UTILISATION OF FAMILY PLANNING SERVICES BY FEMALE ADOLESCENTS OF KAWAMA EAST COMPOUND IN MUFULIRA DISTRICT, COPPERBELT, ZAMBIA

By

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A Dissertation submitted to the University of Zambia in Partial Fulfillment of the requirements for the award of the Degree of Master of Science in Midwifery and Women's Health

THE UNIVERSITY OF ZAMBIA

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Declaration

I, **Idah Namusokwe Kasimbo**, declare that this Dissertation is my own work and that all the sources I have quoted have been indicated and acknowledged using complete references. I further declare that this dissertation has not been previously submitted for a Diploma, a Degree or any other qualification at this or any other university. It has been written in accordance with the guidelines for Master of Science Degree in Midwifery and Women's Health Dissertation of the University of Zambia.

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I, **Mr. Yolan Banda**, having supervised and read this Dissertation is satisfied that this is the original work of the author under whose name it is being presented.

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The University of Zambia approves this Dissertation of Idah Namusokwe Kasimbo on Utilisation of Family Planning Services by adolescents of Kawama East compound of Mufulira District, Copperbelt Province, Zambia in Partial Fulfillment of the requirements for the award of Master's Degree in Midwifery and Women's Health.

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Abstract

Background: This study focuses on utilisation of family Planning services by female adolescents of Kawama East compound in Mufulira District, Zambia. Utilisation of family Planning by female adolescents is vital because it can save lives of babies and their mother.

Objective: The main objective of the study was to determine factors influencing utilisation of family planning services by female adolescents of Kawama East compound in Mufulira, Zambia.

Methodology: A quantitative cross sectional study design was used. 408 participants who were selected by systematic sampling were interviewed in privacy with permission from Neighborhood Health Committees. Data was collected using researcher administered questionnaire from female adolescents aged fourteen to nineteen years. Data analysis was done by use of Statistical Package for Social Science version twenty. Descriptive data was analysed using frequencies and percentage while inferential statistics were analysed using the Chi-square**.** Logistic Regression Analysis was done to establish the association of variables. Estimates with p-value less than 0.05 were considered statistically significant.

Key findings: The study revealed low levels of utilisation (34 %). Contributory factors included educational background (p-value=0.033), state of service delivery (p-value<0.010), religious denomination (p-value<0.010) and cultural beliefs (p-value<0.010). Binary logistic regression results revealed that respondents with primary school level were less likely to utilise the service while Catholics and Protestants were more likely to utilise the service. Those with low state of service delivery and beliefs were also more likely to utilise the service. These were all statistically significant with utilisation of the service.

Conclusion and recommendations: The study revealed that there is low utilisation of family Planning services among female adolescents of Kawama East compound of Mufulira District. It also revealed a significant association between socio-demographic factors and Family Planning. The findings will raise awareness and influence use of the services. Ministries of Health and Higher Education should work together to establish Youth Friendly Services at local schools and engage wider community through mass and peer campaign strategies.

Key words: Utilisation, Family planning, Female, Adolescents".

Dedication

This Dissertation is dedicated to my husband Thomas Kasimbo who has always encouraged me to work hard in my postgraduate studies and for the financial support he offered. I also dedicate it to our son Kaziya Kasimbo, our three daughters Nzabuka Kasimbo, Mukanzala Kasimbo and Moono Kasimbo for their ceaseless support throughout the period of study.

I also dedicate it to my late Mum and Dad Mr. and Mrs. Simusokwe and my late brothers Jeff Simusokwe, Hector Simusokwe and Stephen Simusokwe for giving me the inspiration to further my education.

Acknowledgements

This study would not have been possible without the support of the School of Nursing Sciences.

My heartfelt gratitude goes to my research supervisors Mr. Yolan Banda and Mrs. Martha Mwelwa for their ceaseless guidance. I am also indebted to both my supervisors for their invaluable help. Thank you for your patience and for allowing me to disturb your work at any time.

I would like to thank the Faculty at School of Nursing Sciences UNZA, the Faculty at School of Medicine UNZA, Mufulira District Health Management Team, my research assistants and my children for moral and logistical support. I thank the study participants for their participation in this study, my fellow Master of Science in Nursing students among them Kalobwe Secunda Mwape and Juness Kachimba and my husband Thomas Kasimbo for the great encouragement and support during the course of this work.

I am also grateful to the Ministry of Health for the financial support throughout the period of study.

My sincere gratitude also goes to my brother Lieutenant Colonel David Simusokwe for the guidance and moral support rendered to me during the study including my sisters Maureen Namusokwe, Medina Namusokwe, Mary Namusokwe and my brothers Golden Simusokwe and Brown Simusokwe.

Lastly but not the least I thank the Almighty Jehovah God for giving me strength and guidance throughout the period of study.

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List of Abbreviations

BMC	Bio Medical Central

CCIH	Christian Connections for International Health
CHAZ	Churches Health Association of Zambia
CHPS	Community-based health planning and Services
CIDRZ	Centre for Infectious Diseases Research Centre
CMML	Christian Mission in Main lands
CPR	Contraceptive Prevalence Rate
CSO	Central Statistical Office
DHMT	District Health Management Team
DMO	District Medical Officer
DRC	Democratic Republic of Congo
EMTCT	Elimination of Mother to Child Transmission of HIV
FBO	Faith Based Organisations
FGD	Focus Group Discussion
FP	Family Planning
FPS	Family Planning Services
GNMCZ	General Nursing and Midwifery Council of Zambia
HCP	Health Care Provider
HIV	Human Immuno-deficiency Virus
HMIS	Health Management Information System
HPM	Health Promotion Model
IEC	Information Education and Communication

IPPF	International Planned Parenthood Federation
IUCD	Intra Uterine Contraceptive Device
JW	Jehovah's Witnesses
LAM	Lactation Amenorrhea Method
LARC	Long-Acting Reversible Contraceptive
LICs	Low Income Countries.
MoE	Ministry of Education
MoFNP	Ministry of Finance and National Planning
MoH	Ministry of Health
NGO	Non-Governmental Organisation
NHC	Neighbourhood Health Committee
OCP	Oral Contraceptive Pills
OPD	Out Patients Department
PAC	Post Abortion Care
RH	Reproductive Health
SARAI	Sexual and Reproductive health for All Initiative
SDG	Sustainable Development Goals
SDA	Seventh Day Adventist church
SPSS	Statistical Package for Social Sciences
SRH	Sexual Reproductive Health

STI	Sexually Transmitted Infections
TDRC	Tropical Disease Research Centre
UCZ	United Church of Zambia
UN	United Nations
UNAID	United Nations Joint Program on HIV/AIDS
UNFPA	United Nations Population Fund Agency
UNZA	University of Zambia
UNZABREC	University of Zambia Biomedical Research Ethics Committee
US	United States
USAID	United States Agency International Development
VCT	Voluntary Counseling and Testing
WHO	World Health Organisation
YFS	Youth Friendly Services
ZDHS	Zambia Demographic Health Survey
ZSA	Zambia Statistics Agency

CHAPTER ONE – INTRODUCTION

1.1. Introduction

This study focuses on utilisation of family Planning services (FPS) by adolescents of Kawama East compound in Mufulira District. FPS involves giving information as well as providing contraceptive methods (World Health Organisation (WHO), 2016). Family planning (FP) is the practice of controlling the number of children in a family and the intervals between their births, it involves cognitive decisions and behavioural practices that enable a woman to conceive a wanted pregnancy and avoid an unwanted or a badly timed pregnancy, particularly by means of artificial contraception or voluntary sterilization (WHO, 2016). It is a voluntary decision made by an individual or a couple on the appropriate number of children they wish to have, and when to have them (WHO, 2016). This implies that men and women have the right to be informed and to have access to safe, effective, affordable, and acceptable methods of their choice for fertility regulation, which are not against the law, as well as the right of access to health care for safe pregnancy and childbirth (WHO, 2014; Centre for Infectious Disease Research in Zambia (CIDRZ, 2014).

1.2. Background Information

There are about 1.2 billion adolescents in the world, making up sixteen per cent of the world's population, a quarter of the world's population (WHO, 2021). Among these, large numbers are sexually active and they would want to avoid, delay or limit pregnancy but lack the knowledge, agency or resources to make decisions regarding their reproduction (Marshall and Jones, 2012). Globally on average, unmet need for contraception is greater among unmarried adolescents than those who are married (Marshall and Jones, 2012). Worldwide, more than one in five of the adolescent girls are currently married or in a union, and three per cent are unmarried but sexually active (UNFPA, 2016). It is estimated that every year, approximately 21 million girls between the ages of 15 and 19 years become pregnant in developing regions (WHO, 2018). Approximately half of these pregnancies (49 percent), reported among adolescents of this age group who live in low-income regions, are unintended, and over 50 percent result in abortions, usually under unsafe conditions (Darrochi et al., 2016). In spite of the high rates of pregnancies and births among adolescents, contraceptive use among this category of population remains low globally, particularly in Low-income countries (LICs), such as those in Africa (Hounton et al., 2015; Ngome and Odimegwu, 2014; Nyarko, 2014). Overall, contraceptive use over the 18 years has been low,

with only 9.8 percent of adolescent girls aged between 15- and 19-years using contraceptives (Chola et al., 2020). Evidence shows that contraceptive prevalence rate (CPR) among adolescent females aged 15–19 years in LICs is 21% for all methods (modern and traditional) (Arthur and Champiti, 2016; Hounton et al., 2015). The low use of contraception among adolescents occurs against the backdrop of evidence that using family planning methods has benefits that could reduce some of the negative consequences of adolescent pregnancy and childbearing such as, reduction in maternal and infant mortality and improvements in schooling (Rutstein and Winter, 2015). Madagascar which joined Family Planning 2020 in 2015, clearly defined access to family planning as a guaranteed right for adolescents, and it included counseling and family planning services for sexually active teens, married or unmarried, (Schlachter and Boven, 2018). More or so, according to Gudeman and Madge (2011), under the Federal Title X Family Planning Program, family planning services are made available for free or at low cost to adolescents and one of the specific goals of the program was to address the reproductive health needs of adolescents and prevent unwanted pregnancies among sexually active adolescents. Similarly, WHO (2018) emphasised that it is important that family planning is widely available and easily utilised through midwives and other trained health workers to adolescents who are sexually active. On the other hand, it is essential to reach adolescents before they are sexually active with information about puberty, fertility awareness and contraception as this would enable them to delay sexual initiation, or to engage in safer sexual practices, including contraceptive use (WHO, 2016). Hence it is not mandatory but important for all sexually active adolescents to use FP services.

In Zambia, FP started as early as in the 1960s, unfortunately, its prevalence remains low (Guttmacher Institute, 2017). Low utilisation of FPS could be due to limited choice of method, limited access to contraception, fear or experience of side effects, cultural or religious opposition, poor quality of available services, users and provider's bias or gender-based barriers (WHO, 2017). Under utilisation of FPS by adolescents may result in increased maternal mortality and unintended pregnancies (WHO, 2017).

The unmet adolescent's need for contraception remains high in Zambia (ZSA, 2018). Hence, to help adolescents better utilise FPS, the barriers that adolescents encounter in defining their reproductive intentions, and in demanding use of contraceptives should be understood.

In addition, it is important to understand what works in empowering adolescents to overcome the barriers to utilisation of FPS as substantial numbers of adolescents, both married and unmarried are at risk of pregnancy complications, with serious health and social costs to young mothers and their babies. Poor use of contraception is a key contributory factor (Venkatraman et al., 2014). More or so the introduction of FPS in Zambia, largely conflicts with Christian values which believe only in abstinence as a mode of FP for adolescents. If other methods such as condoms are used by adolescents, it is viewed as fornication which is a sin (Mushabati, 2012).

Several studies indicate barriers to the use of FPS by adolescents, ranging from the society to the Church including some Health Care Providers (HCPs) (James, 2013; United Nations Population Fund Agency; Silumbwe et al., 2018; Mukanu, 2017).

1.3. Statement of the Problem

Insufficient uptake of FP services contributes to morbidity and mortality in female adolescents (Graham and Hussein, 2007; Guttmacher Institute, 2017). Utilisation of FP among adolescents in Zambia stands at 38.3 percent (ZSA, 2018). Therefore, the government has committed to increasing the contraceptive usage to 58% by 2020 through cooperating with other partners (MoH, 2013). However, stoppage of use of FPS and unmet FP needs continue to prevail among female adolescents of Mufulira District, and Kawama East compound in particular.

Statistics show that there is low utilisation of FPS by female adolescents of Kawama East compound (table 1). This is in accordance with Mufulira District Health Office Health Management Information System data base, Twatasha Clinic of Kawama East compound, Kamuchanga District and Ronald Ross General referral Hospitals. This was indicated by adolescent pregnancies from 2015 to 2017, where more adolescent pregnancies were recorded than FP attendances. Furthermore, high figures of abortions by adolescents were observed thus indicating unmet needs of utilisation of FPS by adolescents in Kawama community.

Table 1: Shows the ratio of utilisation of family planning services by female adolescents between 14 and 19 years of age in Kawama East Compound of Mufulira District.

Year	Family Planning Services	Pregnancies from 14 - 19	Kawama East Compound abortions	District abortions
2015	64 (4%)	70 (5%)	34 (2%)	617 (1%)
2016	79(5%)	80 (5%)	61 (4%)	295 (1%)
2017	73 (4%)	203 (12%)	95 (6%)	588 (1%)
	216	**353**	**190**	**1,500**

SOURCE: HMIS Registers for Twatasha clinic, Kamuchanga District Hospital, Ronald Ross General Hospital and Mufulira DHMT - HMIS Database

1.4. Justification

Meeting the unmet need for modern contraception of adolescents would reduce unintended pregnancies among them by 6.0 million annually and this would mean averting 2.1 million unplanned births, 3.2 million abortions and 5,600 maternal deaths, consequently, the reduction in unintended pregnancies would spare women and their families the adverse consequences of early childbearing, reap savings in maternal and child health care, and will boost adolescent's education and economic prospects (Darroch et al., 2016). Hence, utilisation of FPS needs to be determined to evaluate effective ways to enhance its consumption. Countries effectively availing FPS to adolescents have shown an increase in usage. Britain is an example with 86% coverage (UN, 2015). In contrast, studies by Venkatraman et al., (2014) and Eliason et al., (2014), argued that utilisation of FP methods only, doesn't automatically translate into action or practice. Similarly, studies by Sedgh, (2012), Woog et al., (2015) and (WHO, 2012) stated that utilisation and knowledge of FPS prevent or delay pregnancy and is a vital first step for acceptance and subsequent use.Sustainable Development Goals (SDG) require that by 2020, countries achieve universal access to Reproductive Health (RH) through an increase in FP use and a reduction in adolescent birth rates, with adolescents using relevant FPS including Information Education and Communication (IEC). Results of this study will be useful to MoH and its partners in formulating appropriate strategies in implementation of FP interventions which will include establishment of FP outlets in schools and community and add to the existing body of knowledge. Hence the study will contribute in improvement of utilisation of FPS among female adolescents.

1.5. Research Objectives

1.5.1 General Objective

To determine factors influencing utilisation of family planning services among female adolescents of Kawama East compound in Mufulira District, Zambia.

1.5.2. Specific Objectives

1. To determine the level of utilisation of FPS by female adolescents.
2. To assess the relationships between knowledge, service delivery, traditional beliefs, attitude of staff and utilisation of FPS among female adolescents.
3. To determine the relationship between socio-demographic characteristics and utilisation of FPS among adolescents.

1.6. Hypothesis

Alternative Hypothesis

There is an association between utilisation of family planning services and knowledge levels, service-related factors, traditional beliefs and staff attitudes.

