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**LEVEL OF KNOWLEDGE AMONG ADOLESCENT GIRLS ON
MODERN CONTRACEPTION AT TSANGANO TURNOFF
COMMUNITY, NTCHEU DISTRICT, MALAWI**

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LEVEL OF KNOWLEDGE AMONG ADOLESCENT GIRLS ON MODERN CONTRACEPTION AT TSANGANO TURNOFF COMMUNITY, NTCHEU DISTRICT, MALAWI

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Abstract

Purpose: The purpose of this study was to establish level of knowledge among adolescent girls on modern contraception at Tsangano Turnoff community, Ntcheu District, Malawi

Methods: The study used a cross sectional study employing both simple random sampling technique for quantitative data and purposive random sampling technique for qualitative. The research instruments were self-administered questionnaires and Focused Group Discussions (FGD). Quantitative data was analyzed using Statistical Package for Social Sciences version 22.0. Analysis proceeded in two steps. First, univariate descriptive statistics were used to describe sample characteristics and estimate contraceptive prevalence among the adolescents. Contingency table methods were used to test associations between independent (categorical) variable and utilization of contraception and the qualitative data from the FGDs was transcribed and analyzed by thematic content analysis techniques.

Results: This study found that a lot of adolescent girls had general knowledge regarding modern contraception as majority reported to have knowledge about modern contraception (73.9%). This study has shown that utilization increases with the increase in the level of knowledge as it has shown that out of the all the 54 respondents who reported to be utilizing modern contraception all of them had moderate to high knowledge regarding contraception. The results shows that utilization is highly significant statistically to knowledge as those respondents who had adequate knowledge they are four times more likely to utilize modern contraception than those who has little or no knowledge.

Unique Contribution to Theory, Practice and Policy: The study recommended that Knowledge on modern contraception is very important in the utilization of the contraceptive hence since education is one way of empowering the girl child to be a reliable citizen in future therefore the high existing knowledge reported in this study should be encouraged and be related to utilization of modern contraception and other sexual and reproductive health services.

Key Words: *Knowledge, Adolescent Girls , Modern Contraception*

1.0 INTRODUCTION

Globally has limited evidence on the utilization of modern contraception based on the available data. This has a negative repercussion as having little knowledge on the availability of the commodity decreases its utilization (Palemo, *et al*, 2014). In the United States of America, a technical report on adolescent contraception reported that utilization of contraception for adolescent girls aged 15-19 is good especially the condoms which is at 96 percent, withdrawal at 57 percent combined oral contraception (COCs) at 57 percent and emergency contraception utilization is only at 13.7 percent (Ott *et al*, 2014). Much as the utilization of the modern contraception seems good, the study looked at all adolescents (both boys and girls) and also it left out a specific group of girls, those below 15 as majority may be sexually active as well such that they may also need the contraception as the WHO indicated that some 2.5 million pregnancies of this group become pregnant yearly as well which is a substantial figure to be considered.

In a study done in Brazil in an attempt to answer a question if knowledge of contraception affect its use reported that there is no significance between the level knowledge and its utilization as 58 percent of the adolescent girls reported that they have ever used one of the modern contraception methods and this percentage is way too much higher than the previous studies. Even though utilization is good, most of the respondents clearly show that they have insufficient knowledge regarding the some of the contraceptive methods for example emergency contraception and its mechanism of action (Chofakian *et al*, 2016). However, the study has limitations as it focused mainly on emergency contraception such that there is need to conduct another study that will incorporate all the methods so that the adolescents have wider variety of choices not only one contraceptive method. In Nepal, in a study done on factors influencing contraceptives among adolescents reported that almost all the adolescents are aware of at least one contraceptive method. However, even though they know about the contraceptive method, there is low utilization citing the reasons that most of them have little knowledge on the efficacy, mode of operation and proper ways of how to use and when to use the contraceptive methods (Subedi, 2016).

The International Center for Research on Women reviewed several literatures done by several researches done from the year 2000 in the quest to find out about what is known about adolescents' demand for and access to Family Planning information and services and reported that utilization of Family planning is good to the adolescents who have sufficient knowledge and also those with positive attitude. However, the study involved all the adolescents (boys inclusive) as the study may not give the true reflection of contraceptive usage as boys are known to be very good partakers of sexual and reproductive services as compared to girls as such an independent study that will only focus on the unmarried adolescent girls must be done to find the factors that is leading to the heightening of unintended pregnancies (ICRW, 2014).

