

# Utilisation of Family Planning Services by Female Adolescents of Kawama East Compound in Mufulira District, Copperbelt, Zambia

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## Abstract

**Background:** Utilization of family Planning services by female adolescents of Kawama East compound in Mufulira, Zambia was investigated in this study. Utilization of family Planning by female adolescents is vital because it can save lives of babies and their mother.

**Methods:** This was an analytical quantitative cross sectional study done on 408 participants selected by systematic sampling in 18 zones. Data was collected using researcher administered questionnaire and analyzed with the Statistical Package for Social Science version 20. A p-value of  $\leq 0.05$  was considered statistically significant using Chi square test.

**Results:** The study revealed low levels of utilization (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). These were all statistically significant with utilization of the service.

**Conclusion and Recommendations:** There is low utilization of family Planning services among female adolescents of Kawama East compound of Mufulira District. The study also revealed a significant association between socio-demographic factors and Family Planning. The findings will raise awareness and influence use of the services. Therefore, it is recommended that 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.

**Keywords:** Utilization, Family planning, Female, Adolescents.

## Introduction

Family Planning Services (FPS) involve giving information as well as providing contraceptive methods (World Health Organization (WHO 2016)). Family planning (FP) is the practice of controlling the number of children in a family and the intervals between their births, it enables 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 (World Health Organisation (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 (World Health Organisation (WHO 2016)). 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 (World Health Organisation (WHO 2014)).

About a quarter of the world's population are adolescents (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, 2012). On average, unmet need for contraception is greater among unmarried adolescents than those who are married (Marshall, 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 (World Health Organisation (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 (Darroch 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, such as those in Africa (Hounton et al., 2015; Ngome & Odimegwu, 2014; Nyarko, 2015). 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 among adolescent females aged 15–19 years in low income countries is 21% for all methods (modern and traditional) (Hounton et al., 2015; Arthur & Champiti, 2016). The low use of contraception among adolescents occurs against the backdrop of evidence that using FP 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 & Winter, 2015). Moreover, it is clearly defined that access to FP is a guaranteed right for adolescents, and it includes counseling and FPS for sexually active teens, married or unmarried and also that FPS are made available for free or at low cost to adolescents in order to address the reproductive health needs of adolescents and prevent unwanted pregnancies among sexually active adolescents (Schlachter & Boven, 2018; Gudeman & Madge, 2011).

Unfortunately, FP prevalence in Zambia remains low (Guttmacher, 2017). Low utilisation of FP 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. Furthermore, under utilisation of FPS by adolescents may result in increased maternal mortality and unintended pregnancies (World Health Organisation (WHO 2018)).

It is of paramount importance to understand what works in empowering adolescents to overcome the obstacles in the use of FP as substantial numbers of adolescents, both married and unmarried are at risk of pregnancy with serious health and social costs. Consequently, poor access to and use of contraception is a key contributory factor (Chandra-Mouli 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 (Silumbwe et al., 2018; Mukanu, 2017).

In spite of availability of Youth Friendly Services, low

utilisation of FPS exists among female adolescents of Kawama East compound in Mufulira District and no research has been conducted in the area. It is therefore necessary that Information Education and Communication is extensively given to increase utilisation of FPS which will contribute to attainment of Sustainable Development Goals which emphasise on reduction of Infant and Maternal mortality respectively.

This research will contribute to the strategies of addressing the low utilisation of FPS among female adolescents and the overall purpose is to enhance improvement of utilisation of the services and reduce on abortions and unwanted pregnancies among the female adolescents in Kawama East compound of Mufulira District.

Therefore, this study is aimed at determining factors influencing utilisation of family planning services among female adolescents of Kawama East compound in Mufulira District.

## Objectives

### General Objective

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

### 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.

## Methods

### Study Design

An analytical cross-sectional study conducted between 1st April and 10th May, 2019 to determine factors influencing utilisation of family planning services among female adolescents of Kawama East compound in Mufulira District in Zambia.

### Study area and Population

The study was conducted in Kawama East community a Peri-urban area in Mufulira District which is on the Copper Belt Province of Zambia. The area is divided into 18 zones according to Neighbourhood Health Committees each consisting of 200. It 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 Family Planning Services. Moreover, it is the only clinic in this community. 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.

