapati nkaambo luzyibo lutijanwe mubuvwuntauzi oobu luyakugwasya basyi kubamba milawo kuti bajane nzila zyakugwasya bamakaintu balaa tupulo ootu.

BWEENDE BWA BUVWUNTAUZI

Mwamana kudinta cidinto cakuzumina, alimwi mwabuzya amibuzyo yanu, mulabuzyigwa mibuzyo ijatikizya tupulo tujatikizya cizyalilo acisubilo naa cizyalilo acaambukilo. Alimwi mulapegwa ciindi cakupa mizeezo njomuyeeya kuti eeci cintu cisumpuke.

BUYUMUYUMU AKUTALIMVWA KABOTU

Kwiina buyumuyumu naa kutalimvwa kabotu kuliko mubuvwuntauzi oobu kunze kwa ciindi ncomuti vwiile mibuzyo alimwi akamboni unakuliko nomuna kuvwiila mibuzyo. Kuvwiila mibuzyo kulatola ciindi cilampa tuvwaluvwalu tuli makumi one.

BUBOTU

Mukuzumina kutola lubazu mubuvwuntauzi oobu, mulacikonzya kutupa luzyibo lutikayandike kuli basikubamba milawo kutegwa bakacikonzye kujana nzila zyakumugwasya kuti kamujana kusilikwa. Kwiina mali atiipegwe mwatupa luzyibo oolu**.**

MASESEKE

Kvwiila kwanu alimwi aluzyibo loonse ndomutitupe lulaba lwamaseseke kweendelana amulawo mbowaamba. Munakuzyibwa biyo a manambala alimwi luzyibo lwanu takutondezyegwi kamutanazumizya ccita biyo kuti lwalombwa amulawo. Ba cibbadela, cikolo cipati ca University of Zambia, balanganya kuvwuntauzya ba cikolo ca ba ma nurse inga balulanga luzyibo lwanu alimwi, pesi zyoonse eezyi zyicitika mumaseseke.

APPENDIX V: ENGLISH INFORMED CONSENT FORM

The purpose of this study has been explained to me and I understand the purpose, the benefits, risks and discomforts and confidentiality of the study. I further understand that:

If I agree to take part in this study, I can withdraw at any time without having to give an explanation and that taking part in this study is purely voluntary.

I---------- (Names)

Agree to take part in the interview schedule

Signed/ thumb: ---------- **Date: ----------**

Signed/thumb: ---------- **Date: ----------**

PERSON TO CONTACT FOR PROBLEMS OR QUESTIONS

Nchimunya Nambala Tembo, University of Zambia, School of Nursing Sciences, P.O.BOX 50110, Lusaka.

The Dean, University of Zambia, School of Nursing Sciences, P.O BOX 50110, Lusaka.

The Chairperson, Research Ethics Committee, University of Zambia, P.O BOX 50110, Lusaka**.**

APPENDIX VI: CHINYANJA INFORMED CONSENT FORM

CIPEPELA CA CILOLEZO

Colinga cha kafuku-fukuumenewucanenedwakwaine ndipo ndi mnvesetsacolinga, ubwino, zoopsya ndi zowawa, ndi zacisinsi ca kafuku-fukuumeneyu. Ndinvesanso kuti: ngati nalolakutengako mbali mukafuku-fukuumenewu, ndithakuleka nthawi ina iliyonse popandakupeleka cifukwa, ndiponso kuti kutengako mbali kwangamukafukufukuuyusikokakamidzidwa ai.

Ine.....…….... (Maina)

Ndivomerezakutengako mbali mukukambirana pa zakafuku-fukuumenewu.

Signed/thumb: ……Tsiku: ……

Signed/thumb: ……Tsiku: ……

ANTHU AMENE MUNGATHE KULEMBERA NGATI MWAPEZA BVUTO KAPENA MAFUNSO.

NchimunyaNambala Tembo, University of Zambia, School of Nursing, P.O. BOX 50110, Lusaka.

The Dean, University of Zambia, School of Nursing, P.O BOX 50110, Lusaka.

The Chairperson, Research Ethics Committee, University of Zambia, P.O BOX 50110, Lusaka.

APPENDIX VI I: CHIBEMBA INFORMED CONSENT FORM

IPEPALA LYABWISHIBILO

Ukubako no bukankala bwa aya masambililo nakulondololwa kuli ine kabili nintesha bwino, ico yabeleleko, ubusuma, ifibi ne fishingonfwika bwino elyo nenkama ukutila ifikatumbukamo, muli aya masambililo fili nokusungwa munkama, kabili nwtesha ukutila;

Nasumina ukubulamo ulubali muli aya masambililo, kabili kuti nafumamo mukubulamo ulubali pan shita ali yoonse ukwabula ukulondolola umulandu kabili ukubulamo ulubali muli aya maambililo muku ipelesha.

Ine ……..….. (ishina)

Nasumina ukubulamo ulubali mume pusho yapekanishiwe

Ukusaina/ukufwatika……..Ubushiku…….

Ukusaina/ukufwatika…….Ubushiku……..

Abo Mwingepusha ngakuli ubwafya ubuli bonse nangula amaepusho.

Nchimunya Nambala Tembo, University of Zambia, School of Nursing Sciences, P.O BOX 50110, Lusaka.

The Dean, University of Zambia, School of Nursing Sciences, P.O BOX 50110, Lusaka.

The Chairperson, Research Ethics Committee, University of Zambia, P.O BOX 50110, Lusaka.

APPENDIX VIII: CHITONGA INFORMED CONSENT FORM

KUZUMINA KWA BASIKUVWIILA

Muzeezo wabuvwuntauzi oobu wapandululwa kuli ndime alimwi ndateelela muzeezo, bubotu, buyumuyumu, kutalimvwa kabotu alimwi amaseseke abuvwuntauzi oobu. Alimwi ndateelela kuti, kuti ndizumine kutola lubazu mubuvwuntauzi oobu, inga ndacileka kufwumbwa ciindi kakunyina akupa bupanduluzi alimwi akuti kutola lubazu nkwakulyaaba.

Mebo ----------**(Mazyina)** ndazumina kutola lubazu mukuvwiila mibuzyo eeyi

Cidinto: ---------- **Buzuba**----------

Cidinto: ---------- **Buzuba**----------

MUNTU WAKUBUZYA NAA KULI BUYUMUYUMU NAA MIBUZYO

Nchimunya Nambala Tembo, Universuty of Zambia, cikolo ca Nursing, P. O .BOX 50110 Lusaka.

Ba Dean, University of Zambia, Chikolo ca Nursing, P.O.BOX 50110, Lusaka.

Bapati ba Chuuno, Research Ethics Committee, University of Zambia, P.O.BOX 50110, Lusaka.

APPENDIX IX: ENGLISH SEMI STRUCTURED IN-DEPTH INTERVIEW FOR WOMEN WITH OBSTETRIC FISTULA (Objective I)

QUESITIONS

Questions related to participants' characteristics

1. Where do you leave?
2. How old are you?
3. Are you married?
4. Do you have children?
5. How many times have you come for repair?

Probing questions

6. Can you tell me about your condition? **Probe** (When did you sustain an obstetric fistula, how did it happen, what was the cause of your fistula, whom did you tell, what was the reaction of the person you told?
7. Can you tell me about your lived experience? **Probe** (How did getting the fistula affect your life physically, socially, emotionally and financially, how is your relationship with your husband, family, relatives, friends and community after you got the fistula, how did getting the fistula make you feel, how did people around you or in the village/city treat you, Are you currently earning an income? If not, what is your source of income? Who provides you with financial and tangible support? What kind of financial support do you receive? How is your financial situation, How long have you lived with obstetric fistula, did you know that you can get treatment for the fistula and have you tried, who gave you information about treatment, what is your view on the information that you were given about treatment, number of previous fistula surgery, any medication given before operation?
8. How do you cope with the physical consequences, psychological consequences, emotional consequences and financial consequences of Obstetric fistula? How do you cope with the family and society you are living in? How do you see your future?
9. Can you tell me about factors contributing to not seeking health care services for obstetric fistula? **Probe.**
10. What is your view about seeking health care services for obstetric fistula?

We have come to the end of our discussion. Thank you very much for your contributions and for participation as well as your time.

APPENDIX X: CHINYANJA SEMI STRUCTURED INTERVIEW FOR WOMEN WITH OBSTETRIC FISTULA (Objective I)

MAFUNSO

Mafunso oyanjana ndi maonekedwe aotengako mbali

1. Kodi mukhala kuti?
2. Kodi muli ndi zakazingati?
3. Kodi ndimwe okwatiridwa?
4. Kodi muli ndi ana?
5. Kodi munabwera kangati kuzakozedwa?

Mafunso ena

6. Kodi mungathe kuniuza za bvutolanu? **Funsisi-sani** (Kodi ndi liti pamene njira inapangika cifukwa ca kubeleka mobvutikira, nanga zinacitika bwanji, kodi cinalengetsa bvutoli ndi ciani, munauza ndani, kodimunthuyo anacita ciani atauzidwa?)

7. Kodi mungathe kuniuza za zimene mwapitamo? **Funsisi-sani** (Kodi kupangika kwa njira inayi kunabweretsa bvuto lotani ku thupilanu, makhalidwe anu pakati pa ena, m'maganizo, ndi mapezedwe a ndalama, kodi makhalidwe anu ali bwanji ndi amuna anu, banjalanu, anzanu ndi onse ozungulira pamene njira yosayenera yiinapangika, kodi mumanva bwanji kukhala ndi njirayi imene inapangika cifukwa ca kubeleka mobvutikira, kodi anthu okuzungulirani mu mudzi/mzinda amakusungani motani, kodi mulikulandilako kangacepe kena kalikonse? Ngati sitero, kodi mumapeza motani ndalama? Ndani amakuthandizani ndi thandizo la ndalama? Kodi ndi thandizo landalama lotani imene mumalandira? Kodi zandalama zanu zili motani, Kodi mwakhala ndi njiraimeneyi kwa nthawi yaitali motani, kodi mudziwa kuti mungathe kupeza thandizo kuti muthesabvutolo, kodi munayesako kale, kodi ndani amene anaku uzani za kacilisidwe, kodi munenapo zotani pakacitidwe kabvutoli, numbala imene munapatsidwa pa kung'ambidwa kwa nthawi yatha, munapatsidwa mankhwala musana ng'ambidwe?

8. Kodi muma kwanisana nazo motani zobvuta za pathupi, m'maganizo, ndi mapezedwe a ndalama mtang'ambidwa? Kodi mumakwanitsa bwanji kuthesa zobvuta za m'banja ndi malo kumene mukhala? Kodi tsogolo lanu muionamo tani?)

9. Kodi mungathe kuniuza za zimene zipangitsa kusakirathandizo ya zaumoyo cifukwa ca bvuto ya njira imene inapangika nthawi yobeleka? **Funsisi-sani.**

10**.** Kodi zonena zanu ziri motani pa nkhani yakapezedwe kathandizo l'umoyo kwa aja omwe anapangika njira yosayenera pa thawiyobeleka?

Tafika kumapeto kwakukambirana kwathu. Zikomo kwambiri pa zonena zanu, thawi, ndi kutengako mbali kwanu mkukambiranaku.

APPENDIX XI: CHIBEMBA SEMI STRUCTURED INTERVIEW FOR WOMEN WITH OBSTETRIC FISTULA (Objective I)

AMEPUSHO

Amepusho yakwipusha pali abo abaleipushiwa

1. Mwikala kwisa?
2. Muli nemyaka inga?
3. Bushe mwali upwa?
4. Bushe mwalikwata abana?
5. Miku inga mwaisa mukulungisha?

Amepusho yambi

6. Njebeniko pabulwele bwenu? (Nilisa mwakwete obstetric fistula, chatampile shani, chilengo nshi chalengele, mwa ebele banani, ailwikepo shani umuntu mwayebele?
7. Njebeniko ubwikalo bwenu panuma yakwishiba ukuti muli no bulweleubu? (Mwale unfwa shani kubwikalo bwenu, kumyeo shenu, imyangalilo yenu nakundalama. Munfwana shani nabalume benu, ulupwa, abanenu namu nchendemwikala? Mwaunfwile shani panuma yakwishiba ukuti mulinobulwele bwa fistula? Mwaleunfwana shani nabantu munchende mwikala panuma yakwishiba pa bulwele bwenu? Bushe mulabomba? Nga awe, niba nani aba myafwilishako? Ni banani abamipele ubwilu bwa fistula? Mwaliyako kuchipatala mukulungisha ifyaonauka? Mikuinga mwayako kuchipatala?
8. Mukwanisha shani mubwikalo bwenu no bulwele bwa fistula? Mwikala shani nolupwa and bantu bonse kunchende yenu? Muyimona shani kuntashi tuleya?
9. Njebeniko amafya ayalenga ukuya kuchipatala palwabulwele bwa obstetric fistula?
10. Mutontokanyapo shani palwaku fipatala palwabulwele bwa obstetric fistula?

Twaisa kumpela ya mepusho. Twatotela sana pa fintu mwatwebako ne nshita mwabonfya.

APPENDIX XII: CHITONGA SEMI STRUCTURED INTERVIEW FOR WOMEN WITH OBSTETRIC FISTULA (Objective I)

MIBUZYO

Mibuzyo ijatikizya bube bwa basikuvwiila

1. Mukkala kuli?
2. Muli amyaka yongaye?
3. Hena muli kwetwe?
4. Hena mulijisi bana?
5. Hena mwakaboola zyiindi zyongaye kukubambululwa?

Mibuzyo ibuzyisya

6. Hena inga mwandaambila abulwazi bwanu? Kubuzyisya (Hena mwakaba buti atupulo tujatikizya cizyalilo acisubilo naa cizyalilo acaambukilo, cakacitika buti, ncinzi cakapa kuti mube atupulo ootu, hena mwakaambila bani, hena ooyo muntu ngomwakaambila wakacita buti)?
7. Hena inga mwandaambila zyicitika mubuumi bwenu? Kubuzyisya (Hena ootu tupulo mbuti mbotwanyonganya mubili wanu, buumi bwanu, mizeezo yanu, nzila zyakujana mali, hena mukkala buti abalumi banu, bana banu, bamukowa, beenzinyoko alimwi abantu bamucilwo canu kuzwa nomwakaba atupulo ootu, hena mumvwa buti kuba atupulo ootu, hena bantu bamu cilawo camu bamulanga buti, hena mulavwola mali? Naakuti tamuvwoli, syena mwaajana kuli mali? Syena mbaani bamugwasya kumakani a mali? Hena ndugwasyo nzi ndomutambula? Hena kwainda ciindi cilamfwu buti kamutujisi tupulo ootu? Hena mulizyi kuti inga mwajana kusilikwa alimwi mwakasola kale? Hena nguni wakamupa luzyibo lwakuti inga mwasilikwa? Ino muyeeya buti aluzyibe lwakuti inga mwasilikwa? Hena Mwaka pandulwa kale, hena mwakapegwa musamu kamutana pandulwa?
8. Hena mulikwabibilila buti kuli zyimucitikila amubili, mumizeezo, munzila zyakujana mali alimwi amumaano akaambo katupulo ootu? Mukkala buti abamukwasyi alimwi abamucilawo canu? Hena mbele yanu mwiibwene buti).
9. Hena inga mwandaambila zyintu zyakapa kuti muyandaule masena asilika tupulo tujatikizya cizyalilo acisubilo naa cizyalilo acaambukilo? Kubuzyisya (muyeeya buti akuyandaula masena asilika tupulo ootu?
10. Mizeezo yanu akujanika kwamasena aaya?

Twasika kumaanino amubandi wesu. Ndamulumba kapati mukutola lubazu alimwi akuciindi

APPENDIX XIII: ENGLISH STRUCTURED INTERVIEW SCHEDULE FOR WOMEN WITH OBSTETRIC FISTULA ON FACTORS WOMEN EXPERIENCE IN SEEKING HEALTH CARE

Date of Interview .:.....
Place of Interview :.....
Name of Interviewer:.....
Serial Number:.....

INSTRUCTIONS FOR THE INTERVIEWER

1. Introduce yourself to the respondent.
2. Explain the reason for the interview.
3. Assure the respondent of confidentiality and anonymity
4. Do not write the name of the respondent on the interview schedule.
5. Fill in the most appropriate response to the question on the space provided.
6. Provide time for the respondent to ask questions at the end of the interview.
7. Refer the respondents to a person who can answer the questions you are not sure of.
8. Thank the respondent at the end of each interview.

SECTION A: DEMOGRAPHIC DATA

1. Age at last birthday.....

2. Age at fistula occurrence.....
3. Tribe
    1. Tonga
    2. Lozi
    3. Bemba
    4. Ngoni
    5. Luvale
    6. Kaonde
    7. Others (Specify)

4. Religious denomination
    1. Seventh Day Adventist
    2. Roman Catholic
    3. Pentecostal Assembly of God
    4. UCZ
    5. New Apostolic church
    6. Jehovah Witness
    7. Others specify

5. Highest level of education
    1. None
    2. Primary
    3. Secondary
    4. College
    5. University
    6. Others specify.....