In a study done in Sao Paulo, Brazil on the impact of knowledge on Emergency Contraception among adolescents, it was discovered that 95 percent of the girl respondents has knowledge on Emergency Contraception and that 58 percent reported using it (Chofakian *et al*, 2016) and in relation to modern contraception, adolescent girls' dearth of knowledge about relevant sexual and reproductive health care services in Sub Saharan Africa indisputably hinders the utilization of modern contraception as evidence has shown that below 10 percent of the adolescent girls in

Senegal and Zambia are aware of the availability of some of the methods of contraception such as emergency contraception (Williams, 2011 as reported by Oyekunle & Lienaber, 2017). Hence the need is still there for the specific study to be done that will address the unmarried adolescent girls about their knowledge of contraception methods, where to get them and how to effectively use them so that unintended pregnancies can be prevented.

In a study done in Dare Salam, Tanzania on knowledge of the contraceptives among secondary school girls reported that the most adolescent know about contraceptives (75.2%) however the utilization is relatively low (12.4%). This signifies that knowledge about something does not positively correlate with the utilization as a result a study must be conducted that will investigate factors that influence utilization of contraception among unmarried adolescent girls so that they can be addressed thereby help in the reduction of adolescent pregnancies (Kagashe and Honest, 2013). In a related study among female undergraduate student in Dare salaam and Muhimbili Universities reported that almost all the respondents knew about modern contraceptives however, only 56% had ever used on of the contraceptive methods with condoms being utilized most (23%) followed by pills (16 %). The respondents reported that these are the only methods they know, hence there inadequate knowledge and this can also significantly affect the utilization (Somba *et al*, 2014).

In a study done in Kenya on the undergraduate Health Sciences students at the University of Nairobi, it was found that 72.1 percent of the respondents had knowledge on modern contraception. However only 23 percent reported using the method frequently coupled with incorrect use of the method (Gitonga, 2017). Another study done in South Africa on adolescent girls aged 12-14 none of the respondents did not have knowledge on some of the contraceptives especially the emergency contraception method despite over half reported to be sexually active event after asking them leading questions, this automatically shows that there is 0 percentage of utilization(Mda *et al*, 2013).

According to a survey done in Malawi, it reported that adolescent girls are rarely taught about contraception and other sexual and reproductive health services in schools hence they have little knowledge regarding prevention of unintended pregnancies (CEDAW, 2015). There are few studies done in Malawi regarding unmarried adolescent girl contraception utilization. According to a study in the Eastern region of Malawi in Mangochi District on Reaching Adolescents in rural areas reported that a number of factors contribute to underutilization of contraception by adolescents and one of them being lack of information regarding modern contraception (Gondwe, 2014). According to the responses it is very clear that there underutilization of modern contraception hence very difficult for them to prevent unintended pregnancy as such the need is still there to conduct a study that will specifically address the un married adolescent girls and factors that will help to identify the factors that can influence contraception utilization so that they can have sufficient knowledge about it that will enable them to utilize it and in the long run unintended pregnancies can be prevented.

1.2 Statement problem

The World Health Organization (WHO, 2017) conducted an analysis of the Demographic and Health Surveys (DHS) in the 60 countries which the United States Agency for International Development (USAID) assisted and reported that more than 22.5 million adolescent girls (15-19)

had already started bearing children. In addition, every year an estimated 21 million girls aged 15-19 years become pregnant in developing region (Darroch *et al*, 2016).

Approximately 16 million girls aged 15-19 years and 2.5 million girls under 16 years give birth each year globally and 95 percent of them occur in developing regions (UNFPA, 2015). Complications during pregnancy and childbirth are the leading cause of death for adolescent girls globally and every year some 3.9 million girls aged 15-19 undergo unsafe abortions. Besides, adolescent pregnancy have psychosocial consequences and these include dropping out of school which will eventually lead to poverty due lack of formal jobs (Vogel *et al*, 2015; Advocates for Youth, 2013).