### Sampling Procedure

Houses were listed as a sampling frame out of 200 households in each of the 18 zones that exist in Kawama East community of Mufulira District. 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 starting from any number between 1 and 10 then picking the starting household. Following the sampling interval, arriving at the K the household in the systematic sampling until a desired number of households was 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.

### Sample Size Determination

The number of participants required for the studies threshold was calculated using the prevalence proportion formula. With Proportion of adolescents who are aware of the service at 60%, Standard normal variant at 95% confidence level and Precision  $\pm 5\%$ , this formula gave a minimum number of 368 which included compensation (0.9) for attrition of the respondents bound to opt out or quit the interview, it came to 408. This was calculated as shown 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  $\pm 5\%$

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

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

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

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

$$n = 368$$

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 was 408.

### Inclusion Criteria

All female adolescents of Kawama East compound of Mufulira District. Those utilising and not utilising Family Planning Services, 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.

### 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.

### Data Collection Method

A pretested semi structured questionnaire with closed ended questions was used to collect data. Face to face interviews with each female adolescent were conducted.

### Validity and Reliability

Validity and reliability tests were conducted to determine internal consistency and uniformity of the tool. Extensive literature review conducted on recent literature on utilisation of Family Planning Services 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 to draw conclusions with respect to the study population. All questions were constructed in a simple, clear and precise way in order to give respondents chance to give clear and precise answers and questions were translated into Bemba a local language commonly used in the area of study. To ensure reliability, 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. 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.

### Data Collection Process

The researchers conducted face to face interviews with each respondent 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 researchers 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 which 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. Respondents who met the inclusion criteria were interviewed. Respondents were then thanked.

### Data Analysis

Data was checked for accuracy, completeness and consistency in responses. Then it was categorised, coded, entered and analysed using 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. The confidence interval for the study was set at 95% and level of significance was set at 0.05.

### Ethical Consideration

Ethical clearance was sought from University of Zambia Research Ethics Committee for the main study. Participation of subjects was on a voluntary basis and written informed consent was obtained from all respondents prior to participation in the study. Written permission to conduct the study was obtained from Provincial Health Office for Copperbelt Province and Mufulira District Health Office. Anonymity and confidentiality was observed during the interviews ensuring that the codes are used instead of names and that each respondent was interviewed separately from others in a private area. Participants were also assured that no information collected shall be used against them. The questionnaires were kept under lock and key to avoid unauthorized access to the information.

### Results

#### Demographic characteristics of the study respondents

Variable	Frequency	Percent (%)
<b>Age (years)</b>	<b>Mean ± SD=17 years +0.9116</b>	
(14-16) years	42	10.3
(17-19) years	366	89.7
<b>Respondent's guardian</b>		
Both parents	38	9.3
Single parents	88	21.6
Grand parents	256	62.7
Others	26	2.4
<b>Educational level</b>		
None	9	2.2
Primary	355	87.0
Secondary	44	10.8
<b>Denomination</b>		
Catholic	94	23.0
Protestants (SDA, UCZ, Jehovah's Witness, etc.)	166	40.7
Pentecostal	148	36.3

**Table 1:** Demographic attributes of the sampling distribution (n=408)

Table 1 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.

#### Proportion of utilisation of Family Planning Services

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

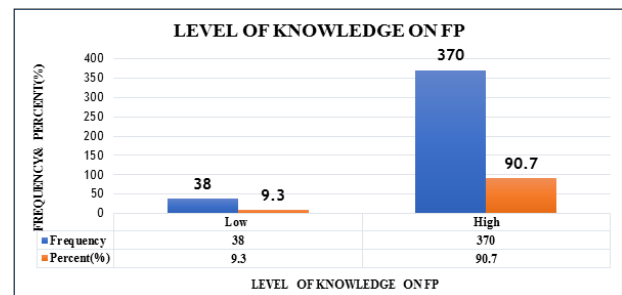
**Table 2:** Proportion of Utilisation of FPS by female adolescents (n=408)

Table 2 shows that majority 271(66%) of the female adolescents were not utilising FPS, while 137(34%) were utilising. Out of 137 study respondents who were utilising FP, majority 69(16.9%) indicated that they used condoms as a FP method, while 19(4.7%) used injectable contraceptives.

