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## Rate of Voluntary Termination of Unwanted Pregnancy among Undergraduate Students in a Tertiary Institution in North Central, Nigeria

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### ABSTRACT

Termination of unwanted pregnancies, especially if unsafely procured, contributes significantly to maternal deaths. This study was designed to determine the rate of voluntary termination of unwanted pregnancies among undergraduate students. It was a cross-sectional study of female University undergraduates. A self administered pre-tested questionnaire was used to elicit information on socio-demographic variables, sexual activities, unwanted pregnancies and voluntary termination. SPSS software version 25.0 was used for analysis. Four Hundred and thirty one (431) respondents were studied out of which 304 (70.5%) of them have been sexually exposed. The modal age of initiation of sexual intercourse was 20 years. Most, 177 (58.2%) has had one sexual partner while 127(41.8%) had multiple sexual partners. At least one-third 119(39.1%) has had an unwanted pregnancy in the past and 63(52.9%) were induced. Among the induced abortions most 32(50.8%) had termination done more than once while 31(49.2%) had it done once. As high as 96.1% were aware of contraceptives and 70.1% had ever used a method in the past. Those who had ever used contraceptive were more unlikely to have an unwanted pregnancy ( $p=0.013$ ). The rate of voluntary termination of unwanted pregnancies was 52.9%. Unrestricted reproductive health information and care should be made accessible and available to these young people to minimize these occurrence and its associated consequences.

**Keywords:** Contraceptive, Unwanted pregnancy, Sex education, Undergraduates, Voluntary terminations

### INTRODUCTION

There is high level of premarital unprotected sexual activity among young people which many times involve multiple sexual partners.<sup>1, 2</sup> Such risky sexual behaviours pose a threat to the reproductive health of this

group of people both in the immediate period and the long term. Aside from unwanted pregnancies, sexually transmitted infections causing chronic pelvic pain, infertility and poor quality of life generally are sequelae.<sup>3,4</sup> Lack or low and inconsistent contraceptive usage among these young people is responsible for the unwanted

pregnancies.<sup>5</sup> Some of the reasons for poor contraceptive usage could be reduced bargaining power for sexual intercourse, spontaneity of sex, sexual abuse, and pressure from sexual partner not to use contraceptive or fear of side effects, lack of availability and accessibility, and ignorance among others.<sup>6</sup> Most of the unwanted pregnancies end up been terminated through either medical or surgical means.<sup>7</sup>

Although reliable data for unsafe abortion is lacking especially in countries where restrictive laws exist; however, available data suggest that out of the approximately 80 million unwanted pregnancies that occur worldwide, 50 million end as induced abortions.<sup>8,9</sup> About 20 million of these are unsafely procured.<sup>6,8</sup> About 70,000 women die from complications of unsafe abortions annually with 69,000 of these deaths occurring in developing countries.<sup>8</sup> For every maternal death, about 16 women suffer sustained long term morbidity.<sup>8</sup> Unsafe abortion is one of the leading causes of maternal deaths worldwide constituting 13% of deaths.<sup>8,10</sup>

Not so much data exist in our environment on the subject of unplanned pregnancies among undergraduates. Hence this study was designed to determine the rate of unwanted pregnancies and voluntary terminations of these pregnancies among this category of young people. Secondly, to proffer recommendations that will assist policy makers device strategies that will promote a healthy reproductive career of young people.

## MATERIALS AND METHODS

This descriptive cross-sectional study was conducted at the Benue State University, North-Central Nigeria. The institution is a state government owned University. It has eight faculties and a college with students from the first undergraduate year through the sixth undergraduate year and facilities for postgraduate training. There is a mixed (males and females) student population with both on and off-campus accommodation.

All female students in the institution were eligible for the study. Stratified random sampling was used in order to have an unbiased representative sample of the study population. The female undergraduates were first stratified according to faculties including the College of Health Sciences to ensure coverage of every part of the University. Simple random sampling/ balloting was done to avoid selection bias. An average of sixty female

students in each of the eight faculties were subsequently selected. The objectives of the study were explained to the students and an informed consent, obtained before they filled the questionnaire. Those who did not consent were excluded, and incomplete forms were regarded as non-response.