Contraceptive use is the key to prevent unintended pregnancies as it can prevent up 90 percent of such pregnancies. However, there is significantly low usage of contraception especially in Africa most specially among sexually active as mostly global monitoring mostly center on married or in-union women leaving out this special group (sexually active adolescent girls) who face a lot of discrimination and inadequate information regarding how and where to access the service (Chandra-Mouli *et al*, 2014; Sidgh *et al*, 2014; UN, 2016).

Adolescent mothers (aged 10 -19 years) face high risk of eclampsia, endometritis and systemic infection than women aged 20-24 years and babies born to adolescent mothers face high risk of severe neonatal conditions than those born to women aged 20-24 years (Ganchimeg, *et al*, 2014). The global adolescent birth rate has declined from 65 births per 1000 women to 47 per 1000 women in 2015 (UN DESA, 2017). However, even though there is progress, the global projections indicate the number of adolescent pregnancies will increase globally by 2030 with the greatest proportional increases in West and Central Africa (where Malawi falls) and Eastern and Southern Africa (UNFPA, 2013).

According to the report produced by Every Woman Every Child (2015), it shows that there are three times more adolescent pregnancies in rural and indigenous population than urban population. Looking at the magnitude of the problem of teenage pregnancy, the World Health Organization (WHO) and the UNFPA, 2011 published guidelines on preventing early pregnancies and reducing poor reproductive outcomes, made recommendations for action that countries could take and one of the recommendations is to increase the use of contraception by adolescents at risk of unintended pregnancies. If this need is met, 2.1 million unplanned births, 3.2 million abortions and 5600 maternal death could be averted (UNFPA, 2011; WHO, 2017).

The Malawi Demographic Health Survey (MDHS, 2015/2016) has reported that as of 2016 the population of Malawi was 17 million and that adolescent fertility rate is one of the highest in the Sub Saharan Region with over 29 percent of adolescents falling pregnant every year. And in Ntcheu alone, 33 percent of the adolescent girls drop out of school due to pregnancy and that there is low contraception among unmarried adolescent girls as only 33 percent use modern contraception against 53 percent of the order women.

2.0 METHODOLOGY

The study area was Tsangano Turn Off community which is in Ntcheu District in the area of Traditional Authority Njolomole, Group Village Headmen Phuka and Kadzakalowa in Malawi and it comprise of seven villages namely; Chipula, Unyolo, Kalulu, Phuka, Galeta, Chingawa

and Kasamba Villages. All unmarried adolescent girls in the seven above mentioned villages around Tsangano Turnoff community in Ntcheu district, Malawi participated in the study. In those villages, the total population was about 10,074 and therefore, there were approximately 3,428 adolescents and dividing this number by half is giving a target of 1,721 adolescent girls. The study used a cross sectional study. Employing both simple random sampling technique for quantitative data and purposive random sampling technique for qualitative. The research instruments were self-administered questionnaires and Focused Group Discussions (FGD). Quantitative data was analyzed using Statistical Package for Social Sciences (IBM SPSS®) version 22.0. Analysis proceeded in two steps. First, univariate descriptive statistics were used to describe sample characteristics and estimate contraceptive prevalence among the adolescents. Contingency table methods were used to test associations between independent (categorical) variable and utilization of contraception and the qualitative data from the FGDs was transcribed and analyzed by thematic content analysis techniques.

3.0 RESULTS

3.1 Characteristics of the study participants

A total of 180 participants were randomly selected from the seven participating villages in the area of Tradition Authority Njolomole in Ntcheu district which was the study area of which 100 percent of questionnaire return rate was obtained. Pilot study to test the reliability of the research instruments was conducted at Bembeke Community in Dedza District as the location has similar characterizes to the research area.

3.1.1 Demographic Data of the Study Participants.

Most the study participants were between the ages of 15 and 19 years 127 (65%) and only 63 (35%) were between 10 and 14 years old. The study was dominated by primary school students 129 (72%) while secondary students were only 51 (28%). Majority of the respondents were living with parents 171 (95%) while only 9 (5%) were living with significant other. Majority of the study respondents were Christians 174(97%) and only 6(3%) were Muslims (Table 1).