1.7. Conceptual Definitions

Adolescent: any persons aged 10 to 19 years (WHO, 2014)

Knowledge: these are facts, information and skills acquired through experience or education, the theoretical or practical understanding of a subject (Oxford, 2017)

Attitude: is a way of thinking or behavior, especially the one you have for a long time (Allen et al, 2007)

Utilisation: to use something especially for a practical purpose (Oxford advanced learners dictionary, 2010).

Barriers: an obstacle that prevents movement or access to communication, understanding, or progress (Oxford, 2017)

Family Planning: a voluntary decision made by an individual or couple on the number of children and when to have children (MoH, 2009)

Belief: a firmly held opinion or conviction that something exists or is true, especially one without proof (Oxford, 2017)

1.8. Operational Definitions

Knowledge: This is what female adolescents know about family planning services and the dangers of not using them. Knowledge was measured by asking the respondents eight (8) item questions. Female adolescents who had high knowledge on family planning scored 10 – 15 and those who had low knowledge scored 9 and below.

Adolescent: Young persons aged 10 to 19 years with agency to utilise Family planning.

Attitude: This is a positive or negative behavior staff portray towards offering family planning services to female adolescents. The variable attitude was measured by asking respondents attitude questions. Those who scored 4 – 8 on attitude question were considered as having a good attitude towards family planning and those who scored 3 and below were regarded as having bad attitude.

Beliefs: Convictions of female adolescents about family planning that result from ethnicity and cultural morals. Measurement of beliefs was based on the yes and no questions. Those who gave a yes response were considered as having beliefs and vice versa.

Utilisation: This is the process of practically using family planning services. Utilisation was measured by asking the respondents whether they were utilising or not utilising any modern family planning method. The score for those who were utilising was '1' while the score for those who were not utilising was '0'.

Barriers: These are circumstances or conditions that may hinder access of adolescents to family planning services.

1.9. Research Variables and Cut off Points

1.9.1. Dependent Variable

Utilisation of family planning services

1.9.2. Independent Variables

Knowledge levels

Service delivery

Traditional Beliefs

Staff Attitudes

Table 2: Variables and Cut off Points

VARIABLES	INDICATOR	CUT – OFF POINT/MEASUREMENT	QUESTION NUMBER
DEPENDENT VARIABLE			
Utilisation of family planning services	Utilising	Yes – (Female adolescents that are using any modern family planning method), representing a score of 1	5 - 7
	Not utilising	No- (Female adolescents that are not using any modern family planning method), representing a score of 0	5 - 7
INDEPENDENT VARIABLES			
Knowledge on family planning	Low knowledge	Respondents scoring less or equal to 9 correct responses to knowledge questions on family planning questions.	8 - 14
	High knowledge	Respondents scoring 10 - 15 correct responses on family planning knowledge questions,	8 - 14
Service delivery	Yes	Good service delivery as one with good stocks of family planning commodities and good infrastructure which is conducive for rendering the service and respondents scoring 7 – 15 positive correct responses.	15 - 25
	No	Bad service delivery with lack of family planning commodities and poor infrastructure' and respondents scoring less than 6 positive correct responses	15 - 25
Traditional beliefs towards family planning	Yes	Existence of traditional beliefs and respondents scoring 1	26 - 32
	No	Non-existence of traditional beliefs and respondents scoring 0	26 - 32
Staff Attitude towards family planning	Positive attitude	Respondent's perception on attitude of staff with a score of 4 – 8 to attitude questions	33 - 36
	Negative attitude	Respondent's perception on attitude of staff with a score of 3 and below to attitude questions	33 - 36

1.10. Conceptual Framework

This research was guided by Pender's Health Promotion Model (HPM) (first formulated in 1982 and then revised in 1996). HPM is an explanatory model of health behaviour that emphasises the role of expectations in the shaping of behaviour (Pender, 1996; Pender et al., 2006). The greater a person's self-efficacy or perceived competence for a behaviour, the more likely the person will commit to action and actually carry out this behaviour (Peterson & Bredow, 2008). The Health Promotion Model is widely used in nursing to guide individual as well as societal behaviours towards healthy lifestyles (McCullagh, 2009). The model has direct applicability for integrating individuals, communities, and public policies in the promotion of health (Pender, Murdaugh, & Parsons, 2011).

1.10.1. Core Assumptions

The HPM is focused more on achievement of higher levels of well-being and self-actualisation. It comprises the following components:

- **Behavioural factors;** that describe the person's prior experiences with a given activity. The activity and associated information previously learned may influence the person's self-efficacy in resuming participation in the activity, for example**,** educational level. An educated person is likely to have perceived benefits towards utilisation of FPS. This may be due to their knowledge about the importance of the service hence may opt for it.
- **Situational factors;** these are factors that may influence behaviour as it relates to the surrounding environment**.** For example, awareness that FP is highly stigmatised, may negatively influence individuals from communities with high levels of stigma and might find it more challenging to use FPS due to the stigma thereafter.
- **Interpersonal influences;** these relate to social support and expectations of others such as clinicians, families and work colleagues. These are other sources of encouragement or discouragement towards the change of behaviour. For example, a respected clinician that advises a client to utilise FP can provide the impetus for the client to use the services.
- **Demographic characteristics;** Age, gender, income, marital status, ethnicity, racial and educational background comprise the demographic characteristics associated with the model. For example, as an individual's income increases the participant is likely to engage

in preventive and safer health care services such as FP. This aspect provides meshing of the HPM with the concept of self-actualisation.

1.10.2. Application of the HPM to the study

The HPM comprises a set of variables which are unique to a person's characteristics and experiences which may be classified under behavioral specific knowledge and affect. These variables have important motivational significance and can be modified through nursing actions.
Behavioural factors in this study include; Knowledge and utilisation. For instance, if one has knowledge about FP and its benefits, he/she may commit to a plan of action to accept and consequently use FPS. An individual, who is knowledgeable about an offered service, is likely to have a positive perception towards it hence the chances of using the service increase.

Availability and utilisation of FPS, lack of information about FP, myths, fears, and misconceptions are some of the situational factors that may influence one's health seeking behaviour. For example, if a person comes from a community with misconception about FP, she may not utilise the service or when services are not available. This may lead to an individual not committing to a plan of action and may therefore decline to utilise FPS.
An individual, who is knowledgeable about an offered service, is likely to have a positive perception towards it hence the chances of using the service increase.

Availability and utilisation of FPS, lack of information about FP, myths, fears, and misconceptions are some of the situational factors that may influence one's health seeking behaviour. For example, if a person comes from a community with misconception about FP, she may not utilise the service or when services are not available. This may lead to an individual not committing to a plan of action and may therefore decline to utilise FPS.
Interpersonal influences may include family, friends, attitude and competence of service providers. If a person receives support from colleagues and positive attitude from providers, she/he is likely to utilise FPS. However, if opposition is perceived as a barrier to action, one may not commit to a plan of action of accepting FP.
Demographic factors such as residence, marital status, education or income may influence the person's ability to utilise FPS. For example, an individual from a low economic social class may have limited or no access to information about FP thereby less likely to utilise contraceptives.

Health Promotion Model

This is the model that guided the study. It focuses on three (3) areas as follows;

- Individual characteristics and experiences
- Behaviour Specific Cognitions and Affect
- Behaviour-Outcome

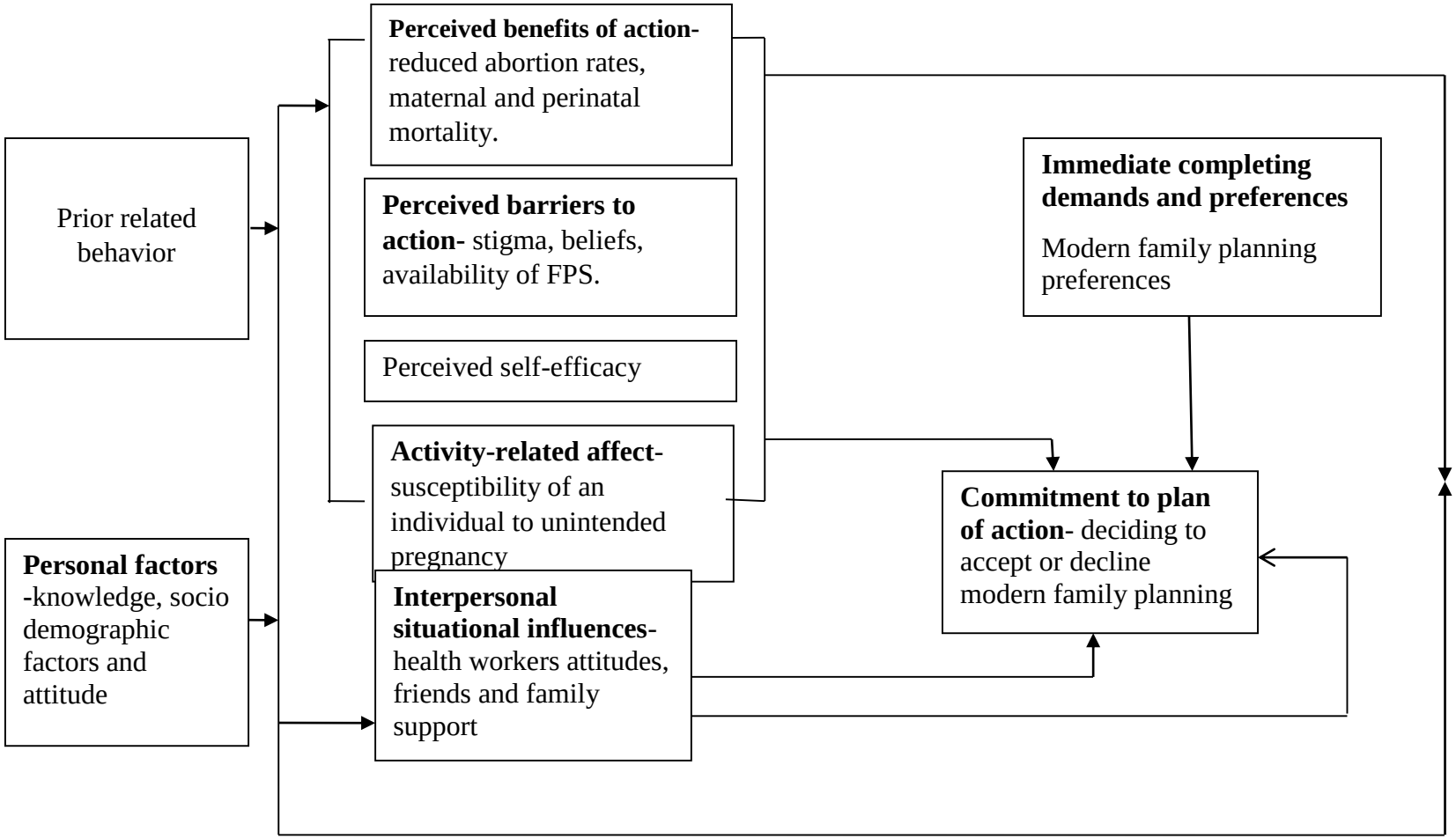

Figure 1: The Health Promotion Model adapted from Gonzalo (2011)

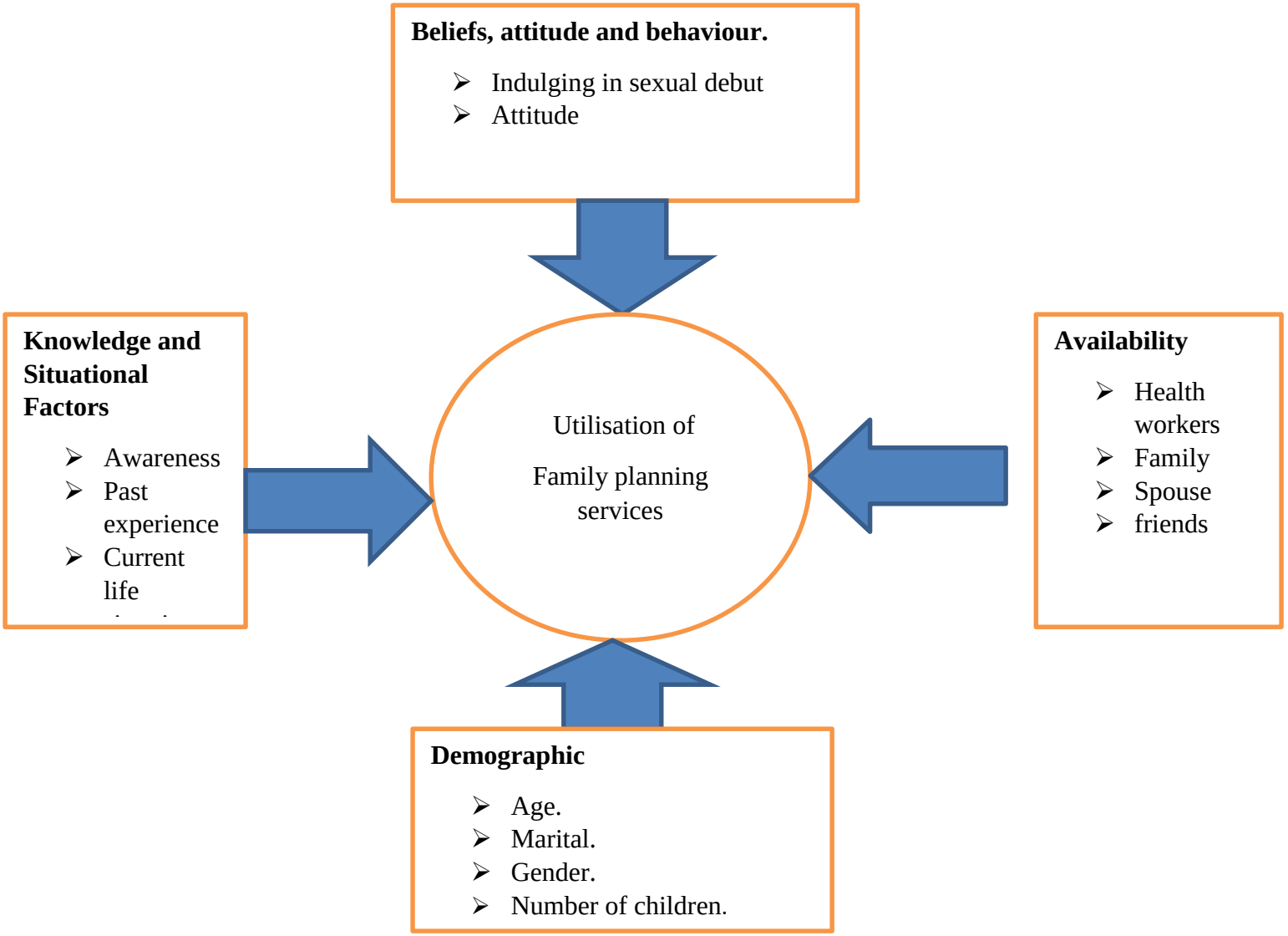

Figure 2: Modified Health Promotion Model (Pender, 2002)

CHAPTER TWO - LITERATURE REVIEW

2.1 Introduction

Worldwide, many studies on the utilisation of FP among adolescents have been done, but very few studies have been done in Zambia. Literature review for this study focused on published studies and the process of reviewing the literature was done to identify scientific, evidence-based literatures that would add value to the study. Literature sources included international and local publications and books. Literature review is an organized written presentation of what has been published on a topic by scholars (Burns and Grove, 2009). Literature review presents a strong knowledge base for the conduct of the research (Burns and Grove, 2009). Literature review is a critical summary on the topic of interest, often prepared to put a research problem in context or as the basis for an implementation project (Polit and Hungler, 2009). Literature review gives the researcher some clues to the methodology and types of data collecting tools which can be used. It also helps the researcher to refine certain parts of the study. Burns and Grove (2016), regard the reviewing of existing knowledge about a topic as essential for the researcher in order to locate existing similar or related studies that could serve as a basis for the study at hand.

