1 Original Research Article

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KNOWLEDGE OF CONTRACEPTIVE USE AMONG SECONDARY SCHOOL ADOLESCENTS IN UVWIE L.G.A OF DELTA STATE

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7 ABSTRACT

Promotion of family planning aims to help female adolescents and youths maintain a strategic 8 distance from undesirable pregnancy. It is imperative to the World Health Organization (WHO) 9 in dealing with the improvement in maternal health and is central to accomplishing the 10 sustainable development goal. This study was carried out to assess the knowledge of 11 contraception among adolescents in Uvwie L.G.A of Delta State, Nigeria. Three hundred 12 secondary school adolescents (12-18) were selected using the multi-stage sampling technique. A 13 semi-structured questionnaire was administered to 300 students and Chi-square was used to 14 determine the association between identified factors and contraceptive use in the study 15 population at a 95% confidence interval and p-value of 0.05 was considered statistically 16 17 significant. The study showed that more than 50% (208) of the research participants have an 18 existing knowledge of contraceptives, 133(63.9%) of them got the information from their friends/peers. One hundred and thirty six (45.33%) of the respondents were reported to be 19 sexually active. However most of them said contraceptives were used for preventing Pregnancy 20 and STI's. The study showed that their knowledge about contraception was relatively poor. 21 Teaching on Health care, Health Education and Reproductive health should be improved. 22

23 Key Words: Knowledge, Contraceptives and Adolescents.

24 **1.0 INTRODUCTION**

Contraception is a method adopted in the prevention of pregnancy, it is also known as birth 25 control or fertility control. Contraceptives are used to achieve pregnancy prevention and birth 26 27 control globally [1]. The use of contraceptives in developed countries, Europe and USA have contributed to a reduced maternal mortality and morbidity among women of reproductive age 28 [2]. However, contraceptive use among women in developing countries is contrastingly poor in 29 30 comparison to developed countries [3]. The relatively low use of contraceptives and contraception observed in middle and low income countries in Sub-Saharan Africa and Asia 31 have been shown to contribute to the high rates of maternal mortality and morbidity in these 32 regions [4]. It is estimated that approximately 16 million adolescents aged 15 to 19 become 33 pregnant each year, constituting 11% of all births worldwide [5]. Complications during 34 pregnancy and childbirth are consistently the second cause of death for girls aged 15 to 19 years 35 old [5]. Young girls who become pregnant are at high risk of abridged education [6], and thus 36 limited economic prospects [5, 7]. About 222 million women who want to avoid pregnancy in 37 developing countries are not using a modern birth control method [8]. Birth control use in 38

39 developing countries has decreased the number of deaths during or around the time of pregnancy by 40% and could prevent 70% if the full demand for birth control were met [9]. Available birth 40 data shows great differences in the rates and prevalence of pregnancy between regions and 41 42 countries [5]. The average rate of teenage births ranges from the highest in Sub-Saharan Africa (143 per 1000 adolescent females), followed by the Americas (68), the Middle East and North 43 Africa (56), and East and South Asia and the Pacific (56), to the lowest rates in Europe (25) [5]. 44 Babies of teen mothers are 50% more likely to be stillborn, die early, or develop acute and long-45 46 term health problems [5]. In developing countries, maternal mortality is high, with 440 deaths per 100,000 live births, with the figure reaching as high as 920 in sub-Saharan Africa [5]. This 47 48 study was carried out to investigate existing knowledge and perception of contraception among adolescents with respect to their sexual behavior, in order to evaluate their understanding of 49 sexuality, contraception and factors influencing the use of contraceptives in Uvwie L.G.A of 50 Delta State, Nigeria. 51

52 2.0 METHODOLOGY

53 2.1 Study Area

The study was conducted in public and private secondary schools located in Uvwie L.G.A of Delta state.

56 2.2 Study Population

The study population consisted of 3,750 male and female adolescents between 10-19 years in
secondary schools, located in Uvwie Local Government Area of Delta state.