Table 1: Demographic Data

Attribute	Frequency (n=180)	Percentage (%)
Age category (Years)		
10-14	63	35
15-20	127	65
Education		
Primary	129	72
Secondary	51	28
Live with parents		
Yes	171	95
No	9	5
Religion		
Christian	174	97
Muslim	6	3

3.2 Knowledge on modern contraception among adolescent girls

When asked whether they had ever heard of modern contraceptives out of 180 respondents, 133 (74%) reported to have heard of contraception while 47 (26%) failed to say something on modern contraception. Out of those who reported to have knowledge on modern contraception 121 (90.8%) reported to only know that they protect one from getting pregnant and only 11 (7.2 %) reported that modern contraception protects a woman from getting pregnant and sexually transmitted diseases as well especially the condoms.

Table 2: Knowledge on Contraception among the respondents

Attribute	Frequency (n=180)	Percentage (%)
Ever heard of contraceptives		
Yes	133	74
The drug for preventing pregnancy	121	90.9
The drug that prevents a woman against pregnancy and sexually transmitted infections	12	9.1

3.2.1 Level of knowledge on modern contraception

On this section the researcher sought to know how well the participants knew about modern contraception. The level of knowledge was categorized into three, low, medium (average) and high and those participants the who mentioned more than 3 methods of contraception were regarded as having adequate knowledge, those who mentioned below 3 methods of contraception were regarded as having medium knowledge and those who mentioned only one method were regarded as having little knowledge. All the 54 respondents who utilized all of them are had knowledge on contraceptives. It has shown that those with knowledge those respondents with knowledge are 4 times more likely to use modern contraceptives than their counterparts without knowledge (OR= 4.121, 95% CI (1.533-11.08), P Value \leq 0.001. The results shows that the level of knowledge is highly significant both statistically and clinically with the utilization of modern contraception among adolescent girls (Table 3).

Table 3 Influence of level of knowledge on modern contraception among the respondents B

Variable	Utilization		OR	95% CONFIDENTIAL INTERVAL		X ²	P-value at 0.05
	Used	Never used		Lower	Upper		
Knowledge level							
Has knowledge	54(40.6%)	79(59.4%)	4.121	1.533	11.08	0.57	< 0.01
No knowledge	0 (0.0%)	126(70.0%)					

REF

3.2.2 Method of modern contraception used by the respondents

Figure 1 shows the method of contraceptives used by the respondents.

The question was a multiple response question and out of the methods used, condoms were the most commonly used method of contraception (58 %), pills were second with (18%), injections (8%), implants (6%), vasectomy and tubal ligation were both mentioned by 2% of the respondents.(Figure 1).