The purpose of review of literature is to determine what is already known about the topic under study so that the comprehensive picture of the state of knowledge on the topic can be given. The purpose of a literature review in quantitative research is to provide the researcher with current and scientific knowledge about a particular phenomenon (Polit and Hungler, 2009). Literature review for this study focuses on published studies and the process of reviewing the literature was done to identify scientific texts that would add value to the study. Scientific studies were searched electronically from HINARI, CINAHL, Pub Med, and Science Direct. Other literature sources included international and local policies and books. This material was selected not to be older than ten years.

The selected literature in this chapter is discussed under the following headings: overview of family planning, knowledge, socio-demographic factors, beliefs/attitude and finally a conclusion was drawn.

2.2.1 Overview on Family Planning.

More than half of all women in the developing world are at risk of having unintended pregnancies with about 16million adolescents aged 14-19 giving birth each year, mostly in low and middle-income countries (BMC, 2017; WHO, 2012).

Within sub-Saharan Africa, use of FP and unmet need vary greatly, with Southern Africa having the contraceptive use rate at 58 percent, and unmet need for FP at 16 percent. A study conducted in Masisi, North Kivu showed that there was low utilisation of family planning by female adolescents with unmet need of 31.7 percent (Casey et al., 2020). In Eastern Africa, unmet need for adolescents is high in Uganda, at 41 percent while in Madagascar, it is 23 percent (Woog et al., 2015). Insufficient uptake of FP contributes to morbidity and mortality in female adolescents.

FP programmes for adolescents play a critical role in national and human development. They facilitate regulated population growth that results in social-economic benefits that includes decreased poverty levels, enhanced education opportunities and reduced gender inequality (Denton, 2014). Furthermore, these programmes provide an opportunity for improved maternal and child health, through prevention of sexually transmitted diseases (STIs), unwanted and early pregnancies, and unsafe abortions (Silumbwe et al, 2018). Therefore, Contraceptive services need to be "youth-friendly" in order to encourage adolescents to seek reproductive health care (Godia, et al., 2013).

In Zambia, knowledge about contraception is almost universal and the government continues to prioritise the need for FP through policies and strategies in partnership with other stakeholders (ZSA, 2018). However, the utilisation of FPS remains less than half. While studies are routinely conducted in the developed world to monitor the utilisation and improve the quality of FP, the developing world especially the sub-Saharan Africa lags behind because of economic restraints that lead to lack of proper data analysis and collection tools and poor research funding (Sedge, 2014: Woog et al., 2015: WHO, 2012). This necessitates the need to delve into the study.

2.3 Utilisation of Family Planning

According to Woog et al., (2015) modern contraceptive use in all regions of Africa was low among married adolescents. In more than two-thirds of the countries in Africa, the proportions were highest in Swaziland (43%), and lowest in Western Africa (5%). In Asia, proportions ranged from 0% in Armenia to 52% in Mongolia while in Latin America and the Caribbean, the proportion of married adolescents using modern contraceptives ranged from 24% in Haiti to 67% in Cuba. Overall, in about half of the countries for which data was available, not more than 30% of sexually active unmarried adolescent women were using a modern family planning method.

A study conducted by Woog et al., (2015), revealed that the overall, unmet need for contraception in Africa was higher among unmarried sexually active adolescent women than among their married counterparts. In 20 countries, more than 50 percent of unmarried, sexually active 14 –19-year-olds had an unmet need for contraception. In Cuba, however, only 14 percent of unmarried, sexually active adolescent females had an unmet need (Woog et al**.,** 2015).

Utilisation of FP remains highest in urban than rural areas among adolescents aged 14 -19 years (25 percent). Non utilisation is higher in rural (24 percent) than in urban areas (17 percent). Utilisation of family planning by adolescents remains low in both private and public arms with the majority in public as indicated by the ZSA (2018) survey, which showed that only 9 percent users of FP obtained the services from private pharmacies and hospitals or clinics. Although these findings point to the continued reliance on government facilities as a major source of contraceptives, the role of the private sector and other sources cannot be ignored (ZSA, 2018).
More or so, use of family planning by adolescents lacks full support by parents, guardians and the society at large especially in the Sub-Saharan Africa. At the community level, use of FPS may be impeded by norms, mores, attitudes and beliefs that adolescents should not be sexually active and that they therefore do not need contraception (UNFPA, 2013). However, there is dilemma between tradition requiring adolescents to have many children, and their right to use contraceptives in order to postpone childbearing until they have completed their schooling or become financially independent to care for their children (James, 2013). According to Silumbwe et al., (2018) in the study conducted in Kabwe, Zambia, Societal stigma was cited by both community members and Health Care Providers (HCPs) as one of the major hindrances to adolescent utilisation of FPS.

Adolescents reportedly would rather not utilise FPS due to negative HCP attitudes and the risk of community members knowing that they were sexually active.

Generally, the society views FPS to be for adults and married couples other than unmarried adolescents. This is consistent with the results of the study conducted in rural Uganda which specifically showed that societal norms such as condemning early engagement in sex, pregnancy and use of contraceptives among unmarried adolescent girls presents a major obstacle to contraceptive use (Nalwadda et al., 2010). Furthermore, some studies support the proposition that adolescents are less likely to engage in sexual risk-taking behaviour when they reside with a parent especially two parents or when they identify with the views of their parents (Biddlecom et al. 2009). Other studies have shown strong evidence of parental monitoring and reduced sexual risk-taking behavior among adolescents (Ibid). A survey-based study in a slum in Nairobi, Kenya, found that when a father lived in the same household as his never-married 12–19-year-old daughters, they were much less likely to have ever had sex, to have had an unwanted pregnancy or to have been recently sexually active than when neither parent or only the mother lived in the household (Ibid).

One major challenge in the utilisation of FP, especially in rural communities are beliefs that FP is not biblical or that it causes sterility (Mukanu, 2017). Some religions believe that the use of contraception is synonymous to committing abortion, which is considered sinful. In addition, provision of FP services to unmarried users including adolescents is generally considered to be inappropriate as it is thought to be promoting promiscuity and sex before marriage in society (Silumbwe et al., 2018). Christian notions about FP stem from church teachings rather than scripture since the Bible says little about contraception. So, beliefs about FP tend to be based on different Christian interpretations of marriage, sex, and family. Contraception was condemned by Christianity as a barrier to God's procreative purpose of marriage.

2.4 Knowledge levels on Family Planning

The Demographic Health Survey conducted by ZSA (2018) discovered that knowledge is a precondition to higher utilisation of any given service. In support, ZSA (2018) found that Knowledge of contraceptive methods was an important precursor to their use. The ability to

recognise a family planning method indicates a respondent's knowledge but does not necessarily indicate the extent of this knowledge.

Woog et al., (2015) found that, in 13 African countries, the proportion of adolescent females who reported knowledge of a source for contraceptive methods was moderate. In three countries, less than a third of adolescent females reported knowing a source. This could explain the compromised utilisation of FP among adolescents in Africa.

The 2018 ZDHS collected information on knowledge of contraceptive methods by asking respondents whether they had heard or knew of any modern methods. The survey found that knowledge of at least one contraceptive method was nearly universal among both women and men including adolescents in Zambia which was attributed to the successful dissemination of FP messages through the mass media (ZSA, 2018). From the surveys report, it can be observed that Knowledge of the Intra Uterine Contraceptive Device (IUCD), Standard Days Method, female and male sterilisation, Lactation Amenorrhea Method (LAM), and emergency contraception are known by smaller percentages of adolescents hence their low utilisation (ZSA, 2018).

2.5 Socio-demographic Factors

Various socio-demographic factors such as marital status, age, economic status residence, educational level may influence utilisation of family planning. ZSA (2018) observed that use of any family planning method was higher among married adolescents (49 percent) than among sexually active unmarried adolescents (39 percent). In line with this, Woog et al., (2015) reported that in African countries, 10–20 percent of adolescent females who were currently married and using contraceptives reported their husbands being the main decision-makers about contraceptive use. In the same study, it was found to influence utilisation of FPS, as use of any modern method was reported to be lower among the adolescents (36 percent) compared to those aged 26-44. Use of any modern method was found highest among those aged 25-34 (49 percent) (ZSA, 2018), indicating the effect of age on utilisation of FPS. Woog et al., (2015) found that residence affected the utilisation of FPS as he discovered that close to half of countries in Africa and Asia had the highest unmet need for contraception among urban, married adolescent females than among married adolescents in rural areas. This was further supported by Maternal Health (2016) in which the availability of family planning services in health facilities for the urban were more than in the rural, where such services are.

Conversely, a study by Sunnu et al., (2016) conducted in Ghana only identified age, education, and religion as the demographic characteristics of respondents significantly associated with contraceptive use. Ethnicity, marital status, occupation and residential area were not significantly associated with contraceptive use. On the other hand, weak infrastructure for health, communications and transport made utilisation of family planning services in rural areas particularly difficult (Jain et al., 2015; Raj et al., 2015). According to Woog et al., (2015) and WHO (2012), Other important structural barriers that may prevent adolescents from obtaining sexual and reproductive health services include inconvenient location and hours of operation of facilities, the cost of services and not knowing where services exist. In support of Sunnu et al., (2016), a study conducted by Chola et al., (2020) in all provinces of Zambia, revealed that contraceptive use among adolescents remains low and that contraceptive use was significantly associated with age and level of education. It further showed that older adolescent girls and those with higher levels of education were significantly more likely to utilise contraception compared to younger ones and those with lower levels of education. This further indicated that education may have an influence on utilisation of FPS by adolescent girls.

On the other hand, a study done by Kabonga et al., (2010) on natural family planning found no association between Age, education level or religion and utilisation of family planning methods. However, marital status, parity and source of information /advice were significantly associated with utilisation of FPS.

2.6 Beliefs and Attitude towards Family Planning

According to ZSA (2018) beliefs and attitudes about family planning may influence the accessibility and utilisation of the services, as adolescents with misconceptions may shun or discontinue family planning. ZSA (2018) reported that about seven percent of contraceptive users in Zambia discontinued using a method within 12 months of starting its use because of side effects, health concerns, or both. Eight percent of adolescents are not willing to use a method because of the respondent's or other people's opposition to the use of contraception.

A study by Nakiboneka and Maniple (2008) on Natural family planning showed that respondents who were willing to use family planning believed it to have no side effects, no cost/cheap and was beneficial for child spacing while those who did not utilise the services including adolescents believed that family planning had no benefit. On the other hand, Shah et al., (2011) in a study

conducted in Kenya, Nigeria and Senegal found many negative beliefs like impotence after condom use, weakness after sterilisation, fear of becoming obese as reasons for choosing different contraceptive methods among college adolescent students.

Due to cultural beliefs, Compernolle (2015) stated that one of the greatest barriers adolescents faces in obtaining sexual and reproductive health services is social stigma. Cultural norms around adolescent sexuality may discourage young people from seeking the services they need as adolescents often reported that they did not seek services due to fear of being stigmatised or punished for having been sexually active. This may negatively contribute to the utilisation of family planning services. Therefore, sexually active unmarried adolescent women faced barriers such as community norms that exclude them from receiving information, counseling and services concerning contraception (WHO, 2012). Furthermore, in many countries, young people require parental consent to obtain medical care services of which family planning is among and in other countries, sexual activity under the age of 16 is illegal, hence health care providers may not be allowed to maintain patient confidentiality when serving young adolescents (UNAIDS, 2011; Woog et al., 2015).

However, even where there are no legal restrictions to obtaining services, young people often faced bias and negative attitudes from providers (Bankole and Malarcher, 2010), as in many places, health providers refused to provide unmarried adolescents with contraceptive information and services because they did not approve of premarital sexual activity (Chandra-Mouli et al., 2014). Therefore, young people may be deterred from seeking the services they need if they feel they will be ill-treated or judged, or if they are concerned that their confidentiality and privacy will not be maintained.

Furthermore, a study conducted by Dangat and Njau, (2013) in Haiti District northern Tanzania on knowledge and attitudes of adolescents found that, the respondents interviewed, 24.4 percent said that family planning could be obtained from anywhere outside the health facility. Adolescents further believed that the use of family planning services caused infertility, damaged the uterus, reduced sexual pleasure, promoted sexual promiscuity, caused diseases of the reproductive organs, caused severe bleeding and causes death. In addition, Kapito et al., (2012) found that adolescents believed that family planning was for older individuals and should only be used by cheating husbands.

From the Christian point of view, family planning often mentions neither God nor marriage. Couples mentioned could be unmarried ones including adolescents, or those in adultery, in which case family planning facilitates sex outside of marriage and this is without perceived risk of pregnancy especially where there is low compliance of uptake of a method of FP such as oral contraceptives. Such relationships are explicitly prohibited and described as sin in Scripture (1 Corinthians 6:9–10), (Wubbenhorst and Wubbenhorst, 2017). A study was conducted by Ahanonu, (2014) on attitudes of healthcare providers towards providing contraceptives for unmarried adolescents in Ibadan, Nigeria, in which most of the respondents were females (88.8%) and Christians (81.0%). The results were that more than half (57.5%) of the respondents perceived the provision of contraceptives for unmarried adolescents as promoting sexual promiscuity. The attitude of 42.7% of them was informed by the Nigerian culture which does not support premarital sex. About half (51.7%), said that unmarried adolescents should be asked to abstain from sex rather than providing them with contraceptives. Over a third (44.2%) reported that providers should not provide services for both married and unmarried adolescents. On the contrary Barot (2013) carried out a study in the United States where the United States Conference of Catholic Bishops had led a vocal and aggressive campaign against utilisation of contraception that might suggest that faith and family planning are incompatible. Yet, among those who ever had sex, 99% of women overall including 98% of Catholic women had used a modern contraceptive method during their reproductive life. Moreover, a wide range of faiths, denominations and religious leaders recognise that utilisation of FP services is essential to the ability of women to protect their own health and well-being, and that of their family (Ibid).

2.7 Conclusion

Literature reviewed clearly indicates that various factors ranging from socio-demographic to attitudes and beliefs have likelihood to influence adolescents' utilisation of various family planning methods. Reviewed studies indicate that knowledge on family planning, level of education, parity, locality and attitudes among other variables, further influence utilisation of family planning. On the contrary, some studies showed that marital status, age or residence had no effect on utilisation of a specific family planning method. Hence the disparities demand undertaking this research study.

Furthermore, literature suggests that most developing countries, Zambia inclusive, need much to do in influencing women's decisions concerning family planning by considering their educational levels, low socio-economic status and sensitisation about family planning.

Although the reviewed studies provide clear associations on various factors that influence adolescents' utilisation of family planning, most information was sourced from articles and research journals conducted in other countries such as Ethiopia, Nigeria, Ghana and western world countries. Therefore, these findings may not give an actual reflection of the Zambian situation as these study settings differ from that of Zambia.

CHAPTER THREE - METHODOLOGY

3.1 Introduction

This chapter discusses research methodology under the following headings; study site, study population, study design, inclusion and exclusion criteria, sampling, data management, pilot study and study limitation.

3.2 Study Design

This was an analytical cross-sectional study design that employed a quantitative approach. It was aimed at obtaining information about the utilisation of family planning services (FPS) by female adolescents and investigating the association between contributing factors and the outcome of interest which was obtained by using a survey research strategy. This design was chosen because it involved collection of data directly from the study sample at one point in time without manipulating the variables. It was also chosen because it was less expensive and less time consuming.

3.3 Study Setting

The study was conducted in Kawama East community in Mufulira District which is on the Copper belt Province of Zambia. Kawama East community was chosen as a study site because it has one of the clinics offering adolescent health services and it has recorded low numbers of adolescents utilising FPS. Moreover, it is the only clinic in this community.

3.4 Study Population

The study population consisted of female adolescents in the age group of 14 – 19 years who reside in Kawama East community of Mufulira District, Copperbelt Province in Zambia.