59 2.3 Study Design

Descriptive cross-sectional study design was adopted for this study to assess the perception,knowledge and factors associated with the use of contraceptive among the adolescents.

62 2.4 Ethical Consideration

Ethical approval to conduct the study was obtained from the Ethics committee of the University of Port Harcourt. Signed informed consent forms were also obtained from prospective study participant before they were included in the study. All personal information collected during the study were kept confidential and findings of the study was strictly used for academic purposes only.

68 2.5 Sampling Method

A multi-stage sampling method was used to select a sample of (300) participants for the study.

70 2.6 Data Collection

Three hundred (300) questionnaires were administered to 300 respondents and all 300questionnaires were retrieved.

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74 2.7 Data Analysis

The data was collected, analyzed and presented in tables and figures, continuous variables are presented as mean and standard deviation, while discrete variables were presented with frequencies and percentages. The chi-square statistic was used to assess the relationship between perception, identified factors and contraceptive use. Data analysis was done with the SPSS v20 software package at a 95% confidence interval and a p-value less than 0.05 was considered statistically significant.

81 3.0 RESULTS

Table 1 contains the sociodemographic data of the respondents. There were 135 (45.0%) male respondents and 165 (55.0%) female respondents. The mean age of the respondents was 16.3 ± 1.4 years, of the 300 respondents, 85 (28.33%) were between 10 – 15 years old, 215 (71.67%) were between 16 – 19 years old. Three (1%) of the respondents were Muslims, while 297 (99.0%) were Christians.

	Frequency (n = 300)	Percent (%)
Age Group		
10-15	85	28.33
16 – 19	215	71.67
Mean Age (± SD)	16.3±1.4 years	
Gender		
Male	135	45.00
Female	165	55.00
Religion		
Christian	297	99.00
Muslim	3	1.00

87 Table 1: Sociodemographic Information of Respondents

88 Table 2: Source of information of contraceptives

89	Of the 208	respondents	who had	d knowledge	of	contraceptives,	133	(63.9%)	of t	hem	got
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Source of Information	Frequency	Percent (%)
Friends/Peers	133	63.9
Health facility	2	1.0
Television	23	11.1
Radio	2	1.0
Internet	11	5.3
Family member/ Partner	13	6.3
Poster/ Banner	5	2.4
School	19	9.1
Total	208	100

90 information of contraceptives from their friends/ peers, 23 (11.1%) got the information from

television, 2 (1.0%) learnt about it from the radio, 11 (5.3%) got the information through the internet, 19 (9.1%) of the respondents were taught about it at school while 2 (1.0%) got information of contraceptives at health facility.

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95 Table 3: Knowledge of Contraceptives by Gender

Knowledge Contraceptive u	of ise	Male	Female	Chi-Square (p-value)		
Yes		92 (68.15)	116 (70.30)	$r^2 = 0.16$		
No		43 (31.45)	49 (29.70)	(0.6871)**		
Total		135 (100.0)	165 (100.0)			
**Differences observed are not statistically significant ($p < 0.05$)						

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Table 3 shows the knowledge of contraceptives of the male and female respondents. Among the male respondents, 92 (68.15 %) had knowledge of contraceptives and 43 (31.45%) did not have knowledge of contraceptives. Among the female respondents, 116 (70.30%) had knowledge of contraceptives while 49 (29.70%) did not have knowledge of contraceptives. No significant difference was observed in the knowledge of contraceptives between both male and female respondents ($x^2 = 0.16$; p = 0.6871).

105 Table 4: Uses of Contraceptives according to Respondents by Gender

	What Contraceptives are used for	Male (n=92)	Female (n=116)	Chi-square (p-value)		
	To Prevent pregnancy	33 (35.87)	62 (53.45)			
	To prevent pregnancy and STI	42 (45.65)	47 (40.52)	$x^2 = 10.67$ (0.0048)*		
	To prevent STI	17 (18.48)	7 (6.03)	()		
	Who Contraceptives are used for	Male	Female			
	Male	14 (15.22)	10 (8.62)	$x^2 = 2.93$		
	Female	9 (9.78)	17 (14.66)	(0.2311)**		
	Male and Female	69 (75.00)	89 (76.72)			
06	*Differences observed are statistically significant ($p < 0.05$)					
07	**Differences observed are not statistically significant ($p < 0.05$)					

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109 Table 4 shows the uses of contraceptives as shown by both the male and the female respondents.