6. What do you do for your living?
    1. Student
    2. Employed
    3. Self employed

7. Marital status
    1. Single
    2. Married
    3. Divorced
    4. Separated
    5. Widowed
8. Years in present marriage.....

9. What was your marital status at the time you sustained a fistula.....

10. Which province are you coming from?
    1. Southern Province
    2. Eastern Province
    3. Muchinga Province
    4. Luapula Province

11. Where you divorced when you started leaking?
    1. Yes
    2. No

12. How many children do you have?
    1. None
    2. One - three
    3. Four -six
    4. Seven - Nine
    5. More than nine

13. What is your average household Income per month?
    1. Above K1, 000.00
    2. Between K500. 00 - K1, 000.00
    3. Below K500. 00

14. Who supports you financially?
    1. Self
    2. Parent

3. Relative
4. Boyfriend
5. Others specify.....

15. How many times have you had obstetric fistula?
    1. Once
    2. Twice
    3. Thrice
    4. Four
    5. More than four

16. How many repairs have you ever had?
    1. Once
    2. Twice
    3. Thrice
    4. Four
    5. More than four

17. What means of transport did you use to go to the hospital? .....

SECTION B: FACTORS WOMEN WITH OBSTETRIC FISTULA EXPERIENCE IN SEEKING HEALTH CARE

18. Have you ever been for fistula repair services?
    1. Yes
    2. No

19. Are fistula repair services available in the country?
    1. Yes
    2. No

20. Would you say that fistula repair services are accessible?
    1. Yes
    2. No

21. Were you received well by health care professionals when you sought repair services?

1. Yes
2. No

22. How was the attitude of health care proffessionals on obstetric fistula?

1. Good
2. Bad

23. Do you ask for permission from you anyone to seek obstetric fistula health care?

1. Yes
2. No

24. Whom do you seek permission from?.....

25. Do you openly discuss matters related to obstetric fistula openly?

1. Yes
2. No

26. Do economic factors prevent women with obstetric fistula from seeking health care services?

1. Yes
2. No

27. Do you agree that the following can hinder women from accessing fistula repair services? Tick all correct answers.

1. Myths and misconception
2. Health Systems barriers
3. Loss of dignity
4. Anxiety
5. Stigma
6. Lack of knowledge on obstetric fistula and repair services
7. Transportation challenges
8. Financing for the procedure

End of the interview and I thank you for your co-operation.

APPENDIX XIV: CHINYANJA STRUCTURED INTERVIEW SCHEDULE FOR WOMEN WITH OBSTETRIC FISTULA ON FACTORS WOMEN EXPERIENCE IN SEEKING HEALTH CARE

Tsiku la kukambirana : …….

Malo okambiranapo: ……..

Dzina l'olankhulitsa :

…….....

Numbala : ……..

ZOTSATIRA ZA OFUNSA MAFUNSO.

1. Nenani dzina lanu kwaoyankha mafunso.

2. Nenani cifukwa cha kukambirana kwanuko

3. Nenani kwaotengako mbali kuti zonena zao ndi dzina zizasungidwa mwacisinsi.

4. Musalembe dzina la amene mukukambirana naye pa cipepela coonetsa ndondomeko yo kambirana.

5. Yakani yankho yoyenera kulingana ndi funso yoperekedwa.

6. Mutatha kukambirana, pelekani mpata ofunsa mafunso kwaomwe mukambirananao

7. Ngati mwalephera kuyankha mafunso moyenera, tumani amene mukambirana naye ku ena amene angathe kupeleka mayankho enei-eni.

8. Thokozani oyankha mafunso pa kutha kwakukambirana kuli konse.

NDIME YOYAMBA: NKHANI ZOKHUZA ZA MALO OKHALAPO NDI CHIWERENGERE CA ANTHU.

1. Muli ndi zaka zingati……..
2. Zaka pamene bvuto ya njira imene imapangika ku azimai ngati ali kubelek amobvutikira ina oneka koyamba…….
3. Mutundu
    1. Tonga
    2. Lozi
    3. Bemba
    4. Ngoni
    5. Luvale
    6. Kaonde
    7. Ena (Nenani) ……..
4. Mpingo
        1. Seventh Day Adventist
        2. Roman Catholic
        3. Pentecostal Assembly of God
        4. UCZ
        5. New Apostolic Church
        6. Jehovah Witness
        7. Ena (Nenani) ……..
5. Maphunziroapamwambakoposa amene munapata
    1. Kulibe
    2. Aku primary
    3. Aku secondary
    4. Aku College
    5. Aku University
    6. Ena (Nenani) …….

6. Kodi mumacitaciani mu umoyo wanu?
        1. Mphunzi
        2. Ndigwira nchito
        3. Ndili ndi nchito yanga-yanga

7. Za cikwati
    1. Osakwatiwa
    2. Okwatiwa
    3. Chikwaticinatha
    4. Tikhalamosiyana ndi amuna
    5. Amunaanafa.
8. Zaka zimene wakhalam'cikwati……
9. Kodi munali okwatila kapena ayi, nthawi imene bvuto ya njira imene imapangika ku azimai ngati alikubeleka mobvutikirainayamba ?

    ……

    ……
10. Kodi mucokera ku mbali iti ya dziko ya Zambia?
    1. Southern province
    2. Eastern province
    3. Muchinga province
    4. Luapula province
11. Kodi amuna anu anakulekani (anathetsa banja) pamene njira yanu itayamba kutulutsa zonyansa zamkatimwa thupi?
        1. Inde
        2. Ayi
12. Kodi muli ndi ana angati?
    1. Nilibe
    2. Umodzi- Atatu
    3. Anai- Asanu ndi umodzi
    4. Asanu ndi awiri- Asanu ndi anai
    5. Opyolaasanu ndi anai
13. Kodi mumapeza ndalama zingati pa mwezi?
    1. Zopyola K1, 000.00
    2. Pakati pa K500.00 ndi K1, 000.00
    3. Zosapyola K500. 00
14. Kodi ndani amene athandizabanja ku nkhani ya ndalama?
    1. Inendekha
    2. Makolo
    3. Abale
    4. A fulendi

15. Kodi mwakhalandi bvuto ya njira yomwe imapangika ku azimai ngati alikubeleka mobvutikira kwanthawi zingati?
    1. Kamodzi
    2. Kawiri
    3. Katatu
    4. Kanai
    5. Kupyora kanai
16. Kodi mwakhala mukukakonzedwa kangati?
    1. Kamodzi
    2. Kawiri
    3. Katatu
    4. Kanai
    5. Kupyora kanai
17. Kodi munali kugwilitsa nchito njira yamayendedwe yotani nthawi imene munali kupita ku cipatala?

    ……

    ……..……..……

    ……

NDIME YACITATU : ZINTHU ZIMENE ZIPANGISA AZIMAI OMWE ALI NDI NJIRA IMENE IMAPANGIKA NTHAWI YOBELEKA NGATI MZIMAI ALI KUBELEKA MOBVUTIKIRAKUKUMANA NDI ZIMENENE AKUMANA NAZO PAMENE AKUSAKIRA THANDIZO YA ZAUMOYO.

18. Kodi munapita kale kuchipatala kukankozedwa?
    1. Inde
    2. Ayi
19. Kodi vipatala vokonza matenda amane aya viliko ?
    1. Ide
    2. Ayi
20. Kodi vipatala vamene ivi mukhoza kufika mosa vwutikila ?
    1. Ide
    2. Ayi
21. Nanga banakulandila bwanji kuchipate pomwe munayenda kukozedwa matenda amene aya ?
    1. Ide

2. Ayi

22. Kasamalidwe ayosebeza kuchipata kanali bwanji?

1. Bwino

2. Sikanali bwino

23. Kodi mumapempha cilolezo kwa ena pomwe mukufuna kukalandira thandizo ya zaumoyo, ndi colinga colandira samalo kulingana ndi bvuto ya njira imeneyo?

1. Inde
2. Ayi

24. Kodi ndani amene mumapemphako cilolezo?……
…….....

25. Kodi mumatha kukambirana nkhani poyera pa zinthu zokhuzana ndi njira imene imapangika ku azimai ngati alikubeleka mobvutikira?

1. Inde
2. Ayi

26. Mokhuzana ndiza kapezedweka ndalama, kodi ndi ciani cimene cimapangitsaazimaiamaneali ndi bvuto ya njira imene imapangika ngati ali kubelekamobvutikira, kulepherakusakirathandizo ya zaumoyo?……
…….
…….
…….

27. Muvomekeza kuti izi zinthu ndizo azimai a kuvera nazo mupofuna thandizo ndi bvuto ya njira imene imapangika ngati ali kubeleka mobvutikira, kulephera kusakira thandizo ya zaumoyo?

1. Zoganizila ndi zoyekezera
2. Ndondomeleko zaumoyo
3. Kusoweka kwa ulemu
4. Nkhawa
5. Zonenedwa ndi anthu
6. Kusaziwa pa zamathenda ndi mochilili
7. Mayendedwe
8. kusowa kwa ndalama zothandizikila kupala matenda

Tafika kumapeto kwakukambirana kwathu. Zikomo kwambiri pa zonena zanu, thawi, ndi kutengako mbali kwanu muku kambirana uku.

APPENDIX XV: CHIBEMBA STRUCTURED INTERVIEW SCHEDULE FOR WOMEN WITH OBSTETRIC FISTULA ON FACTORS WOMEN EXPERIENCE IN SEEKING FISTULA REPAIR SERVICES

Ubushiku bwamepusho:……

Inchende yamepusho……

Ishina yakepusha……..

Nambala nshi…….

Amafunde Yakepusha

1. Nimwebobanani
2. Londololeni ichilengo cha mepusho
3. Mwishibishe uyo mulisha ukutini nkama
4. Mwilemba ishina yenu
5. Mubike ifyasuko fyenu munchende uyoiyishele kumpela
6. Musheko inshita yamepusho kumpela ya fyonse
7. Ngatamwishibe amyasuko yafipusho fimo, Kutimwayeba umunenu amya sukilako
8. Kumpela ya mepusho ne fyasuko, mutashe pali fyonse

SECTION A: PALWA INCHENDE

1. Imyaka pa bushiku bwakulekelesha ubo mwafyalilwepo……
2. Imyaka mwakwete ilyo ubulwele bwa fistula bwatampile…….
3. Lulimi nshi mubonfya
    1. Tonga
    2. Bemba
    3. Ngoni
    4. Luvale
    5. Fimbi ……
4. Mulonganakwisa
    1. Seventh Day Adventist
    2. Roman Catholic
    3. Pentecostal Assembly of God
    4. Ucz
    5. Jehovahs Witness
    6. Fimbi …….
5. Amasambililo Mwashinta
    1. Tapali
    2. Primary
    3. Secondary
    4. College
    5. Ku University
    6. .Fimbi…….

6. Nifinshi muchita mubwikalo Bwenu?
    1. .Kasambilila
    2. . Umubonfi
    3. Ndaibombelanemwine

7. Ubusobolwebwenu
    1. Nabafyeneka
    2. Nalupwa
    3. Twalilekana
    4. Mukanfwilwa
8. Myaka inga mwafisha muchupochenu…….
9. Mwalyupwilweilintumwakweteubulwelebwa fistula…….
10. Ni province nshimwisako?
    1. Southern Province
    2. Eastern Province
    3. Muchinga Province
    4. Luapula Province
11. Bushe mwali abalekana lintu watampile ukusuma?
    1. Ehe
    2. Awe
12. Mwakwata abana banga?
    1. Nshakwata
    2. Umo-Batatu
    3. Bane-Mutanda
    4. Chinelubali-Pabula
    5. Ukuchilapabula
13. Bushe mufola shinga mubwikalo bwenu
    1. Ukupitililaba kwacha balufuikumi (K1,000.00)
    2. Pakati pa bakwachachisano ne kumi (K500.00-1000.00)
    3. Panshipalichisano (K500.00)
14. Nibanani abamya fwilisha kundalama?
    1. Nemwine
    2. Abafyashi
    3. Ulupwa
    4. Umwinamyandi
    5. Bambi…….

15. Miku inga mwakwatapo Obstetric Fistula?
    1. Imikuomo
    2. Imikuibili
    3. Imikuitatu
    4. Imikuyine
    5. Ukupitililayine
16. Miku inga mwayako mukulungisha?
    1. Umukuumo
    2. Imikuibili
    3. Imikuitatu
    4. Imikuyine
    5. Ukupitililayine
17. Mwachenda shani pakwisaku chipatala?.....

SECTION B: EFYO ABANAKASHI BAPITAMO ABO ABAKWATA UBULWELE BWAKAPUNDA KUBWANA KASHI

18. Bushe mwaliyako mu kuundapwa?
    1. Ehe
    2. Awe
19. Bushe ifipatala fyakundapwa oko fyaba?
    1. Ehe
    2. Awe
20. Bushe calianguka ukuya ko?
    1.Ehe
    2.Awe
21. Mukutontonkanya kwenu, bushe abalwele balapokolelwa bwino mufipatala?
    1. Ehe
    2. Awe
22. Bushe kuti mwalanda ati balabapokelela shani
    1. Bwinosana
    2. Ichalinga
23. Mulepusha insambu pa Kuya kuchipatala mukuposha ububulwele?
    1. Ehe
    2. Awe

24. Musenda insambukuli banani?.....

25. Bushe mulalanda palwamilandu ya bulwele bwakapunda kubewana kashi muchintu bwingi?

1. Ehe
2. Awe
3. Bwinosana
4. Ichalinga

26. Filengo nshi ifyabwikalo bwamuchalo ifilesha banamayo ukukanachingililwa muposha ubulwelebwa kapunda kubwanakashi

……
……
……
……

27. Fyakumano nshi ifinga lenga namayo ukukanaya nangula ukuchingilila kubulwelebwa obstetric fistula?

1. Lyashi lyafishilamo pamo nefyakwelenganya
2. Imibombele yabula ukufikapo mufipatala
3. Ukulufya ubucindami
4. Ukusakamana
5. Ukusulwa ku bantu
6. Ukukana ishiba pa bulwele bwa kupulinkana
7. Ubwafya bwa myendele pakuya kucipatala
8. Ifyakulipila pakundapwa

Twaisa mukutendeka kwa fipusho ne fyasuko. Twatotela sana palwamape yamashiwi yenu nenshita mwabonfya mukwasuka fyonse

APPENDIX XVI: CHITONGA STRUCTURED INTERVIEW SCHEDULE FOR WOMEN WITH OBSTETRIC FISTULA ON FACTORS WOMEN EXPERIENCE IN SEEKING FISTULA REPAIR SERVICES

Buzuba bwakubuzya mibuzyo:……...

Busena bwakubuzyila mibuzyo:…….....

Izyina ya sikubuzya mibuzyo:……

Serial number:…….

MALAILILE ASIKUBUZYA MIBUZYO

1. Kolipandulula kuli sikuvwiila.
2. Kopandulula muzeezo wa mibuzyo.
3. Komusyomezya sikuvwiila kuti bwiinguzi bwakwe mbwamaseseke alimwi takazyibwi.
4. Utalilembi zyina lyasikuvwiila apepa lijisi mibuzyo.
5. Ulembe bwiinguzi buyandika kumubuzyo abusena bwapegwa.
6. Upe ciindi kuli sikubuzya kutegwa abuzye mibuzyo kumamanino.
7. Umutondezye sikuvwiila muntu uukonzya kumuvwiila mibuzyo njotakonzyi kuvwiila yebo.
8. Umulumbe sikuvwiila kumamanino amubuzyo uli oonse.

CIBEELA CAKUTAANGUNA: BUVWILIZI BWA BUNTUSUSU

1. Muli amyaka yongaye?.....
2. Mwakali amyaka yongaye bulwazi bwa kapulo kajatikizya cizyalilo acisubilo naa cizyalilo a caambukilo nobwakatalika?.....

3. Muli bamusyobo nzi?
    1. Ba Tonga
    2. Ba Bemba
    3. Ba Lozi
    4. Ba Ngoni
    5. Ba Luvale
    6. Ba Kaonde
    7. Kuti kamuli wamusyobo wataambwa mujulu inga mwalemba musyobo wanu……..……
4. Chikombelo nko mupaila
    1. Ku nsabata
    2. Ku Roman Catholic
    3. Ku Pentecostals assembly of God
    4. Ku UCZ
    5. Ku New Apostolic Chuch
    6. Muli bakamboni bamwami
    7. Kuti chikombelo nkomupaila tiicalembwa mujulu inga mwalemba…….…….
5. Mpomwaka simpila mulwiiyo
    1. Tiindakaiya
    2. Ndakasimpila ku primary
    3. Ndakasimpila ku secondary
    4. Ndakasimpila ku collage
    5. Ndakasimpila ku university
    6. Kuti lwiiyo ndomujisi tiilwalembwa mujulu inga mwatulembela……..……
6. Hena chinzi ncomucita mubuumi?
    1. Muli basicikolo
    2. Mulabeleka
    3. Mulalibelekela

7. Luzyibo lwa cikwati
    1. Tamukwetwe
    2. Mulikwetwe
    3. Mwakalekana
    4. Mwakaandana
    5. Mwakafwidwa
8. Muli amyaka yongaye mucikwati momubede?.....