3.5 Target Population

The target population for this study was female adolescents within the reproductive age group of 14 – 19 years which formed the representative sample and the accessible population was the female adolescents between the ages of 14 – 19 who met the sampling criteria established by the researcher.

3.6 Sample Selection

The female adolescents were selected using systematic sampling and participants were interviewed in the community in private areas after getting permission from the Chairmen of the Neighbourhood Health Committees (NHCs) and the area Councilor, until the sample size was obtained.

Kawama East compound is divided into 18 zones according to NHCs. There are 200 households in each zone and houses were listed as a sampling frame. Households were selected using systematic sampling. From the known number of households (population sample) and the sample size, sampling interval was calculated, i.e., dividing the sample size into the population sample, then start from any number between 1 and 10 then pick the starting household. Then following the sampling interval, you arrive at the K the household in the systematic sampling until a desired number of households is achieved. Therefore 21 participants were obtained from each of zones 1 to 8 and 20 from each of zones 9 to 18 to meet the sample size. The houses where there were no eligible participants, researchers moved to the next house. Where adolescents were more than one, they were given chance to be interviewed.

3.6.1 Inclusion Criteria

The respondents who were included in the study were all female adolescents of Kawama East compound of Mufulira District. These included the ones utilising and not utilising FPS, the ones between 14 and 18 years who signed the assent forms to participate in the study and whose guardians signed the consent form to allow them to do so. Also, the ones between 18 and 19 years who gave written consent were included in the study.

3.6.2 Exclusion Criteria

All female adolescents who were unwell and those who were below the age of 18 years who were willing to participate in the study but whose parents or guardians were unavailable to grant them permission to participate in the study were excluded from the study.

3.7 Sample Size

According to the previous studies by WHO, (2015) 60 percent of the adolescents in Zambia are aware of family planning services and only 40 percent are unaware. The population size of adolescents of Twatasha Clinic catchment area (Kawama East compound) is approximately 2323

The sample was calculated manually using the prevalence proportion formulae below.

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

- Where:

  P= Proportion of adolescents who are aware of the service = 60%.

  Z= standard normal variant at 95% confidence level (CI) = (1.96)

  D= precision ±5%

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

$$n = \frac{(1.96)^2 \times 0.6 \times (1-0.6)}{(0.05)^2}$$

$$n = \frac{3.8416 \times 0.6 \times 0.4}{2.5 \times 10^{-3}}$$

$$n = \frac{0.929184}{2.5 \times 10^{-3}}$$

$$n = 368$$

The estimated sample size was 368 plus compensation for attrition of the respondents bound to opt out or quit the interview. 368/0.9 compensation = 40. Hence 368 + 40 = 408. Therefore, the sample size is 408.

3.8 Data Collection tool

This study utilised a semi structured questionnaire to collect data from participants as beneficiaries of family planning services in Kawama East compound. The tool consisted of five (5) sections. Section A had the respondents' demographic data; section B had respondents' utilisation of FPS**,** section C had respondents' level of knowledge on FPS, section D had service delivery, section E had respondents' beliefs and lastly section F had attitude of staff towards use of FPS by female adolescents. This tool had closed ended questions and it was translated into Bemba a local

Language commonly used on the Copperbelt by a Teacher who teaches Bemba at Chankwa Secondary School in Mufulira District.

3.8.1 Validity

Extensive literature review was conducted on recent literature on utilisation of FPS by adolescents. Research supervisors, expert midwives and nurses examined the questions to determine whether they were able to elicit the desired responses on the variables that were being measured so that conclusions could be drawn with respect to the study population. All the questions were constructed in a simple, clear and precise way in order to give respondents chance to give clear and precise answers. Questions were translated into local language (Bemba) which is commonly used in Kawama East compound of Mufulira district by a Teacher who teaches Bemba at Chankwa Secondary School in Mufulira District.

3.8.2 Reliability

A variety of closed ended questions were used and all questions were asked to each participant in the same sequence. A pilot study was conducted to determine whether the data collection tool would actually measure what it was supposed to measure. During data collection the adolescents were informed of the purpose of the interview and need for them to respond truthfully. The questions were administered in the same order to respondents, one at a time in a private area to make them feel secure and at easy when answering the questions.

3.9 Data Collection Technique

Data was collected from adolescents for a period of six weeks from 1st April to 10th May, 2019. The researcher conducted face to face interviews with each female adolescent at a time in a private area. All questions were asked to each participant in the same sequence and questions were clarified there and then to avoid mistakes. The researcher started by greeting the participant and explained the purpose of the study. Respondents were informed that participation was voluntary and they could withdraw from the study if they so wished and this would not affect their obtaining health care in any way, after the explanation the researchers obtained consent from parents or guardians of the respondents below the age of 18 years and assent from the respondents of this same age while those above 18 years signed consent. The researcher then proceeded to ask the respondents questions using the semi structured questionnaire. Confidentiality was assured with the use of unique identification codes and names were not indicated.

Questions were read out to the participants and those which were not understood were read again without directing the participant to the answer. Clarifications on questions not fully understood were made. About 61 female adolescents were interviewed by the researcher and two (2) research assistants each week with each interview taking approximately 20 to 30 minutes. Respondents who met the inclusion criteria were interviewed. After the interview, respondents were thanked for participating in the study.

The anxious respondents were handled tactfully, friendly and empathetically.

3.10 Pilot Study

It was used on subjects who met the criteria for the study sample. It was conducted in Luansobe clinic catchment area in Mufulira district. The area was chosen because it had similar characteristics to the research setting. The number constituted 10% of the sample size, which were 40 participants. The pilot study helped to correct the errors within the questionnaire. Adjustments to the data collection tool were then made appropriately by removing question 8 which was asking if the respondent knew any of her age mates that was using FPS which was not answering the question of utilisation of FPS. Question 9 also which was asking about the respondent having ever used FPS before instead of asking about the current situation, was removed and replaced with question 6 which was asking if the respondent was currently utilising family planning services.

3.11 Ethical Consideration

Ethics clearance was obtained from the University of Zambia Biomedical Research Ethics Committee (UNZABREC) and the clearance number was 002-11-18. Written permission to conduct the study was obtained from Provincial Health Office for Copperbelt Province and Mufulira District Health Office.

The purpose and nature of the study was explained to the study participants. Those who declined to participate were reassured that no privileges would be denied to them. Those who agreed to take part in the study and were above 18 years old were asked to sign a consent form and those below 18 years signed assent while their parents/ guardians signed consent forms. The Illiterate ones were asked to thumb stamp the consent which was written in Bemba and English. Those who participated in the study were not remunerated in any way. The respondents were in their natural setting and hence were not exposed to any physical and emotional danger or harm.

Confidentiality and anonymity were maintained and respondents were interviewed one at a time in a place which ensured privacy. After each interview session the researcher put all questionnaires under lock and key and no persons other than the researcher could have access to the collected data.

The ethical issues regarding use of FP especially in adolescents, who are in the age of 14 and 15 years are that, the ethical requirement is that informed consent must be voluntarily obtained and devoid of undue inducement and coercion, and individuals have the right to make autonomous decisions. However, adolescents of 14 to 15 years are not allowed to give consent to participate in the research unless their parents or guardians are willing to allow them. Hence the involvement of parents or guardians in an informed consent process may jeopardise the autonomous decision making by the adolescent and compromise confidentiality (Folayan et al., 2014).

CHAPTER FOUR - DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1. Introduction

This chapter presents the results or findings of the collected research data. The section further describes how coded data that was entered in the computer was analysed. The collected data was

analysed using a computer Software Statistical Package for Social Sciences (SPSS) version 20. The initial calculated sample size was 368 and the response rate was 100%. The findings of the research were presented according to objectives.

4.2. Data Processing and Analysis

During data processing, the questionnaires were counted to ensure that the correct numbers that were administered to study participants was obtained. All questionnaires were checked for completeness and consistency every evening after work; the data was then sorted out coded, categorized and summarized. Data was analysed using computer Software Statistical Package for Social Sciences (SPSS) version 20. Descriptive data was analysed using frequency, percentage (%) and counts, while inferential statistics were analysed using the Chi-square test and simple correlations presented in cross tabulation tables. Furthermore, Logistic Regression Analysis was done to establish the association and to what extent the factors were contributing to the utilisation of family planning services. This was done at 0.05 significance level.

4.3. Presentation of the findings

Data from this study was presented according to the sections in the questionnaire. The questionnaire consisted of six (6) sections. Section A had questions on the respondents' demographic data; Section B had questions on utilisation of family planning services, Section C comprises questions on level of knowledge on utilisation of family planning services by female adolescents. Section D comprises questions on service delivery, Section E on beliefs and section F comprises questions on attitude of staff. Cross tabulation tables were also used to show relationship between dependent and independent variables. The findings of the study were presented in frequency tables, bar graphs and pie charts to ensure that the readers understand the findings of the research study easily.

4.3.1. Section A: Demographic characteristics of the study respondents

This section presents the demographic information of the study respondents based on their Age range, who you reside with, Education level and Denomination. The demographic data for respondents were as follows;

Table 3: Demographic attributes of the sampling distribution (*n=408*)

Variable	Frequency	Percent (%)
Age (years)	**Mean ± SD=17 years ±0.9116**	
(14-16) years	42	10.3
(17-19) years	366	89.7
Respondent's guardian		
Both parents	38	9.3
Single parents	88	21.6
Grand parents	256	62.7
Others	26	6.4
Educational level		
None	9	2.2
Primary	355	87.0
Secondary	44	10.8
Denomination		
Catholic	94	23.0
Protestants (SDA, UCZ, Jehovah's	166	40.7
Witness, etc.)	148	36.3
Pentecostal		

Table 3 shows that the mean age of respondents was 17 years and standard deviation was 0.9116. It also shows that out of 408 study respondents, the majority 366 (89.7%) female adolescents were between 17-19 years old while 42 (10.3 %) were between 14-16 years old. It further revealed that the majority 355(87.0%) of the study respondents had attained primary school education, while 9(2.2%) had no form of school education and that majority 166(40.7%) were of Protestant denominations (SDA, UCZ, Jehovah's Witness, etc.) while 94(23.0%) were Catholic.

4.3.2. Section B: Proportion of utilisation of FP Services

This section presents the proportion of female adolescents utilising FPS at the Health Centre. A series of questions were asked and further categorised as not utilising or utilising to indicate the proportion of utilisation of FPS.

Table 4: Proportion of Utilisation of FPS by female adolescents (*n=408*)

Variable	Frequency	Percent (%)
Sexual partner		
Yes	248	60.8
No	160	39.2
Use of family planning?		
Yes	137	33.6
No	271	66.4
If yes to the question above, which family planning method did you use?		
Condom	69	16.9
Oral contraceptives	49	12.0
Injectable contraceptives	19	4.7

Table 4 revealed that the majority 271(66%) of the female adolescents were not utilising FP services, while 137(34%) were utilising FP services. Out of 137 study respondents who were utilising FP, majority 69(16.9%) indicated that they used condoms as a family planning method, while 19(4.7%) used injectable contraceptives.

4.3.3. Section C: Knowledge level on FP

This section assesses the knowledge of female adolescents on FP which includes its definition, types of FP, Importance and benefits of using FPS.

4.3.3.1 Assessing Knowledge on FP among female adolescents

Table 5: Assessing Knowledge on FP among female adolescents (*n=408)*

Variable		Frequency	Percent (%)
Heard about FP;	**Yes**	384	94.1
	No	24	5.9
Source of information on FP;	**From health care providers**	262	64.2
	Mass media	9	2.2
	Family members	2	0.5
	Peers	111	27.2
Meaning of Family Planning;	**Delaying pregnancy**	295	72.3
	Spacing children	64	15.7
	Not to have children in the life time	5	1.2
	Don't Know	20	4.9
Types of FP methods known;	**Condom**		
	Oral contraceptives	291	71.2
	Implants	34	8.4
	Intra uterine contraceptive device	30	7.4
	Don't know	8	2.0
		21	5.1
Importance of use of FP services;	**Yes**	356	87.2
	No	2	0.5
	Don't know	26	6.4
Reasons for the importance of use of FP services;			
Important because it will prevent unwanted pregnancies		356	87.2
Not important because it will promote promiscuity		2	0.5
Don't know		26	6.4
Benefits of using FP;			
Giving chance to continue with education without disturbance		306	75.0
Allowing healthy growth of children		49	12.0
Controls menstrual flow		1	0.2
Don't know		28	6.9

Table 5 revealed that out of 408 study respondents, the majority 384 (94.1%) had heard about FP while 24(5.9%) had not heard about FP. Out of 384 of those who had heard about FP the majority 262(64.2) heard from health care providers while 2(0.5%) heard from family members. Most of the study respondents 295(72.3%) knew that FP means delaying pregnancy while 5(1.2%) knew that FP means not having children in one's life time. Majority 356(87.2%) of the study respondents

indicated that it is important for adolescents to use FPS and gave the reason that it would prevent unwanted pregnancies while 2(0.5%) indicated that it is not important for adolescents to use FPS with the reason that it would promote promiscuity.

4.3.3.2 Level of Knowledge on FP among Female Adolescents

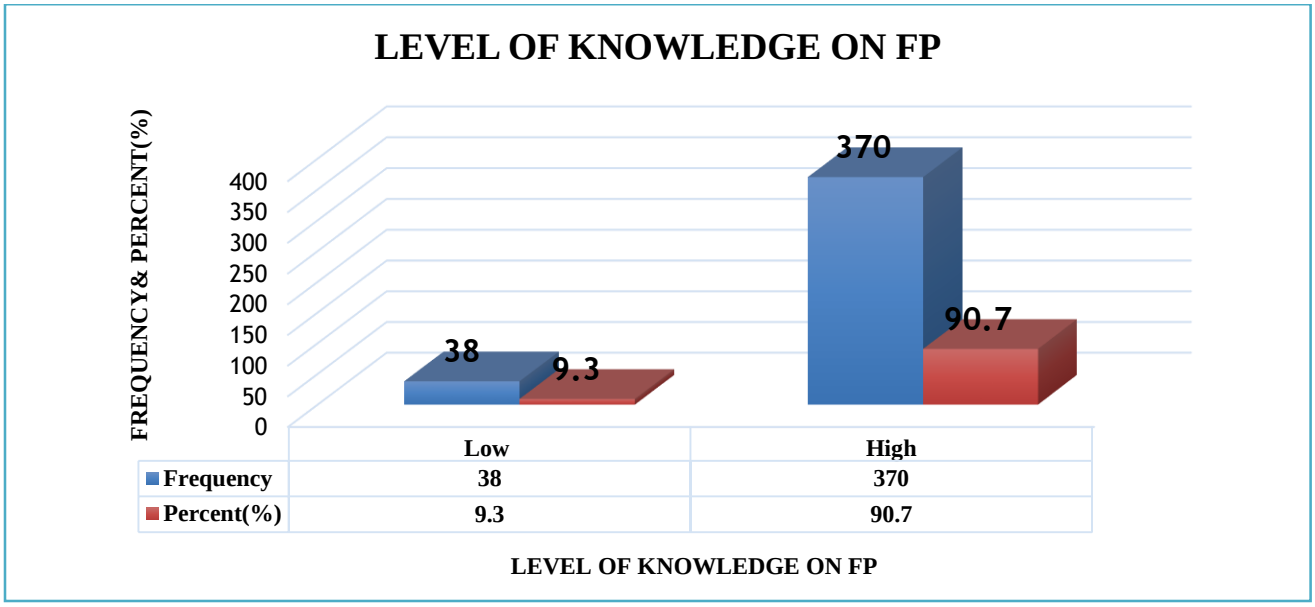

Figure 3: Level of Knowledge on FP among Female Adolescents (*n=408*)

Figure 3 above shows that out of 408 study respondents, the majority 370(90.7%) had a high level of knowledge on FP, while 38(9.3%) had a low level of knowledge.