#### Knowledge level on Family Planning

Level of Knowledge on FP among female adolescents

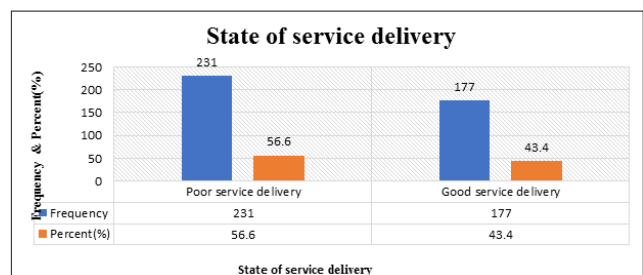
#### State of service Delivery



**Figure 1:** Level of knowledge on FP among female adolescents (n=408)

Figure 1 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.

#### State of service Delivery



**Figure 2:** State of Service Delivery (n=408)

Figure 2 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.

### Factors associated with proportion of Utilisation of FP services among Female Adolescents

#### Statistical testing for association between proportion of Utilisation of FPS among female adolescents and Demographic factors

Variables	Utilisation of Family Planning services		Statistic test	P-value
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)	$\chi^2(2)=13.530$	.001
Primary	131(95.6)	224(82.7)		
Secondary	5(3.6)	39(14.4)		
Denomination				
Catholic	31(22.6)	63(23.2)	$\chi^2(2) = 4.701$	0.95
Protestants	47(34.3)	119(43.9)		
Pentecostal	59(43.1)	89(32.8)		

**Table 3:** Chi-square results: Association between proportion of Utilisation of FPS and Demographic factors

In Table 3 it is shown that out of 137 study respondents utilizing FPS, 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 utilization of FPS and Age range Fisher's exact [ $p < 0.05$ ]. Out of 137 study respondents utilizing FPS, the majority 131(95.6%) had attained primary school educational level, and this was statistically significant with proportion of utilization of FPS [ $\chi^2(2) = 13.530$ ;  $p < 0.001$ ].

### Discussion

Utilization of FPS by female adolescents of Kawama East compound in Mufulira District, Zambia was investigated in this study. The current study revealed that there was low utilization of FPS among female adolescents at 34%.

The findings in (Table 1) showed that majority 89.7% of the study respondents were between 17 and 19 years' old which showed a statistically significant association between proportion of utilization of FPS and Age Range Fisher's exact [ $p < 0.05$ ]. This was in agreement with the results of the study on utilization of FPS among adolescents conducted in North and South Kivu, Democratic Republic of Congo (Casey et al., 2020) in which majority of the respondents were in the higher age between 15 - 19. 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 87% of the study

respondents had attained primary school education, (Table 1) and this was statistically significant with proportion of utilization of FPS [ $p < 0.001$ ]. 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 [UN], 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). The high percentage could also 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 revealed that there was a strong association between the use of FPS and education level (Hossain et al., 2014). Similarly, another study conducted in Senegal found that demand for FP was lowest among adolescents with no education (Sunnu et al., 2016; 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 in the Mbouda Health District, Cameroon revealed that there was no relationship between utilisation of FPS and education level of adolescents with [ $p$  value  $> 0.05$ ] (Nansseu et al., 2015).

Concerning the denomination of respondents, many 40.7% were of Protestant denomination (Table 1), which was also statistically significant with [ $p$ -value = 0.007]. The large number of Protestants could be attributed to the fact that Protestants include many churches such as Methodists, the nation's second-largest Protestant denomination who preach that every couple has the right and the duty prayerfully as well as the responsibility to control conception according to their circumstances while the small number of Catholics consists of one type of congregants who oppose all forms of contraception short of abstinence (Stacey, 2018). On the contrary and. A similar study conducted in Mwanza city, Tanzania revealed that the majority of the adolescent respondents were the Protestant where churches allow contraception and may even promote family planning as an important moral good while the minority were Catholic who 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).