9. Hena mwakali kwetwe ciindi nomwakaba abulwazi bwa tupulo tujatikizya cizyalilo acisubilo naa cizyalilo acaambukilo?.....

10. Hena muzulilwa kulubazu nzi lwa cisi?
    1. Kumusanza
    2. Kulubazu lwakati
    3. Kulubazu lwa Muchinga
    4. Kulubazu lwa Luapula

11. Hena mwakali lekedwe nomwakatalika kusweka?
    1. Inzya
    2. Peepe
12. Hena muli abana bongaye?
    1. Kunyina
    2. Omwe-botatwe
    3. Bone-bali cisambomwe
    4. Bali lusele-bali fwuka
    5. Balayinda kuli bali fwuka
13. Hena muvwola mali nzi amwezi?
    1. Alainda amwaanda
    2. Akatikati ka zyuulu zyosanwe amwaanda
    3. Taasiki kuzyuulu zyosanwe
14. Hena mbaani baleta mali amunzi?
    1. Lwanu
    2. Bazyali
    3. Bamukowa
    4. Basankwa banu

5. Kuti naa kuli bambi inga mwatulembela

15. Hena mwakaba zyiindi zyongaye abulwazi bwa tupulo tujatikizya cizyalilo acisubilo naa cizyalilo acaambukilo?
    1. Ciindi comwe
    2. Zyiindi zyobie
    3. Zyiindi zyotatwe
    4. Zyiindi zyone
    5. Zyiindi zyiinda kuli zyone
16. Hena mwakaba akubambululwa kongaye?
    1. Komwe
    2. Kobile
    3. Kotatwe
    4. Kone
    5. Kwiinda kuli kone

17. Hena mwakabelesya nzila nzi kuya kucibbadela?.....

CIBEELA CABILI: ZYINTU ZYIYUNGIZYA KULI ZYICITIKA KULI BAMAKAINTU BALAA TUPULO TUJATIKIZYA CIZYALILO ACISUBILO NAA CIZYALILO ACAAMBUKILO NOBAYANDAULA KUSILIKWA

18. Hena inga mwalyaaba kale kuya kubambululwa tupulo ootu naa mwakabambululwa kale?
    1. Inzya
    2. Peepe

19. Hena zyibandela zisilika malwazi akapulo kozili?
    1. Inzya
    2. Peepe

20. Hena zyibbandela ezyi zilisikika?
    1. Inzya
    2. Peepe

21. Mukuyeeya kwanu, muyeeya kuti basilisi balabatambula kabotu bayandaula kusilikwa kutupulo tujatikizya cizyalilo acisubilo naa cizyalilo acaambukilo?
    1. Babatambula kabotu
    2. Tababatambuli kabotu

22. Hena bube bwabasilisi mubuyeeyela buti?
    1. Buli kabotu
    2. Tabuli kabotu

23. Hena mulalomba kuzuminizyigwa kumuntu uli oonse nomuyanda kusilikwa kutupulo tujatikizya cizyalilo acisubilo naa cizyalilo acaambukilo?
    1. Inzya
    2. Peepe

24. Hena mulomba kulibani kuzuminizyigwa ooku?.....

25. Hena twaambo tujatikizya tupulo ootu mulatubandika muntangalala?
    1. Inzya
    2. Peepe

26. Hena zyintu nzi zyicitika zyijatikizya kupona kwabantu, mbuli kujana mali akubaa azyakulya, zyalo zyikwabilila bamakaintu balaa tupulo ootu mukuyandaula kusilikwa?.....
    .....
    .....
    .....
    .....

27. Hena mulazumina kuti bamakaintu bali abulwazi bwatupulo walajana buyumuyumu kuya kukusilikwa akaambo ka twaambo out?
    1. Tunsiyansiya
    2. Kukatazingwa izila zyandene a ndene zyayakuya kuchibbandedela
    3. Kubula bulemu
    4. Kuyoowa
    5. Kuyeeyelwa zyintu zitelende
    6. Kubula luzyibo lwabulwazi ankobusilikilwa

7. Kubula zyendelo
8. Kubbandela kusilikwa

Twasika kumamanino amubandi wesu. Ndamulumba kapati mukutola lubazu mumubandi ooyu alimwi aciindi ncomwandipa kuti ndikanane andimwe.

APPENDIX XVII: ENGLISH INTERVIEW SCHEDULE FOR HEALTH CARE PROFFESSIONALS VIEWS ON FACTORS WOMEN EXPERIENCE IN SEEKING FISTULA REPAIR SERVICES.

Date of Interview : .....

Place of Interview : .....

Name of Interviewer: .....

Serial Number : .....

INSTRUCTIONS FOR THE INTERVIEWER

1. Introduce yourself to the respondent.
2. Explain the reason for the interview.
3. Assure the respondent of confidentiality and anonymity
4. Do not write the name of the respondent on the interview schedule.
5. Fill in the most appropriate response to the question on the space provided.
6. Provide time for the respondent to ask questions at the end of the interview.
7. Refer the respondents to a person who can answer the questions you are not sure of.
8. Thank the respondent at the end of each interview.

SECTION A: DEMOGRAPHIC DATA

1. Age at last birthday .....
2. Sex
    1. Female
    2. Male
3. Occupation .....

4. Marital status
    1. Single
    2. Married
    3. Divorced
    4. Separated
    5. Widower
5. Religious Denomination
    1. Seventh Day Adventist
    2. Catholic
    3. UCZ
    4. Jehovah's witness
    5. New Apostolic church
    6. Pentecostal Assembly of God
    7. Others specify……

6. Department working from?.....

7. Number of years working in that department?
    1. 0-5 years
    2. 6-10 years
    3. More than 10 years

SECTION B: FACTORS WOMEN WITH OBSTETRIC FISTULA EXPERIENCE IN SEEKING HEALTH CARE

7. The following factors were mentioned by women with obstetric fistula as hindering them from seeking fistula repair services? What are your views on each factor?

1. Lack of knowledge on the condition and repair services

……

……

……

……

2. Anxiety

……

……

……

……

……

3. Loss of dignity

……

……

……

……

……...

4. Stigma

……

……

……

……

5. Transportation challenges

……

……

……

……

……

6. Financing for the procedure

……

……

……

……
……

7. Myths and misconception

……
……
……
……
……

8. Health systems barrier

……
……
……
……
……

We have come to the end of our discussion. Thank you very much for your contributions and for participation as well as your time.

APPENDIX VIII: RESERCH BUDGET

CATERGORY	UNIT COST ZMK	QUANTITY	TO TAL
STATIONARY			
1. External hard drive	750.00	2	1500.00
2. Bond paper	50.00	20	1000.00
3. Pens	2.50	10	25.00
4.Pencils	2.50	5	12.50
5. Rubbers	5.00	2	10.00
6. Notebooks	8.00	10	80.00
7. Tipex	12.00	2	24.00
8.Bags for questionnaires	150.00	5	750.00
9. Stapler	25.00	5	125.00
10. Staples	10.00	1 box	10.00
11. Tape recorder	800.00	1	800.00
SUBTOTAL			**4336.00**
PERSONNEL			
a. Lunch allowance			
Principal researcher	50.00	1x 98 days	4,900.00
Research assistants	50.00	4x 98 days	19, 600.00
SUBTOTAL			**24,500.00**
SECRETARIAL SERVICES			
Ethics Committee	1000.00	**1**	1000.00
Data entry	3000.00	1	3000.00
Data analysis	3000.00	1	3000.00

Photocopying Proposal	0.50	100x3	150.00
Photocopying Questionnaires,information sheet and informed consent	0.30 x 22 pages	273	1 801.80
Photocopying report	0.50	273 x4	546.00
Binding	300.00	4 Copies	1200.00
Printing Picture Report	500.00	1	500.00
Publications	750.00	3	2250.00
SUBTOTAL			**13447.80**
TOTAL			**42,283.00**
Contigency Fund 10%			**4,228.30**
GRANDTOTAL			**46, 511.30**

JUSTIFICATION FOR THE BUDGET

Stationary was required for the paperwork

Allowances for the researchers were required because the team collected data throughout the day, away from their homes.

Funds were needed for photocopying and binding of the proposal and reports

Contigency fund which is 10% of the budget was reguired for any extra costs due to inflation and for any eventualities

THESIS TIMELINES

Activities	Year 1 (March 2016- Feb, 2017			Year 2 (March, 2017- March, 2018)				Year 3 (March, 2018- March, 2019				Year 4 (March, 2019- March, 2020)				Year 5 (March, 2020- Feb2021				Year 6 (March 2021- Feb 2022				
	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1
Proposal Writing	←								→															
Ethical Approval						↔		-																
Data collection							→				←													
Data Analysis											→											→		
Final Write up																			→					
Thesis submission																					→	←		
Publication of Papers						←																		→
Defense																						↔		

LIST OF PUBLICATIONS

- Tembo, N.,N., Odland J., Zulu, J.,M., Kwaleyela, C.N., Mukwato, P.,M., & Maimbolwa, M.,C. (2020). Views of health care providers on factors hindering women with obstetric fistula in seeking fistula repair services in Zambia: The case of Muchinga, Luapula, Eastern and Southern provinces. International Journal of Nursing and Midwifery, Vol 12 (1), pp 7-13, (https://doi.org/10.5897/IJNM2019.0384)

- Tembo N.,N., Odland J., Zulu, J.,M., Kwaleyela, C.,N., Mukwatokatowa, P., M., & Maimbolwa, M.,C. (2020). Marital experiences of women with obstetric fistula: a systematic review of qualitative studies. African Journal of Midwifery and Women's Health. .https://doi.org.uk/10.12968/ ajmw.2018.0009

- Tembo,N.,N., Maluwa, A., Odland, J., Mukwato, P.,M., Kwaleyela, C.N., Zulu, J.,M., &. Maimbolwa, M.,C. (2020). Barriers in seeking fistula repair services among women with obstetric fistula in Zambia: The case of Muchinga, Luapula Eastern and Southern Provinces. International Journal of Midwifery and Nursing Practice.. 3(1): 13-20.

All Correspondence should be addressed to the
Permanent Secretary
Telephone: +260 211 253040/5
Fax: +260 211 253344

In reply please quote:

MH/10/9/10

REPUBLIC OF ZAMBIA
MINISTRY OF HEALTH

NDEKE HOUSE
P. O. BOX 30205
LUSAKA

1 December, 2017

Authorized to Collect Data
Hlwa

Professor M.C. Maimbolwa
University of Zambia
School of Nursing Sciences
LUSAKA

Dear Madam,

SUBJECT: REQUEST TO COLLECT DATA ON OBSTETRIC FISTULA FROM REPRODUCTIVE HEALTH UNIT OFFICERS

Ministry of Health acknowledges receipt of a letter dated 20 November, 2017 in which you requested the institution to allow **Nchimunya Nambala Tembo** (PhD Student) to interview Reproductive Health Officers from this office on issues patterning to obstetric fistula.

The Ministry is pleased to inform you that permission has been granted, and the student can go ahead and conduct the interviews.

Ministry looks forward to receiving the results of the study.

Dr. Kennedy Malama
Permanent Secretary – (A)
MINISTRY OF HEALTH

REPUBLIC OF ZAMBIA
MINISTRY OF HEALTH
11 DEC 2017
P.O. BOX 30205 LUSAKA

Reproductive Health Team
Kindly provide bearer the necessary support

DPH
11.12.2017.

(2) AD - Reproductive Health
Kindly deal
04.06.2018

THE UNIVERSITY OF ZAMBIA
SCHOOL OF NURSING SCIENCES

Tel: +260 211 252453
+260 211 252453
Website: www.unza.zm
Email: dean-nursingscience@unza.zm

School of Nursing Sciences Buidling Fax:
University Teaching Hospitals
P.O Box 50110
Lusaka, Zambia

28th May, 2018.

REPUBLIC OF ZAMBIA
MINISTRY OF HEALTH
OFFICE OF THE PERMANENT SECRETARY
ADMINISTRATION
P.O. BOX 30205, LUSAKA
(1)

DPH
deal
1/6/18

The Permanent Secretary
Ministry of Health
P.O BOX 30505
Lusaka

Dear Sir,

RE: REQUEST TO COLLECT DATA ON OBSTETRIC FISTULA FROM REPRODUCTIVE HEALTH UNIT OFFICERS

The above subject matter refers.

I acknowledge receipt of a letter dated 4th April, 2018 in which the Ministry of Health approved and granted permission for the student to conduct the study in Eastern, Muchinga and Southern provinces and further advised to replace Southern Province with Luapula Province because this is where recorded and treated cases of obstetric fistula are more according to the fistula survey report (2016-2017).

I wishes to inform you that following the approval of the proposal by both the University of Zambia Research ethics committee and subsequently the National Health Research Authority, the student went ahead and collected research data in the named provinces, Southern Province inclusive. However, the sample size for Southern Province was not achieved. In view of the above, I request for your permission to allow the student conduct interviews in Luapula Province in order to achieve the sample size.

Find attached the approval letters from the University of Zambia research ethics committee, the National Health Research Authority, letters of authority to conduct the study in Southern Province for easy of your reference.

Looking forward to hearing from you.

NHRA
Kindly advise on how we proceed Regarding the Request
05/06/18

Yours faithfully,

Professor M. C. Maimbolwa (*PhD*)
RESEARCH SUPERVISOR

Cc: Dean, School of Nursing Sciences
Assistant Dean (PG), School of Nursing Sciences
File

THE NATIONAL HEALTH RESEARCH AUTHORITY
Paediatric Centre of Excellence
University Teaching Hospital
P.O. Box 30075
LUSAKA

Telephone: +260 211 250309 | Mobile: +260 95 5632726

14th June, 2018

Research Supervisor
Prof. Margaret Maimbolwa
University of Zambia
School of Nursing Sciences
P. O Box 50110
Lusaka, Zambia

Re: Request to Collect Data on Obstetric Fistula from Reproductive Health Unit Officers

The National Health Research Authority through the Ministry of Health is in receipt of your request to add Luapula Province as one of the study sites for the study titled **"Experiences of Women with Obstetric Fistula in Seeking Health Care in Zambia".**

I wish to inform you that following submission of your request and the guidance from the Permanent Secretary in a letter dated **4th April, 2018**, the Authority is pleased to inform you that it has no objection to the extension of your student's study site to include Luapula Province. However, be advised that the Principal Investigator needs to obtain ethical clearance from the University of Zambia Biomedical Research Ethics Committee in line with the amendments made to the research protocol before proceeding with the data collection.

Yours sincerely,

REPUBLIC OF ZAMBIA
NATIONAL HEALTH RESEARCH AUTHORITY
14 JUN 2018
OFFICE OF THE DIRECTOR/CEO
P.O. BOX 30075
LUSAKA

Dr. Godfrey Biemba
CEO/Director
National Health Research Authority

CC: PS Administration, MOH
CC: Director Public Health, MOH
CC: Deputy Director, Research Promotion and Regulation, NHRA

All correspondences should be addressed to the Director and Chief Executive Officer

THE NATIONAL HEALTH RESEARCH AUTHORITY
Paediatric Centre of Excellence
University Teaching Hospital
P.O. Box 30075
LUSAKA
Telephone: +260 211 250309 | **Mobile:** +260 95 5632726
Email: znhrasec@gmail.com | **Website:** www.nhra.org.zm

15th August, 2018

Nchimunya N Tembo
University of Zambia
School of Nursing Sciences
P.O. Box 50110
LUSAKA

Re: Request for Authority to Conduct Research

The National Health Research Authority is in receipt of your request for authority to conduct research titled **"Experiences of Women with Obstetric Fistula in Seeking Health Care in Zambia: A Case of Muchinga, Eastern, Southern and Luapula Provinces."**

I wish to inform you that following submission of your request to the Authority, our review of the same and in view of the ethical clearance, this study has been **approved** on condition that:

1. The relevant Provincial and District Medical Officers where the study is being conducted are fully appraised;
2. Progress updates are provided to NHRA quarterly from the date of commencement of the study;
3. The final study report is cleared by the NHRA before any publication or dissemination within or outside the country;
4. After clearance for publication or dissemination by the NHRA, the final study report is shared with all relevant Provincial and District Directors of Health where the study was being conducted, University leadership, and all key respondents.

Yours sincerely,

Dr. Godfrey Biemba
Director/CEO
National Health Research Authority

All correspondences should be addressed to the Director/CEO National Health Research Authority

UNIVERSITY OF ZAMBIA
BIOMEDICAL RESEARCH ETHICS COMMITTEE

Telephone: 260-1-256067
Telegrams: UNZA, LUSAKA
Telex: UNZALU ZA 44370
Fax: + 260-1-250753
Federal Assurance No. FWA00000338

Ridgeway Campus
P.O. Box 50110
Lusaka, Zambia
E-mail: unzarec@unza.zm
IRB00001131 of IORG0000774

9th September, 2019.

Your Ref: 021-05-17

Ms. Nchimunya Nambala,
Lusaka College of Nursing and Midwifery,
P.O Box 50366,
Lusaka.

