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Original Article

THE ROLE OF PEER INFLUENCES AND SOCIAL NETWORKS ON CONTRACEPTIVE BEHAVIOUR AMONG MEDICAL STUDENTS IN A NIGERIAN INSTITUTION

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ABSTRACT

Contraceptive is a powerful tool that helps to curb the stigma associated with unwanted pregnancy, the stress of unwanted abortion, and reduces the spread of sexually transmitted disease among medical student. The study aimed to access the role of peer influence and social network on contraceptive behaviour among medical students in Nnamdi Azikiwe University. It was a descriptive cross-sectional study with a sample size of 209 participants. Data entry and analysis were done using IBM-SPSS version 25 statistical software. The study results reflected that the most common source of contraceptive related information was school, health workers, and friends. The common types of contraceptives used were calendar-based methods, emergency contraceptives and male condoms. The majority of the sexually active groups opined that their social network and friends influenced their choice of contraceptive use,

showing that there was a significant relationship between social networks and peer influence on contraceptive choices among medical students ($x^2=74.47$, p=0.001). There was also a significant relationship between sociodemographic factors and contraceptive use. In conclusion, in order to improve the role of peer influence and social network on contraceptive choices for a healthier society, we must tackle the misconceptions on the use of modern contraceptive use and encourage interventions to improve contraceptive use and advocate for peer-based education and support.

Keywords: Social networks, peer influences, contraceptive behaviours, Medical students

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INTRODUCTION

Contraceptive is a method of preventing unwanted pregnancy and bringing only about wanted pregnancy. Approximately, there are 1.9 billion people (15-49 years) who can become pregnant in the world. Majority of these people have a need for family planning, about 842 million people have been found to use contraceptives with 270 million having unmet need for contraception.¹ The reasons people have not be using contraceptive effectively include inaccessibility of contraceptives, knowledge of the limited different contraceptive methods, fear of side effects, religious or cultural beliefs, poor healthcare service and gender based barriers.¹

Contraception can be a powerful tool that strengthen the right to reproduce, when and how to reproduce. People acquire contraceptive related information in different ways such as researching online, talking to healthcare workers, friends, family, and social media.² Studies have also shown that youths discuss contraceptive related matters with their partners, clinicians and family members. A study to determine the use of contraceptive among undergraduates found that people are more likely to use contraceptives when they have partners who support their decisions.³

Another study among undergraduates found that women thought that contraceptive decisions should not be made by them alone.⁴ additional studies on attitude of college women contraceptives found that students have positive attitudes regarding more contraceptive methods when they were able

to discuss about it with the providers, these show that communication with health workers create a positive attitude towards contraception.⁵ One study using undergraduates show that the majority of the students feel uncomfortable discussing contraceptives related matters with their mothers.⁶ Study on how college peers discuss contraceptives related matters show that talking to one's peers on contraceptive only related matters not increase knowledge about contraceptives but also encourage it use.⁷

The peer influence model suggests that peers significantly influence the behaviour of other peers, including private or nonpublic behaviour, such as sexual activity. Social network effects on intimate sex acts have been demonstrated in numerous studies of condoms use, contraception and sexual risk behaviour. For example, in terms of condom use, a social network is an essential determinant of condom use. Men whose peers did not use condoms have been found not to use condoms themselves.9 Therefore, future interventions should raise awareness and think of ways how peers could be engaged in disseminating correct information

