

## ETHNOBOTANY OF CONTRACEPTIVES AMONG THE ADOLESCENTS OF OMUDIOGA IN EMOHUA LOCAL GOVERNMENT AREA

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### *Abstract*

*This study assesses the ethnobotany of contraceptives among the adolescents of Omudioga in Emohua Local Government Area. An exploratory research design was adopted and the respondents were selected among people of ages 9-20 years using purposive non-probability sampling method. The study randomly selected 187 (98 males and 89 females) respondents as the sample size. A questionnaire titled; Questionnaire on Ethnobotany of Contraceptives (QEC) was specifically designed as the instrument for the study. A reliability coefficient of 0.89 was obtained using Cronbach's Alpha method. Frequencies and percentages were employed in data analysis to answer research questions. The findings of this study revealed a remarkably high level of contraceptives awareness, though only 5.3% of respondents identified herbal contraceptives. There was a low level of herbal contraceptive awareness as well as level of actual herbal contraceptives knowledge was low at 6.6%. The study also revealed that 10.7% of the teenagers had sex more than once in a week, while 20.3% had sex several times in a month. 8.0% of the teenagers had sex at least once in every month. Findings also indicated egalitarian decision making (35.8%) on the issue of herbal contraceptives use. Based on the findings, this study recommends among others that due to the low level of herbal contraceptive knowledge accurate and detailed information should be passed to teenagers with the aim of creating more positive attitude towards herbal contraceptives.*

*Keywords: Ethnobotany, Contraceptives, Adolescents, Herbal, Umudioga, Birth Control.*

### **Introduction**

One of the characteristics of living organisms is reproduction, which brings about new individuals and cause increase in the number of such organism that has undergone reproduction. While there is increase in population (number of organisms) the resources available to these organisms keep depleting. It became necessary, especially for the human population to control the rate of reproduction, which led to development of types of contraceptives. Birth control, alias contraceptive, is a regimen of one or more actions, devices or medications followed in order to deliberately prevent or reduce the likelihood of pregnancy or childbirth (Medicine Net, 2013). The medicines and other devices that are used to prevent or reduce the likelihood of pregnancy are referred to as contraceptives (Fookes, 2018). Birth control has been used since ancient times, but effective and safe methods of birth control only

became available in the 20<sup>th</sup> century (Ojule & Abam, 2017). Planning, making available, and using birth control is called family planning (WHO, 2016).

Some cultures limit or discourage access to birth control because they consider it to be morally, religiously, or politically undesirable (Hanson & Burke, 2010 cited in Ojule & Abam, 2017). The term birth control is a bit of a misnomer since abortion is not regularly considered under the term. Birth control methods may work in a number of different ways as organized by (Trindade, et al., 2019). They include; preventing sperm from getting to the eggs - condoms, diaphragms, cervical caps, and contraceptive sponges. Other methods involve; keeping the ovaries from releasing eggs that could be fertilized - birth control pills, patches, shots, vaginal rings, and emergency contraceptive pills. Also, Intra-Uterine Contraceptive Devices (IUCDs) which are devices implanted into the uterus to prevent occurrence of fertilization. While other methods can be kept in place for several years, Sterilization is a permanent method of preventing someone from getting pregnant or from being able to get someone else pregnant (Njoku, 2023).

The choice of contraception should be based on several factors (Trindade, et al., 2019). These include your health, how often you have sexual activity, number of sexual partners you have, and whether you want to have children in the future. Your health care provider can help you select the best form of contraceptive for you. The most effective methods of contraception are sterilization by means of vasectomy in males and tubal ligation in females, intrauterine devices (IUDs), and implantable birth control. This is followed by a number of hormone-based methods including oral pills, patches, vaginal rings, and injections. Less effective methods include physical barriers such as condoms, diaphragms, and birth control sponges and fertility awareness methods (Fookes, 2018). The least effective methods are spermicides and withdrawal by the male before ejaculation (Fookes, 2018). Sterilization, while highly effective, is usually irreversible (Njoku, 2023). Safe sexual practices, such as with the use of male or female condoms, can also help prevent sexually transmitted infections. Other methods of birth control do not protect against sexually transmitted diseases. Emergency birth control can prevent pregnancy if taken within 72 to 120 hours (3 to 5 days) after unprotected sex, the effectiveness reduces after 72 hours (Strauss & Barbieri, 2019). Some argue not having sex is also a form of birth control, but abstinence-only sexuality education may increase teenage pregnancies if offered without contraception education, due to non-compliance (Duffy et al., 2018).