Dear Ms. Nambala,

RE: REQUEST FOR RENEWAL OF APPROVAL FOR RESEARCH STUDY ENTITLED: "EXPERIENCES OF WOMEN WITH OBSTETRIC FISTULA IN SEEKING HEALTH CARE IN ZAMBIA: A CASE OF MUCHINGA, EASTERN, SOUTHERNAND LUAPULA PROVINCES" (REF. No. 021-05-17)

We acknowledge receipt of your request for renewal and attached progress report therewith.

Renewal is hereby granted for a period of one year from 22nd August, 2019 to 21st August 2020.

Yours sincerely,

Munsaka.

Sody Mweetwa Munsaka, BSc., MSc., PhD
CHAIRPERSON
Tel: +260977925304
E-mail: s.munsaka@unza.zm

No objection
MNCH facilitate
noted

THE UNIVERSITY OF ZAMBIA
SCHOOL OF NURSING SCIENCES

Telephone: 252641
Telegrams: UNZA, Lusaka
UNALUZA 44370

P.O Box 50110
Lusaka

6th October, 2017

REPUBLIC OF ZAMBIA
MINISTRY OF HEALTH
02 NOV 2017
PROVINCIAL HEALTH OFFICE
PROVINCIAL HEALTH DIRECTOR
P.O. BOX 510023, CHIPATA

No objection
P/Planner
Facilitate

The Provincial Health Director,
Eastern Province,
Chipata.

Dear Sir/Madam,

RE: REQUEST FOR PERMISSION TO COLLECT DATA – NCHIMUNYA NAMBALA TEMBO

Nchimunya Nambala Tembo is currently a student pursuing PhD in Midwifery at University of Zambia, School of Nursing Sciences. Her research title is "**Experiences of women with obstetric fistula in seeking health care in Zambia; A case of Muchinga, Eastern and Southern provinces**".

The purpose of writing this letter is to request your office to allow the student to collect data in the province by interviewing women with obstetrics in their homestead.

Your support is highly appreciated.

Yours faithfully,

Dr. M.C. Maimbowa ***PhD***
SENIOR LECTURER/RESEARCH SUPERVISOR

Cc: Dean, School of Nursing Sciences
Assistant Dean (PG), School of Nursing Sciences
File

THE UNIVERSITY OF ZAMBIA
SCHOOL OF NURSING SCIENCES

Telephone: 252641
Telegrams: UNZA, Lusaka
UNALUZA 44370

P.O Box 50110
Lusaka

6th October, 2017

REPUBLIC OF ZAMBIA MINISTRY OF HEALTH
02 NOV 2017
PROVINCIAL HEALTH OFFICE
PROVINCIAL HEALTH DIRECTOR
P.O. BOX 510023, CHIPATA

No objection
P/Planner
Faulitse

The Provincial Health Director,
Eastern Province,
Chipata.

Dear Sir/Madam,

RE: REQUEST FOR PERMISSION TO COLLECT DATA – NCHIMUNYA NAMBALA TEMBO

Nchimunya Nambala Tembo is currently a student pursuing PhD in Midwifery at University of Zambia, School of Nursing Sciences. Her research title is "**Experiences of women with obstetric fistula in seeking health care in Zambia; A case of Muchinga, Eastern and Southern provinces**".

The purpose of writing this letter is to request your office to allow the student to collect data at your institution by interviewing health care providers (programme Planners).

Your support is highly appreciated.

Yours faithfully,

Dr. M.C. Maimbowa ***PhD***
SENIOR LECTURER/RESEARCH SUPERVISOR

Cc: Dean, School of Nursing Sciences
Assistant Dean (PG), School of Nursing Sciences
File

THE UNIVERSITY OF ZAMBIA
SCHOOL OF NURSING SCIENCES

Telephone: 252641
Telegrams: **UNZA**, Lusaka
UNALUZA 44370

P.O Box 50110
Lusaka

6th October, 2017

REPUBLIC OF ZAMBIA MINISTRY OF HEALTH
02 NOV 2017
PROVINCIAL HEALTH OFFICE
PROVINCIAL HEALTH DIRECTOR
P.O. BOX 510023, CHIPATA

No objection
P/Planner
Facilitate

The Medical Superintendent,
Katete Mission Hospital,
Katete.

Dear Sir/Madam,

RE: REQUEST FOR PERMISSION TO COLLECT DATA– NCHIMUNYA NAMBALA TEMBO

Nchimunya NambalaTembo is currently a student pursuing PhD in Midwifery at University of Zambia, School of Nursing Sciences. Her research title is "Experiences of women with obstetric fistula in seeking health care in Zambia; A case of Muchinga, Eastern and Southern provinces".

The purpose of writing this letter is to request your office to allow the student to collect data from health care providers (programme implementers) working in gynaecological wards.

Your support is highly appreciated.

Yours faithfully,

ST. FRANCIS' MISSION HOSPITAL
03 NOV 2017
MEDICAL SUPERINTENDENT
PRIVATE BAG 01, KATETE.
TEL:0216 252210, FAX:0216 252278

Dr. M.C. Maimbowa ***PhD***
SENIOR LECTURER/RESEARCH SUPERVISOR

Cc: Dean, School of Nursing Sciences
Assistant Dean (PG), School of Nursing Sciences
File

THE UNIVERSITY OF ZAMBIA
SCHOOL OF NURSING SCIENCES

Telephone: 252641
Telegrams: UNZA, Lusaka
UNALUZA 44370

P.O Box 50110
Lusaka

6th October, 2017

Granted
Everything checked with the standards
Kindly collect the data
22/10/17

The Provincial Health Director,
Muchinga Province,
Chinsali.

Dear Sir/Madam,

RE: REQUEST FOR PERMISSION TO COLLECT DATA – NCHIMUNYA NAMBALA TEMBO

Nchimunya Nambala Tembo is currently a student pursuing PhD in Midwifery at University of Zambia, School of Nursing Sciences. Her research title is "**Experiences of women with obstetric fistula in seeking health care in Zambia; A case of Muchinga, Eastern and Southern provinces**".

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Your support is highly appreciated.

Yours faithfully,

Dr. M.C. Maimbowa ***PhD***
SENIOR LECTURER/RESEARCH SUPERVISOR

Cc: Dean, School of Nursing Sciences
Assistant Dean (PG), School of Nursing Sciences
File

REPUBLIC OF ZAMBIA
MINISTRY OF HEALTH
MUCHINGA PROVINCIAL HEALTH OFFICE
25 OCT 2017
PROVINCIAL HEALTH DIRECTOR
P.O. BOX 480021,
CHINSALI.

THE UNIVERSITY OF ZAMBIA
SCHOOL OF NURSING SCIENCES

Telephone: 252641
Telegrams: **UNZA**, Lusaka
UNALUZA 44370

P.O Box 50110
Lusaka

6th October, 2017

Granted. Kindly MS, Chilmya the student to accept collect the data.
Dr. M.C. Maimbowa For PHD
25/10/2017

The Provincial Health Director,
Muchinga Province,
Chinsali.

Dear Sir/Madam,

RE: REQUEST FOR PERMISSION TO COLLECT DATA – NCHIMUNYA NAMBALA TEMBO

Nchimunya Nambala Tembo is currently a student pursuing PhD in Midwifery at University of Zambia, School of Nursing Sciences. Her research title is "**Experiences of women with obstetric fistula in seeking health care in Zambia; A case of Muchinga, Eastern and Southern provinces**".

The purpose of writing this letter is to request your office to allow the student to collect data at your institution by interviewing health care providers (programme Planners).

Your support is highly appreciated.

Yours faithfully,

Dr. M.C. Maimbowa ***PhD***
SENIOR LECTURER/RESEARCH SUPERVISOR

Cc: Dean, School of Nursing Sciences
Assistant Dean (PG), School of Nursing Sciences
File

Copy: HA

HA is aware of research activity
26 OCT 2017
HOSPITAL ADMINISTRATOR
P.O. BOX 450030,
MPIKA.

THE UNIVERSITY OF ZAMBIA
SCHOOL OF NURSING SCIENCES

Telephone: 252641
Telegrams: **UNZA**, Lusaka
UNALUZA 44370

P.O Box 50110
Lusaka

6th October, 2017

The Medical Superintendent,
Chilonga Mission Hospital,
Mpika.

Dear Sir/Madam,

RE: REQUEST FOR PERMISSION TO COLLECT DATA– NCHIMUNYA NAMBALA TEMBO

Nchimunya Nambala Tembo is currently a student pursuing PhD in Midwifery at University of Zambia, School of Nursing Sciences. Her research title is "Experiences of women with obstetric fistula in seeking health care in Zambia; A case of Muchinga, Eastern and Southern provinces".

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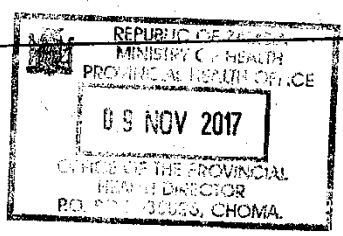

09/11/17
AH MS/ DHDE
Please facilitate

The Provincial Health Director,
Southern Province,
Choma.

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The purpose of writing this letter is to request your office to allow the student to collect data in the province by interviewing women with obstetrics in their homestead.

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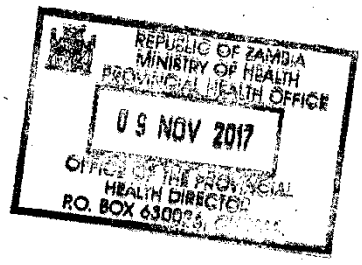

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Telegrams: **UNZA**, Lusaka
UNALUZA 44370

P.O Box 50110
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09/11/17
Authority granted

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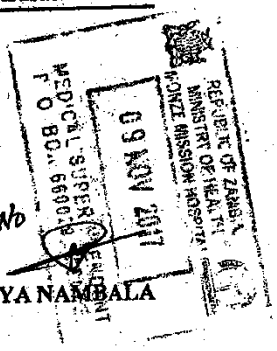

The Medical Superintendent,
Monze Mission Hospital,
Monze.

SHA FYA
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Assistant Dean (PG), School of Nursing Scienees
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THE UNIVERSITY OF ZAMBIA
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Department of Midwifery, Women's and Child Health

Tel: +260 211 252453
Fax: +260 211 252453
Website: www.unza.zm
Email: dean-nursingscience@unza.zm

School of Nursing Sciences Building
University Teaching Hospitals
P.O Box 50110
Lusaka, Zambia

16th August, 2018

No objections

The Provincial Health Director,
Luapula Province,
MANSA.

Dear Sir/Madam,

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Prof M.C. Maimbolwa ***PhD***
RESEARCH SUPERVISOR

Cc: Dean, School of Nursing Sciences
Assistant Dean (PG), School of Nursing Sciences
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School of Nursing Sciences Buidling
University Teaching Hospitals
P.O Box 50110
Lusaka, Zambia

16th August, 2018

21 AUG 2018

No objections

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Luapula Province,
MANSA.

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Website: www.unza.zm
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School of Nursing Sciences Building
University Teaching Hospitals
P.O Box 50110
Lusaka, Zambia

16th August, 2018

REPUBLIC OF ZAMBIA
MINISTRY OF HEALTH
MANSA GENERAL HOSPITAL
20 AUG 2018
MEDICAL SUPERINTENDENT
P.O. BOX 710155, MANSA

The Medical Superintendent,
Mansa General Hospital
MANSA.

go ahead with data collection
20/08/18

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Yours faithfully,

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RESEARCH SUPERVISOR

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THE UNIVERSITY OF ZAMBIA
SCHOOL OF NURSING SCIENCES

Telephone: 252641
Telegrams: UNZA, Lusaka
UNALUZA 44370

P.O Box 50110
Lusaka

6th October, 2017

The Director,
UNFPA,
Lusaka.

Dear Sir/Madam,

RE: **REQUEST FOR PERMISSION TO COLLECT DATA– NCHIMUNYA NAMBALA TEMBO**

Nchimunya Nambala Tembo is currently a student pursuing PhD in Midwifery at University of Zambia, School of Nursing Sciences. Her research title is "**Experiences of women with obstetric fistula in seeking health care in Zambia; A case of Muchinga, Eastern and Southern provinces**".

The purpose of writing this letter is to request your office to allow the student to collect data from the Zambia technical support team (programme planners) involved in obstetrics fistula.

Attached are letters of approval from the National Health Research Authority and University of Zambia Biomedical Research Ethics Committee.

Your support is highly appreciated.

Yours faithfully,

Dr. M.C. Maimbowa *PhD*
SENIOR LECTURER/RESEARCH SUPERVISOR

Cc: Dean, School of Nursing Sciences
Assistant Dean (PG), School of Nursing Sciences
File

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International Journal of Nursing and Midwifery

Full Length Research Paper

Views of health care providers on factors hindering women with obstetric fistula in seeking fistula repair services in Zambia: The case of Muchinga, Luapula, Eastern and Southern provinces

Nchimunya Nambala Tembo1*, Jon Odland2, Joseph Mumba Zulu3, Concepta Namukolo Kwaleyela1, Patricia Katowa Mukwato1 and Margaret C. Maimbolwa1

1School of Nursing Sciences, University of Zambia, P. O. Box 50110, Lusaka, Zambia.
2Norwegian University of Science and Technology (NTNU), Trondheim, Norway
3School of Public Health, University of Zambia.

Received 2 July, 2019; Accepted 19 December, 2019

Poor use of fistula repair services has contributed to the continued consequences of obstetric fistula that are physical, psychological, social, financial and economic among the afflicted women. The study was designed to assess views of health care providers on factors hindering women with obstetric fistula in seeking fistula repair services. A descriptive cross sectional design was used. Sixty-five (65) health care providers were selected to participate in the study. A structured interview schedule was used to collect data. Reliability was ensured using test retest and alpha value of 0.7 for the views scale Statistical analysis was performed with the IBM SPSS Statistics 20 software. Data was expressed as descriptive summary measures. Factors found to be hindering women in seeking fistula repair services were lack of knowledge that repair services exist, anxiety, loss of dignity, stigma, transportation challenges, financing for the procedure, myths and misconception on obstetric fistula and health systems barriers. Therefore, there is need to engage the individual, communities, organisations and policy makers in order to improve women's use of fistula repair services**.**

Key words: Health care providers, women with obstetric fistula, fistula repair services, obstetric fistula, Views, Zambia.

INTRODUCTION

Obstetric fistula is a childbirth complication in which a hole develops between the bladder and vagina or between the rectum and vagina (Gele et al., 2017). It occurs after a prolonged and neglected labour without adequate assistance or might happen as a complication after caesarean delivery, and causes a constant leaking of urine and/or faeces through the vagina (Gele et al.,2017). Fistula occurs roughly in 50,000 –130,000 girls and women occurring living in Africa annually (Alkire et al., 2012).

However, treatment consists of surgical repair of the fistulas, though it sometimes requires multiple surgeries to get a complete resolution of the problem (Wall, 2012a). Women with fistula may be unaware that repair is possible, or lack the resources to seek care, and may face delays in receiving appropriate treatment due to personnel or facility shortages and poor quality of care (Fiander et al., 2013). Also, many women and girls may not seek fistula surgery despite realising the urine leakage soon after delivery (Turan et al., 2007).

Several studies (Aliyu and Esegbona, 2011; Mselle et al., 2011) have revealed failure to seek care as a result of women with obstetric fistula not being accompanied to the treatment facilities by their husbands, families, or communities. Women normally have to travel long distances to reach the few facilities that conduct fistula surgery. The woman may also lack the resources needed to seek care, as distances to health facilities may be great and travel to facilities may be costly (Bangser et al.,2010; Fiander et al., 2013). Sometimes, even if awareness, financial and transportation barriers to care are

overcome, women may experience delays in seeking repair due to a number of factors including lack of skilled fistula surgeons, and long hospital waiting times (Bellows et al., 2013).

In addition, bad treatment of women and girls with obstetric fistula in health facilities can deter them from going for follow-up care or seeking further medical treatment in case of unsuccessful surgery (Odhiambo, 2010). Also, afflicted women experience anxiety, loss of dignity, and low self-worth that inhibits their agency and motivation for seeking treatment (Bangser, 2011). Previous research have also shown that some of the morbidities related to delay in seeking treatment are neurological damage in the lower limbs, such as foot drop, development of contractures, disuse atrophy,genitourinary infections, renal failure, and dermatitis. Other factors too include a disproportionately high prevalence of depression (Mselle et al., 2011).

Furthermore, research has shown that in the quest for healing, women wandered between different modern health structures before being directed to an effective fistula repair centre, a few initially consulted witchdoctors before turning to modern health care and some women resorted to traditional care for lack of proper referral or in an attempt to maintain some social support by complying with local practices and family advice (Maulet et al., 2015). Seeking repair services from other sources further delays women in seeking modern treatment.

Given the above factors of which some have also beenidentified in this current study, the aim was to assess views of health care providers on factors hindering afflicted women in seeking fistula repair services.

