



(RESEARCH ARTICLE)



Evaluation of the practice of contraception among adult female traders at international market Orlu, Imo state, South east Nigeria

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World Journal of Advanced Research and Reviews, 2024, 21(01), 2883–2893

Publication history: Received on 31 January 2023; revised on 27 January 2024; accepted on 30 January 2024

Article DOI: <https://doi.org/10.30574/wjarr.2024.21.1.0286>

Abstract

Aim: To evaluate the practice of contraception among adult female traders at Orlu International Market

Background: Contraception is the use of any practice methods or devices to prevent pregnancy from occurring in sexually active women. Currently in Nigeria, there are concerns about the rise in maternal mortality rate and the increase in unwanted pregnancies. This trend is said to be on the rise among the less educated women. This necessitated our study to evaluate the practice of contraception among adult female traders in the international market Orlu Imo State of Nigeria

Methodology: An observational descriptive retrospective study involving adult female traders of Orlu International Market, selected by convenience sampling, which is a non probability sampling method. Both self and interviewer administered questionnaires were used collaged data was analysed using statistical package for social sciences (SPSS) version 20 IBM, USA. Results were presented in frequency tables, bar charts and pie charts

Result: A total of 308 respondents participated in the study. Majority were within the age range of 30-39years (36%). Majority of the respondents (68%) had good knowledge of contraception, however, only 34% has used one or more forms of contraception in the past; disappointingly, majority (64%) do not use any form of contraception

Conclusion: There is high level of knowledge of the practice of contraception but the usage rate is abysmally low.

Keywords: Evaluation; Practice; Contraception; Female; Traders; Orlu International Market

1. Introduction

Contraception is the use of any practices, methods, or devices to prevent pregnancy from occurring in a sexually active woman¹.

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Throughout the world for thousands of years, child spacing has been practiced using various traditional methods. In African culture, traditional practices especially abstinence from coitus was used in the past in most societies to enforce child spacing, improving the health of mothers and children and not merely for limiting family size².

The Ebers papyrus from 1850 BC and the Kahun papyrus from 1850BC have within them some of the earliest documented description of birth control, they use honey; acacia leaves and lint to be placed in the vagina to block sperm³⁻⁹.

Generally, other benefits of contraception are; reduction in the risk of malignancy e.g. ovarian cancer, endometrial cancer and painful menstruation^{2,10}. There are different methods of contraception which are broadly classified as natural and artificial methods¹¹⁻¹⁸. The study aimed to evaluate the practice of modern contraception among adult female traders in the international market Orlu Imo State of Nigeria.

2. Material and method

2.1. Study Area

The research was carried out at international market Orlu located in Orlu Local Government Area of Imo State. Orlu is the headquarter of Orlu zone in Imo State south East Nigeria. The inhabitants are mainly civil servants, artisans student and traders

2.2. Study design

The study is of observational, descriptive cross-sectional design

2.3. Study population

This comprises of female traders in International Market Orlu, Imo State

2.4. Inclusion criteria

Adult female traders

2.5. Exclusion criteria

Girl children hawking/assisting their parents in trading

2.6. Sample size determination

$$\text{Sample size (N)} = \frac{Z^2pq}{D^2}$$

N = total size of the population

Z= confidence interval at 95% level of significance given as 1.96

P = the proportion of the target population estimated to have a particular characteristics. If there is no reasonable estimate, then use 50% (i.e. 0.5)

Q = 1.0-p

D = margin of error tolerated (5%) substituting the desired precision

$$n = \frac{196^2 \times 50 (100 - 50)}{5^2} = 384$$

Since the total study population is <10,000, the sample size was adjusted using the formula

$$nf = \frac{n(n)}{1 + (N)}$$

Where;

nf = the desired sample size

n= the desired sample size when the population is more than 10,000 (previous calculated sample size)

N= the estimated of the population size (3,000)

$$\text{Therefore, } Nf = \frac{384(384)}{1+(3000)} = 340.4$$

10% of 340.4 = 34.04 (added to the sample size for attrition)

Final sample size is 340.4 + 34.03 = 374.4

The calculated sample size is 374.4 but due to the fact that error decreases with increase in sample size, the sample size was made up to 400. Therefore 400 market women were used.

2.7. Data Collection Methods

Interviewer administered questionnaires were used as the study instrument; data was collected from market woman and this was done by asking the market woman the questions and the information was filled in the questionnaire until the number required was completed.

2.8. Statistical Analysis:

The information generated was analyzed using Statistical Package for Social Sciences version 20, international Business Machine (IBM) USA, and results were presented in frequency tables, bar charts and pie charts,

2.9. Ethical Consideration

Ethical Clearance for the study was obtained from the Ethics and Research Committee of Imo State University Teaching Hospital Orlu and consent was obtained from the chairman Orlu International market association and the respondents with assurance of confidentiality.