However, ethnobotany is the study of the inter-relationship between human and plants, historically and cross-culturally, particularly the role of plants in human culture and practices, how humans have used and modified plants, and how they represent them in their systems of knowledge according to (Wickens, 2013). However, current use of the term implies the study of indigenous or traditional knowledge of plants (Zahra & Mohammed, 2020). It involves the indigenous knowledge of plant classification, cultivation, and use as food, medicine and shelter. Although, most of the early ethno botanist studied plant used in cultures other than their own, the term ethno botany does not necessarily mean the study of how 'other' people use plants. It is also not restricted to the study of medicinal plants by indigenous cultures. The use of ethno botany in plant selection entails a careful recording of the relationship between indigenous communities and plants (Zahra & Mohammed, 2020). It is a very complex undertaking that often requires collaboration of experts drawn from various disciplines such as anthropology, botany, ecology, pharmacy, linguistics, medicine and ethnography. Generally, the term "ethno

botanical uses” describes the utilization of plants for purposes other than pharmaceutical (Tefera & Kim, 2019; Haroon & Abdabasi 2021). Ethnobotany has now emerged as a discipline by itself that studies all types of interrelations between people and plants. As Iwu (2013) noted that ethnobotany lacks a unifying theory but it does have a common discourse. The central theme is the recognition of the reciprocal and dynamic nature of the relationship between humans and plants. The importance of plants as a source of anti-fertility drugs has been emphasized by many researchers (Shaik, et al., 2017). In recent years, the use of ethnobotanical information in medicinal plant research has gained considerable attention in some segments of the scientific community, employing medicinal plants and their products to solve many health problems including regulation of fertility in many countries (Sathiyaraj et al., 2013; Ashidi et al., 2013). Drugs of plant origin are on the intense search as plants show promises as a source of newer alternatives with lesser side effects. Plants have served as a natural source of anti-fertility substances and women dwelling in rural areas have used plants before coitus for prevention of pregnancy (Patil & Patil, 2013).

Furthermore, the ethnobotany of contraceptives is referred to as the interrelation between human and the extent to which plants are used in preventing pregnancy without the use of medications or physical devices. These concepts are based on awareness and observations about a woman’s body and menstrual cycle (Adebisi & Alebiosu, 2014). It could be considered as natural contraceptives. Herbal contraceptives are those plants used for birth control or in the prevention of pregnancy and for premature expulsion of a fetus from the womb. Many plants have been reported to have sterilizing, contraceptive and abortifacient properties. Plants that have contraceptive and abortifacient properties may act through rapid expulsion of the fertilized ova from the fallopian tube, inhibition of implantation due to a disturbance in estrogen- progesterone balance, fetal abortion, perhaps due to lack of supply of nutrients to the uterus and the embryo, and also on the male side through affecting sperm count, motility and viability (Ciganda & Laborde, 2013). Antifertility agents obtained from indigenous medicinal plants would be of immense benefit especially to inhabitant of rural communities, since the cost of these drugs would be within their means (Adebisi & Alebiosu, 2014).

Moreover, major population of the country lives in rural areas and those people have approach to the traditional method of contraception. Traditional sterilization method based on herbal medicines is used to control population growth rate: including abortion at initial weeks, preventing conception of making the either member of the couple sterile. Several plant products inhibit male and female fertility and may be developed into contraceptives (Kaur et al., 2013). Even though, many indigenous plants have been shown to prevent the birth, only few plants have so far been investigated for antifertility activities (Patil & Patil, 2013). Various medicinal plants extracts have been tested for antifertility activity both in male and female. Several hormonal contraceptives have been developed and practiced till date but they did not meet the demand of developing countries as they are chemical based expensive, sophisticated and have some side effects, some herbal contraceptives have also been developed (Adebisi & Alebiosu, 2014). But due to the problems, people are now looking for the use of herbal medicines against various diseases and for controlling fertility (Patil & Patil, 2013). Nearly 80% of the world populations rely on traditional medicines for primary health care, so far it has lesser side effects and more effective than the chemical compound (Kaur et al., 2013). In

Nigeria, some women prefer this alternative means of birth control as it constitutes little or no side effects when compared to the synthetic contraceptives and other abortion pills (Sofowora, 2006 cited in Chiputa & Carlos, 2018).