4.3.4 Section D: State of Service Delivery

The section assesses the state of service delivery of FP at the Health facility. This included questions on counseling done during the sessions, how much information was given during the sessions, if the provider did anything that made the respondent uncomfortable, if privacy was respected, if any educational material were given on FP during the visit and if the time spent with the HCP was adequate.

Table 6: State of service delivery (*n=408*)

Variables		Frequency	Percent (%)
Available FP services;	**Condoms**		53.4
	Oral contraceptives	55	13.5
	Implants	2	0.5
	Injectable contraceptives	4	1.0
	Intra uterine contraceptive device	2	0.5
	Don't know	127	31.1
Opportunity to ask question;	**Yes**	125	30.6
	No	156	38.3
Provider response;	**Yes**	102	24.9
	No	23	5.7
Counseling done **;**	**Yes**	244	59.9
	No	37	9.0
Information given;	**Yes**	136	33.4
	No	84	20.7
	Don't Know	24	5.8
Provider explanation;	**Good**	128	31.4
	Bad	72	17.7
	Don't know	20	5.0
Anything uncomfortable;	**Yes**	125	30.8
	No	119	29.1
Privacy respected;	**Yes**	72	17.6
	No	172	42.3
Felt uncomfortable;	**Yes**	136	33.4
	No	36	8.9
Educational material on FP provided;	**Yes**	138	33.8
	No	106	26.1
Time spent with provider;	**Enough**	128	43.4
	Not enough	67	16.5

Results in Table.6: show that the majority 244(59.9%) of the study respondents were counseled during the FP sessions while 24(5.9%) were not. Many 136(33.4%) of them indicated that they were given a lot of information during the counseling session while 84(20.7%) were given minimal information. Furthermore, the majority 128(43.4%) said they spent enough time with the service provider, while 67(16.5%) did not have enough time with the provider.

4.3.4.1 State of service delivery

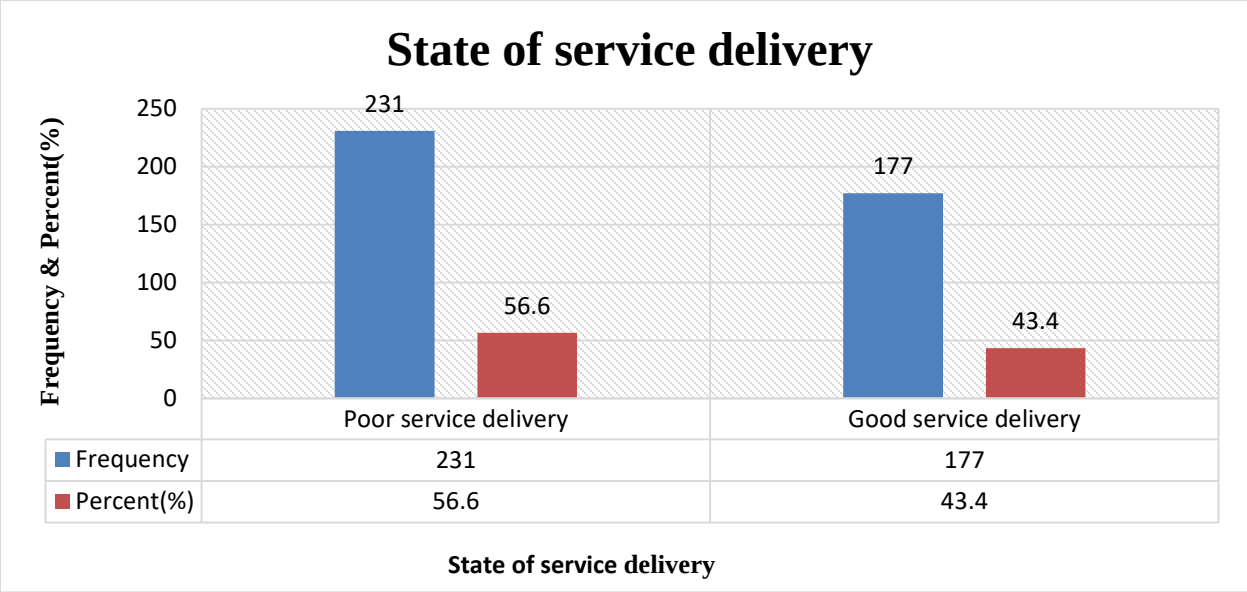

Figure 4: State of Service Delivery (*n=408)*

Figure.4 shows that the majority 231(56.6%) of the study respondents had indicated that service delivery was poor, while 177(43.4%) indicated that the service delivery was good.

4.3.5 Section E: Beliefs on FP

This section looks at beliefs on FP. It includes myths and presence of traditions that prevent female adolescents from utilising FPS.

Table 7: Beliefs on FP (*n=408*)

Variable		Frequency	Percent (%)
Myths and traditions preventing use of FPS;	**Yes**	268	65.7
	No	140	34.3
Types of myths ;	**Infertility**	217	53.2
	Fornication	50	12.3
	Others (specify)	1	0.2
Suggestions on how FP services can reach adolescents;			
Involving parents/guardian		363	88.9
Giving health education to adolescents in the community and at school		26	6.4
Don't know		19	4.7

From table 7 above, the majority 268 (65.7%) indicated that there were myths and traditions that prevent female adolescents from utilising FPS, while 140(34.3%) indicated that there were no myths and traditions that prevented use of FPS.

Furthermore, the majority 217(53.2%) held a myth that FP contraceptive causes infertility while 50(12.3%) held a myth that FP promotes fornication.

4.3.6. Section F: Attitude of Staff

This section looks at the attitudes of staff. It includes the purpose of the visit and the Health Care Provider who attended to the respondents (female adolescents).

Table 8: Attitude of staff towards FP (*n=408*)

Variable		Frequency	Percent (%)
Ever visited FP Clinic;	**Yes**	347	85.0

	No	61	15.0
Purpose of the visit;	**To get contraceptive**	233	57.1
	For advice	114	27.9
Category of provider ;	**Nurse**	280	68.6
	Clinical officer	26	6.4
	Doctor	33	8.1
	Classified employee	8	2.0

Table 8 above reveals that out of 408 study respondents, majority 347 (85.0%) had visited FP Clinic while 61(15.0%) did not**.** Out of 347 study respondents who visited FP Clinic**,** many 233(57.1%) had indicated that purpose of the visit was to get contraceptive while 114(27.9%) stated that the visit was for advice.

Figure 5: Attitude of Staff towards FP *(408)*

Figure 5 shows that out of 347 study respondents who visited the health facility, the majority 198(59.0%) of staff had a positive attitude, while 139(41.0%) had a negative attitude.

4.4 Factors associated with proportion of Utilization of FP services among Female Adolescents

4.4.1 Statistical Testing for Association between Proportion of Utilisation of FP services among Female Adolescents and Demographic Factors

Using the chi-square test statistic, the results on association between proportion of utilisation of FPS and demographic factors are shown below, i.e. level of education and Religious Denomination. More or so Fisher's exact test was performed for age range only.

Table 9: Chi-square results: Association between proportion of Utilisation of FP services and Demographic factors

Variables	**Utilisation of FP services**		**Statistic test**	***P-value***
	Utilising n (%)	**Not utilising n %)**		
Age range in years			**Fisher's exact**	
(14-16)	1(0.7)	41(15.1)		.010
(17-19)	136(99.3)	230(84.9)		
Level of Educational			**Chi-square**	
None	1(0.7)	8(3.0)	χ^2 (2) =13.530	.001
Primary	131(95.6)	224(82.7)		
Secondary	5(3.6)	39(14.4)		
Denomination				
Catholic	31(22.6)	63(23.2)	χ^2 (2) = 4.701	.095
Protestants	47(34.3)	119(43.9)		
Pentecostal	59(43.1)	89(32.8)		

In Table 9 it is shown that out of 137 study respondents utilising FP services, the majority 136(99.3%) were in the age range of (17-19) years old. It is also shown that there is a statistically significant association between proportion of utilisation of FP services and Age range Fisher's exact [$p<0.05$]. Out of 137 study respondents utilising FP services, the majority 131(95.6%) had attained primary school educational level, and this was statistically significant with proportion of utilisation of PFS [χ^2 (2) =13.530; $p<0.001$]

4.4.2 Statistical Testing for Association between the Proportion of Utilisation of FP Services among Female Adolescents and level of Knowledge

Performing the chi-square test statistic, the results on association between proportion of utilisation of FP services and level of knowledge on FP is shown below;

Table 10: Chi-square results: Association between Utilisation of FP services and level of Knowledge

Variable	**Utilisation of FP services**		**Chi-square**	***P-value***
Level of Knowledge on FP	**Utilising n (%)**	**Not utilising n (%)**		
Low	14(10.2)	24(8.9)	χ^2 (1) = 0.200	0.655
High	123(89.8)	247(91.1)		

In Table 10 it is shown that out of 137 study respondents, majority 123(89.8) had high level of knowledge on FP while 14 (10.2%) had low level of knowledge on FP. Furthermore, it is shown that there is no statistically significant association between proportion of utilisation of FP services and level of knowledge on FP [χ^2 (1) = 0.200; p>0.05].

4.4.3 Statistical Testing for Association between the Proportion of Utilisation of FP services among Female Adolescents and State of Service Delivery

Using the chi-square test statistic, the results on association between proportion of utilisation of FP services and state of service delivery is shown in table 11;

Table 11: Chi-square results: Association between Utilisation of FP services and State of Service Delivery

Variable	Utilisation of FP services		Chi-square	*P-value*
State of service delivery	**Utilising n (%)**	**Not utilising n (%)**		
Poor	12(8.8)	219(80.8)	χ^2 (1) = 192.338	<.010
Good	125(91.2)	52(19.2)		

In Table 11 it is shown that out 137 study respondents, majority 125(91.2%) had indicated that the state of service delivery was good while 12 (8.8%) had indicated that the state of service delivery was poor. it is also shown that there is a statistically significant association between state of service delivery and proportion of utilisation of FPS [χ^2 (1) = 0.200; p<0.05]

4.4.4 Statistical testing for Association between the proportion of Utilisation of FP services and presence of Myths and Traditions (Beliefs) preventing use of FP.

Using the chi-square test statistic, the results on association between proportion of utilisation of FP services and presence of beliefs preventing use of FP services is shown below;

Table 12: Chi-square test results: Association between proportion of Utilisation of FP services and presence of Myths and Traditions preventing use of FP

Variable	Utilisation of FP services		Chi-square	*P-value*
Myths and traditions (Beliefs) preventing use of FP	**Utilising n (%)**	**Not utilising n (%)**		
Yes	45(32.8)	223(82.3)	χ^2 (1) = 98.688	<.010
No	92(67.2)	48(17.7)		

Table 12 shows that the majority 92(67.2%) of the study respondents utilising FP services pointed out that there are no myths and traditions that prevent adolescents from utilising FP services while

the 45 (32.8%) utilising FP services indicated that there was presence of myths and traditions preventing use of FPS. This was statistically significant with the proportion of utilisation of FP [χ^2 (1) = 98.688; p<0.05].

4.4.5 Statistical testing for Association between the proportion of Utilisation of FP services among Female Adolescents and attitude of Staff

Performing the chi-square test statistic, the results on association between proportion of utilisation of FP services and attitude of staff is shown below;

Table 13: Chi-square test results: Association between proportion of Utilisation of FP services and attitude of Staff

Variable	**Utilisation of FP services**		**Chi-square**	***P-value***
Attitude of staff	**Utilising n (%)**	**Not utilising n (%)**		
Positive	91(68.9)	107(49.8)	χ^2 (1) = 12.269	<.010
Negative	41(31.1)	108(50.2)		

Table 13 shows that the majority 91(68.9%) of the study respondents utilising FP services had indicated that health care providers had a positive attitude when being attended to, while 41 (31.1%) study respondents utilising FP services had indicated that health care provider had a negative attitude. Furthermore, there was statistically significant association between Attitude of staff and proportion of utilisation of FP services [χ^2 (1) = 12.269; p<0.05]

4.5 Binary Logistic Regression Analysis

The study sought to establish the association and to what extent the factors were contributing to utilisation of family planning among female adolescents. A Binary logistic regression was performed between the dependent variable that is utilisation of FP services and the following independent variables; Age range, respondent's guardian, level of education, religious denomination, level of knowledge on FP, state of service delivery, presence of beliefs on FP and attitude of staff.

4.5.1 Test of Model coefficients

Table 14: Hosmer and Lemeshow Test

	Chi-square	df	Sig.
Step	41.222	6	<.010

Table 14 above illustrates how perfect the regression equation fits the data. The regression model predicts the dependent variable significantly well, as indicated with the p=<0.010.

Model Summary

The model summary revealed that the R is 0.49. This revealed a positive correlation in the model and indicated that the degree of correlation was moderate. The value of R-squared was 0.671. According to this model, 67.1% of utilisation of FP was as a result of Level of educational, religious denomination, level of knowledge on FP, state of service delivery, beliefs and attitude of staff. Hence, the remaining 32.9% of utilisation of FP was as a consequence of other factors not considered in this model.

4.5.2 Binary logistic Regression Results

Table 15: Variables in the equation

Variable	OR	95% CI	*p-value*
Educational background (Primary)	.240	.065- .888	.033
Religious Denomination (Catholic)	5.746	2.134-15.468	.001
Religious Denomination (Protestant)	3.776	1.438 -9.915	.007
Level of Knowledge on FP (Low)	.978	.274 - 3.495	.972
State of service delivery (poor)	60.834	20.552-180.069	<.010
Presence of Beliefs on FP (Yes)	3.287	1.442- 7.490	.005
Attitude of staff (Positive)	.897	.369- 2.093	.771

Table 15 shows that study respondents who had attained primary school level of education were 0.240 times at odds or less likely to utilise FP services as compared to those who had utilised FP services, this could be as low as .065 to .888 high in the actual population (OR= 0.240, 95% CI= .065 - .888; p-value=0.033), this difference was statistically significant with a p-value of 0.033. The study respondents belonging to Catholic denomination were 5.746 times at odds or more likely to utilise FP services as compared to those who did not, this could be as low as 2.134 to 15.468 high in the actual population (OR= 5.746, 95% CI= 2.134 – 15.468; p-value=0.001), this difference was also statistically significant with a p-value of 0.001. The study respondents belonging to protestant denomination were 3.776 times at odds or more likely to utilise FP services compared to those who were not. This could be as low as 1.438 to 9.915 high in the actual population (OR= 3.776, 95%CI= 1.438 – 9.915; p-value=0.007). It was also statistically significant with a p-value of 0.007. The study respondents who indicated a low state of service delivery were 60.834 times at odds or more likely to utilise FP services as compared to those who had not. This could be as low as 20.552 to180.069 as high in the actual population (OR= 60.834, 95%CI= 20.552-180.069; p-value= <.010). This difference remained statistically significant with a p-value of <.010.

The study respondents who indicated presence of beliefs on FP were 3.287 times at odds or more likely to utilise FP services as compared to those who had not. This could be as low as 1.442 to

7.490 high in the actual population (OR= 3.287, 95%CI= 1.442- 7.490; p-value=0.005). This difference remained statistically significant with a p-value of 0.005.

Furthermore, having low level of knowledge had odds ratio of 0.978 with p-value of 0.972. Having a good attitude of the staff had an odds ratio of .897 with p-value of .771. These were all statistically insignificant with utilisation of FP services.

CHAPTER FIVE - DISCUSSION OF FINDINGS

5.1. Introduction

This chapter presents the discussions on the findings of the study which was aimed at establishing utilisation of FPS by female adolescents of Kawama East compound in Mufulira district. The outline of the discussion consists of the characteristics of the sample, discussion of each objective used in the study which includes the descriptive statistics and factors associated with utilisation of FPS by female adolescents, application of the conceptual framework, the implications of the findings to the nursing care system, recommendations, dissemination of findings, limitations of the study, strengths of the study and the conclusion. The results were based on the analysis of data obtained from a sample of 408 adolescents aged between 14 to 19 years.