In respect with utilization of FPS by female adolescents (Table 2) revealed that the majority of the study respondents (66%) were not utilizing FPS, while the minority (34%) were utilizing. This indicated a low utilization of FPS and the 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

utilize the service while Catholics and Protestants were more likely to utilize the service. Those with low state of service delivery and beliefs were also more likely to utilize the service. These were all statistically significant with utilization of the service. The low utilization 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 also revealed that FP is not biblical and it causes sterility (Mukanu, 2017). According to the qualitative study conducted in Kabwe, it was revealed that some religions believe that the use of contraception is synonymous to committing abortion, which is considered sinful (Silumbwe et al., 2018). 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 (Mukanu, 2017).

In another study conducted in Talensi District whose study respondents were married and unmarried adolescents, it was revealed that the factors that although majority of the respondents were generally aware of FPS in the district, usage of the service was low. These findings are consistent with the results of the study conducted in Talensi District whose study respondents were married and unmarried adolescents. In this study, factors that influenced the utilization of FPS among adolescents 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 (Apanga & Adam, 2015). Major reasons cited for not using the service included partners opposition against the practice (Apanga & 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 utilizing the FPS (Woog et al., 2015).

Regarding the knowledge of respondents on utilization of FPS (Figure 1), the present study revealed no statistical significant association between knowledge level on FP and utilization of FPS with a p-value=0.655, despite the majority 90.7% having a high level of knowledge on FP. Regression analysis results further revealed that, the study respondents who had low level of knowledge on FP were less likely to utilize FPS 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 utilize FP as being promiscuous. A similar study conducted in the Cook Islands revealed low knowledge among adolescents

who experienced unplanned birth. Due to non sensitization messages on FP, they were not using a contraceptive method when they became pregnant, believing they would not become pregnant (Mann et al., 2018).

With regard to utilization of FPS among female adolescents and state of service delivery, the study results revealed that the majority 56.6% of those that had used the service indicated that the state of service delivery was good while the minority 43.4% (Figure 2) indicated that it was poor. This was statistically significant with utilization of FPS, with [p<0.05]. Further results revealed that, the respondents who indicated poor service delivery were more likely to utilize FPS compared to those who did not indicate poor service delivery. This was statistically significant with a [p-value of <.010]. The high likelihood of utilization 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 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 (Kiggudu et al., 2018). In consonance, a study conducted in Talensi District, Ghana revealed that high awareness of FPS by Community-based Health Planning and Services (CHPS), made FPS more accessible to the rural communities (Apanga & Adam, 2015). On the contrary a study conducted in Kabwe District, Central Province of Zambia, revealed that female adolescents from rural areas recounted that walking long distances to healthcare facilities in order to access FPS hindered utilization (Mukanu, 2017).

Furthermore, the current study revealed that the majority 67.2% of respondents utilizing FPS indicated that there are no beliefs that prevent adolescents from utilizing FPS while the minority 32.8% said there were beliefs. The results in this study showed that there was a statistically significant association between existence of beliefs and utilization of FPS among adolescents with a p-value of <0.010. This could be attributed to high knowledge among respondents, good attitudes of Health Care Providers (HCP) who provide education on misconceptions. Similarly, 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 utilization of FPS by adolescents (Fortier, 2013).

The findings of this study also revealed that the majority 68.9% respondents utilizing FPS indicated that HCP had positive attitude when being attended to, while the minority 31.1% indicated that HCP had negative attitude, showing that there was a statistically significant association between attitude of staff and utilization of FP with p<0.05. Furthermore, regression analysis results revealed that respondents, who indicated that staff had positive attitudes, were less likely to utilize FPS.

This was statistically insignificant with the p-value of 0.771. Low utilization by study respondents who indicated that staff had positive attitudes could be attributed to the cultural and religious values which bring about fear to be associated with promiscuity and committing sin among unmarried adolescents. In a similar study conducted in Mahalapye, Botswana, it was revealed that there was positive attitude among HCP as they were comfortable to prescribe contraceptives to adolescents (St Tshitenge et al., 2018). On the contrary, the results of the study conducted in Ibadan, Nigeria revealed that HCP had negative attitudes towards provision of contraceptives to unmarried adolescents (Ahanonu, 2014).