However, the attitude youths have about contraceptives is an important determinant of the use and non-use of contraceptives. Positive attitudes are associated with greater use of contraceptive while negative attitudes are associated with lesser contraceptive use (Wu, 2013; Chiputa & Carlos (2018). Furthermore, the attitudes youths have towards contraception are shaped differently among males and females. Chiputa and Carlos (2018), suggested that an increase in contraceptive knowledge among boys helps them form positive attitudes towards contraceptives. Girls, on the other hand, form positive attitudes towards contraceptives by acquiring more knowledge on actual reproductive health and the ways in which their bodies function. Conversely, according to Adedini et al 2018, most ethnic groups in Nigeria loathe barrenness which is expressed by the honor given to women with many children, especially in rural communities, are regarded as the pride of womanhood, as well as economically beneficial for the family and community at large. People in such communities usually accord higher levels of respect for women having a large number of children, while women who have no children are sometimes treated with disdain and given the status of an 'incomplete woman' (Adedini et al., 2018).

In most rural settings, a vast number of children are given birth to in order to use the male children for farm labor. Unfortunately, these acts or any other acts of uncontrollable birth lead to overpopulation of a country (Garba et al. 2013). However, due to the attendant problems of overpopulation, Government of Nigeria has continually made frantic efforts to control birth through methods such as the use of oral contraceptive pills, intrauterine device, sterilization, safe periods, and injectable. In addition to the foregoing generally regarded as modern methods, public enlightenment campaign is also employed like "The Borgen Project". Natural methods are also available which are usually adopted by individuals in a society. They include the use of medicinal plants, prolonged breast feeding, ornaments, and spiritual invocations (Aninyei et al., 2008 cited in Alenoghena et al., 2019). However, the use of medicinal plants preponderates over other traditional means because plants are viewed as an integral part of the culture and are easier and safer to use (Alenoghena et al., 2019).

The aim of this study was to assess the ethnobotany of contraceptives among adolescents of Omudioga, Emohua Local Government Area. Specifically, the following objectives will be appraised, to; 1. determine the level of awareness and knowledge of herbal contraceptives among adolescents in Umudioga community, 2. assess the extent of sexual activities among the adolescents in Omudioga community, 3. identify the extent of herbal contraceptive use among adolescents in Omudioga community, 4. Determine gender influence adolescents' use of contraceptives in Omudioga community.

This study was organized around the following research questions: 1. What is the level of awareness and knowledge of herbal contraceptives among adolescents in Omudioga? 2. To what extent are adolescents in Omudioga community involved in sexual activities? 3. To what extent is herbal contraceptives used among adolescents of Omudioga community? 4. What is the influence of gender on adolescents' use of herbal contraceptives?

## Literature Review

### Awareness and Knowledge Level of Contraceptive Among Adolescents

Ofosu & Sam (2020), investigated the knowledge and awareness level of contraceptive usage among Adolescents in Mankranso of Ahafo-South District. The purpose of the study was to assess the level of knowledge, awareness and attitude towards the practice of contraception of the adolescents' in Mankranso, Ghana. The results of the study according to the investigators, revealed that most of the adolescents lack knowledge about modern contraceptives such as jadelle and implanon. Majority of the respondents (94%) indicated that they have never used any contraception before. The main contraceptive device observed to have been used by respondents was condom (10%). Most of them strongly agreed that the use of contraceptive by a girl before her first birth can lead to infertility and use of condom does not make sex enjoyable. Religious doctrine and stigmatization were strongly agreed with index of 85% and 84% respectively as challenges faced by adolescents in seeking contraceptive services. The study showed that the level of knowledge on contraceptives usage among the adolescents was low and the usage of modern contraceptives was not preferred based on the negative attitude they have about contraceptives.