5.2. Demographic Characteristics of the Sample

The demographic characteristics which were relevant to the study are Age range, Education level and Denomination, and these are presented in section A of chapter four (4).

According to Table 3 (page 29) majority of the study respondents were between 17 and 19 years old. This is in agreement with the results of the study on utilisation of FPS among adolescents conducted in North and South Kivu, Democratic Republic of the Congo in which majority of the respondents were in the higher age between 15 - 19 (Casey et al., 2020). The higher age range of respondents in both studies could be attributed to most of them having attained the age of 18 years and could give consent on their own to participate in the study**.**

Regarding education level, majority of the study respondents had attained primary school education, while the minority had no form of education (Table 3). The high percentage of respondents attaining the primary school education could be attributed to the effective implementation of the education sector policy by the government. This is consistent with the United Nations Sustainable Development Goal number 4 which requires that all girls and boys complete free, equitable and quality primary education by 2030 (United Nations, 2015). On the contrary, results of the study which was conducted in Enugu State, Nigeria revealed that most of the adolescents had secondary education (54.0%) (Ngozi et al., 2018).

Concerning the denomination of respondents, many of the respondents were of Protestant denomination while few were of Catholic denomination (Table 3). The large number of Protestants could be attributed to the fact that Protestants include many churches such as Jehovah's Witnesses (JW), and United Church of Zambia (UCZ) and the small number of Catholics consists of one type of congregants. A similar study conducted in Mwanza city, Tanzania revealed that the majority of the adolescent respondents were the Protestant while the minority were Catholic (Nyasa et al., 2019).

5.3 Utilising Family Planning services by Female Adolescents

Figure 5 revealed that the majority of the study respondents were not utilising FP services, while the minority were utilising. This indicated a low utilisation of FP services. The study results also revealed that out of the 137 (34%) respondents who were utilising the FPS, 67.1% of the utilisation, was as a result of the Level of education, religious denomination, level of knowledge on FP, state of service delivery, beliefs and attitude of staff. However, the remaining 32.9% of utilisation of FP was as a consequence of other factors outside this model or not considered in this study. The low utilisation of FPS could be attributed to some religious beliefs that, use of FPS by the adolescents especially the unmarried ones is not allowed in the Christian religion and it also causes sterility, furthermore it promotes promiscuity. A similar study conducted in rural communities of Zambia by Mukanu (2017) also revealed that FP is not biblical and it causes sterility. According to the qualitative study conducted in Kabwe, Zambia by Silumbwe et al., (2018), it was revealed that some religions believe that the use of contraception is synonymous to committing abortion, which is considered sinful. In addition, provision of FPS to unmarried adolescents is generally considered to be inappropriate as it is thought to be promoting promiscuity and sex before marriage in society (Silumbwe et al., 2018).

In another study conducted in Rangpur District Bangladesh, it was revealed that the fertility rate of adolescent girls was high while the rate of contraceptive use had remained low, which made these adolescents extremely vulnerable in terms of reproductive healthcare (Shahabuddin et al., 2016). These findings are consistent with the results of the study conducted by Apanga and Adam, (2015) in Talensi District whose study respondents were married and unmarried adolescents. In this study, factors that influenced the utilisation of FPS among respondents were investigated and

it revealed that although majority of the respondents were generally aware of FPS in the district, usage of the service was low. Major reasons cited for not using the service included partners opposition against the practice (Apanga and Adam, 2015). In another study carried out in Cuba, however similar results were obtained where only 14 percent of unmarried, sexually active adolescent women were not utilising the FPS (Woog et al., 2015). On the contrary results of the study conducted by Nansseu et al., (2015) in Mbouda District, Cameroon revealed a high (65.3%) contraceptive use among adolescents, highly superior to the 24 % reported by the 2011 Cameroon DHS.

5.4 Factors associated with Utilisation of FPS among Female Adolescents

5.4.1 Relation between Utilisation of FP services among Female Adolescents and Socio-demographic Factors

5.4.1.1 Educational Background

The high percentage of respondents attaining the primary school education which had significant association between utilisation of FPS and education status of female adolescents (Table 9) could be attributed to the effective education given to adolescents on use of FPS early starting from grade 4. A similar study conducted in Senegal and Niger by Hossain et al., (2014) revealed that there was a strong association between the use of FPS and education level. Similarly, another study conducted in Senegal found that demand for family planning was lowest among adolescents with no education (Sunnu et al., 2015 and Cavallaro et al**.**, 2017). These results may be attributed to the health workers not effectively implementing health education and Information Education and Communication (IEC) approach which cuts across social barriers such as education status. On the contrary results of the cross-sectional study conducted by Nansseu et al., (2015), in the Mbouda Health District, Cameroon revealed that there was no relationship between utilisation of FPS and education level of adolescents with (p value > 0.05).

5.4.1.3 Religious Denomination

The results of the study revealed that the majority of respondents utilising FP services were of Pentecostal denomination, while the minority were of Catholic denomination (Table 9). This was not statistically significant with proportion of utilisation of FPS, p-value >0.095. After regression

analysis, the results further revealed that those who belonged to the Catholic and Protestant denominations were more likely to utilise FPS. Catholic denomination had p value 0.001.

Adolescents who belong to the Catholic denomination are discouraged from utilising contraceptives. If they do, they are regarded as committing sin, performing abortion and being promiscuous. However, for those who were more likely to utilise FPS, it could be attributed to the acquisition of information on the benefits through Non-Governmental Organisations (NGOs) during community sensitisation and distribution of FP methods in the community and in schools and also learning in schools where they are taught Sexual and Reproductive Health (SRH) at an early age in grade 4. So, youths are well informed. A similar study conducted in United States of America, revealed that female adolescents with Catholic religious affiliation were more likely to utilise FPS despite the Church's formal opposition to contraceptive methods other than natural family planning such as abstinence (Jones and Dreweke, 2011). On the contrary, the study conducted in Uganda revealed that Muslim adolescent females were more likely to use contraceptives compared to Catholics (Kabagenyi et al., 2016).

Protestant denominations were also more likely to utilise FP services as compared to those who were not. This was statistically significant with p-value <0.007. This could be attributed to the fact that Protestants are composed of many different churches. According to Stacey, (2019), majority of Protestant denominations, theologians, and churches allow contraception and may even promote family planning as an important moral good. In consonance, Methodists, the nation's second-largest Protestant denomination, preach that every couple has the right and the duty prayerfully as well as the responsibility to control conception according to their circumstances. In consonance also are Jehovah's Witnesses teachings which indicate that there is nowhere the Bible explicitly condemns birth control and this is supported by the book of Romans chapter 14:12 (Watch Tower Bible and Tract Society of Pennsylvania, 2019). On the contrary, Evangelical Protestants Oppose to birth control and more heavily on Catholic teachings, so birth control still remains controversial. Some oppose all forms of contraception short of abstinence while others allow natural family planning but oppose other methods (CCIH, 2018). On the contrary also, results of the study conducted in rural areas of the Mwanza region in Northwestern Tanzania revealed that adolescents were not likely to utilise FPS because of the bible scripture (Genesis 1;28) which forbids Christians to use FP as it requires that mankind multiplies and fills the land (Sundararajan et al., 2019).

5.4.2 Relation between Utilisation of FP services among Female Adolescents and level of Knowledge on FP

The present study it was revealed no statistical significant association between knowledge level on FP and utilisation of FPS with a p-value=0.655, despite the majority of the study respondents having a high level of knowledge on FP (Table 10). Regression analysis results further revealed that, the study respondents who had low level of knowledge on FP were less likely to utilise FP services compared to those who did not have low level of knowledge, this was statistically insignificant with a p-value of .972. Low knowledge could be attributed to weak implementation of health promotion strategies such as radio listening groups, community health information boards as a way of disseminating information including outdoor media film shows and social media in order to bring awareness on FPS among adolescents and reach more youths. Also, myths and cultural values viewed as a taboo where adolescents are not expected to discuss FP issues openly with family members, so they are not well informed. Religious beliefs don't also allow adolescents to have sex before marriage and if they do so, then they are committing sin and society views adolescents who utilise FP as being promiscuous.

A similar study was conducted in the Cook Islands revealed low knowledge among adolescents who experienced unplanned birth. Due to non sensitisation messages on FP, they were not using a contraceptive method when they became pregnant, believing they would not become pregnant (Mann et al., 2018). Another study conducted in United States of America revealed that many women were not utilising long-acting, reversible contraceptives (LARCs) because they were unaware of its high efficacy (Rodriguez, 2015). The study by Samandari et al., (2019), carried out in Zinder Region, Niger is also in consonance. It revealed that adolescents recognise the health benefits of delaying the first birth through contraceptive use but because of the belief that child birth is "God's will", there was low utilisation of FPS. Similarly, a study conducted by Farahani et al., (2012) in Tehran, Iran revealed that most adolescents who had little awareness about FP and had incomplete and unreliable knowledge did not utilise FPS. On the contrary, results of the study conducted in Machakel district, northwest Ethiopia revealed that more than two thirds (67%) of the adolescents had knowledge about family planning and that only one fifth (21.5%) of the adolescents had ever used FPS. It was also found that FP service use was significantly associated with knowledge. The reasons for low utilisation were disapproval by parents and social and

cultural taboos (Alemu and Seme, 2014). On the contrary also are results of the study conducted in Zambia which revealed that 19-year-old female adolescents were more likely to utilise contraceptives compared to 15-year-olds which could be attributed to older female adolescents being more mature and knowledgeable about contraception and the importance of contraceptive use, unlike younger female adolescents (Chola et al**.**, 2020).

5.4.3 Relation between Utilisation of FP services among Female Adolescents and state of Service Delivery

The study results revealed that the majority of those that had used the service indicated that the state of service delivery was good while the minority indicated that it was poor (Table 11). This was statistically significant with utilisation of FP services, with $p<0.05$. Further results revealed that, the study respondents who indicated poor service delivery were more likely to utilise FP services compared to those who did not indicate poor service delivery. This was statistically significant with a p-value of <.010. The high likelihood of utilisation of FPS could be attributed to high level of knowledge, availability of FP methods, and short distances to the health facility, while others were going for advice on FP and not FP commodities. A similar study conducted by Kiggudu et al**.**, (2018) in Budaka district, Uganda revealed good service delivery for adolescents in that FP clinics encompassed strategies of prevention of Human Immunodeficiency Virus (HIV), delivering FPS as close to the families as possible, that is, in health posts, health units, health centres, hospitals and community-based distribution by Community Health Workers (CHW) from door-to-door service delivery and distribution at the workplaces. In consonance, a study by Apanga (2014) conducted in Talensi district, Ghana revealed that high awareness of family planning services by Community-based Health Planning and Services (CHPS), made FPS more accessible to the rural communities. On the contrary a study conducted in Kabwe district, the provincial capital of the Central Province of Zambia revealed that female adolescents from rural areas recounted that walking long distances to healthcare facilities in order to access FP services hindered utilisation (Silumbwe et al., 2018).

5.4.4 Relation between Utilisation of FP services among Female Adolescents and Beliefs

The majority of study respondents utilising FP services indicated that there are no beliefs that prevent adolescents from utilising FP services while the minority indicated that there were beliefs

that were preventing the use of FPS (Table 12). The results in this study showed that there was a statistically significant association between presence of beliefs and utilisation of FP services among adolescents with a p-value of <0.010. Further results revealed that, the study respondents who indicated that there are no beliefs that prevent adolescents from utilising FP services compared to those who did not. This was statistically significant with a p-value of 0.005. This could be attributed to high knowledge among respondents, good attitudes of HCP who provide education on misconceptions and some Christian denominations are not rigid on the use of FPS by adolescents. A similar study conducted in Cox's Bazar, Bangladesh; Ali Addeh, Djibouti; Amman, Jordan; East Leigh, Kenya; Kuala Lumpur, Malaysia; and Nakivale, Uganda by Tanabe et al**.,** (2017) revealed that the Burmese acknowledged that their religion allowed for the use of contraceptives to protect the health of the adolescent mother and to adapt to the challenges of displacement. Similarly, according to Fortier, (2013), in a study conducted in Addis Ababa, it was revealed that providing clear and accurate information to dispel myths and remove cultural barriers creates access to utilisation of family planning services by adolescents. In agreement also are the results of a study conducted in rural Malawi by Chipeta et al., (2010), which revealed that it is the Ngokota (pain in the body and lower limbs during menstruation) as a result of witch craft that would render an adolescent barren and not the use of FP.

On the contrary, a study conducted in Kenya, Nigeria and Senegal revealed low utilisation and less likelihood of utilisation of FPS due to beliefs such as FP methods causing infertility, reducing an adolescent's sexual urge, causing cancer, birth of deformed babies and that she may become promiscuous (Gueye et al**.**, 2015). Also, in disagreement, the results of the study conducted by Silumbwe et al., (2018) revealed that some religious beliefs prevent the use of contraception by adolescents indicating that the use is synonymous to committing abortion, which is considered sinful. Furthermore, it is believed that provision of FP services to unmarried users including adolescents is generally considered to be inappropriate as it is thought to be promoting promiscuity and sex before marriage in society (Ibid).

5.4.5 Relation between Utilisation of FP services among Female Adolescents and Staff Attitudes

The findings revealed that the majority 91 (68.9%) study respondents utilising FP services indicated that health care providers had a good attitude when being attended to, while the minority 41 (31.1%) indicated that health care providers had a bad attitude (Table 13). This showed that there was a statistically significant association between attitude of staff and utilisation of FP with $p<0.05$. Furthermore, regression analysis results revealed that respondents who indicated that staff had good attitudes, were less likely to utilise FPS. This was statistically insignificant with the p-value of 0.771. Low utilisation by study respondents who indicated that staff had good attitudes could be attributed to respondents avoiding to say bad things against staff to avoid being victimised. It could also be attributed to the cultural and religious values which bring about fear to be associated with promiscuity and committing sin among unmarried adolescents. The high likelihood of utilisation of FPS could be attributed to good staff attitudes. A study conducted in Mahalapye, Botswana revealed that there was good attitude among Health Care Providers (HCP) as they were comfortable to prescribe contraceptives to adolescents (St Tshitenge et al., 2018). Similarly, the study conducted in Ethiopia revealed that majority of health workers had positive attitudes towards providing FP services to unmarried female adolescents and the multivariate analysis proved that there was significant association between negative attitudes toward provision of FP services to adolescents and utilisation of FP (Tilahun et al**.**, 2012). On the contrary, the results of the study conducted in Ibadan, Nigeria by Ahanonu, (2014) revealed that HCP had bad attitudes towards provision of contraceptives to unmarried adolescents. On the contrary also, a study conducted in Uganda revealed that most of the HCP had negative attitudes towards the provision of contraceptives for young people and were not prepared or were hesitant to give young people contraceptives. As such, they imposed non-evidence-based age restrictions and consent requirements (Nalwadda et al**.**, 2011). More or so, findings of the study conducted in rural and urban areas of Democratic Republic of Congo (DRC) showed that low accessibility of FPS from health facilities and pharmacies was compounded by shame and stigma including cost and judgmental attitudes of HCP (Muanda et al., 2018).