Using prevalence of induced abortion of 51% in a study among female undergraduates in Ibadan<sup>11</sup>; a sample size of 348 was obtained from Fisher's formula.  $N = Z^2 pq/d^2$ : N= minimum sample size; Z= standard normal deviate corresponding to level of significance at 95%=1.96, p=51%, q=1-p, and d=level of precision, set at 5%. However, 450 questionnaires were administered to allow for non-response and to increase the statistical power. A total of 431 were properly entered and thus analyzed given a percentage response rate of 97.8%.

Data was collected through a pre-tested semi-structured self administered questionnaire which was designed in English Language. It was used to collect data on the students' socio-demographic characteristics, age of sexual debut, number of sexual partners, number of times pregnant, number of voluntary terminations of pregnancies, contraceptive usage and pregnancies.

The assurance of anonymity and confidentiality was stated as the researcher identifies sexual behavior as a sensitive issue. In order to maintain confidentiality, names, initials or identification numbers were not used. It is believed that the responses provided were correct.

The data obtained from the questionnaire were analyzed using the SPSS version 25.0 software package. Frequency distributions and percentages were derived for variables. Strength of association was estimated using the Chi-square test and statistical significance was set at p-value <0.05 at 95% confidence interval.

## RESULTS

Four hundred and thirty one respondents were studied out of which the majority (83%) were single. Most (57.8%) of the respondents were between 20-24 years of age. Almost one third (30.9%), (30.2%) were in third and fourth year respectively while majority (89.6%) of them were Christians as shown in Table I. Most 304(70.5%) of the respondents have been sexually exposed and the modal age of initiation of sexual intercourse was 20 years. Out of the 304 students sexually exposed, 177(58.2%) has had one sexual partner while 127(41.8%) had more than one

sexual partner (See table II). One hundred and nineteen (39.1%) of the sexually exposed have had an unwanted pregnancy terminated in the past, out of which 63(52.9%) were induced. Among the induced abortions half 32(50.8%) of them had termination done more than once, while 31(49.2%) had it done once as shown in table III. Among the sexually active respondent, 213 (70.1%) had ever used contraceptive in the past. Those who ever used contraceptive were more unlikely to have had an

**Table I: Socio-demographic characteristics of respondents**

Variable	Frequency (N=431)	Percentage (%)
<b>Age range (years)</b>		
15-19	44	10.2
20-24	249	57.8
25-29	100	23.2
30-34	28	6.5
>34	10	2.3
<b>Marital status</b>		
Single	360	83.5
Married	62	14.4
Divorced	9	2.1
<b>Academic level</b>		
100	42	9.7
200	93	21.6
300	133	30.9
400	130	30.2
500-600	33	7.7
<b>Religion</b>		
Christianity	386	89.6
Islam	31	7.2
Traditional	6	1.4
Others	8	1.8

**Table II: Sexual behavior of respondents**

Variable	Frequency	Percentage (100%)
<b>Sexual Activity</b>		
Yes	304	70.5
No	127	29.5
<b>No of Sexual Partners</b>		
1	117	38.5
≥2	187	61.5

**Table III: Unwanted pregnancy and termination experience**

Variable	Frequency	Percentage (100)
<b>Unwanted Pregnancy</b>		
Yes	119	39.1
No	185	60.9
<b>Termination of pregnancy</b>		
Yes	63	52.9
No	56	47.1
<b>Number of terminations</b>		
1	31	49.2
≥2	32	50.8

**Table IV: Relationship between contraceptive use and unwanted pregnancy among the sexually active respondents**

Contraceptive use	Unwanted Pregnancy		Total	Statistics
	Yes	No		X <sup>2</sup> =4.894
Yes	92	121	213	P=0.0134
No	27	64	91	OR=1.802
<b>Total</b>	<b>119</b>	<b>185</b>	<b>304</b>	CI=(1.066-3.047)

unwanted pregnancy (p=0.001), with OR of 1.802 and CI=(1.066-3.047) see table IV.

## DISCUSSION

As high as 70.5% of the students were sexually active with the modal age at sexual debut being 20 years. This is similar to the finding of Eze *et al* in Oghara who reported a high sexual activity of 73.6% and modal age at sexual debut of 20 years among the females.<sup>12</sup> Abiodun and Balogun reported a higher rate of 77.6% sexual activity in Ekiti.<sup>13</sup> Sunmola *et al* and Onebunne *et al* in Niger state and Oyo state respectively reported the same modal age of 20 years at sexual debut.<sup>11,14</sup> This is a reflection of the high and early commencement of sexual activity among young people in higher institutions of learning. There is every need to sustain campaigns towards promoting abstinence before marriage.