110 Generally, 95 (45.67%) of the participants shown that contraceptives were utilized to prevent

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pregnancy, 89 (42.79%) indicated that contraceptives were utilized to prevent pregnancy and
STI's, while 24 (11.54%) indicated that contraceptives were utilized to prevent STI's.

113 Among the male respondents, 17 (18.48%) indicated that contraceptives were utilized to prevent sexually transmitted infections (STI's) only, 33 (35.87%) showed that contraceptives were 114 utilized to prevent pregnancy, while 42 (45.65%) indicated that contraceptives were utilized to 115 prevent pregnancy and STI's. Among the female respondents, 7 (6.03%) indicate that 116 contraceptives were utilized to prevent STI, 47 (40.52%) indicated that contraceptives were used 117 to prevent pregnancy and STI's while 62 (53.45%) indicated that contraceptives were utilized to 118 119 prevent pregnancy. The difference in the knowledge of contraceptives utilization between both genders was significant ($x^2 = 10.67$; p = 0.0048). 120

121	Table 5:	Uses of Contrace	ntives according f	to Respondents h	v Age Groun
121		Uses of Contract	Juves according e	ιο περροπάεπιο μ	y Age Oroup

	Age Group (years)					
What Contraceptives are used	10 - 15	16 - 19	Chi-square			
for	(n =85)	(n = 123)	(p-value)			
To Prevent pregnancy	41 (48.24)	52 (42.27)				
To prevent pregnancy and STI	21 (24.71)	68 (55.28)	$x^2 = 35.76$			
To prevent STI	23 (27.06)	3 (2.43)	(0.0001)			
Who Contraceptives are used for						
Male	15 (17.65)	9 (7.31)	$x^2 = 17.44$			
Female	18 (21.18)	8 (6.50)	(0.0002)			
Male and Female	52 (61.18)	106 (86.18)				

*Differences observed are statistically significant (p < 0.05)

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Table 5 shows that among respondents between 10 - 15 years, 41 (48.24%) indicated that contraceptives were used to prevent pregnancy, 23 (27.06%) indicated contraceptives were used to prevent STI's and 21 (24.71%) was used to prevent pregnancy and STI's. Respondents between 16 - 19 years responded accordingly on the uses of contraceptives; 68 (55.28%) indicated prevention of pregnancy and STI's, 52 (42.27%) indicated prevention of pregnancy and 3 (2.43%) indicated to prevent STI's. The responses between both groups on the use of contraceptives was significant ($x^2 = 35.76$; p < 0.0001). Responses on who contraceptives are meant for by the respondents between 10 - 15 years include; 15(17.65%) indicating males only, 18 (21.18%) indicating females only and 52 (61.18%) indicating males and females. Among the respondents between 16 - 19 years, 8 (6.50%) indicated females only, 9 (7.31%) indicated males only and 106 (86.19%) indicated male and females alike. The difference in the knowledge on who contraceptives are meant for between the different age groups was significant ($x^2 = 35.76$; p < 0.0001)



Among the respondents, 208 (69.33%) shown that they had knowledge of what contraceptives are, while 92 (30.67%) shown that they had no knowledge of contraceptives as shown in Fig 1.





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Fig 4.2: Sexually Active Adolescents

152 Of the 300 adolescents, 136 (45.33%) were sexually active and 164 (54.67%) were not sexually 153 active as shown in Fig 4.2.