## Conclusion

The outcomes of this study have shed light on the utilization of FPS by female adolescents of Kawama East compound of Mufulira district. The study revealed that there is low utilization of FPS. Factors contributing to low levels of utilization included educational background, state of service delivery, religious denomination and cultural beliefs. The findings will raise awareness and influence use of the services. Therefore, The Government of the Republic of Zambia through the Ministry of Health (MoH) should consider addressing challenges that deter utilization 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 at local schools in order to increase utilization of the service by adolescents.

## Limitations

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 closed ended questions. The respondents were asked to recall some information retrospectively; this might yield some recall bias.

## Acknowledgement

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## Conflict of Interest

The authors declare no conflict of interest in this study.

## Authors Contribution

This work was carried out in collaboration among all authors. Author MMM designed the study and wrote the protocol. Author KNI wrote the first draft of the manuscript. Author BY managed the analysis of the data and the literature searches. All authors read and approved the final manuscript.

## References

1. World Health Organisation. (2016). Family planning/Contraception. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/family-planning-contraception>
2. World Health Organisation. (2014). Health for the world's adolescents: a second chance in the second decade: summary, Geneva. Retrieved from <https://apps.who.int/iris/handle/10665/112750>
3. World Health Organisation. (2021). Adolescent Health. Retrieved from <https://www.who.int/southeastasia/health-topics/adolescent-health>
4. Marshall, N. J. (2012). Economics. Empowering girls to prevent early pregnancy. Retrieved from <https://www.semanticscholar.org/paper/Charting-the-future%3A-Empowering-girls-to-prevent-Presler-Marshall-Jones>.
5. UNFPA. (2016). universal access to reproductive health progress and challenges. WHO, Geneva. Retrieved from <https://www.unfpa.org/publications/universal-access-reproductive-health-progress-and-challenges>
6. World Health Organisation. (2018). Family Planning/Contraception. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/family-planning-contraception>. Accessed on 30/12/18.
7. Darroch, J. E., Woog, V., Bankole, A., & Ashford, L. S. (2016). Adding It Up: Costs and Benefits of Meeting the Contraceptive Needs of Adolescents. Retrieved from <https://www.guttmacher.org/report/adding-it-meeting-contraceptive-needs-of-adolescents>
8. Hounton, S., Barros, A. J., Amouzou, A., Shiferaw, S., Maïga, A., Akinyemi, A., Friedman, H., & Koroma, D. (2015). Patterns and trends of contraceptive use among sexually active adolescents in Burkina Faso, Ethiopia, and Nigeria: Evidence from cross-sectional studies. *Glob Health Action*, 8(1), 29737. DOI: 10.3402/gha.v8.29737
9. Ngome, E., & Odimegwu, C. (2014). The social context of adolescent women's use of modern contraceptives in Zimbabwe: a multilevel analysis. *Reprod Health*, 11(1), 64. DOI:10.1186/1742-4755-11-64
10. Nyarko, S. H. (2015). Prevalence and correlates of contraceptive use among female adolescents in Ghana. *BMC Women's Health*, 15(1), 60. Retrieved from <https://bmcmwomenshealth.biomedcentral.com/counter/pdf/10.1186/s12905-015-0221-2.pdf>
11. Chola, M., Hlongwana, K. & Ginindza, T. G. (2020). Patterns, trends, and factors associated with contraceptive use among adolescent girls in Zambia (1996 to 2014): a multilevel analysis. *BMC Women's Health*, 20, 185. Retrieved from <https://bmcmwomenshealth.biomedcentral.com/articles/10.1186/s12905-020-01050-1>.
12. Arthur, M. C., & Champiti, M. (2016). Sexual behaviour and contraceptive knowledge and use among female adolescents in Senior High School in Manhyia submetro, Kumasi. Retrieved from <https://ir.knust.edu.gh/items/ca480262-4111-41d5-b6e8-38d74bfe3f21>
13. Rutstein, S., & Winter, R. (2015). Contraception needed to avoid high-fertility-risk births, and maternal and child deaths that would be averted. DHS analytical studies. No. 50. Rockville, Maryland, USA: ICF International. Retrieved from <https://bmcmwomenshealth.biomedcentral.com/counter/pdf/10.1186/s12905-015-0221-2.pdf>