MATERIALS AND METHODS

This was a descriptive cross sectional study. The study population included was policy markers working in the Reproductive Health Unit at the Ministry of Health, program planners at the Provincial Health Offices in the four provinces of Zambia (Muchinga, Luapula, Eastern and Southern provinces) and UNFPA and program implementers working in the four fistula repair centres (Mansa General Hospital, Chilonga, Katete and Monze Mission hospitals). A total of 65 respondents participated in the study from October 2017 to September 2018. Data were collected using a structured questionnaire. Data collection instrument was pre-tested in Lusaka
province on program planners working at Lusaka Provincial Health Office and program implementers at the University Teaching Hospitals - Women and Newborn Hospital. The results were then used to reframe the questionnaire for final collection of data. The interview took 30–45 minutes.

Validity and reliability of the instrument

To ensure validity, data collection instruments were subjected to scrutiny by clinical experts and research supervisors. Same data collection tool was used on all the respondents in the same way. To ensure reliability, each interview question was tested using test retest and the average alpha value was above 0.7 for the views scale.

Ethical approval

The proposal was approved by the Biomedical Research Ethics Committee of the University of Zambia. Written permission was granted by the National Health Research Authority under the Ministry of Health. Written permission was also sought from the Provincial Health Directors (Muchinga, Luapula, Eastern and Southern Provinces), Senior Medical Superintendent at the
University Teaching Hospital and Medical superintendents in the four fistula repair centres (Mansa General Hospital, Chilonga Mission Hospital, Katete Mission Hospital and Monze Mission Hospital). Respondents were asked to give their consent to participate. Only those who consented participated in the study. Privacy, anonymity and confidentiality were maintained and participation in the study was purely voluntary. Collected data were securely kept in a locked cupboard and only accessible to the researcher.

Data was entered in a computer and analysed using SPSS version 20 computer statistical package to summarise the quantitative data with consequent generation of frequencies and proportions.

RESULTS

A total of 65 health care providers participated in the study. The age of the participants ranged from 20 to 59 years (Table 1)**.** The results of the study have been presented using frequency tables.

Socio demographic characteristics of sample

Majority 35 (53.8%) of the respondents were aged 20 to 35 years while those aged above 50 years were 7 (10.8%). More than two thirds 51 (78.5%) of the respondents were females. Majority 42 (64.6%) were were married. Almost all 64 (98.5%) of the respondents were Christians. Majority 37 (56.9%) were diploma holders. More than half 40 (61.5%) of the respondents were married. Almost all 64 (98.5%) of the respondents were Christians. Majority 37 (56.9%) were diploma holders. More than half 40 (61.5%) of the respondents were working in gynecological wards. More than two thirds 50 (76.9%) of the respondents have been working in the same departments for 0-5 years.

Table 1: Demographic data (n=65)

Variable (n=65)	Frequency (f)	%
Age		
20-35 years	35	53.8
36--50 years	23	35.4
51 years and above	7	10.8
Sex		
Females	51	78.5
Males	14	21.5
Marital status		
Married	42	64.6
Not married	23	35.4
Religion		
Christians	64	98.5
Non-Christians	1	1.5
Qualification		
Degree	10	15.4
Diploma	37	56.9
Certificate	18	27.7
Department working from		
Surgical Ward	12	18.5
Gynecological Ward	40	61.5
MOH/ PHO/UNFPA	13	20.0
Number of years working in that department		
0 – 5 years	50	76.9
6 years and above	15	23.1

Respondents rating of views on factors hindering women in seeking fistula repair services

Table 2 shows respondents ratings of views on factors hindering women in seeking fistula repair services. Below are the views of health care providers on factors hindering women in seeking fistula repair services.

Table 2. Health care provider views (n=65).

View	Yes		No	
	n=65	%	n=65	%
Lack of knowledge that repair services exist				
Build fistula centres in villages	48	73.8	17	26.2
Sensitise chiefs, community leaders, community based volunteers, religious leaders, local Government officials and non-governmental organization	38	58.5	27	41.5
Educate all pregnant women during antenatal clinics on obstetric fistula and fistula repair services	22	33.3	43	66.2
Mobile clinics to include obstetric fistula repair	24	36.9	41	63.1
Anxiety				
Target families of afflicted women and give them information on obstetric fistula	33	50.8	32	49.2
Families to escort the afflicted woman for fistula repair	22	33.8	43	66.2
Loss of dignity				
Counselling to afflicted women and their relatives pre- and post-fistula repair on obstetric fistula	56	86.2	9	13.8
Stigma				
Formulation of fistula support groups in the community	6	9.2	59	90.8
Government to improve on the tracking system	43	66.2	22	33.8
Transportation challenges				
Afflicted women should be recruits on social cash transfer	21	32.3	44	67.8
Transport refund for those who seek repair services using own resources	48	73.8	17	26.2
Government to build proper road networks	12	18.5	53	81.5
Keeping women who sustain a fistula until repaired	2	3.1	63	96.9
Financing for the procedure				
Government to provide free fistula services	65	100	0	0
Educate men not to abandon their wives after sustaining a fistula so as to support their wives Financially	65	100	0	0
Myths and misconception				
Sensitise the communities on myths and misconception on obstetric fistula	65	100	0	0
Engage Ministry of traditional affairs	5	7.7	60	92.3
Health systems barrier				
Train surgeons on how to repair afflicted women	47	72.3	18	27.7

DISCUSSION

Our study brings a new perspective, that of the healthcare providers view on factors hindering women with obstetric fistula in seeking fistula repair services. Policy makers, program planners and program implementers participated in the study.

The respondents were asked to assess each factor hindering women with obstetric fistula in seeking fistula repair services and provide their views. Regarding lack of knowledge that fistula repair services exist, it is not surprising that majority (73.8%) of the respondents stated that fistula centres should be built in villages in order to facilitate education on the condition and also to have the fistula repaired. This issue of building more centres has been documented by Cam et al. (2009) who indicated out that establishing dedicated fistula centres in high prevalence areas is an effective strategy in supporting women living with obstetric fistula rather than a hospital committed to fistula repair. In our study, a minority of healthcare providers (33.3%) expressed education of all pregnant women during antenatal care on obstetric fistula and fistula repair services. This may result in women who sustain a fistula in seeking fistula repair services in good time. It is important to note that education may directly improve an individual's knowledge, as well as ability to process information. Therefore, during antenatal clinic visits, nurse midwives and public health nurses should educate women on the risks of developing an obstetric fistula (Sullivan, 2014). Further, over half of the respondents (58.5%) felt that there was need to sensitise chiefs, community leaders, community based volunteers, religious leaders, local government officials and nongovernmental organisations on fistula repair services so that they can in turn assist in informing their communities on obstetric fistula and repair services. This may result in seeking fistula repair services among women with fistula.

According to Cam et al. (2009), many women who suffer from obstetric fistula do not know what fistula is, that their condition is treatable, or where to get treatment. Also, with regards to lack of knowledge that repair services exist, health care providers (36.9%) stated that mobile clinics must include fistula repair services. Mobile health services are a

complimentary service delivery made to people in hard to reach areas and remote parts (Zambia National Health Strategic Plan- 2017-2021).

The respondents were also required to provide their views on anxiety as a cited factor hindering women in seeking fistula repair services. Slightly more than half (50.8%) of the respondents thought that target families of women with obstetric fistula should be targeted and given information on obstetric fistula. Less than half (33.8%) of the respondents stated that families must escort the women with obstetric fistula for fistula repair which is not surprising, since escorting fistula patient for repair services has been a growing problem. However, it is striking to note that there is a small number of respondents who opted that afflicted women should be escorted. If women had never travelled out of their villages, they may want to be accompanied by a relative (Bangser, 2007).

While loss of dignity is common among women with obstetric fistula and making afflicted women not to seek repair services, majority (86.2%) of the respondents cited counselling as one element that would help women to know more about the condition and to seek repair services. The importance of counselling of women with obstetric fistula cannot be over emphasised as it would increase ones knowledge and benefit the afflicted women in keeping clean, avoiding the smell and easily mix with others in the community. Counselling would be done through local radio stations, individual psychosocial counselling provided by health care providers and by successfully repaired women. Successfully repaired women who have undergone a similar situation would be living examples to easy loss of dignity. A study done by Meurice et al. (2016) noted that having successfully treated women to teach others about obstetric fistula is an important resource and mass media a major channel of communication (Were, 2015).

When asked about stigma as a contributing factor hindering women in seeking fistula repair services, worthy of attention is the large percentage of respondents (90.8%) that do not regard formulation of fistula support groups in the community as one way that could motivate women with obstetric fistula to seek fistula repair services. While interpreting these views, despite a small proportion of respondents reporting formulation of fistula support groups in the community, it is important to note that this could assist in finding women who isolate themselves and not seek fistula repair services. This finding is supported by a study done by Landrya et al. (2013) who revealed that revealed that community-based groups engaged in addressing the needs of afflicted women are well placed to address stigma. Fistula support groups would sensitise the afflicted women on the importance of repair services and this could motivate them to seek fistula repair service. Moreover, it was also viewed by the health care providers (66.2%) that Government should improve on the tracking system of women with obstetric fistula as a way to help identify women who could be isolating themselves.

Transportation challenges play an important role in hindering women with obstetric fistula in seeking fistula repair services. It is important to note that less than onethird (32.3%) of the respondents mentioned that the afflicted women should be recruits on social cash transfer to enable them raise funds for fistula repair services while 73.2% commented on the transport refund for those who seek repair services using their own resources. Despite a small proposition of respondents suggesting that afflicted women should be recruited on social cash transfer, such would be helpful for those women who express an interest in starting small businesses thereby improving their financial situations and consequently utilise money to seek repair services. On the one hand, providing transportation or transportation fees would make accessing treatment easier (Meurice et al., 2016). In addition, respondents (18.5%) felt that Government should build proper road networks to easy access to fistula repair services. This is in agreement with Gele et al. (2017) who suggested that fistula centres should be established, and access to these facilities has to be guaranteed for all patients who need these services.
Further, only 3.1% viewed keeping women who sustain fistula following delivery without discharging them until repaired. This is supported by Meurice et al. (2016) who revealed that perhaps rather than sending women home to recover, they could be referred immediately to minimise delay and need for funds for transportation.

It is not particularly surprising that financing for the procedure is a factor that would make women with obstetric fistula not to seek care. Quite encouraging is the fact that all the respondents (100%) in the current study talked about Government providing free fistula services as a way to encourage women to seek fistula repair services. However, fistula services in Zambia and elsewhere are offered free of charge as the government supports donor-funded fistula repair camps. These camps offer free repair surgeries though do not cover all associated costs and hospitals where repair services are conducted have to subside the costs. It is also important to note that routine fistula repairs are conducted in fistula repair centres. On the other hand, all respondents (100%) were of the view that husbands of women with obstetric fistula must not abandon their wives following development of a fistula. Women who are abandoned by their husbands may find it more difficult to acquire funds for financing the procedure or transportation costs to fistula repair centres (Bellows et al., 2015).

When asked about their views on myths and misconception as a factor hindering afflicted women in seeking fistula repair services, all respondents (100%) overwhelmingly stated that sensitisation of the communities with regard to myths and misconception was cardinal. This is because fistula is often considered a sexually transmitted disease and viewed as a punishment from God (Were, 2015). If that is the belief held by women with obstetric fistula, they are unlikely to be interested in seeking treatment at a health facility. This is supported by Kasamba et al. (2013) who noted that

misconception and negative belief might hinder afflicted women in seeking fistula repair services and certain herbs could be used to cure obstetric fistula. Further, another (7.1%) of the respondents stated that engaging the Ministry of Traditional Affairs would be of benefit. The small percentage of respondents citing engagements of the Ministry of Traditional Affairs is not well understood. Health systems barriers were also cited as factors hindering women in seeking fistula repair services. Majority (72.3%) of the respondents were of the view that Government should train fistula surgeons as unsuccessful repairs could have an impact on seeking fistula repair services. This is in line with Sullivan (2014) who reported that the ability of healthcare providers to provide comprehensive, holistic, and quality care is important and is influenced by available resources, acceptability to the culture, and institutional regulations. Perceived poor quality of care is a commonly cited barrier involving multiple facets of cares (Bellows et al., 2015).

Conclusion

This study showed that all the respondents viewed provision of free fistula services, educating men not to abandon their afflicted women, and sensitising the communities on myths and misconception of obstetric fistula would enable women to access fistula repair services. Also, most of the respondents viewed counselling of afflicted women and their relatives on obstetric fistula, building fistula centres in village, training of surgeons on how to repair fistulas and transport refund for those who seek repair services using their own resources as way that would encourage women to seek fistula repair services. More than half of the respondents reported sensitising chiefs, community leaders, community based volunteers, religious leaders, local government officials and non-governmental organisations as well as improvement on the tracking system of women with obstetric fistula by government as very important contributing factors in seeking fistula repair services. In addition, less than half of the respondents viewed educating all pregnant women during antenatal clinics on obstetric fistula and fistula repair services, mobile clinics to include fistula repair services, families escorting women with obstetric fistula for fistula repair, formulation of fistula support groups in the community, recruiting women with obstetric fistula on social cash transfer, building of proper road networks by governments and keeping women who sustain fistula until repaired as other ways to assist women with obstetric fistula to seek fistula repair services. There is thus need for consented efforts to be put in place by all stakeholders so as to enhance utilisation of fistula repair services by women with fistula.

Limitations of the study

There are limitations, which include the (unavoidable) fact that the views expressed in the study are speculative rather than based on experience or knowledge. The other limitation is that this study includes the viewpoints of one stakeholder group, that of healthcare providers. Anotherimportant limitation of this study is its cross sectional design, hence making it difficult to establish a causal relationship among the factors and views of the health care providers.

Implications of the study

Several strategies to overcome the factors hindering women with fistula in seeking fistula repair services could be implemented as a result of this study. Firstly, sensitization programmes on the condition and repair services by health care providers may be beneficial. Secondly, Government should participate in the transportation of women with obstetric fistula for repair
services and continue investing in the training of fistula surgeons.

Recommendations

(i) Mass sensitization of communities on obstetric fistula and fistula repair services to assist women with obstetric fistula in seeking fistula repair services.
(ii) Support systems for women with obstetric fistula are crucial for these and play an important role in a woman deciding whether to seek fistula repair services or not.
(iii) Involvement of husbands of afflicted women because of their pivotal role in decision making process.
(iv) Adequate funding of obstetric fistula services for the procurement of medical supplies as well as equipment and training of fistula surgeons.
(v) Government should ensure physical proximity of health care facilities that conduct fistula repairs so that women with obstetric fistula do not have to travel long distances to seek the service.

CONFLICTS OF INTERESTS

The authors have not declared any conflicts of interests.

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African Journal of Midwifery and Women's Health | 2020 | https://doi.org/10.12968/ajmw.2018.0009 Original research

Marital experiences of women with obstetric fistula: a systematic review of qualitative studies

Abstract

Background Obstetric fistula is serious childbirth morbidity with medicosocial consequences such as infertility and marital disharmony. Obstetric fistulas have been eliminated in developed countries but remain highly prevalent in Africa and Asia.

Aim The aim of this systematic review was to identify and analyse the marital experiences of women with obstetric fistula in order to guide interventions aimed at helping women cope with their situation as well as improving partner support towards women living with this condition.

Methods A range of electronic databases were searched for studies conducted worldwide and published between 2003 and 2018. English language publications were searched for using relevant keywords. Main themes were identified in the primary studies through relation to study objectives, content of interview questions, and respondents' views and experiences.

Results 33 studies were included in total. Three main themes in the marital experiences of women with obstetric fistulas were identified: loss of marriage, marital and sexual life is no longer joyful, and partner support. 25 studies included the theme 'loss of marriage'. 17 studies included 'marital and sexual life is no longer joyful'. 20 studies reported data with the theme 'partner support'.

Conclusion Obstetric fistula can have significant impacts on a woman and her partner. Healthcare professionals should be aware of these concerns. Counselling should be provided for partners as well as women with obstetric fistula and surgical repair should be encouraged.

Keywords: Obstetric fistula; rectovaginal fistula; vesicovaginal fistula; psychosocial experiences; review; support systems

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Introduction

An obstetric fistula is an abnormal opening between the vagina and the bladder (vesicovaginal fistula) or between the vagina and the rectum (rectovaginal fistula) through which urine and/or faeces continuously leak through the vagina, a problem that has not been found in the developed world the last century (Roush et al, 2009). It is a birthing injury, which is mainly caused by unrelieved obstructed labour (Irani, 2012; Abokaiagana, 2010). There are other non-obstetric causes of obstetric fistulas, such as sexual trauma, injuries from surgery, radiation therapy, penetrating injuries, and harmful traditional practices (Abokaiagana, 2010).

The World Health Organisation (WHO) estimates that more than two million girls and women worldwide live with obstetric fistula, with an additional 50 000–100 000 new cases occurring every year (WHO, 2010). In 2003, the UNFPA and its partners launched the first-ever global campaign to end fistula. It was the first concerted effort to eradicate the disease. The 'End Fistula' campaign was aimed at preventing fistula from occurring or reoccurring, repairing women with fistula and helping repaired women return to full and productive lives. The campaign brought fistula to the attention of the public, policymakers, health officials and women with fistula. It has allowed countries to identify existing expertise in handling obstetric fistula and also to design national programs that improve services.