Hernandez et al (2017), carried out a study on the awareness and perceptions of emergency contraceptive pills among women in Kinshasa, Democratic Republic of the Congo. The study was aimed at assessing the awareness of emergency contraception among women, and the method in family planning programming. Data from 15 focus group discussions conducted in 2016 among women aged 15-35 were used to examine awareness and perceptions of, and attitudes toward emergency contraceptives. Women reported employing a wide range of postictal contraceptive behaviours, albeit often using inappropriate products, and generally agreed that emergency contraceptive pills seemed to be a potentially effective solution to their family planning needs.

Rabiu and Rufai (2018), investigated the role of traditional contraceptive methods in family planning among women attending primary health care centers in Kano. Their socio-demographic characteristics, number of children, knowledge, and use of traditional contraceptives were recorded on a pretested questionnaire. The mean age  $\pm$  standard deviation (SD) was  $29.1 \pm 6.22$  years. The mean number of children ( $\pm$ SD) was  $3.9 \pm 2.27$ . A total number of 280 (70.0%) participants knew about TCMs, but only 147 (36.8%) used these methods and among those that used TCMs, herbal medicine was the most used method ( $n = 67, 45.6\%$ ). There was no statistically significant difference between the mean number of children of the respondents who used traditional contraceptives and those who did not ( $t = 0.382$ ,  $df = 398$ ,  $P = 0.703$ , 95% confidence interval-0.374-0.555). Educational status was significantly associated with the use of traditional contraceptives ( $\chi^2 = 8.327$ ,  $P = 0.005$ ). There was more knowledge of traditional than modern contraceptive methods. Herbal medicine was the most commonly used method. There was poor utilization of the modern contraceptive methods and fair utilization of the TCMs. The study showed no clear benefit of traditional contraceptive usage over its non-use in reducing family size. However, unintended pregnancy remains a major challenge to the reproductive health of women especially in the developing countries. It is a major reason for unsafe abortion, a major contributor to maternal mortality.

### Sexual Activity among Adolescents

Arruda et al (2020), investigated Sexual Practices during Adolescence, adopting a cross-sectional study of adolescents enrolled in state schools in the city of Ribeirao Preto, state of Sao Paulo, Brazil. The following objectives were considered; to determine the average age at the first sexual intercourse (sexarche), the average number of sexual partners, and the frequency of contraceptive and condom use. Data for the study were obtained using a semi-structured questionnaire. Forty-eight girls (36.01%) and 21 boys (30.43%) were in the first year of high school, 66.94% of adolescents reported sexual intercourse, and 56.25% used a condom during the first sexual intercourse. A total of 36.72% of students said they had safe sex most of the time, and 83.59% said that the first sexual intercourse happened because they had a crush on the other person.

Olawade, et al (2024), presented a narrative review of the realities of adolescent sexual behaviours in Nigeria and concluded that several factors, including sexual maturation, peer association, and environment play key roles in an adolescents' drive toward a first sexual experience. Many adolescents participate in risky sexual activities that may impact their health and well-being. These risky sexual behaviours, such as early sexual debut (sexarche), lack of or improper use of condoms, multiple sexual partners, put them at high risk of contracting sexually transmitted infections (STIs), as well as unintended adolescent pregnancy. These resulted from adolescents' curiosity, peer influence, pleasure and financial benefit, amongst others. The strategies given in this review have the potential to increase sexual awareness in adolescents, encourage contraceptive use and improve adolescent reproductive and sexual health in the country.

### Herbal Contraceptive Use

Traditional contraceptive methods (TCMs) have been used by our ancestors for a long time in child spacing before the advent of the modern contraceptive methods but even with the introduction of the modern methods some women prefer and are still using TCMs. Rabiou & Rufai (2018), investigated the Role of Traditional Contraceptive Methods in Family Planning among Women Attending Primary Health Care Centers in Kano. The aim of the study was to assess the utilization of traditional contraceptives in child spacing and its association with family size among women of child-bearing age attending primary healthcare centers in Kano. The result showed that the mean age  $\pm$  standard deviation (SD) was  $29.1 \pm 6.22$  years. The mean number of children ( $\pm$ SD) was  $3.9 \pm 2.27$ . A total number of 280 (70.0%) participants knew about TCMs, but only 147 (36.8%) used these methods and among those that used TCMs, herbal medicine was the most used method ( $n = 67$ , 45.6%). There was no statistically significant difference between the mean number of children of the respondents who used traditional contraceptives and those who did not ( $t = 0.382$ ,  $df = 398$ ,  $P = 0.703$ , 95% confidence interval: -0.374-0.555). Educational status was significantly associated with the use of traditional contraceptives ( $\chi^2 = 8.327$ ,  $P = 0.005$ ). There was more usage of traditional than modern contraceptives methods. Herbal medicine was the most commonly used method. There was poor utilization of the modern contraceptive methods and fair utilization of the TCMs.