- com/articles/10.1186/s12905-020-01050-1.
14. Schlachter, B., & Boven, T. V. (2018). Family Planning 2020, Madagascar Enacts Historic Family Planning Law. Retrieved from [https://medium.com/@FP2020Global\\_20685/madagascar-enacts-historic-family-planning-law-8ac7ab62e0ad](https://medium.com/@FP2020Global_20685/madagascar-enacts-historic-family-planning-law-8ac7ab62e0ad).
  15. Gudeman, R., & Madge, S. (2011). The Federal Title X Family Planning Program: Privacy and Access Rules for Adolescents. Retrieved from <https://youthlaw.org/publication/the-federal-title-x-family-planning-program-privacy-and-access-rules-for-adolescents1/>
  16. Guttmacher Institute. (2017). Adding It Up: Factsheet on investing in contraception and maternal and newborn health, Retrieved from <https://www.guttmacher.org/factsheet/adding-it-up-contraception-mnh-2017>.
  17. World Health Organisation. (2018). Adolescent Pregnancy. Retrieved from <https://www.who.int/news-room/factsheets/detail/adolescent-pregnancy>.
  18. Chandra-Mouli, V., McCarragher, D., R., Phillips, S., J., Williamson, N., E., & Hainsworth, G. (2014). Contraception for adolescents in low- and middle-income countries: needs, barriers, and access. *Reproductive Health, Department of Reproductive Health and Research, World Health Organization, Avenue Appia 20, 1211 Geneva 27, Switzerland. Reprod Health, 11(1)*, DOI: 10.1186/1742-4755-11-1
  19. Mushabati, N. (2012). Utilization of family planning services in Zambia and Norway. Retrieved from <https://hvloopen.brage.unit.no/hvloopen-xmlui/bitstream/handle/11250/150374/Utilization%20of%20family%20planning%20in%20Zambia%20and%20Norway.pdf?sequence=1>
  20. Silumbwe, A., Nkole, T., Munakampe, M. N., Milford, C., Cordero, J. P., Kriel, J., M. Z., Steyn, P. S. & Zulu, J. M., (2018). Community and health systems barriers and enablers to family planning and contraceptive services provision and use in Kabwe District, Zambia. *BMC Health Serv Res, 18(1)*, DOI: 10.1186/s12913-018-3136-4
  21. Mukanu, M. (2017). Religious Leaders and Family Planning: A Match Made in Heaven? Retrieved from <https://medium.com/amplify/religious-leaders-and-family-planning-a-match-made-in-heaven-de47ba7ba14f>
  22. Casey, S. E., Gallagher, M. C., Kakesa, J., Kalyanpur, A., Muselemu, L. B., Rafanoharana, R. V., & Spilotros, N. (2020). Contraceptive use among adolescent and young women in North and South Kivu, Democratic Republic of the Congo: A cross-sectional population-based survey. *PLoS Med, 17(3)*, e1003086. DOI: 10.1371/journal.pmed.1003086
  23. United Nations. (2015). Sustainable Development Goals. Retrieved from <https://social.desa.un.org/issues/disability/sustainable-development-goals-sdgs-and-disability>
  24. Ngozi, A. O., Efiog, S. S., Nwagu, E. N., Obioma, P. N., & Chiemezie, A. (2018). Sexual and reproductive health services (SRHS) for adolescents in Enugu state, Nigeria: a mixed methods approach. *BMC Health Serv Res, 18(1)*, 92. DOI: 10.1186/s12913-017-2779-x
  25. Hossain, M., Ahmed, S., & Rogers, L. (2014). Does a wife's education influence spousal agreement on approval of family planning? Random-effects modeling using data from two West African Countries. *J Health Care Poor Underserved, 25(2)*, 562–576, DOI: 10.1353/hpu.2014.0098
  26. Sunnu, E., Adatar, P., Opere, F. Y., Kuug, A. & Nyande, F. (2016). Factors Influencing the Utilisation of Family Planning contraceptives among Men and Women in the Ho Municipality of Ghana. *Int J Health Sci Res, 6(8)*, 204-213.