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155 4.0 DISCUSSION

156 The study showed that more than half (69.33%) of the adolescents had knowledge of what contraceptives were and their uses. The result showed that (68.15%) of male and (70.30%) 157 158 female respondents alike had knowledge of contraceptives and their uses. This is consistent with the findings of Nwankwo et al., [10] which reported that a high proportion (>60%) of 159 adolescents in secondary schools had knowledge of contraceptives and their uses. Najafi et al., 160 [11] also reported a high proportion of adolescents had good knowledge of contraceptive use in 161 high school in India. This may be attributed to the ease of accessing information as seen in the 162 current century where information is readily available especially through social media interaction 163 164 and with the increasing ease of access to internet facilities, knowledge on particular things or events are easier [12]. A study by kothe et al., [13] reports that the knowledge of contraceptives 165 166 among adolescents maybe attributed to their intention to become sexually active. The desire to become sexually active may influence the need to use contraception to prevent consequences 167 (such as pregnancy) of been sexually active [14]. However, knowledge of contraceptives among 168 adolescents reported in studies carried out in other parts of the country were relatively lower 169 ranging from 40 - 55% [18-20]. The observed difference may be attributed to the differences in 170 locale and the peculiarities which are different in urban and rural areas [11]. The knowledge of 171 contraceptives between urban, semi-urban and rural areas have been reported to be greatly 172 different and declines from urban to rural locales [10]. 173

Although a high proportion of the adolescents knew what contraceptives were, only 45.67% 174 knew that contraceptives are used mainly for preventing pregnancy, while 42.79% showed that 175 176 contraceptives were used for prevention of pregnancy and sexually transmitted infections. This is similar to the findings of Olubayo-Fatiregun [15] which reported that at least 30% of adolescents 177 have no idea what contraceptives are and its uses. It has been reported that knowledge of 178 contraceptives and contraception among adolescents in developing countries of the world is 179 180 proportionately low compared to adolescents in developed countries of the world [3, 16, 21]. The knowledge of contraceptives observed among adolescents in developed countries due to better 181 182 standards of healthcare and health education obtainable in these countries which is in stark contrast in comparison with the level of socio-community health education in Sub-Saharan 183 African settings [8, 17]. Though most of the adolescents indicated that contraceptives are meant 184 by male and females alike, 53.45% of the female respondents showed that contraceptives were 185 used for preventing pregnancy in contrast to less than half of the male respondents which gave 186 similar responses on the use of contraceptives. While a significant proportion of the respondents 187 188 42.79 % indicated that contraceptives were used for the prevention of pregnancy and sexually transmitted infections. This may be attributed to the fact that the most common and easily 189 accessible form of contraception among adolescents in developing countries is the condom, 190 especially the male condom [8, 11, 16]. 191

192 The finding of this study showed that most of the respondents (63.9%) got information on 193 contraceptives from their peers with only 1.0% (2/208) getting information from health 194 institutions. This is in contrast with studies in the U.S reporting that at least 40% of adolescent 195 get information on contraceptive use from health institutions, however, more than 50% of them 196 also rely on their peers for information on contraceptive use [3, 8]. Generally, adolescents tend to 197 trust their peers to help them out in so called "grey areas" in the use of contraceptives due to fear 198 of rebuke from their parents or health workers in health institutions which is a common 199 occurrence in countries like Nigeria [10, 19].

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201 CONCLUSION

It was observed that more than half of the adolescents interviewed knew what contraceptives were. However, few of the respondents showed that contraceptives are mainly for prevention of pregnancy, while others thought contraceptives could be used for preventing pregnancy and STI and this is an indication of a poor knowledge on what contraceptives are used for. There is need for improvement on adolescent health education and reproductive health.