5.5 Application of the Conceptual Framework

This study was supported by the conceptual framework that was adopted from Pender's Health Promotion Model (HPM) which was first formulated in 1982 and then revised in 1996. It comprises a set of variables which are; Behavioural factors, Situational factors, Interpersonal influences and Demographic characteristics. These variables have important motivational significance and can be modified through nursing actions. Behavioural factors in this study include; Knowledge and utilisation. An individual, who is knowledgeable about an offered service, is likely to have a positive perception towards it hence the chances of using the service increase. However, the findings of this study revealed that utilisation of the FPS were low in spite of the adolescents having high knowledge. Availability and utilisation of FPS, lack of information about FP, myths, fears, and misconceptions are some of the situational factors that may influence one's health seeking behaviour. For example, if a person comes from a community with misconception about FP, she may not utilise the service. This may lead to an individual not committing to a plan of action and may therefore decline to utilise FPS. In this study it was revealed that the majority of respondents were not utilising FPS due to myths and beliefs that prevent utilisation of FPS by female adolescents. Interpersonal influences may include family members, friends, attitude and competence of service providers. If a person receives support from colleagues and positive attitude from providers, she/he is likely to utilise FPS. However, if opposition is perceived as a barrier to action one may not commit to a plan of action of accepting FPS. The study revealed that influences from family members, Health Care Providers (HCP) and peers affect utilisation of FPS by adolescents. Demographic factors such as low education level and religion background may influence the person's ability to utilise FPS. For example, individuals with low education level may have limited or no access to information about FP thereby less likely to utilise contraceptives. Results of this study revealed that having low education level amounted to low utilisation of FPS, consequently some religious beliefs in the Christian religion which do not allow use of FPS by the adolescents especially the unmarried ones lead to low utilisation of FPS.

5.6. Strengths of this Study

The study achieved the main objective of establishing factors influencing utilisation of family planning services by adolescents of Kawama East compound in Mufulira District. It also established that there is statistical significant association between education status of adolescents and utilisation of FPS, between denomination and proportion of utilisation of FPS by adolescents

and between beliefs and utilisation of FP services among adolescents and also that having low level of knowledge had a significant association with the low utilisation of FPS. The conducted study had a relatively large sample (408) and statistical methods such as Chi square and binary logistic regression have been applied. It has added to the body of knowledge which will inform policy towards development of strategies that will improve utilisation of family planning services among female adolescents.

5.7. Limitations of the Study

The study was only conducted in one catchment area of Mufulira District on the Copperbelt Province and therefore, results cannot be generalized to other catchment areas of Mufulira and other Districts in Zambia. The collection of data involved face to face interviews with adolescents which could have affected their openness when answering questions in spite of the reassurance that was given to them before beginning the interview. The questionnaire only had open ended questions. The respondents were asked to recall some information retrospectively, this might yield some recall bias. However, these limitations would be avoided by using a mixed method, allowing self-administered questionnaire and conducting similar studies in all catchment areas of Mufulira District.

5.8. Implications to the Health Care System

5.8.1. Nursing/Midwifery Practice

Nurses and midwives have a leading role in ensuring delivery of quality health care in the country. Men and women including adolescents have the right to be informed and to have access to safe, effective, affordable, and acceptable methods of their choice for fertility regulation, which are not against the law, as well as the right of access to health care for safe pregnancy and childbirth. Therefore, nurses and midwives ought to render the FPS in order to provide solutions to unmet needs for FP among adolescents.

The study revealed that the majority 370 (90.7%) had high level of knowledge on FP. Among these, three quarters 355(87.0%) had attained a primary level of education. Normally the ones that have attained secondary level of education are expected to have high knowledge than the ones with primary education level because they are expected to have more understanding which could result

in high utilisation of the service. In spite of high level of knowledge by respondents, the study revealed that the majority 271 (66%) were not utilising the FPS. However, the revelation of having low level of knowledge with a p-value of .0655 had statistically insignificant association with the low utilisation of FPS. This impacts negatively on nursing and midwifery practice, by implying that nurses and midwives should engage more in intensifying Information Education and Communication (IEC) on utilisation of FPS including the importance of utilising the service by adolescents. This should be complemented with strengthening of the Youth Friendly Services (YFS). Furthermore, with the availability of the 2 Radio Stations in Mufulira, nurses and midwives of Twatasha Clinic in Kawama East compound, through the office of the District Health Director, should disseminate the health promotion messages on the importance of utilisation of FPS by adolescents. They should also work with the local schools to sensitise and provide contraceptive methods to adolescents in the schools.

5.8.2. Nursing Administration

It is imperative that nursing management improves staffing levels nurses so that sufficient time is allocated to IEC in communities and schools in order to improve utilisation of FPS by adolescents. Nurses should be trained in nursing education especially adolescent family planning strategies to prevent unwanted pregnancies and unsafe abortion which would in turn contribute to reduction in maternal and neonatal morbidity and mortality.

5.8.3. Nursing Education

The study revealed that out of 408 study respondents, majority 271(66%) were not utilising FPS while 137(34%) were utilising FP services which indicated low utilisation of FPS. This implies that empowering female adolescents with knowledge on utilisation of FPS is a critical tool in achieving better health by avoiding unwanted pregnancies and preventing maternal complications. Nursing education should therefore, emphasise the importance of nurse -client interaction so that nurses and midwives develop the skill and attitude of providing adequate and quality information to female adolescents on utilisation of FPS. Nursing education plays a pivotal role in grooming and shaping student nurses and midwives into professionals capable of providing quality health education to female adolescents.

5.8.4. Nursing Research

This study has revealed that there is low utilisation of FPS by adolescents of Kawama East compound of Mufulira district, Copperbelt Province. Literature review has shown that many studies have been conducted to determine factors associated with utilisation of FPS by adolescents in many countries and findings are similar. There is need to research further on the factors associated with low utilisation of FPS by adolescents.

5.9. Conclusion

This study was evaluating the factors that influence utilisation of family planning services by adolescents of Kawama East compound in Mufulira District on the Copperbelt. The write up comprised five chapters of which chapter one covered introduction, background information, statement of the problem, theoretical framework, justification of the study, research objectives stating of the hypothesis and definition of terms. Chapter two covered literature review on utilisation of FPS by adolescents globally, regionally and locally and on the variables. Chapter three was the methodology; chapter four was presentation of findings and chapter five was discussion of research findings.

All the objectives were successfully accomplished and the study revealed that there is low utilisation of FPS (34%) among adolescents of Kawama East compound of Mufulira District. The study results further revealed that 67.1% of utilisation of FPS which was low, were as a result of the following variables which had a significant association with the low utilisation of FP; educational background with p value of 0.033 Religious denomination (p value<0.010), state of service delivery (p-value<0.010) and cultural beliefs (p-value<0.010) on FP. Nevertheless, good attitude of the staff towards FPS with p-value of .771 and low level of knowledge with p-value of 0.972 did not have statistically significant association with low utilisation of FPS. However, 32.9% of utilisation of FPS was as a result of other factors outside the model or not considered in this study.

5.10. Recommendations

5.10.1. Recommendations to the Nurses and Midwives

Nurses and midwives should be equipped with proper communication skills to ensure efficient service delivery to the adolescents at the youth friendly corners. At health centre level, they should collaborate with gatekeepers such as Pastors Councilors and members of parliament in their catchment area to disseminate key messages on the importance of utilisation of FPS and diffusing some beliefs which hinder utilisation of the service. Midwives and nurses at health centre level should also work in collaboration with Community Based Distributors to intensify education and use of contraceptives by adolescents.

5.10.2. Recommendations to Mufulira District Health Management Team

Mufulira DHMT should strengthen supportive supervision to health centres so as to assist nurses and midwives to adhere to the guidelines during dissemination of information in Youth Friendly Corners. DHMT should collaborate with other ministries such as Youth and Sport, General Education and Community Development to work out fora in which to effectively communicate the importance of utilisation of FPS by adolescents. Mufulira DHMT should also continue working with Non-Governmental Organisations (NGOs) such as Sexual and Reproductive health for all initiative (SARAI) to intensify outreach dissemination of key messages and provide contraceptives to female adolescents. DHMT should above all draw sensitisation program with the 2 local Radio Stations.

5.10.3. Recommendations to the Ministry of Health

The Government of the Republic of Zambia through the Ministry of Health (MoH) should consider addressing challenges that deter utilisation of FPS by adolescents as a measure of avoiding unsafe abortions which contribute to high maternal mortality. MoH should work with Ministry of General Education to establish Youth Friendly Services (YFS) at local schools in order to increase utilisation of the service by adolescents.

5.10.4. Recommendations to Nursing Educators and the GNMCZ

The nursing and midwifery curricula should be strengthened particularly on adolescent FP in order for the nurses and midwives to acquire adequate knowledge which will enable them render quality FPS according to the standard of MoH and World Health Organization (WHO) at large. More hours should be allocated for clinical experience in Youth Friendly Corners so as to enable students gain more knowledge and skill on utilisation of FPS by adolescents.

5.10.5. Recommendations for Future Research

This study was limited to socio-demographic factors such as educational background, level of knowledge on FP, attitude of staff towards FP, service delivery, religious denomination affiliation and beliefs on FP adding up to 67.1% of utilisation of FP. Future research should therefore look at other influencing factors other than the ones in this model. This study used cross sectional design. Future research can use longitudinal study where adolescents can be followed up. This study used a questionnaire with only closed ended questions and did not allow free opinions in the responses of the respondents. Future research should use mixed method to involve qualitative tools such as Focus Group Discussions (FGD) and index interviews involving in-depth interviews. There is also need to carry out this same study at a large scale so as to allow for generalization of the study findings.

5.11. Dissemination and Utilisation of Findings

The results of the study were presented during the postgraduate seminar week on 24th October 2019 organised by the Directorate of Research and Graduate Studies. The results will also be presented to management at Mufulira DHMT which was the study site. In addition, the results will be published in a recognised peer reviewed Journal such as the Zambian Medical Journal, Journal of Agriculture and Biomedical Sciences or the Journal of Nursing, Midwifery and Health sciences. Furthermore, bound copies of the study will be submitted to the school of Nursing Sciences, UNZA -Medical Library, Main Library UNZABREC and National Health Research Authority. The researcher will also present this report during clinical meetings at Mufulira DHMT to inform the nurses and midwives and other health care providers in all the health centres in Mufulira district.

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Appendices

Appendix I: Participant Information Sheet

TITLE OF STUDY: UTILISATION OF FAMILY PLANNING SERVICES BY FEMALE ADOLESCENTS OF KAWAMA EAST COMPOUND IN MUFULIRA DISTRICT, ZAMBIA.

My names are Idah Namusokwe Kasimbo, a student pursuing a Master of Science Degree in Midwifery and Women's Health, at the University of Zambia, School of Nursing.

In partial fulfillment of my training in Master of Science Degree in Midwifery and Women's Health program, I'm required to undertake a research project of which my topic is stated above. This study wishes to establish factors influencing utilisation of family planning services by female adolescents of Kawama East compound in Mufulira District.

This study wishes to find out why most female adolescents have not been using family planning services that are currently offered at most of the clinics in Mufulira. I wish to inform you that participation in this study is voluntary and therefore; you are free to withdraw at any stage of the study if you so wish. You will answer questions on knowledge levels, educational level, cultural beliefs, attitude and distance/transport to the health facility. You will also be expected to give information on your demographic data. Any information given will be kept in confidence and no name will be written on the questionnaire survey. In an event where you are not clear with the question you can ask for clarification. If you think you are not comfortable answering certain questions you may omit them. There are no monetary benefits from this study but you will benefit from the study results by improving ways of educating the adolescents to utilise family planning services. The information that you will give will assist the researcher to determine factors influencing utilisation of family planning services and the findings will be used by policy makers and other organizations in finding ways to improve utilisation of the family planning services by female adolescents.

If you are willing to participate in this study, you will be asked to sign consent or thumb print for agreement. Please ask where you are not clear for clarification.

Appendix II a: Voluntary Consent Form

DECLARATION

TITLE OF STUDY: UTILISATION OF FAMILY PLANNING SERVICES BY FEMALE ADOLESCENTS OF KAWAMA EAST COMPOUND IN MUFULIRA DISTRICT, ZAMBIA.

I have been explained to, and I understand the nature of the research in which I have been requested to participate. The opportunity to ask questions about the research was given and I have been answered to my satisfaction.

I therefore agree to participate.

I ……..here by called the respondent understands the guidelines of this study and I am willing to participate in the study.

Dated this …….day of ……..…...2019.

Signature/ thumb print of respondent…….……..

Witness…….....

PERSONS TO CONTACT FOR PROBLEMS OR QUESTIONS

Idah Namusokwe Kasimbo, University of Zambia. School of Nursing Sciences. P.O. Box 50110, Lusaka.
Cell: 0977305088/0967305088/0953517104
Email. namusokweidah@gmail.com
Mr. Yolan Banda and Mrs. Martha M. Mwelwa, University of Zambia, School of Nursing Sciences. P.O. Box 50110, Lusaka. Cell: 0977504109 and 0977821663 respectively.
The Chairman, Research Ethics Committee, University of Zambia. P.O. Box 50110, Lusaka. Phone no. 260- 1- 256067

Appendix II b: Consent Form (In Bemba)

DECLARATION

TITLE OF STUDY: UTILISATION OF FAMILY PLANNING SERVICES BY FEMALE ADOLESCENTS OF KAWAMA EAST COMPOUND IN MUFULIRA DISTRICT, ZAMBIA.

Naba nondolwela nokutesha nintesha ifyo uku kufwailisha pa mibomfeshe ya misango yakutalusha ukwimita nangula ukucingililia ukukana imita bwangu mu misepela ilepilibula. Kabili ninsumina ukuibimbamo mukwasuka amepusho. Elyo namepusho nacipusha ku balefwailisha nacipusha banjasuka bwino icakuti nacitesha.

Eico ndesumina ukuibimba muli uku kufwailisha.

Ine ne ……. ….ne uleitwa uwakwasuka amepusho nintesha amafunde ya uku ukufwailisha, kabili indi uwaipekanya ukuibimbamo.

Pali ubu ubushiku bwapa……no mwaka wa…….…...2019.

Signature/ thumb print of respondent…….…….

Witness…….....

ABANTU BAKUMONA NGA MWAKWATA AMAFYA NANGULA AMEPUSHO NI BA

Idah Namusokwe Kasimbo, University of Zambia. School of Nursing Sciences. P.O. Box 50110, Lusaka.
Cell: 0977305088/0967305088/0953517104
Email. namusokweidah@gmail.com Nangula ba
Mr. Yolan Banda naba Mrs. Martha M. Mwelwa, University of Zambia, School of Nursing Sciences. P.O. Box 50110, Lusaka. Cell: 0977504109 and 0977821663 respectively.
The Chairman, Research Ethics Committee, University of Zambia. P.O. Box 50110, Lusaka. Phone no. 260- 1- 256067.

Appendix III a: Informed Assent Form

TITLE OF STUDY: UTILISATION OF FAMILY PLANNING SERVICES BY ADOLESCENTS OF KAWAMA EAST COMPOUND IN MUFULIRA DISTRICT, ZAMBIA.

The purpose of this study has been explained to the child and I understand the purpose, the benefits, risks and discomforts and confidentiality of the study. I further understand that if I agree my child to take part in this study, she can withdraw at any time without having to give an explanation and that taking part in this study is purely voluntary.

I …… Date……..

(Names)

Agree that my child takes part in this study.

Signed……..…… Date……..

(Guardian/Parent)

Parent's signature or thumb print

Signed…… Date……..

(Witness)

Signed……... Date……..

(Researcher)

PERSONS TO CONTACT FOR PROBLEMS OR QUESTIONS

Idah Namusokwe Kasimbo, University of Zambia. School of Nursing Sciences. P.O. Box 50110, Lusaka.

Cell: 0977305088/0967305088/0953517104

Email. namusokweidah@gmail.com

Mr. Yolan Banda and Mrs. Martha M. Mwelwa, University of Zambia, School of Nursing Sciences. P.O. Box 50110, Lusaka. Cell: 0977504109 and 0977821663 respectively.

The Chairman, Research Ethics Committee, University of Zambia. P.O. Box 50110, Lusaka. Phone no. 260- 1- 256067

Appendix III b: Informed Assent Form (In Bemba)

TITLE OF STUDY: UTILISATION OF FAMILY PLANNING SERVICES BY FEMALE ADOLESCENTS OF KAWAMA EAST COMPOUND IN MUFULIRA DISTRICT, ZAMBIA.