  27. Cavallaro, F., Benova, L., Macleod, D., Faye, A., & Lynch, C., A. (2017). Examining trends in family planning among harder-to-reach women in Senegal 1992–2014. *Sci Rep, 7*, 41006. DOI: 10.1038/srep41006
  28. Nansseu, J. R., Nchinda, E. C., Katte, C. J., Nchagnouot, F. M., & Nguetsa, G. D. (2015). Assessing the knowledge, attitude and practice of family planning among women living in Mbouda health district, Cameroon. *Reproductive health, 12*, 92. Retrieved from <https://reproductive-health-journal.biomedcentral.com/articles/10.1186/s12978-015-0085-9>.
  29. Stacey, D. (2018). What Do Religions Say About Birth Control and Family Planning? Dotdash publishing family. Retrieved from <https://www.verywellhealth.com/what-are-religious-views-on-birth-control-906618>
  30. Sundararajan, R., Yoder, R. M., Kihunrwa, A., Aristide, C., Kalluvya, S. E., Downs, D. J., Mwakisole, A. H. & Downs, J. A. (2019). How gender and religion impact uptake of family planning: results from a qualitative study in Northwestern Tanzania. *BMC Womens Health, 19(1)*, 99. Retrieved from DOI: 10.1186/s12905-019-0802-6
  31. Apanga, P. A., & Adam, M. A. (2015). Factors influencing the uptake of family planning services in the Talensi District, Ghana, *The Pan African Medical Journal, 20*, 10. DOI: 10.11604/pamj.2015.20.10.5301
  32. Woog, V., Susheela, S., Alyssa, B., & Jesse, P. (2015). Adolescent Women's Need for and Use of Sexual and Reproductive Health Services in Developing Countries, New York: Guttmacher Institute, 2015. Retrieved from <https://www.guttmacher.org/report/adolescent-womens-need-and-use-sexual-and-reproductive-health-services-developing-countries>
  33. Mann, E. S., Larkan, F., & White, A., L. (2018). Sexual and reproductive healthcare: official journal of the Swedish Association of Midwives. Retrieved from [https://www.researchgate.net/publication/323756464\\_Contraceptive\\_knowledge\\_attitudes\\_and\\_use\\_among\\_adolescent\\_mothers\\_in\\_the\\_Cook\\_Islands](https://www.researchgate.net/publication/323756464_Contraceptive_knowledge_attitudes_and_use_among_adolescent_mothers_in_the_Cook_Islands). Accessed on 29/05/2020.
  34. Kiggudu, G., K., Nyashanu, M., & Eskenyong, S., (2018): An exploration of the factors affecting the utilisation of family planning services among youth (18-24 years) at community level in rural Budaka district, Uganda. *Int J Sex Reprod Health Care, 3(1)*, 005-011. <https://doi.org/10.17352/ijshrhc.000009>
  35. Apanga, P. A., & Adam, M. A. (2015). Factors influencing the uptake of family planning services in the Talensi District, Ghana, *The Pan African Medical Journal, 20*, 10. DOI: 10.11604/pamj.2015.20.10.5301
  36. Fortier, L. (2013). Cultural Barriers to Family Planning.



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Retrieved from <https://www.girlsglobe.org/2013/11/14/cultural-barriers-to-family-planning/>

37. St Tshitenge, K. N., Setlhare, V., & Ogundipe, R. (2018). Knowledge, attitudes and practice of healthcare providers regarding contraceptive use in adolescence in Mahalapye, Botswana. *South African Family Practice*, 60(6), 181-186. <https://doi.org/10.1080/20786190.2018.1501239>
38. Ahanonu, E. L. (2014). Attitudes of Healthcare Providers towards Providing Contraceptives for Unmarried Adolescents in Ibadan, Nigeria, *Journal of Family and Reproductive Health*. 8(1), 33–40. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/24971131/>.

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