Ahinkorah et al., (2020) investigated the female adolescents' reproductive health decision-making capacity and contraceptive use in sub-Saharan Africa: What does the future hold? The study sought to assess the association between female adolescents' reproductive

health decision making capacity and their contraceptive usage. The result showed that 68.66% of adolescents in SSA had the capacity to make reproductive health decisions. The overall prevalence of contraceptive use was 18.87%, ranging from 1.84% in Chad to 45.75% in Zimbabwe. Adolescents who had the capacity to take reproductive health decisions had higher odds of using contraceptives (AOR = 1.47; CI = 1.31-1.65,  $P < 0.001$ ). The use of general and modern contraceptives among adolescents in SSA remains low. Therefore, there is a need to strengthen existing efforts on contraceptives usage among adolescents in SSA.

Abubakar and Abubakar (2024) stated that Nigeria has the largest population in Africa, a high fertility rate, and unmet needs for family planning. Agreed, family planning is a key strategy for sustainable development and a good knowledge of factors that determine contraceptive uptake is imperative for policy formulation. In Abubakar and Abubakar (2024), a nationally representative secondary dataset of 41,821 women aged 15–49 years who participated in the 2018 Nigeria Demographic and Health Survey was analyzed. Multivariate logistic regression was used to examine the association between various factors and the current use of modern contraceptives. The respondents' average age was  $35.9 \pm 7.9$  years. Overall, contraceptive prevalence was 16.6% for traditional methods and 12.2% for modern methods.

Casey et al (2020), investigated the contraceptive use among adolescent and young women in North and South Kivu, Democratic Republic of the Congo: A cross-sectional population-based survey. In the study, they analyzed contraceptive use among sexually active young women aged 15-24 in the health zones served by the partner's programs. The partners conducted cross-sectional population-based surveys in programs areas of North and South Kivu using two-stage cluster sampling in six health zones in July-August 2016 and 2017. Twenty-five clusters were selected in each health zone, 22 households in each cluster, and one woman of reproductive age (15-49 years) was randomly selected in each household. Their manuscript presented results from a secondary data analysis for 1,022 women aged 15-24 who reported ever having sex: 326 adolescents (15-19 years) and 696 young women (20-24 years), 31.7% (95% confidence interval [CI] 29.5-34.1), of whom were displaced at least once in the previous five years. Contraceptive knowledge was high, with over 90% of both groups able to name at least one modern contraceptive method. Age of sexual debut, having some secondary education, being unmarried, and having begun childbearing were associated with modern contraceptive use.

### **Influence of Gender on Adolescent Attitude towards Contraceptive Use**

Nanda et al (2013), reported in their study conducted on the Influence of Gender Attitudes on Contraceptive use in Tanzania: New evidence using husbands' and wives' survey data. The paper explored the hypotheses that gender attitudes scales (which measure the degree of equity in gender attitudes) are associated with contraceptive use. The findings revealed that, on average, wives endorsed more inequitable gender attitudes compared with husbands on all gender attitudes scales. For wives, more equitable gender attitudes were positively associated with contraceptive use.

### **Methodology**

In conducting this study, an exploratory research design was adopted. Exploratory studies are usually conducted to gain more knowledge of a situation or phenomenon within a given population. This form of study is usually employed when there is a lack of information on

a particular issue among a given population. No previous study on ethno-botany of contraceptive practices among people of Omudioga, hence the selection of an exploratory research design for the study. The area of study which is Omudioga is one of the villages that make up Emohua clan in Emohua Local Government Area. Omudioga is bestowed with a wide range of natural vegetation with a great biodiversity. Omudioga has several links to towns and villages like Elele Town, Omoku, Omerelu, Egbeda, Ubimini, etc, inhabited by mostly its indigenous occupants. This study was be limited to adolescents (boys and girls of the age 9-20 years) of Omudioga, Emohua Local Government Area. The target population of this study consisted of 420 boys and girls of the age range 9-20 years from Omudioga, Emohua Local Government Area. Purposive non-probability sampling method was adopted for this study and a total of 187 boys and girls of the age range 9-20 years were appraised for the success of this study.