Among the sexually active students, 41.8% had multiple sexual partners. This is lower than the 48.2% reported by Eze *et al* in Oghara.<sup>12</sup> These risky sexual behaviours have serious implications on the reproductive health of young women. They should be made to understand that, the higher the number of sex partners, the more the chance of

acquisition of sexually transmitted infections.<sup>1,4</sup> Pelvic infections are known to cause pelvic inflammatory disease that is responsible for tubal factor infertility in women.

Our study showed that 39.1% of the students had an unwanted pregnancy in the past. This is far lower than the 78.8% reported by Okpani and Okpani in Port-Harcourt and the 92.7% reported by Onebunne *et al* in Ibadan.<sup>11, 15</sup>

This disparity may be due to higher contraceptive usage in our study population. As high as 70.1% of the students have ever used contraceptive, although current and consistent usage was not assessed. Although, several researchers opined that the low prevalence of contraceptive uptake will continue to give rise to unwanted pregnancies and subsequently voluntary terminations of these pregnancies.<sup>16,17,18</sup>

Others argue that even in the context of an increase in contraceptive awareness and usage pregnancy rates may still be high.<sup>8,16</sup> In our study, although contraceptive appeared to reduce the chance of the young girl from getting pregnant, 43.2% who were using contraceptives still experienced an unwanted pregnancy. It is important to emphasize to clients the need for effective and consistent usage of the method of their choice. Furthermore, it is necessary to let the students know the set back an unwanted pregnancy in school could have on their studies. Apart from forced school dropout, the psychological, emotional and physical trauma associated with an unwanted pregnancy could even lead to depression, and other forms of mental health problems that may in extreme cases result in suicide.<sup>19</sup>

Among those who unintentionally became pregnant, 52.9% had a deliberate termination of the pregnancy. This is similar to the 51.0% reported by Onebunne in Ibadan but lower than the 88.6% reported by Okpani and Okpani in Port-Harcourt.<sup>11,15</sup> Although, abortion is not legalized in our setting, many of the girls are still able to procure. Available evidence in Nigeria revealed that over 80% of adolescents and youths who have an unwanted pregnancy seek the option of induced abortion with many of them using dangerous and unsafe methods.<sup>20,21</sup> Unwanted pregnancy among teens and young people account for about three million unsafe abortions worldwide and the incidence seems to be on the rise.<sup>22</sup> The economic implication of treating complications of unsafe abortion is profound which often steers the debate on review of our abortion laws.<sup>22</sup>

There are important steps that are subjects of debate in the

fight against unwanted pregnancies that could result in induce abortions. The first issue is that of sexuality education which should start at home and continues at school.<sup>2</sup> Many parents argue that this preventive approach which aim at empowering the youth so that they can resist every temptation of sexual misbehavior or violent abuse of their sexual rights will rather promote sexual immorality.<sup>2</sup>

<sup>20</sup> The second argument is the cultural norm against premarital sexual activity which makes it difficult for young people to easily access contraceptives for usage.<sup>11</sup> Thirdly, the issue of legalization of abortion in order to prevent unsafe terminations of unwanted pregnancy that could contribute to maternal mortality. Even though some medical experts agree to this proposal, several others consider this as a taboo.<sup>21,22</sup>

Whichever, the line of argument there has to be a renewed vigor in promoting healthy sexual lifestyle of the young people who are the future of our nation.<sup>23</sup> Deliberate strategy of promoting information dissemination through counseling, campaigns, debates, conferences/workshops about sexuality issues and enhancing contraceptive uptake should be sustained as a primary preventive measure against unwanted pregnancies.

## CONCLUSION

The rate of voluntary termination of unwanted pregnancies was 52.9%. Unrestricted reproductive health information and care should be made accessible and available to these students to prevent this occurrence and its associated consequences.

## Recommendations

There is need to provide reproductive health information and services to undergraduate students in the University health centers. Sexuality education should also be offered at home and schools from primary to tertiary levels of education. Campaigns to promote abstinence and faithfulness in relationships with the opposite sex should be sustained. Efforts should be made to promote availability, affordability and utilization of contraceptives.

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## Conflict of interest

The authors declare no conflict of interest.

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