207 **REFERENCES**

- WHO. (2013). Addressing the Sexual and Reproductive Health of Adolescents. Retrieved from Sexual and Reproductive
- 210 Health:www.who.int/reproductivehealth/topics/adolescence/background/en
- 2. WHO: Millennium Development Goal (MDG) 5: Improve Maternal Health. 2012. 2
 2. January 2013]; Available from: http://www.who.int/topics/millenium_development_goals/maternal_health/en/index.html.
 Accessed 11th January, 2018.
- 3. UNAIDS (2011). Securing the future today: Synthesis of strategic information on HIV and young people. (Geneva: UNAIDS).
- 4. Hubacher D, Mavranezouli I, McGinn E., (2008). Unintended pregnancy in sub-Saharan
 Africa: magnitude of the problem and potential role of contraceptive implants to alleviate
 it. *Contraception*, 78:73-78
- WHO. (2011). The Sexual and Reproductive Health of Younger Adolescents: Research
 Issues in Developing Countries. Geneva: WHO.
- 6. Rosenberg, M.; Pettifor, A.; Miller, W.C.; Thirumurthy, H.; Emch, M.; Afolabi, S.A.;
 Tollman, S. (2015) Relationship between school dropout and teen pregnancy among rural
 South African young women. Int. J. Epidemiol. 44, 928–936.
- 7. UNICEF (2011) Opportunity in crisis: Preventing HIV from early adolescence to young adulthood. (New York: UNICEF).
- 8. Nibabe WT, Mgutshini T. (2014) Emergency contraception amongst female college students-knowledge, attitude and practice. *Afr J Prim Health Care Fam Med.* 2014; 6(1): 538.
- 9. World Health Organisation *Making Pregnancy Safer: Annual Report 2007* Geneva:
 World Health Organisation; 2008.
- 10. Nwankwo, B. E., Balogun, S.K., Chukwudi, T.O, & Ibeme, N.C (2012).Self-esteem and
 locus of control as correlates of adolescents well-functioning. British Journal of Arts and
 Social Sciences. 9.2:214-228
- 11. Najafi, F.S.A., Rahman, H.A. & Juni, M.H. (2011) 'Barriers to modern contraceptive
 practices among selected married women in public university in Malaysia', Global
 Journal of Health Science 3(2), 50–54.

- 12. Lenhart, A., Anderson, M., & Smith, A. (2015). Teens, technology & romantic
 relationship. Pew Research Centre. Internet Science and Tech.
- 13. Kothe, E. J., & Mullan, B. A. (2014). Interaction effects in the theory of planned
 behaviour: Predicting fruit and vegetable consumption in three prospective cohorts.
 British Journal of Health Psychology, 20, 549-562.
- 14. Doswell, W. M. Braxter, B. J., Cha, E., Kim, K. H. (2011). Testing the Theory of Reasoned Action in Explaining Sexual Behavior Among African American Young Teen Girls. Journal of Pediatric Nursing. 26 (6): e45 – e54.
- 246 15. Olubayo-Fatiregun, M.A (2012). The parental attitude towards adolescents' sexual
 247 behaviour in Akoko- Edo and Etsako West Local Government Area, Edo State Nigeria.
 248 World Journal of Education. Vol 2 No 6.
- 16. Tyler, C.P., Warner, L., Kraft, J.M., Spitz, A., Gavin, L., Grigorescu, V. et al., 2012,
 'Sexual experiences and contraceptive use among female Teens-United States', Journal
 for Disease Control and Prevention 61(17), 297–301.
- 17. Kanku, T. & Mash, R. (2010), 'Attitude, perceptions and understanding amongst teenage
 pregnancy, sexuality and contraception in Taung', South African Family Practice 52(6),
 563–572.
- 18. Otoide, V.O.F., Oronsaye, F. and Okonofua, F.E. (2011) Why Nigerian Adolescents Seek
 Abortion Rather than Contraception: Evidence from Focus Group Discussions.
 International Family Planning Perspective, 27, 77-81.
- 19. Ofole, N.M. (2013). Moderating effect of attitude and perception on adoption of safer sex
 practices amongst students in tertiary institutions in Anambra state. Gender & Behaviour
 11.2: 5734-5744
- 20. Abeshi, S E., Ago, B. U., Njoku, C. O., Emechebe C. I. (2017). Knowledge, Practice and
 Perception of Contraception by Literate Adolescents in Calabar, Nigeria. European
 Journal of Biology and Medical Science Research 5(6):1-6.
- 264 21. Singh S, Bankole A, Woog V. (2015). Evaluating the need for sex education in developing countries: sexual behaviour, knowledge of preventing sexually transmitted infections/HIV and unplanned pregnancy. *Sex Education*, 5:307-331.