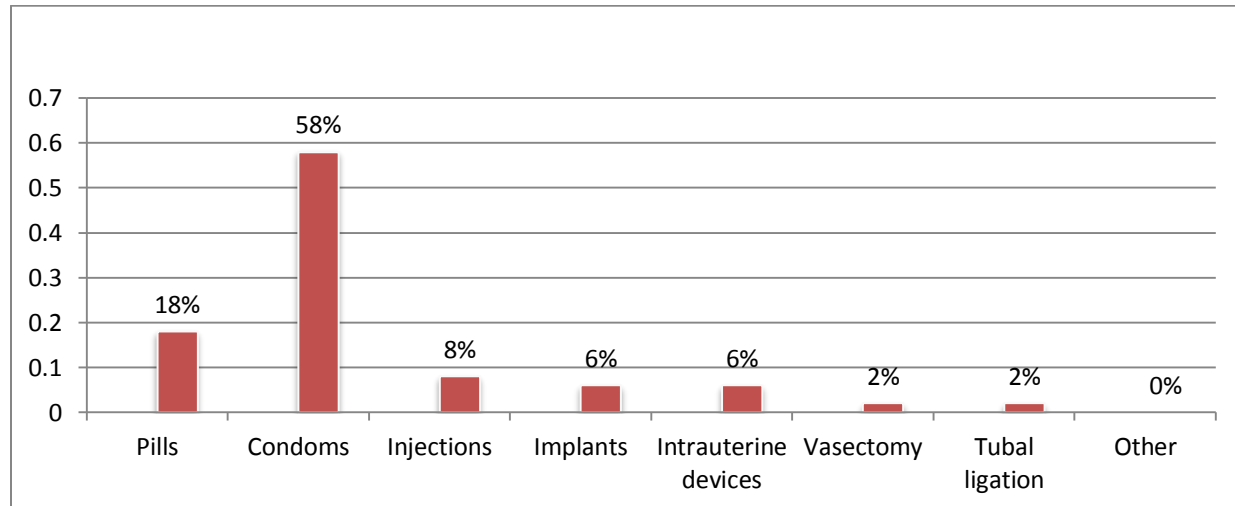


Figure 1: Types contraceptives used by the adolescents.

4.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

4.1 Summary

This study found that a lot of adolescent girls had general knowledge regarding modern contraception as majority reported to have knowledge about modern contraception (73.9%). This study has shown that utilization increases with the increase in the level of knowledge as it has shown that out of the all the 54 respondents who reported to be utilizing modern contraception all of them had moderate to high knowledge regarding contraception. The results shows that utilization is highly significant statistically to knowledge as those respondents who had adequate knowledge they are 4 times more likely to utilize modern contraception than those who has little or no knowledge.

This results are similar to the findings of the study by Murigi (2014) in Kenya which reported that having knowledge on modern contraceptives increases the use by threefold than those without knowledge (OR: 3.2, 95% CI 1.115-9.183, $p=0.025$). The study also agrees with the findings of the WHO which states that knowledge about modern contraception is an effective way of reducing teenage pregnancies as adolescents who have knowledge are able to utilize modern contraception (WHO, 2018). Njoroge reported that knowledge and awareness of modern contraception lead to its effective utilization. (Njoroge, 2016). Similar findings were reported in a study which was conducted in the Eastern part of Ethiopia which reported that out of the respondents who reported not to be using modern contraception, 23.7% reported that they lack knowledge on how to use the modern contraception (Ansha, Boshu, Jaleta, 2017). In Cameroon in 2018 Essiben reported that utilization of modern contraception is highly significant with knowledge as those respondents (adolescent girls) who were never consulted about family

planning services could not utilize the service (OR 2.32 CI 1.29-4.16, P=0.140) (Essiben, 2018). Glinski *et al*, on the other agree that lack of awareness, lack of understanding of family planning methods that includes side effects adversely affects adolescents in utilizing modern contraception as Knowledge of reproductive health services and where to where to access the services has been found to be a critical factor in met need for family planning – many adolescents don't know where they can find products and youth-friendly services (Glinski *et al*, 2014). This study agrees with Glinski *et al* findings which further reported that although studies show that most adolescents have heard of contraception and some types of methods, a far smaller proportion is able to demonstrate detailed knowledge about reproductive health, pregnancy prevention, and how to use certain methods as a result of this lack of this detailed knowledge on modern contraception there is still low utilization (Glinski *et al*, 2014). Skrzeczkowska *et al* found 85% of adolescents to have interest in the use of contraceptives and did not know where to get the methods and use indicating adolescents' contraceptives unmet needs are still global public and reproductive health challenges to adolescents' contraceptives knowledge and utilization (Skrzeczkowska *et al*, 2015).

However, Tchokassa in Osun Nigeria found that the enhancing factors to utilization of modern contraception are proper sex education (78.8%), Outreach services (71.5%) and Proper orientation (69.5%) and that there is no statistical difference in the knowledge and utilization of modern contraception ($F=2.394$; $p>0.05$) (Tchokassa, 2018).

4.2 Conclusion

The level of knowledge of modern contraception among adolescent girls is important as far as utilization is concerned. This study discovered that those respondents who were sexually active and had moderate to high levels of knowledge were using modern contraception as compared to their counterparts who had little or no knowledge. The null hypothesis that there is no relationship between knowledge of modern contraception and utilization is therefore rejected.

4.3 Recommendations

Knowledge on modern contraception is very important in the utilization of the contraceptive hence since education is one way of empowering the girl child to be a reliable citizen in future therefore the high existing knowledge reported in this study should be encouraged and be related to utilization of modern contraception and other sexual and reproductive health services.

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