Ubukankala bwa kufwailisha imisango yaku talushishamo ukwimita nangula ukukana imita bwangu nabalondolwela umwana, kabili nintesha ubukankala, ubusuma na mafia yene, elyo no bubi bwingasangwamo ne nkama ili muli ii milimo. Nokucishapo, ndesumina ukutila ati umwana wandi kuti bamwipushako amepusho pali uyu mulimo. Nakabili nintesha ukutila umwana wandi ngalefwaya ukuleka ukusendamo ulubali muli uyu mulimo kuti aleka inshita iili yonse ukwabula ukupela ubulondoloshi ubuli bonse. Nakuba uyu mulimo wakutila ati umwine alefwaya ukuibimbamo.

Iine ne……Pabushiku bwelelo…….

(Names)

Naumannite umwana wandi ukuibimba muli uyu mulimo.

Signed…….…… Date…….

(Guardian/Parent)

Parent's signature or thumb print

Signed…… Date…….

(Witness)

Signed……... Date…….

(Researcher)

ABANTU BAKUMONA NGA MWAKWATA AMAFYA NANGULA AMEPUSHO NI BA

Idah Namusokwe Kasimbo, University of Zambia. School of Nursing Sciences. P.O. Box 50110, Lusaka.

Cell: 0977305088/0967305088/0953517104

Email. namusokweidah@gmail.com Nangula ba

Mr. Yolan Banda naba Mrs. Martha M. Mwelwa, University of Zambia, School of Nursing Sciences. P.O. Box 50110, Lusaka. Cell: 0977504109 and 0977821663 respectively.

The Chairman, Research Ethics Committee, University of Zambia. P.O. Box 50110, Lusaka. Phone no. 260- 1- 256067.

Appendix IV a: Questionnaire

THE UNIVERSITY OF ZAMBIA

SCHOOL OF NURSING SCIENCES

SURVEY QUESTIONNAIRE

TOPIC: UTILISATION OF FAMILY PLANNING SERVICES BY FEMALE ADOLESCENTS OF KAWAMA COMPOUND IN MUFULIRA DISTRICT, ZAMBIA.

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. Do not write the name of the respondent on the interview schedule

4. Tick ☑ the most appropriate response to the question or fill in the answer on the space provided.

5. Assure the respondent of confidentiality and anonymity.

6. Provide time for the respondent to ask questions at the end of the interview.

7. Thank the respondent at the end of each interview.

SECTION A: SOCIO-DEMOGRAPHIC DATA

1. Age in years at last birthday
    1) (14 - 16) years
    2) (17-19) years
2. Who do you reside with?
    1) Both Parents
    2) Single parent
    3) Grand parents
    4) Others (specify)…….……
3. Education level of the Adolescent
    1) None
    2) Primary
    3) Secondary
    4) Tertiary.
4. Denomination
    1) Catholic
    2) Protestants (SDA, UCZ, [Jehovah's Witness, etc.)
    3) Pentecostal

SECTION B: UTILISATION OF FPS

5. Do you have a sexual partner?
    1) Yes
    2) No
6. Are you using family planning?
    1) Yes
    2) No
7. If yes to question b, which family planning method did you use?
    1) Condom
    2) Oral contraceptives
    3) Implants

4) Injectable contraceptives

5) Intra uterine contraceptive device

6) Abstinence

7) Herbs

Level of Utilising FPS

1) Utilising = Yes

2) Not utilising = No

SECTION C: LEVEL OF KNOWLEDGE ON FP

8. Have you ever heard about FP?

1) Yes

2) No

9. If yes to question a, how did you know about FP?

1) From health care providers

2) Mass media

3) Family members

4) Peers

10. What is meant by family planning?

1) Delaying pregnancy
2) Spacing children
3) Not to have children in the life time
4) Don't know

11. Which types of family planning methods do you know?

1) Condom
2) Oral contraceptives
3) Implants
4) Intra uterine contraceptive device
5) Don't know

12. In your opinion, is it important for adolescents to utilise family planning services?

1) Yes

2) No

3) Don't know

13. Give reasons to your answer to the question above

1) Yes, because they will prevent unwanted pregnancies

2) No, because it will promote promiscuity

3) Don't know

14. What are the benefits of using FP that you know?

1) Giving chance to continue with education without disturbance

2) Allowing healthy growth of children

3) Controls menstrual flow

4) Don't know

Level of Knowledge on FP

1) Low = $\leq$ 9 correct responses

2) High = 10 - 15 correct responses

SECTION D: SERVICE DELIVERY

15. What family planning services are available at your nearest health facility?

1) Condoms
2) Oral contraceptives
3) Implants
4) Injectable contraceptives
5) Intra uterine contraceptive device
6) Don't know

16. Did the provider ask if you had any question?

1) Yes

2) No

17. Did the provider respond to the question?

1) Yes

2) No

18. Was counseling done during the family planning session?

1) Yes

2) No

19. Were you given adequate information during the session?

1) Yes

2) No

3) Don’t know

20. How was the provider’s explanation?

1) Good

2) Bad

3) Don’t know

21. Did the provider do or say anything that made you uncomfortable?

1) Yes

2) No

22. Was your privacy respected during the session?

1) Yes

2) No

23. If not did this make you feel uncomfortable in any way

1) Yes

2) No

24. Were you given any educational material on family planning at the clinic?

1) Yes

2) No

25. What do you think of the time you spent with the provider?

1) Enough

2) Not enough

3) Don't know

State of service delivery

1) Yes = Good service delivery with availability of family planning commodities and conducive infrastructure and respondents scoring 7 – 15 positive correct responses.

2) No = Bad service delivery with lack of family planning commodities and poor infrastructure' and respondents scoring less than 6 positive correct responses

SECTION E: BELIEFS

26. Did you get permission from your next of kin before coming to the clinic?

1) Yes
2) No

27. If yes who did you get permission from?

1) Parents
2) Spouse
3) Others (specify)……

28. Do you have any challenges in accessing family planning services at your clinic?

1) Yes
2) No

29. If yes choose the challenge below

1) Distance
2) Religion
3) Culture
4) Other (specify)…….

30. Is there any myth in your tradition that discourages you from using family planning?

1) Yes

2) No

3) Don't know

31. If yes which ones are, they?

1) Contraceptives cause infertility

2) It promotes fornication

3) Society requires that you have a lot of children

4) Other (specify)……

32. Give suggestion on how you think family planning services can be done to reach the Adolescents

1) Involving parents/guardians in health education on the benefits

2) Giving health education to adolescents in the community and in schools

3) Don't know

Beliefs towards family planning
Yes - Existence of traditional beliefs and respondents scoring 1
No - Non-existence of traditional beliefs and respondents scoring 0

SECTION F: ATTITUDE OF STAFF

33. Have you ever visited Family Planning clinic?

1) Yes

2) No

34. If yes to question (a) what was the purpose of the visit?

1) To get contraceptives

2) For advice

35. Which provider attended to you?

1) Nurse

2) Clinical officer

3) Doctor

4) Classified Employee
5) Don't know her/his position

36. How was the reception by the health care provider?

1) Good

2) Bad

Attitude towards family planning; Classified as Positive or Negative

Positive attitude was given a score of 4 – 8

Negative attitude was given a score of 3 and below

……***THANK YOU***…….

Appendix IV b: Questionnaire (In Bemba)

THE UNIVERSITY OF ZAMBIA

SCHOOL OF NURSING SCIENCES

SURVEY QUESTIONNAIRE

TOPIC: UTILISATION OF FAMILY PLANNING SERVICES BY ADOLESCENTS OF FEMALE KAWAMA COMPOUND IN MUFULIRA DISTRICT, ZAMBIA.

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. Do not write the name of the respondent on the interview schedule

4. Tick ✔ the most appropriate response to the question or fill in the answer on the space provided.

5. Assure the respondent of confidentiality and anonymity.

6. Provide time for the respondent to ask questions at the end of the interview.

7. Thank the respondent at the end of each interview.

SECTION A SOCIO-DEMOGRAPHIC DATA

1. Bushe uli ne myaka inga

   1) (14 - 16) years
   2) (17-19) years

2. Bushe wikala na banani?

   1) Ba mayo na ba tata
   2) Ba mayo/ ba tata
   3) Ba mama na ba shikulu
   4) Bambi (balumbule)…….…….

3. Bushe ma sambililo nshi wafikilemo?

   1) Tapali
   2) Ayanono
   3) Ayakalamba
   4) Ayakalamba sana

4. Bushe upepa kwisa?

   1) Katolika
   2) Protestants (SDA, UCZ, Chitawala, etc.)
   3) Pentecost

SECTION B: UTILISATION OF FPS

5. Bushe walikwata umutemwikwa umwaume?

1) Ee

2) Awe

6. Bushe pali ino inshita ulebomfyapo umusango wakutalushishamo ukwimita nelyo ukukana imita bwangu?

1) Ee

2) Awe

7. Nga wasumina ku lipusho lyalenga mutanda (6), musango nshi ulebomfya?

1) Imipila

2) Utu bulungwa twakunwa

3) Umuti wa kwingisha mu nkanda ya pa kuboko

4) Inshindano

5) Umuti wakubika mu cilalo ca bufyashi
6) Ukukana lala no mwaume/umwanakashi
7) Umuti wacimuntu

Level of Utilising FPS

1) Utilising = Yes

2) Not utilising = No

SECTION C: LEVEL OF KNOWLEDGE ON FP

8. Bushe walyumfwapo spa lwa kukana imita bwangu?

1) Ee

2) Awe

9. Bushe nga cakutila walyumfwapo, ni kwisa waumfwile?

1) Ababomfi ba chipatala

2) Pa mulabasa

3) Aba lupwa

4) Abanandi

10. Bushe uku kana imita bwangu cipilibula inshi?

1) Uku kokola ukwimita

2) Uku talukanya abana mu ku fyala

3) Ukukana fyala

4) Nshishibe

11. Lumbula imisango ya kutalukanyishamo abana muku fyala nangu ukukana imita bwangu iyo waishiba

1) Imipila

2) Utu bulungwa twakunwa

3) Umuti wa kwingisha mu nkanda ya pa kuboko

4) Umuti wakubika mu cilalo ca bufyashi

5) Nshishibe

12. Mu Kutontonkanya kobe, bushe caliba icikankala imisepela ukubomfya umusango waku kana imita bwangu?

1) Ee

2) Awe

3) Nshishibe

13. Landa ico wapelela ubwasuko bwa lipusho lya e,

1) Ee, pantu cilacingilila ukwimita ilyo namayo talefwaya

2) Awe, pantu cilenga fye ukuleta ubulalelale

3) Nshishibe.

14. Bushe busuma nshi bwaba mu kubomfya umusango wakutalukanya ukwimita nelyo ukukana imita bwangu?

1) Cilalenga ukukana pumfyanishiwa ku kutwalilila ama sambililo

2) Abana balakula bwino

3) Umusango wa kuya ku mweshi ulalondoloka

6) Nshishibe

Level of Knowledge on FP

1) Low = $\leq$ 9 correct responses

2) High = 10 - 15 correct responses

SECTION D: SERVICE DELIVERY

15. Bushe misango nshi iyaba pa chipatala ca mupepi iya kutalukanya ukwimita nelyo ukukana imita bwangu?

1) Umupila

2) Utubulungwa twakunwa

3) Umuti wakwingisha mu nkanda pa kuboko

4) Umuti wa nshindano

5) Umuti wakubika mu cilalo ca bufyashi

6) Nshishibe

16. Bushe balikwipwishe nga walikwete amepusho?

1) Ee

2) Awe

17. Bushe abalekutangata balyaswike amepusho yobe?

1) Ee

2) Awe

18. Bushe mwalikwete ukulanshanya nabalekutangata?

1) Ee

2) Awe

19. Bushe walisambilile ifingi?

1) Ee

2) Awe

3) Nshishibe

20. Bushe ubulondoloshi bwa mubomfi wa chipatala bwali shani?

1) Bwino

2) Tabwali bwino

3) Nshishibe

21. Bushe umubomfi wa chipatala alisosapo fimo ifyakukucena mu milandile yakwe?

1) Ee

2) Awe

22. Bushe umubomfi wa chipatala alimona ukutila ati takuli na bambi abaleumfwako ifyo mwalelanshanya?

1) Ee

2) Awe

23. Nga tefyo, bushe fyalikulenga ukukana kakuluka mu kulanda?

1) Ee

2) Awe

24. Bushe balikupelako ifyakusomamo pa lwa musango waku talukanishishamo ukwimita nelyo ukukana imita bwangu?

1) Ee

2) Awe

25. Bushe kuti watila shani panshita mwaposele mukulanshanya no mubomfi wa chipatala?

8) Yali bwino
9) Yali cepa
10) Nshishibe

State of service delivery

1) Yes = Good service delivery with availability of family planning commodities and conducive infrastructure and respondents scoring 7 – 15 positive correct responses.

2) No = Bad service delivery with lack of family planning commodities and poor infrastructure' and respondents scoring less than 6 positive correct responses

SECTION E: BELIEFS

26. Bushe walipoka ulusa pakuya ku chipatala kubo wikala nabo?

1) Ee

2) Awe

27. Nga walipoka, wapokele kuli bani?

1) Abafyashi.

2) Abena mwandi

3) Bambi (lumbula)……

28. Bushe walikwatako ubwafya bwa kupoka umusango wa kutalukanya ukwimita nelyo ukukana imita bwangu?

1) Ee

2) Awe

29. Nga walikwata, salapo ubwafya usanga

1) Ubutali ku chipatala

2) Amafunde yaku chalichi

3) Intambi

4) Fimbi (lumbula)…….

30. Bushe paliba intambi ishinga kulesha ukubomfya umusango wa kutalukanya ukwimita nelyo ukukana imita bwangu?

1) Ee

2) Awe

3) Nshishibe

31. Nga eko yaba, ni isa?

1) Ukupwisha ubufyashi

2) Ilalenga ubulalelale

3) Ukulingana nemikalile, umuntu afwile afyala abana abengi

4) Fimbi (lumbula)……

32. Sosa ifyo imisepela inga sanga umusango waku talushishamo ukwimita nelyo ukucingilila ukwimita bwangu

1) Ukusambilisha abafyashi pa busuma bwa ku pela imisepela umusango waku talushishamo ukwimita nelyo ukucingilila ukwimita

2) Ukusambilisha imisepela umusango waku talushishamo ukwimita nelyo ukucingilila ukwimita mu mushi na ku ma sukulu

3) Nshishibe

Beliefs towards family planning

Yes - Existence of traditional beliefs and respondents scoring 1
No - Non-existence of traditional beliefs and respondents scoring 0

SECTION F: ATTITUDE OF STAFF

33. Bushe walitala auya ku chipatala uko bapela imisango ya kutalukanyishamo abana muku fyala nangu ukukana imita bwangu?

1) Ee

2) Awe

34. Nga ulesumina ku lipusho lyalenga ama kumi yatatu na tutatu, cinshi waile mu ku cita?

1) Mu kupoka imisango ya kutalukanyishamo abana muku fyala nangu ukukana imita bwangu

2) Mu kupoka amano pa lwa misango ya kutalukanyishamo abana muku fyala nangu ukukana imita bwangu

35. Bushe babomfi nshi aba chipatala abaliko mukukutangata?

1) Nurse

2) Ba shinganga mwaice

3) Ba shinganga mukalamba

4) Abawamya mu chipatala

5. Nshishibe

36. Bushe ba kupokelele shani ababomfi ba chipatala?

1) Bwino

2) Ububi

Attitude towards family planning; Classified as Positive or Negative

Positive attitude was given a score of 4 – 8

Negative attitude was given a score of 3 and below

……. NATOTELA……