Data for this study was collected through the use of a structured survey questionnaire titled Questionnaire on Ethno-botany of Contraceptive (QEC) specifically designed for the study. The questionnaire contains two sections; the first section of the questionnaire sought to elicit socio-demographic information from respondents. The second section covered questions that gave answers to the research questions. Copies of questionnaire were administered with the help of two research assistants after the CDC Chairman has permitted, which enabled the researcher to approach teenagers around the study area. The questionnaires were delivered by hand to the respondents to complete and retrieved immediately. The researcher distributed questionnaires o teenagers selected at random according to the scope of the study. The researcher allowed respondents to complete questionnaires without pressuring them and to return them to the researcher immediately. The research instrument was validated by 3 experts in; Test and Measurement, Biology Education and Health and safety education, all of Ignatius Ajuru University of Education, Port Harcourt before its administration. Cronbach's Alpha was used to obtain a reliability coefficient of 0.89 from the pilot test. Data obtained from the survey were analysed using frequencies and percentages.

## Results

To ascertain the level of respondents' awareness of the existence of herbal contraceptive methods, respondents were asked to write down all the methods of contraceptives they knew of. They were given a list of contraceptive methods from which to select, to prevent skewing the results.

**Table 1: Adolescents' awareness level of herbal contraceptive (N=187)**

What contraceptive are you most aware of?	Frequency	Percent (%)
Condoms	54	29
Oral pills	35	18.7
Injection	33	17.6
Temperature reading	20	10.7
Implants	19	10.2
Withdrawal	10	5.3
Spermicides	6	3.2
Herbal contraceptive	10	5.3
<b>Total</b>	<b>187</b>	<b>100</b>



The resulting data, presented in table 1, indicates a high level of general awareness of the existence of contraceptive methods, with over 95% of respondents able to mention at least one method. Condoms (29%) and oral contraceptive pills (18.7%) were the methods indicated most often. 17.6% of respondents reported knowing of injectable contraceptives, while 10.7% and 10.2% knew of the temperature reading method and implants respectively. 5.3% of respondents also reported knowing of the withdrawal method of contraception. Interestingly, only 5.3% of respondents identified herbs. Awareness of spermicides as a contraceptive was low, at only 3.2% while 5.3% of respondent reported being aware of herbal contraceptives.

**Table 2: Respondents' sexual activeness with regards to gender**

Frequency of sexual intercourse in the past six months.	Gender		Total
	Male %	Female %	
Every day or most days	2.0	1.1	1.6
More than once a week	6.1	15.7	10.7
Approximately once a week	11.2	16.9	13.9
Several times a month	20.4	20.2	20.3
Approximately once a month	11.2	15.7	13.4
A few times	7.1	9.0	8.0
Once	10.2	5.6	8.0
Not sexually active in past 6 months	19.4	4.5	12.3
Never had sex	12.2	11.2	11.8
<b>Total % (n)</b>	<b>100.0 (98)</b>	<b>100.0 (89)</b>	<b>100.0 (187)</b>

At the time of this study, 60% of the respondents (112) reported having been sexually active within the past six months; of these, 10.7% reported having sex more than once in a week, while 20.3% reported having sex several times in a month in a month. 8.0% of respondents reported having sex at least once in every month. Slight gender differences were also observed with regards to being sexually active. About 70% of female respondents were sexually active, exceeding the 51% of male respondents who were sexually active.

**Table 3: Distribution of respondents by use of herbal contraceptives (N = 55)**

I make use of herbal contraceptives	Male	Female	Total (%)
Often	0	18 (32.7%)	32.7
Sometimes	0	11 (20.0%)	20.0
Never	23 (41.8%)	3 (5.5%)	47.3
<b>Total</b>	<b>23</b>	<b>32</b>	<b>100</b>

In this study, over half of those who reported using contraceptives were females at 55%. When asked to indicate specifically the method of contraception they are using, the results showed that teenagers (32.7%) often use herbal contraceptives and 20.0% sometimes use herbal contraceptives, also, 41.8% of the male never used herbal contraceptives as well as 5.5% of the female respondents never used herbal contraceptives. However, often use of herbal contraceptives was peculiar to female respondents as no male respondent reported using the herbal contraceptive often. Also, the herbal contraceptives sometimes used by the respondent was the commonly used herbal contraceptive among the female respondents.