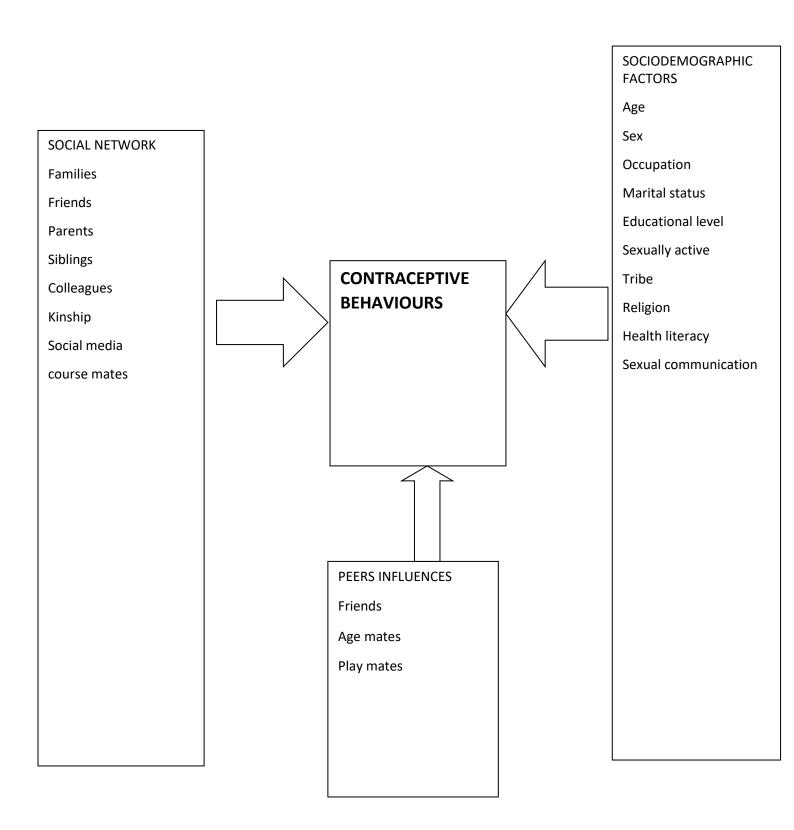
The knowledge of these social networks and the way they affect contraceptive behaviour would also help in creating proper awareness and education of these individual on how best to manage these factors to raise adults with protective contraceptive behaviours.

The knowledge from this study can inform the development of targeted interventions to promote responsible sexual behaviour, improve contraceptive knowledge and access, and ultimately contribute to better reproductive health outcomes among this population and beyond and also add to the existing body of research and as well advance knowledge in the field by informing future research.

Conceptual framework

The conceptual frame work that guided this analysis is illustrated in the figure below.

Contraceptive communication (older women in the family and peers and intimate partners) and contraceptive social norms (older women in the family and peers) are hypothesis that these variables may interact.



METHOLODY

This study was conducted in the college of health sciences, Nnamdi Azikiwe University, Nnewi campus, Anambra State, Nigeria. This study was a descriptive cross-sectional study.

The study population include undergraduate students from the faculties of Basic medical science, Health science and technology and medicine in the college of health science, Okofia, Nnewi, Anambra state, Nigeria.

The sample size was determined using Kish Leslie formula;

 $n=(z^2pq)/d^2$.

A prevalence of 85% (proportion of undergraduate students whose choice of contraceptive was influenced by peers obtained from a previous study) obtained from previous study in south-eastern Nigeria.¹⁰

The formula nf = n/[1+(n/N)] was applied to determine the sample size when the total population is less than 10,000; where nf = minimum sample size for a finite population (<10,000) and N=estimated population size of 5000.

A 10% attrition rate was considered in the study and a final sample size of 209 was used in the study.

The multistage sampling technique was used in the selection of students for this study

Ethical approval was obtained from the Nnamdi Azikiwe University Human Research Ethics Committee (NAUHREC) and written informed consent was obtained from the respondents. The IBM statistical software for social sciences (SPSS) version 25 was used to load and analyse the data

RESULTS

The number of male respondents was 117 (56%) while female respondents were 91 (43.5%) Most of the respondents were single (208; 99.5%), majority of the respondents were Igbo origin (206;98.6%) and all the respondents were Christians.

Most of the respondents' fathers and mothers were skilled workers (58.9% and 56.5%) respectively) and had tertiary level education (76.1%) 83.3% and respectively Majority of the respondents indicated that they belong to polygamous family 208(99.5%). The greater number of the respondents (77%) were not sexually active but there is a high level awareness of contraceptive method (97.1%) . It was observed that only 26.8%(56) of the respondents have ever used any method of contraceptive while 9.1% used

contraceptive in their recent sexual include school (94.7%), social media encounter. The major sources of (77.5%), and health workers (70.8%). information on contraceptive methods