Despite efforts to end it, obstetric fistula remains prevalent in developing countries (Roush, 2009). Therefore, the effect that an obstetric fistula has on a woman's societal standing, particularly as a wife, partner and mother, is a significant theme in the literature (Roush, 2009). Meanwhile, marital experiences of women with obstetric fistulas have not been previously analysed individually in a systematic review.

Aim

The aim of the systematic review was to identify and analyse the marital experiences of women with obstetric fistulas to guide interventions aimed at helping women cope with their situation as well improving partner support towards women living with this condition.

Methods

This study is a systematic review of studies exploring the marital experiences of women with obstetric fistula. The review included studies conducted worldwide between 2003 and 2018.

Search methods

A preliminary search was conducted in February 2018 to identify previously published research on obstetric fistulas and to refine the objectives, test the proposed search terms, and identify the potential contribution of each review. The full search was conducted in March and April 2018, using the agreed search terms. Studies published in English between 2003 and 2018 were searched for using the following electronic databases: CINHAL, Pubmed, Hinari, Mendeley, Google Scholar, BioMed Central and MEDLINE. Papers from 2003 onwards were selected as this was the year that the End Fistula Campaign was launched by UNFPA. The key words used in the search were 'obstetric fistula', 'vesicovaginal fistula', 'VVF', 'rectovaginal fistula', 'RVF', 'challenges of fistula', 'consequences of fistula', 'psychosocial experiences', 'support systems', 're-integration', 'lived experience', and 'review'. The search returned papers containing these terms anywhere in their full text.

Study selection

The studies included in this review were selected in a three-stage process (**Figure 1**). First, the abstracts were reviewed to determine whether the paper met the eligibility criteria. Then, the full text was read and papers that did not meet the eligibility criteria were discarded. Finally, data from the article were extracted and entered into a

structured form which detailed the following key elements of the study: name of author, publication date, country, setting, study design, and characteristics of participants.

Eligibility criteria

Articles that met the inclusion criteria for this review were primary research studies that examined marital experiences of women with obstetric fistula. Only articles that were published in a peer-reviewed scientific journal between 2003 and 2018 were included. Articles were not excluded based on location of study. All articles were full text and written in English or with an English translation.

Quality appraisal

To scrutinise the quality of the included studies, the Critical Appraisal Skills Programme (CASP) checklist, a generic checklist covering different types of qualitative research methodology, was used (Moher et al, 2009). Selected studies were assessed with the listed criteria in CASP, which include clarity of the objectives, appropriateness of method used, clarity of the study context. Overall, the majority (81%) of the studies were of good quality. The poor-quality studies featured limitations such as unreliable recruitment strategies, unclear researcher participant relationships, or unclear data analysis methods. As the aim of the review was to obtain a complete understanding of marital experiences of women with obstetric fistulas that may influence future policies and interventions, studies that met the stated inclusion criteria were included regardless of quality.

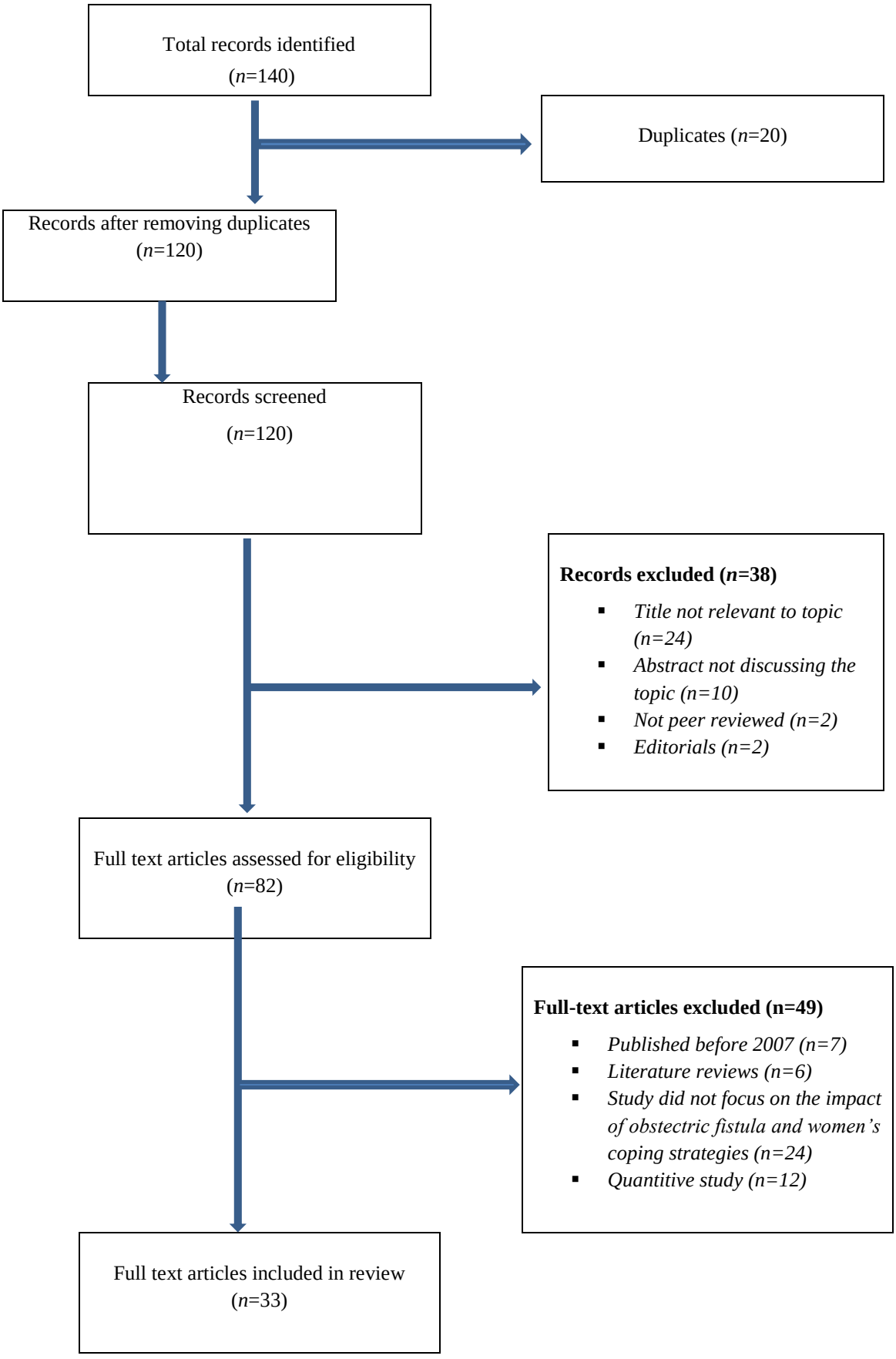

Figure 1 shows a summary of the selection process.

Theme identification

Three key themes were identified that were informative and beneficial to the analysis: loss of marriage, marital and sexual life is no longer joyful, and partner support.

Results

Search results

The search yielded 140 studies, 20 of which were duplicates. After the removal of duplicates, 120 studies remained, which were subjected to further screening. During the screening process, two studies were excluded as they were not peer-reviewed, two were excluded as they were editorial commentaries, 24 were excluded for having titles that were not relevant, and 10 were excluded as the abstracts did not contain information from the inclusion criteria. Out of the 82 remaining studies, seven were published before 2003, six were literature reviews and not original studies, 12 were quantitative studies, and 24 studies did not focus on the effects of obstetric fistula conditions and women's coping strategies. All these were excluded from the review, as they did not meet the inclusion criteria. A total of 33 studies remained, which were included in the review.

Themes

Analysis of the 33 studies showed that the marital experiences of women with obstetric fistulas were determined through focus group discussions (FGDs) and/or in-depth interviews. Qualitative data were interpreted and organised into different themes based on the marital experiences of women with obstetric fistulas. The themes were: loss of marriage, marital and sexual life no longer joyful, and partner support.

Loss of marriage

A total of 25 out of the 33 studies supported the conclusion that loss of marriage is a powerful challenge affecting women with obstetric fistulas.

Table 1. Characteristics of studies with the theme 'loss of marriage'

Study	Country/region of study	Study design	Key characteristics	Quality assessment
Abokaiagana (2010)	Bawku East, Ghana	Qualitative explorative	In-depth interviews with 10 women who had developed obstetric fistulas, aged 20-70	Good
Bangser et al (2011)	Tanzania, Uganda	Mixed method	Semi-structured in-depth interviews with 137 women with fistula	Fair
Barageine et al (2015)	Mulago Hospital, Uganda	Qualitative exploratory	Eight FGDs with 56 women living with genital fistulas, aged 14-60	Good

Changole, Thorsen and Kafulafula (2017)	Bwaila Care centre and in homes, Malawi	Qualitative	Semi-structured interviews with 25 women with fistula and 20 family members	Good
Dennis et al (2016)	Moshi, Tanzania	Mixed method	Survey of 59 women living with obstetric fistula, in-depth follow-up interviews with 20 women with fistulas, aged 18 years or older	Good
Farid et al (2013)	Karachi, Pakistan	Qualitative exploratory	In-depth interviews with eight women with vesicovaginal fistula, aged 19-45 years old	Poor
Fenta (2010)	Addis Ababa, Ethiopia	Qualitative	Interviews with six women with obstetric fistula, FGDs with 10 members of society, interviews with healthcare providers	Poor
Gebrasilase (2014)	Addis Ababa, Ethiopia	Qualitative	In-depth interviews with eight women with obstetric fistulas, aged 20–24 years	Good
Hsiung and Savback (2014)	Moshi, Tanzania	Mixed method	Semi-structured interviews with 63 women with fistula, aged 8–71 years	Good
Irani (2012)	Dodoma, Mbeya, Mwanza,	Qualitative	In-depth interviews with 37 women with	Good

	Singidi, Tanzania		obstetric fistula, aged 17-75 years	
Kasamba et al (2013)	Nabitovu Village – Iganga District, Eastern Uganda	Qualitative	FGDs with men and women, aged 18-49 years	Good
Kay et al (2015)	Kigali, Rwanda	Qualitative	Interviews with 11 women with obstetric fistulas, aged 27–57 years	Good
Khisa (2010)	West Pokot, Kenya	Qualitative exploratory	In-depth interviews with eight women with repaired obstetric fistulas, aged 17–30 years FGDs with 15 women with obstetric fistula	Good
Khisa and Nyamongo (2012)	West Pokot, Kenya	Qualitative exploratory	In-depth interviews with eight women with obstetric fistula, aged 17–30 years Two FGDs with 7 women with obstetric fistula and 12 community members	Good
Kimani (2014)	Kenya	Mixed method	Structured interviews and questionnaires with 120 women with obstetric	Good

			fistula Focus group discussion with husbands of women with obstetric fistula	
Maulet et al (2015)	Niger	Mixed method	In-depth interviews with 35 women with obstetric fistula, aged 18–60 years	Good
Mehta and Bangser (2006)	Tanzania	Mixed method	In-depth interviews with 61 women with obstetric fistula, aged 17–78 years Problem tree, free listing and ranking exercises with 42 family members Group discussions with 23 local healthcare providers	Good
Mohammed et al (2018)	Somalia	Qualitative descriptive	In-depth interviews with 21 women with obstetric fistula, aged 15–55 years Interviews with eight key informants	Poor
Mselle and Kohi (2015)	Tanzania	Qualitative descriptive	Semi-structured interviews with 16 women with obstetric fistula Two focus group discussions with 12 women with obstetric fistula	Good
Mselle et al (2012)	Tanzania	Mixed method	Questionnaire completion by 151 women with	Good

			obstetric fistula Interviews with eight women with obstetric fistula	
Mselle et al (2011)	Tanzania	Mixed method	Focus group discussions with 12 women with obstetric fistula and six husbands of the affected women, aged 18–43	Good
Oyortey et al (2014)	Sierra Leone	Qualitative	In-depth interviews with 15 women with obstetric fistula, aged 18–50 years	Poor
Sullivan (2014)	Ghana	Qualitative ethnographic	In-depth interviews with 14 women who had or have had obstetric fistula	Good
Women's Dignity Project and Engender Health (2007)	Uganda	Qualitative	In-depth interviews with 76 women with obstetric fistula, aged 17–70 years Combination of discussion, problem tree exercises, freelisting exercises, and ranking exercises with 26 women, 63 family members, 120 community members, 21 healthcare providers and 54 traditional birth attendants	Good
Yeakey et al (2009)	Malawi	Qualitative	Interviews with 45 women with obstetric fistula and 30 family	Good

			members, aged 20-74 years	

Appendix 2. Characteristics of studies with the theme 'marital and sexual life is n longer joyful'

Study	Country/region of study	Study design	Key characteristics	Quality assessment
Abokaiagana (2010)	Ghana	Qualitative exploratory	In-depth interviews with 10 women with obstetric fistula, aged 20–70 years	Good
Barageine et al (2015)	Uganda	Qualitative exploratory	Focus group discussions with 56 women with obstetric fistula, aged 14–60	Good
Farid et al (2013)	Pakistan	Qualitative exploratory	In-depth interviews with eight women with vesicovaginal fistula, aged 19–45 years old	Poor
Fenta (2010)	Ethiopia	Qualitative	Interviews with six women with obstetric fistula Focus group discussions with 10 members of society Interviews with healthcare providers	Poor
Gebrasilase (2014)	Ethiopia	Qualitative	In-depth interviews with eight women with obstetric fistula, aged 20–24 years	Good
Hsiung and Savback (2014)	Tanzania	Mixed method	Semi-structured interviews and review of records with 63 women with obstetric fistula, aged 8–	Good

			71 years	
Irani (2012)	Tanzania	Qualitative	In-depth interviews with 37 women with obstetric fistula, aged 17–75 years	Good
Kay et al (2015)	Rwanda	Qualitative	Interviews with 11 women with obstetric fistula, aged 27–57 years	Good
Khisa and Nyamongo (2012)	Kenya	Qualitative exploratory	In-depth interviews with eight women with obstetric fistula, aged 17–30 years	Good
			Focus group discussions with 7 women with obstetric fistula and 12 community members	
Kimani (2014)	Kenya	Mixed method	Structured interviews and questionnaires with 120 women with obstetric fistula	Good
			Focus group discussion with husbands of women with obstetric fistula	
Mohammed et al (2018)	Somalia	Qualitative descriptive	In-depth interviews with 21 women with obstetric fistula, aged 15–55 years	Poor
			Interviews with eight key informants	
Mselle and Kohi (2015)	Tanzania	Qualitative descriptive	Semi-structured interviews with 16 women with obstetric fistula	Good
			Focus group discussions with 12 women with	

			obstetric fistula	
Mselle et al (2011)	Tanzania	Mixed method	Focus group discussions with 12 women with obstetric fistula and six husbands of the affected women, aged 18–43	Good
Nsemo (2014)	Nigeria	Mixed method	Structured interviews and in-depth interviews with 120 women with vesicovaginal fistula, 18 in follow-up after repair and three key informants	Good
Okoye et al (2014)	Nigeria	Qualitative	In-depth interviews with 10 women awaiting repair of fistula	Good
Pope et al (2011)	Tanzania	Mixed method	In-depth interviews with 71 women with obstetric fistula	Good
Sullivan (2014)	Ghana	Qualitative ethnographic	In-depth interviews with 14 women who had or have had obstetric fistula	Good

Table 3. Characteristics of studies with the theme 'partner support'

Study	Country/region of study	Study design	Key characteristics	Quality assessment
Abokaiagana (2010)	Bawku East, Ghana	Qualitative explorative	In-depth interviews with 10 women who had developed obstetric fistulas, aged 20-70	Good
Barageine et al (2015)	Mulago Hospital, Uganda	Qualitative exploratory	Eight FGDs with 56 women living with genital fistula, aged 14-60	Good
Dennis et al (2016)	Moshi, Tanzania	Mixed method	Survey of 59 women living with obstetric fistula, in-depth follow-up interviews with 20 women with fistulas, aged 18 years or older	Good
Drew et al (2016)	Seven districts in Malawi	Qualitative	In-depth interviews with 20 repaired women, aged 19–76	Good
Hsiung and Savback (2014)	Moshi, Tanzania	Mixed method	Semi-structured interviews and review of records with 63 women with fistula, aged 8–71 years	Good
Johnson et al (2010)	Dekemhare Eritrea	Qualitative	Interviews with 47 women with fistula, FGD with 19 women with fistula	Good
Kasamba et al (2013)	Nabitovu Village – Iganga District, Eastern	Qualitative	FGDs with men and women, aged 18–49	Good

	Uganda		years	
Khisa and Nyamongo (2012)	West Pokot, Kenya	Qualitative exploratory	In-depth interviews with eight women with obstetric fistula, aged 17–30 years Two FGDs with 7 women with obstetric fistula and 12 community members	Good
Maulet et al (2015)	Referral hospitals in Mali and Niger	Mixed method	In-depth interviews with 35 fistula patients, aged 18-60 years	Good
Mehta and Bangser (2006)	Singida, Songeo, Ukerewe, Tanzania	Mixed method	In-depth interviews with 61 women with obstetric fistula, aged 17-78 years Problem tree, free listing and ranking exercise with 42 family members Group discussions with 23 local healthcare providers	Good
Mohammed et al (2018)	Benadir, Mudug, Somalia	Qualitative descriptive	In-depth interviews with 21 women with obstetric fistula, aged 15-55 years Interviews with eight key informants	Poor
Mselle and Kohi	CCBRT Hospital, Dares	Qualitative	Semi-structured interviews with	Good

(2015)	Salaam, Tanzania	descriptive	16 women with obstetric fistula Two FGDs with 12 women with obstetric fistula	
Mselle et al (2011)	Dodoma region, Tanzania	Mixed method	FGDs with 12 women with fistula and six husbands of the affected women, aged 18–43	Good
Muleta et al (2008)	Seven administrative regions of Ethiopia	Mixed method	Interviews with 52 women with obstetric fistula	Good
Mutambara et al (2013)	Zimbabwe	Qualitative phenomenological	In-depth interviews with four women with fistula, aged 17–31 years	Good

Table 3. Characteristics of studies with the theme 'partner support' (*Cont.*)

Study	Country/region of study	Study design	Key characteristics	Quality assessment
Nsemo (2014)	Nigeria	Mixed method	Structured interviews and in-depth interviews with 120 women with vesicovaginal fistula, 18 in follow-up after repair and three key informants	Good
Oyortey et al (2014)	Sierra Leone	Qualitative	In-depth interviews with 15 women with obstetric fistula, aged 18–50 years	Poor
Sullivan (2014)	Metropolis of Tamale, Northern Ghana	Qualitative ethnographic	In-depth interviews with 14 women who	Good

			had or have had obstetric fistulas	
Women's Dignity Project and Engender Health (2007)	Kasese, Masaka, Soroti, Kaberamaido, Uganda	Qualitative	In-depth interviews with 76 women with obstetric fistula, aged 17-70 years, problem tree exercises with 26 women, discussion and problem tree exercised with 63 family members, discussion, problem trees, freelisting and ranking exercised with 120 community members, discussion with 21 healthcare providers and 54 traditional birth attendants	Good
Yeakey et al (2011)	Mangoshi Malawi	Mixed method	In-depth interviews with 45 women with fistula and 30 family members, aged 20-74 years	Good

household duties when she had painful menses. Several women reported that their husbands bought detergents and perfumes to cover the smell resulting from incontinence. Some husbands also consulted elderly women for herbal medicine. Some women who remarried reported receiving treatment support from their second husbands. Women also reported being supported by their spouses regarding the abstinence recommendation following surgical repair.