**Table 4: Gender influence on the use of herbal contraceptives (N=187)**

Who decides on whether to use herbal contraceptive or not	Frequency	Percentage
Male partner	28	15
Female partner	48	25.7
Both partners	67	35.8
Not sure	44	23.5
<b>Total</b>	<b>187</b>	<b>100</b>

As presented in Table 4, there was a higher response that decisions around contraception among adolescents in relationships are egalitarian as a higher proportion of respondents (35.8%) indicated that they both decide on issues of contraceptive together. However, 15% of respondents reported that only the male partner takes such decisions and about 25.7% respondents revealed that the female partner is responsible for decisions as this. Whereas, 23.5% are not sure of who makes the decision.

### Summary of Findings

The findings obtained in this study are summarized as stated below according to the objectives of the study;

1. The level of awareness and knowledge of herbal contraceptives among adolescents in Umudioga community is very low.
2. Sexual activities among the adolescents in Omudioga community is well established as over 70% of them have had sex once within six months.
3. Findings show that 53% of adolescents in Omudioga community who are aware of herbal contraceptives use them.
4. Both male and female partners are involved in taking decisions concerning contraceptives use in Omudioga community.

### Discussion of Findings

From the results on table 1, 95% of respondents were aware of at least one method of contraceptives, which disagrees with Ofosu and Sam (2020) who found that 94% of respondents lack knowledge of modern contraceptives. This study indicated that only 5.3% of respondents are most aware of herbal contraceptives. This finding corroborates Rabiou and Rufai (2018) who investigated the role traditional contraceptives in family planning and found out that 36.8% of respondents use traditional family planning methods, mainly, herbal medicine.

The findings of this study revealed a relatively high prevalence rate of sexual activity among teenagers (77.9%). These findings corroborate other findings of Arruda et al (2020) who reported that 66.9% of adolescents are involved in sexual activities. Given the non-usage of contraceptives (unprotected sex) there could be increasing the tendency of contracting Sexually Transmitted Infections (STIs) as well as unwanted pregnancy and other risks associated with it.

The result as shown on table 3 indicated that 53% of the few adolescent that are aware of herbal contraceptive actually use them as birth control measures. This result agrees with Rabiou and Rufai who reported that herbal contraceptives were the most used means of family planning in Kano Nigeria. Results also show that male partners do not use herbal contraceptives but the females are more comfortable using herbal contraceptives.

Interestingly, the result revealed that male dominance does not influence contraceptive use among young people of Omudioga. Rather, the findings suggest more egalitarian practices among the teenagers, where both male and female partners in sexual relationships take decisions on contraceptive issues. This is in agreement with Nanda et al (2013) who reported equitable support from both male and female partners in a sexual relationship on use of contraceptives.

### Conclusion

This research attempted to explore ethno-botany of contraceptive among teenagers of Omudioga with reference to the contraceptive awareness and knowledge, extent of sexual activities, contraceptive use, as well as gender influence on herbal contraceptive use. Despite teenagers' high awareness of the existence of contraceptive methods and continuous engagement in sexual activity, the level of actual herbal contraceptive knowledge as well as the rate of herbal contraceptive use among teenagers was found to be low. A situation that will pose a lot of sexual health risks and adversely affect the society if measures are not taken to encourage the use of contraceptives, especially the herbal contraceptives.

### Recommendations

1. There should be conscious spread of information about contraceptives in Umudioga community and its environs, as this will improve their level of awareness.
2. Due to the high level of sexual activities among adolescents in Umudioga community, NGOs, community development committee (CDC) and Churches should carry out community wide campaign on sexual health, to remind them the consequences of their actions.
3. Since it is difficult to control their sexual activities, adolescent should be encouraged to use contraceptives, especially herbal contraceptives in order to control the consequences of unprotected sex.
4. The cooperation between male and female partners in sexual relationship should be strengthened with regular safe sex campaigns.

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