Table 1: Major Sources of Information on Contraceptive Methods Among Medical Students of College of Health Sciences, Nnamdi Azikiwe University, Nnewi Campus, Anambra State

| Friends | Frequency | Percentage |
|-----------------|-----------|------------|
| No | 68 | 32.5 |
| Yes | 141 | 67.5 |
| Total | 209 | 100 |
| Sexual partners | | |
| No | 178 | 85.17 |
| Yes | 31 | 14.83 |
| Total | 209 | 100 |
| Health workers | | |
| No | 61 | 29.2 |
| Yes | 148 | 70.8 |
| Total | 209 | 100 |
| Social media | | |
| No | 47 | 22.5 |
| Yes | 162 | 77.5 |
| Total | 209 | 100 |
| School | | |
| No | 11 | 5.3 |

| Yes | 198 | 94.7 |
|-------|-----|------|
| Total | 209 | 100 |

It was noticed that female condoms (96.7%), Emergency contraceptives (14.4%), and Calendar based methods (16.3%), were the commonest contraceptives used.

The respondents that do not think that their friends influence their choice of contraceptive are greater in number (71.3%). Similarly, most respondents do not believe that their sexual partner influences their choice of contraceptive (56.9%) followed by those that think they

DISCUSSION

From the research conducted results showed that 28.7% were influenced by their peers on their contraceptive choice, this is similar to a study carried out in Abakiliki Ebonyi State south east Nigeria 28.3% of reproductive age were using contraceptive based on peer influence. 11 the similarity might be due to the both studies were carried out among students and southeast Nigeria.

Results from study in Enugu State, south east Nigeria and In Ilorin showed that in Enugu, 98% of male and 85% of female, while Ilorin 67% of respondents

influence them very much (16.7%), a little (13.4%)

There was a significant relationship between sexual activeness and peer influences on the contraceptive choices among medical students ($\chi^2 = 21.401$, df = 9, N = 209, p value = 0.01).

There was a significant relationship between social networks and peer influences on the contraceptive choices among medical students ($\chi^2 = 74.47$, df = 9, N = 209, p value =0.001)

respectively showed that their friends influence their choice of contraceptive. 12,13 This significantly different from that which was obtained in our study. The discrepancy might be because our study was carried out medical students with higher knowledge of contraceptives and theirs carried out among social students.

Similarly, a study conducted in reproductive health decision making in Ghana and Ethiopia revealed that a number of factors such as age, educational level, wealth index among others influenced women decision in reproductive issues.^{14,15}

This shows the role of educational level on contraceptive

A study in Nigeria, the result indicates low contraceptive among women with less educational level and poor family background. This support our finding that contraceptive use is influenced by sociodemographic factors.

From our study, most of the respondents (70.8%) had information on contraceptives from health workers,77.5% from social media, 94.7% from school. Differently, a study among young adults in Poland showed that major source of information from about contraceptive were internet(35%), from peers was 22%. 17 the discrepancy may be due to the fact that our work was carried out among only youths while theirs were carried out among women aged 18-91 years. A study in Ghana had social media having (62.0%), while peers had (30.0%) as their source of information¹⁸ this shows that social media is a big source of information for the younger generation. In consistent with our study, a study in Lagos, Southwest Nigeria shows that 70% of married women or divorced seek for

CONCLUSION

With social network, there was a significant relationship between social networks and peer influences on contraceptive choice among medical students. There was contraceptive related information from health workers while 90% of single women source of contraceptive related information is school or educational institution. ¹⁹ this also is in line with our work that sociodemographic factors affect contraceptive use.

A study in Katsina, Gombe and Zamfara state showed that 80% of the adolescent female contraceptive decision, were influenced by social network, while 60% of the adolescent male were influenced by the social network²⁰.this shows that young adolescents are more likely to be influenced by social network.

From our study, common contraceptive methods used were calendar-based method (16.3%) emergency contraceptive (14.4%), male condom (13.4%). Similarly, a study which was conducted in Nigeria among undergraduate students in delta state, showed that condoms and oral pills were the most preferred contraceptive option. Also, another study which was conducted in Anambra state, showed that the most common contraceptive method were condoms and oral pills²¹.

significant relationship between sociodemographic factors and contraceptives choice. In order to improve on the role of peer influences and social networks on contraceptive choices, for a healthier society, the researchers therefore recommend the incorporation of social network assessment into family planning and decision making; tackling social misconception, bridging the knowledge gap on contraceptive related decisions among medical students by government and other stakeholders through advocating for peer based education and support. Regular monitoring and evaluating the influences of social networks on contraceptive choices, as a means to refine strategies and improve outcome is recommended.

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