'My husband is very supportive. He takes care of me and provides me with money for detergent and perfume. He feels obliged to assist me as much as he can' **Abokaigana (2010).**

Some studies reported that husbands left their wives without any support and many women reported struggling to survive with low support from their spouses before divorce. Some studies reported women being neglected by their second husbands and seeking treatment on their own. Husbands are also reported to have initially supported their wives for treatment but later become disgruntled, mainly because of unsuccessful repairs. Women also reported not being accompanied for fistula repair and not receiving support after fistula surgery.

> ***'My second husband was a good one but he left me because of my fistula case and he did not even attempt to help me with my complication in anyway. Normally a woman takes her half when divorced but the worst thing about fistula is that women takes herself to the hospital and never go back to the village for she is left with nothing from her husband but the complication and its socio-economic consequences'*** **Fenta (2010).**

Discussion

This review explored the marital experiences of women with obstetric fistula, as reported in studies conducted between 2003 and 2018. Three themes were identified as commonly reported within these studies. 25 studies reported the theme 'loss of marriage', 17 reported the theme 'marital and sexual life no longer joyful', and 20 reported the theme 'partner support'.

Loss of marriage was a common theme, identified in 25 of the 33 studies. As indicated in other studies, many women are divorced or abandoned by their husbands due to obstetric fistula (Miller et al., 2005; Ahmed and Holtz, 2007; Dyer, 2009). This is often the result of the woman's lack of ability to bear further children, an important aspect of marriage culturally.

A total of 17 studies found that women reported that their marital and sexual life was no longer joyful as the result of the fistula. A healthy sexual life is the source of children and family bonding, and a lack of it contributes to women's loss of self-esteem and confidence in their womanhood (Girma, 2008). Many women indicated that they ceased to enjoy sexual interactions from the day they developed an obstetric fistula. They reported intermittent sexual acts or a complete lack of it, which prevented intimate relationships with their husbands. The ability to bear children may play a central role in determining which marital relationships dissolve in the face of fistula (Turan et al, 2007). The respect, honour, and sense of pride associated with having children (Dyer, 2009) may explain why women who have had children before developing fistula have been reported to have a relatively better experience of living with fistula compared to those without children (United Nations Population Fund, 2003). The type of marriage described by women in this review are similar to findings reported in other studies conducted in sub-Saharan Africa, in that they remained married but did not continue any sexual relations with their husbands and in a few instances, lived in a separate house (Mwini-Nyaledzigbor et al, 2013; Roush, 2009). However, not all marriages were disrupted after sustaining a fistula, and even though sexual activity was affected, it continued for some women even before treatment.

Partner support was an important theme in this review. 20 of the 33 studies contained this theme. In some cases, it was reported that men who chose to stay with their wives also provided the funds for the women to receive obstetric fistula treatment (Neilson et al, 2009; Roush, 2009). Men who did not leave their wives after their condition developed often provided economic support to ensure the woman's basic needs were met. Accounts of supportive relationships between partners and women living with obstetric fistula were reported in most studies included in this review, as well as other studies into this area (Mwini-Nyaledzigbor et al, 2013; Neilson et al, 2009; Roush, 2009).

Limitations

Despite the comprehensive review, there is a chance that not all relevant studies have been included. The shortcomings in the quality of some included studies could also have an effect on the overall quality of this review. Most of the studies were exploratory and qualitative; therefore, the ability to infer results overtime might be limited.

Conclusion and recommendations

Systematically reviewing marital experiences of women with obstetric fistula is important in order to guide interventions aimed at helping women cope with their situation as well as to improve partner support towards women living with this condition. On the basis of the existing evidence, all healthcare providers must have an understanding of how obstetric fistulas affect married women. In the absence of such an understanding, it is difficult to map an intervention that does not infringe on women's beliefs and practices. It is important for clinicians to note that, even after fistula repair, regardless of whether it is successful or not, women may face marital challenges. Counselling post-repair should be offered for repaired women but also for partners. Counselling should be provided on the subject of the condition, when it is safe to resume sexual activity, how to book follow-up visits, and subsequent pregnancies. The importance of surgical repair should be emphasised as traditional medicine does not cure a fistula.

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Key points

Obstetric fistula is a birthing injury that affects millions of women worldwide

This study reviewed 33 papers on the marital experiences of women with obstetric fistula

Loss of marriage, marital and sexual life is no longer joyful and partner support were the three key themes identified by this study

Healthcare providers should be aware of these issues when treating women with obstetric fistula

Counselling should be offered for partners as well as for women with obstetric fistula, in order to ensure both members of a couple are prepared for and supported when handling the consequences of obstetric fistula

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Conflict of interest

None declared

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Barriers in seeking fistula repair services among women with obstetric fistula in Zambia: The case of Muchinga, Luapula Eastern and Southern Provinces

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Abstract
Background & Aim: Obstetric fistula is a condition in which a hole develops in the birth canal as a result of childbirth resulting in leakage of urine and/or stool through the vagina. Once obstetric fistula occurs, it requires reconstructive surgery as fistulas usually cannot heal by themselves. However, women most women do not seek fistula repair services.

Objective: To explore barriers contributing to not seeking fistula repair services among women with obstetric fistula.

Methods: This was a qualitative study. The study was conducted between October, 2017 and September, 2018. The study setting was Muchinga, Luapula, Eastern and Southern provinces of Zambia. A purposive sample of 16 participants was recruited and interviewed in their homes. In-depth interviews were conducted. Data was analyzed manually using thematic content analysis.

Results: The age of the participants ranged from 19 - 87 years. Six thematic areas were identified that included lack of knowledge that fistula repair services exist, inaccessibility to fistula repair services, health systems barrier, poverty levels, effect of fistula, unsuccessful repairs and cost for transport.

Conclusion: Women either delayed in seeking fistula repair services or did not seek the service at all. Strategies such as addressing barriers at individual, family, community, organization and facility levels must be implemented in order to improve access to fistula surgical repair services.

Keywords: Barriers, afflicted women, obstetric fistula, fistula patients, fistula repair services

Introduction

Obstetric fistula is one of the most severe childbirth injuries and a physically and socially disabling obstetric complication that affects many women and girls annually (Mselle *et al*., 2011) [1]. World Health Organisation (2010) [2] estimates more than two million girls and women worldwide living with obstetric fistula, with an additional 50,000–100,000 new cases occurring every year. Up to 130,000 new cases occur each year in sub-Saharan Africa and South Asia (UNFPA, 2008) [3]. In Zambia, 2000 women await surgery each year (UNFPA, Zambia Annual report, 2014) [4].

Obstetric fistula treatment is critical to the health and survival of the women. Delaying treatment has an impact on the prognosis and it may cost more money when compared with treatment for women who came earlier for repair (Raassen, Verdansdonk & Vierhout 2008) [5]. Girls and women live with the condition up to 50 years even if most of them realize the urine leakage soon after delivery and view it as normal (Turan, Johnson andn Polan, 2007) [6]. Although, services for repair of fistula are available, it is estimated that 80% of women with obstetric fistula never seek treatment (Gessessew and Mesfin, 2003) [7].

Despite the benefits of surgical repair, women with obstetric fistula have reported significant barriers to care including transportation to surgical centres, financially challenges and surgical intervention that are not well known (Obed, 2010) [8]. Furthermore, the challenge standing between women and fistula treatment is information (Holme, Breen and MacArthur, 2006) [9] or lacking decision power and attitudes for seeking care (Velez *et al*., 2007; Ramsey *et al*, 2007) [10, 11]. Additionally, studies by Kijugu (2009) [12] and Muleta (2008) [13] found travelling alone to seek repair services a difficult thing to do in some cultures especially for women who are incontinent (Yeakey *et al*., 2009) [14]. Maulet *et al*., (2015) [15] also reported a few afflicted

women as initially consulted witchdoctors before turning to modern health care or in an attempt to maintain some social support by complying with local practices and family advice. Also, in low-income countries, women have less access to appropriate surgical care for repair due to the limited availability of health facilities with repair services and lack of surgical training for fistula repair (Bangser, *et al*., 2011; Rushwan *et al*., 2012) [16, 17] and limited available surgeons (Velez *et al*., 2007; Wall *et al*., 2005; Ramsey *et al*. 2007) [10, 18, 19].

Some women living with fistula believe that doctors cause fistulas during deliveries (Bellows *et al*., 2014) [20] and that fistula is a curse or a punishment from God (Naidu and Donnay 2003, Muleta *et al*. 2008) [21, 22]. When fistula is believed to be caused by a doctor's actions or a curse, a woman living with fistula is unlikely to be interested in seeking treatment at a health facility (Naidu and Donnay 2003; Muleta *et al*. 2008; Bellows *et al*., 2014) [21, 22, 20].

To our knowledge, data on barriers to seeking fistula repair services in Zambia are sparse and obstetric fistula has not been well researched. The purpose of this study was to explore barriers in seeking fistula repair services among afflicted women.

Material and Methods

A qualitative design was used to collect data on barriers of women with obstetric fistula in seeking fistula repair services. The study was conducted between October, 2017 and September, 2018. The study population included a purposive sample of 16 women with fistula recruited from the four provinces (four each at Muchinga, Eastern, Southern and Luapula provinces). Participants who had never been for fistula repair, had been either one, twice, thrice, fourth and fifth were included in the in-depth interviews. This helped to identify common challenges and barriers to seeking fistula repair services in these women. It also highlighted common experiences in living with obstetric fistula. After the interview, the participant was given a unique identifying number.

The study sites were chosen because there are fistula repair centres and women with obstetric fistula were easily traced through hospital records for easy follow up. Thereafter, a list of eligible participants were compiled in readiness for the study. Community Health Volunteers (Safe Motherhood Action Groups-SMAGs) who are involved in mobilising and supporting obstetric fistula clients for repairs helped to identify homestead of women with obstetric fistula. Once traced, the researcher arranged for in-depth interviews. The aim of the study was explained to the participants and they were informed that participation was voluntary. After obtaining the consent, the participants were encouraged to speak about their experiences in seeking fistula repair services. The interviews took about 30 to 60 minutes.

The inclusion criteria included consenting women with obstetric fistula aged 18 years and above and diagnosed by the gynaecologist upon delivery or during postnatal visits, living in Muchinga, Eastern, Southern and Luapula provinces of Zambia. The exclusion criteria included women below 18 years living with obstetric fistula in the four provinces and those who were not willing to participate in the study.

The study received ethics approval from the University of Zambia Research Ethics Committee. The main considerations were maintaining the participant's confidentiality as the study was conducted at a place that ensured confidentiality. In addition, no information was collected that would identify the participant to the data. The study was qualitative and hence a low risk study that ensured safety of the participants.

Pretesting of the data collection instrument was conducted in Lusaka province to test the practicability of the tool. Interviews took place in participants homestead.

Data were analyzed manually using thematic analysis.

Rigor of the study

An assessment of trustworthiness was done according to Lincoln and Guba (1985) [24], Trustworthiness of data includes credibility, dependability, transferability and confirmability. Credibility involves prolonged engagement, persistent observation, triangulation, peer briefing, negative case analysis, referential adequacy and member checking. Dependability involves the inquiry audit (interaction with participants), a detailed descriptive information of the process of data collection, and analysis. Transferability involves thick description of the context, the study participants and the themes (analytic generalisation). Confirmability involves confirmatory audit, audit trail, triangulation and reflexivity. Trustworthiness of the study was ensured by taking participants through the same questions and debriefing and any additional information was taken into consideration during data analysis. The participants were interviewed to the point of data saturation and the interviews were tape recorded and transcribed. To enhance the credibility of findings, findings were taken back to eight participants to see whether the results compared with their accurate responses and changes obtained from participants were incorporated into the final descriptions. The researcher also made sure that there was no shift in the meaning of the codes during the process of coding. This was achieved by comparing data with the codes and by writing memos about the codes and their definitions. All interview materials, transcriptions, documents, findings, interpretations and recommendations were kept, to be available and accessible to the supervisors and any other researchers for the purpose of conducting an audit trail. Furthermore, writing detailed field notes and discussing the findings helped ensure trustworthiness of the study.

Results

The results of this study are summarized as demographic characteristics of the participants and themes as shown below. The participants were numbered (1 to 16) and the number after each quotation shows who was talking.

Demographic Characteristics of the Participants

Demographic characteristics of the study participants are summarized in Table 1. Age ranged from 19 - 87 years. Thirteen participants were in the childbearing age (15 to 49 years). Eight participants were married, twelve had children and nine were self employed. Seven had no source of income.

Table 1: Demographic data (n=16)

Participant No	Age	No of children	Marital status	Occupation	Income
P1	33	3	Divorced	None	Nil
P2	64	10	Widowed	Small scale farmer	K500.00 ($50)
P3	87	0	Widowed	None	Nil
P4	19	0	Single	None	Nil
P5	37	4	Married	None	Nil
P6	33	3	Married	Sales lady	More than K200.00 (>$20)
P7	37	1	Married	None	Nil
P8	33	0	Divorced	Small scale farmer	K500.00 ($50)
P9	36	1	Married	Small scale farmer	K500.00 ($50)
P10	52	3	Divorced	Business	K200.00 ($20)
P11	45	6	Married	Farming	K500.00 ($50)
P12	37	2	Married	None	Nil
P13	26	1	Divorced	None	Nil
P14	32	3	Married	Farming	Less than K500.00(< $50)
P15	37	6	Married	Business /Farmer	K200.00 ($20)
P16	42	0	Divorced	Farming	K180.00 ($18)

The mode of delivery, fistula type, gravid, number of years living with fistula, number of fistula repair attempts and partner support for the respondents are summarized in Table 2. Eight were delivered by Caesarean section during pregnancy that resulted in obstetric fistula while the other eight women had spontaneous vaginal delivery at home. Fourteen women had Vesico- Vaginal Fistula (VVF) while two had Recto Vaginal Fistula (RVF). Nine participants sustained a fistula during their first pregnancy. The number of years women had been living with an obstetric fistula ranged from 1 year to 70 years. Thirteen had one or more attempts at fistula repair while three had never been for fistula repair services. Six were supported by their partners.

Table 2: Mode of delivery, fistula type, gravid, number of years living with fistula, number of fistula repair attempts and partner support for the respondents (n=16)

Participant No	Mode of Delivery	Type of fistula sustained	Gravid when sustained a fistula	No of years living with fistula	No of fistula attempts	Partner support
P1	C/S	VVF	3	3	1	N/A
P2	SVD	VVF	4	41	4	N/A
P3	SVD	VVF	1	70	1	N/A
P4	SVD	VVF	4	4	2	N/A
P5	SVD	VVF	1	22	3	Yes
P6	C/S	RVF	4	5	5	Yes
P7	SVD	VVF	1	1	2	Yes
P8	C/S	VVF	4	7	3	N/A
P9	C/S	VVF	1	10	4	Yes
P10	SVD	VVF	1	25	2	N/A
P11	SVD	RVF	1	17	1	Yes
P12	SVD	VVF	2	5	3	Yes
P13	C/S	VVF	1	10	3	N/A
P14	C/S	VVF	1	6	0	Nil
P15	C/S	VVF	8	1	0	Nil
P16	C/S	VVF	1	18	0	N/A

The analysis of the qualitative data gave rise to four main themes which were individual, household, community and health systems barriers. Themes are reported as results of the study.

Individual barriers

Participants did not know that they suffer from an obstetric fistula hence did not seek fistula repair services. This is what one participant said, *"I thought it is normal that a woman after delivery leaks faeces and/or urine. At the hospital no one talked about it. I went home thinking leakage was normal." (P11)*

Another one said, *"I have never gone for surgical repair. I delivered in hospital but health care providers did not tell me anything about the urine leakage despite them knowing that I sustained a fistula."* (P14)

Participants who had never been for fistula repair reported that they did not access the service because they did not know that fistula repair services were available in the country despite having delivered in the hospital the pregnancy that resulted in them sustaining a fistula. This is what they said, "*I did not know that fistula repair services exist despite delivering in hospital. That is why as long as I do not know that repair services are available; I would not decide to go to the hospital."* P14, P15 and P16*).*

Participants also reported that they did not know that doctors who would offer fistula repair services were available in the country despite delivering in the hospital. This is what one participant who has never been for fistula repair services said "*I did not know whether doctors were available who would treat fistula that is why I have not been to the hospital to seek the service." (P16)*

Participants who had been for fistula repair services reported distance to fistula repair centres as a barrier in seeking fistula repair services. This is what participant number 12 and 13 said;" *It is not easy to seek repair services due to distance to hospitals that offers repair. So I have not gone back to the hospital to date. " (P12 and P13).*

Some of the challenges that worsened distance were factors such as poverty. Most women had no source of income because of not been in formal employment. Being poor met that women were not able to seek repair services due lack of finances for transportation cost. This is what one participant said, I *have never gone back for fistula repair services ever since I third attempt at repair. This is because I was sent to the tertiary hospital in the country to seek repair services. It is a long distance. I do not have money to pay for transport.* (P14)

Another one said, *"I was leaving very far away from the fistula repair centre where I could travel for a day because of the distance. Those who can walk or travel for few hours are able to seek repair services in good time."(P7)*

Some participants mentioned that the fistula wound does not come without problems such pain. The pain makes it difficult to sit on the bicycle if that is the only cheapest mode of transport to seek fistula repair services that can be used. Participant number 11 has this to say, *"Fistula is a painful condition. It is not possible to access treatment as I do not even manage to sit on the bicycle because of the pain I experience."*

Participants reported experiencing loss of dignity. They mentioned the embarrassment of leaking as tormenting and discouraging from seeking fistula repair services. This is what participants said; "*When you go to seek fistula repair services. People in the bus will start saying "It smells there. They just look at where you are seated. They sit behind or in front of you. No one will sit next to you until the bus is full. They start talking among themselves. How can you continue seeking care if you have to experience such a thing? You are a human being also. Dying is better than being alive."(P8, P9, P11)*

For those who managed to seek fistula repair services, the uncontrolled leakage of urine and/or stool caused transportation problems. They reported that being in public transport made things even worse. One afflicted woman reported how she suffered using public transport. *"When the bus stopped, I could quickly go and change my pads which were wet and put in the bag I carried. I did that the whole way until we arrived. It is a sacrifice that is why I cannot continue seeking repair services." (R7)*

Two participants had this to say regarding the uncontrollable leakage of urine. "*Urine smells. It is not even possible to sit around people. Private transport is needed as when leaking is too much; you need private vehicles to bring you to the hospital for surgical repair."(P1, P2)*

However, the same participants also said, "*I feel bad, I feel sick, I always have backaches and sleep almost all the time. The body feels cold, very cold and weak. Sometimes I would feel as if I have something sitting on my back. This hinders me from seeking care. " (P1, P2*)

In addition, participants reported that they were anxious to travel alone to seek repair services. Hence, they delayed seeking care for fear of travelling all the way to seek the services without anyone to accompany them. This is what participants said, *I am anxious to travel alone to seek repair services that is why I have just been once for repair services. It is a big sacrifice especially that urine smells and people look at you with bad eyes. You have no one to talk to all the way to the hospital that offers repair services." (P1, P3)*

Women used alternative treatment instead of seeking fistula repair services. Women had different views about the causes of fistula that contributed to the type of service sought. They reported that since fistula was as a result of witchcraft only traditional medicine would heal it. Use of traditional medicine made women delay in seeking care as reported in the excepts below;
"I went to the witch doctor who gave me medicine to drink and I have gone from one witch doctor to another just to seek help. The witch doctor said people took my clothes and threw them in water and that is the water I am leaking to date. The witchdoctor also told me that I will recover after finishing the whole course of traditional medicine. "(P7, P9, P11, and P12)

Another woman with fistula said, "*The traditional healer said it is "Mukunko" meaning leaking urine from the vagina. The traditional healer said it occurs due to childbirth following witchcraft where the witch would not want me to remain in marriage due to jealousy. The witchdoctor told me to I sit in the medicine so that the urine leakage can lessen I sit in the medicine in the morning, at lunch time and in the evening. The urine leakage has reduced. I am able to manage my situation. Seeking fistula repair services is not an issue now" (P2)*

Afflicted women reported need to pay for any unforeseen circumstance while at the hospital. Considering the poverty levels among these afflicted women, the afflicted woman preferred not to seek repair services anymore as they could not manage to pay for any unforeseen circumstances. This is what one fistula patient said; "*At the hospital, I once tried to ask for financial support. I explained to them that I did not have a job and I tried by all possible means to survive. I cannot go to the hospital now because they will ask me to pay for other services such as blood tests." (P13).*

Household barriers

Most of the participants reported that they needed financial support from their family members and partner to enable them seek repair services. Participants had this to say; *"What I need from my family is transport money to enable me seek repair services. I really want to heal completely" (P5, P6)*

Another one had this to say; *"Money was difficult to find because of the way I was staying with my husband. He was working in another town but because of my fistula he married another woman and stopped supporting me. There was nothing I could do." (P7, P13)*

Due to lack of husband support to seek fistula repair services, my family advised that I seek alternative treatment. This is what the participant said; *"They (my family) told me that what had happened to me was a mystery. They had never seen such a thing happen to anyone and they had never heard about such a thing. They decided that we go to the witch doctor to seek help" (P13)*

Community barriers

Most participants reported that their communities did not have any idea on what obstetric fistula is and on the availability of fistula repair services. According to the participants this hindered them from seeking fistula repair services. This is what participants said, "*In the village, people are ignorant. It is only those who are educated on fistula who could know and identify the problem fast and advise us to seek repair services. The community health workers should sensitize the community on the condition and repair services" (P2, P5, P6, P14 and P15)*

Some participants who had informed their communities about their condition felt that they were of no help. If communities were of help in terms of taking them to the hospital for repair services then they could have accessed care. This is what participants said**,"** *The community should help us access treatment. If the family has no resources then the community should be able to help women with fistula. They should take us to the hospital for repair services." (P2, P5 and P6)*

Participants reported that after informing their communities about their condition, they were stigmatised. They could no longer interact as they used to. This is what participants said; *"Some people in the community tell other people that even when you see her like that she leaks urine. It makes me feel very bad about it." (P5, P12)*

Health systems barriers

Participants reported that health care providers did not about their condition which contributed to their failure in seeking fistula repair services. Hence participants thought health care providers understanding of the condition was very minimal. The participant number 15 said**, "***When I sustained a fistula, health care providers just put a catheter on me without telling me anything about why the catheter was inserted. What they only said is that all those who had caesarean section were fine apart from me. So I was discharged without knowing anything about my condition."(P15)*

Absence of treatment centres near where afflicted women stay was reported as significant contributory factors for delay to seek treatment**.** One woman wished fistula repair services would be at their door steps. This is what she said, *"Hospitals that offer repair services should be near our doorsteps. Really, I would like to stop leaking urine completely, that is the treatment I want." (P1)*

Shortage of fistula surgeon resulted in those who had been to seek repair services not to continue seeking the service. fistula patients said, "*Sometimes you can be lucky to find doctors repairing*

women with fistula. Like what has been happening to me, whenever I hear that there are doctors doing repairs. I would go for fistula repair. I just used to leave home without informing anyone because it is my life. I wanted to be healed completely. I needed to chance the doctor because only a few doctors are able to conduct repairs. But I cannot continue going for the service if doctors are not available." (P5, P6)

Another said, "*I have been repaired three (3) times though sometimes when I went for repair services, I was told it is not now when the Doctor conducting repair is coming but at times I was missing the doctor." (P8)*

Participants also reported that as a result of shortage of doctors, they were given appointment. Appointments were not successful. This is what participants said, *"I was given an appointment when to seek repair services. The appointment given was for several months. I will never seek fistula repair services. " (P5, P6)*

For those that were repaired, afflicted women reported having unsuccessful repairs. Having unsuccessful repairs discouraged them from seeking repair services. A fistula patient said "*I fear that the Doctor would make another mistake which would worsen my situation. Iam* scared *in the sense that I have had three repairs done and the doctor made mistakes during each operation. I am still leaking. So, I have not gone back to that hospital for the operation up to now." (P5, P12)*

Other fistula patients put it like this, *"I did not go for another attempt at repair because I did not heal previously and I got discouraged because of lack of skilled fistula surgeon". (P9, P10 and P13)*

Some participants also felt that they were not given instruction from the hospitals or clinics on where else to seek fistula repair services after failed attempts at their usual source of care. Fistula patients had this to say, "*The hospitals and clinics should be able to refer us where we can successfully be repaired. It is important to heal completely. " (P4 and P5)*

Other afflicted women felt that the healing was not a must and the timing for repair was not appropriate for them. A fistula patient said, *"The timing for repair services is bad. Like now women are supposed to go for repair. There is a camp but most of us have decided to go "kufishimu" (fetch caterpillars) so that we make abit of money to sustain ourselves and families." (P11).*

Due to unsuccessful repairs, women decide to stay with the leaking urine and/ or stool. This is what some participants said*, "I was repaired and went back home. I continued leaking. Years came and went until there came a time when I heard that there were doctors who were doing repairs again. I went. Even the second, I could not heal completely. I continued coming to the hospital until I had all the four repairs but without recovering. I am still leaking. So I have just decided to stay like this without seeking repair services." (P4)*

Another one said, "*Once you are repaired even if it is not successful the leakage minimizes and so we are able to cope with the situation*." *(P6)*

Discussion

The age of women with obstetric fistula who participated in the study ranged from 19-87 years. This could mean that after sustaining an obstetric fistula, women stay for many years without seeking repair services and /or without having successful repairs. This is in agreement with a study done by Turan, *et al.,* (2007) [6] who found out that afflicted women live up to 50 years without surgical repair. Repair of fistula is recommended within 3 months of woman first experiencing fistula symptoms; if women delay seeking treatment for more than 3 months, the condition tends to be difficult to repair and results in more delay in healing and possible reoccurrence of fistula (Dennis *et al*., 2016; Mohamed, Ilesanmi and Dairo, 2018) [25, 26]. Eight participants were married. Therefore, the large proportion of women that is still married in this study is difficult to explain, but may be due to differences in the case or acceptability of divorce in Zambia, compared with other countries. One other possibility is that in communities that practice polygamy, the husband may take another wife without having to divorce the existing wife. Similar results were reported by previous studies conducted in other African countries where not all women were divorced following sustaining a fistula (Yeakey, *et al*., 2011; Mehta and Bangser, 2006) [27, 28]. Nine afflicted women were self-employed. This could be attributed to the fact that women with fistula are not education and could not be in formal employment. Lack of employment resulted in the women having no source of income unless those that were still married and supported by their partners. Thirteen participants were of the childbearing age and some women have had children following a pregnancy that resulted in an obstetric fistula. This may means that women would still get pregnant and have children regardless of having unsuccessful repairs. This is supported by (Bishinga *et al*., 2013) [29] who noted that delivery has been reported to be associated with the recurrence of fistula after surgical repair.

In this study, findings showed that some women had never been for fistula repair services while those that had been for fistula repair services had unsuccessful repairs. In support of the findings, some women had no idea that treatment is available. According to literature, an estimation of 80% of afflicted women never seeks treatment because they lack knowledge that repair services exist (WHO, 2006) [30]. If women are not aware of the service they would not utilise it. It is therefore, suggested that reliable information on where and when treatment is available needs to be disseminated to the afflicted women and in their communities consistently to promote seeking fistula repair services.

Study findings showed that distance, limited availability of fistula repair centres and poor road infrastructure also prevented women from seeking repair services. Similar findings are reported from a study conducted by Abokaiagana, (2010) [31] who found out that long distances to health facilities contributed to delay in accessing health care services. Limited availability of fistula centres contribute to women staying at home despite any complications that they may have. Hence, establishing a dedicated fistula centres in high prevalent areas is an effective strategy in supporting women living with obstetric fistula rather than a hospital committed to fistula repair (Cam *et al*., 2009) [32]. Also, study findings by Gele *et al*. (2017) [33] suggested that fistula centres should be established, and access to these facilities has to be guaranteed for all afflicted women who need these services.

Study findings showed that all women that had been repaired before had unsuccessful repair hence the perceived poor quality of care by women with obstetric fistula. This has an impact in seeking repair services. Therefore, trained fistula surgeons repair should conduct repair services since they have the knowledge and skills on how to perform the procedure. Unsuccessful surgery led to the women staying home for long periods before they could attempt another visit to the hospital or not seek repair services at all. This is in agreement with a study done by Khisa, *et al.,* (2017) [34] who revealed that women expressed frustration with multiple surgery and unsuccessful repairs. It is worth noting that multiple visits for treatment are costly and women with no source of income could not afford it. Similar results were reported by Tilahun, *et al.,* (2014) [35] who indicated that unsuccessful repairs made afflicted women give up and learnt to tolerate their situation.

Study results showed that financial barrier that included transportation cost and the cost of health care made some afflicted women not to seek fistula repair services. Failure to pay for transportation and repair services were caused by the fact that most women were self-employed and hence had minimum or no income. Assisting afflicted women with transportation or transportation fees would make accessing treatment easier (Meurice *et al*., 2016) [36]. In support of the above findings, Woldeamanuel (2012) [37] indicated that afflicted women had to think twice before going to the hospital in fear of paying huge sums of money. These findings suggest that services and transport to treatment should be available and affordable, ideally at no cost to the woman and her family.

Several studies (Aliyu *et al*., 2011; Mselle *et al*., 2011) [38, 1] have revealed failure to seek care as a result of women with obstetric fistula not being accompanied to the fistula repair centres by their husbands, families, or communities. In addition, afflicted women experience anxiety, loss of dignity, and low self-worth that inhibits their agency and motivation for seeking treatment (Bangser, 2011) [39]. In support of the findings, it was noted that stigmatization by the communities hinder women from seeking fistula repair services. This finding concurs with the results by Arora, Mullan and Lawton (2010) [40] who reported that the stigma associated with fistula make the afflicted women to live in a state of denial and hiding from the public.

Findings also suggested that afflicted women do not seek repair services because of their physical illness and use of traditional medicine. These findings portrayed that women experienced loss of body control, body weakness and felt fatigued most of the times. This is in agreement with a study done by Khisa, *et al.,* (2017) [34] who revealed that the onset of fistula illness and patient's recognition of symptoms are a crisis that the individual resolves through staying home with illness or reaching out to the for-mal and informal systems for treatment. Similar results were noted by (Kavai, Chepchirchir and Kayugira, 2010) [41], who reported that cultural beliefs and traditional practices reduced the use of medical care by women with obstetric fistula. These findings suggest that afflicted women and their communities must be given information on the condition to enable them make informed decisions about repair services.

Conclusion

Based on the findings of this study, there is evidence that most women who seek fistula repair services have had unsuccessful repairs. However, a notable number of women with obstetric

fistula did not seek fistula repair services because they did not know that fistula repair services existed despite delivering the child in hospital that resulted in them sustaining a fistula. Thirteen women were of the childbearing age. Therefore, it is important that current approaches to improving knowledge on condition and repair services available are addressed. Also, availability of fistula surgeons to conduct repairs is necessary in order to encourage women to seek repair services. In the absence of such an understanding, it is difficult to map out the interventions that would help women access surgical repair.

Study limitations

The study was subject to the following limitation: First, the study was only limited to four provinces of Zambia which may not be representative of other provinces which were not included since there are different in terms of geographical location. Secondly, only rural women with obstetric fistula were interviewed which could not be representative of the urban women living with obstetric fistula. However, the fact that this study contained time-specific information in four provinces of Zambia does not mean that the findings would be inapplicable and have no meaning in other contexts.

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Conflict of Interest

The author declares no competing interest in the study.

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