2.10. Limitations and Challenges

There were challenges in getting approval from the chairman Orlu International Market association but with persistent trial we are able to obtain his consent.

Possible objection to the subject of research as a result of religious bias. Orlu area is predominantly populated by the Roman Catholic Christians as the sect frowns at non-natural modes of contraception.

Result

Table 1 shows the socio-demographic information of the respondents. More than half (52.%) of the respondents were married, one-third (33.5%) were single while 11.6% were widows. Fifty nine percent of the respondents have active sexual partners while 38.7% of the respondents do not have active sexual partners. Majority (68.4%) of the respondents have 1-6 household. More than one-third (36.1%) of the respondents has 0-3 number of children, 27.1% had 4-6 number of children while 8.7% had more than 6 number of children. Twenty four percent of the respondents earn N 41,000- N 50,000, 20.6% earn above N 50,000 while 3.9% earn N 21,000- N 30,000

Table 1 Sociodemographic characteristics of respondents

Variables	Frequency	Percentages (%)
Female	310	100
Total	310	100
Age		
No response	6	1.9
Below 19	8	2.6
20-29	96	31.0
30-39	108	34.8
40-49	84	27.1

50-59	8	2.6
Total	310	100.0
Tribe		
No response	6	1.9
Igbo	304	98.1
Igbo	310	100.0
Religion		
No response	10	3.1
Catholic	216	68.7
Anglican	16	5.2
Pentecostal	86	21.9
Total	310	100.0
Education		
No response	6	1.9
No formal education	40	12.9
Primary level	26	8.4
Secondary level	188	60.6
Tertiary level	20	6.5
Post graduate	30	9.7
Total	310	100.0

Of the 310 respondents interviewed, about one-third (34.8%) were within 30-39 years, 31.0% were within 20-29 years while 2.6% were either below 19 years or between 50-59 years. Majority (98.1%) of the respondents were Igbos. A large proportion (67.7%) of the respondents were Catholics, 21.9% were Pentecostals while 5.2% were Anglicans. Sixty percent of the respondents had secondary education, 12.9% had no formal education while 6.5% had tertiary education.

Table 2 Sociodemographic characteristics of respondents continued

Parameter	Frequency	Percentages (%)
Marital status		
No response	6	1.9
Single	104	33.5
Married	164	52.9
Widowed	36	11.6
Total	310	100.0
Occupation		
Trader	310	100.0
Have active sexual partners		
No response	6	1.9
Yes	184	59.4

No	120	38.7
total	310	100.0
No of people living in the Household		
No response	6	1.9
1-6	212	68.4
More than 7	92	29.7
Total	310	100.0
Number of children		
No response	87	28.1
0-3 children	112	36.1
4-6 children	84	27.1
More than 6	27	8.7
Total	310	100.0
Average monthly income		
No response	98	31.6
10000 and below	40	12.9
21-30000	12	3.9
31-40000	20	6.5
41-50000	76	20.6
Above 50000	64	20.6
Total	310	100.0

Table 2 shows that majority of respondents are married (52.9%) while 59.4% agreed to having active sexual partners. About 29.7% has more than 7 people making up a household while 27.1% has 4-6 children. A fairly high percentage of respondents (20.6) enjoyed average monthly income of 50000 and above.

Table 3 Awareness about contraceptives and sources of information

Parameter	Frequency	Percentages
Ever heard of Contraception		
No response	14	4.5
Yes	212	68.4
No	84	27.1
Total	310	100.0
Male condom	124	40.0
Female condom	99	31.9
Withdrawal method	64	20.6
Oral contraceptives	135	43.5
Implants	56	18.1
IUCD	12	3.9

Tubal ligation	8	2.6
Spermicidal	8	2.6
Emergency contraception	16	5.2
Diaphragm	12	3.9
Source of information		
Village meeting	4	1.3
Chemist shop	44	14.3
Market	16	5.2
School	52	16.8
Magazines	28	9.0
Friend/relatives	95	30.6
Bill board	28	9.0
Television	80	25.8
Radio	36	11.6
Health workers	56	18.1

In table 3 above majority of the respondents (68.4%) has heard of contraceptive method while (27.1%) have not heard about contraceptives. Oral contraceptive (43.5%) and use of male condom (40.0%) are the most popular methods known. The major source of information on contraception among Orlu market women is through friends and relatives (30.6%) while 1.3% source information via village meetings

Table 4 Respondents 'awareness about contraceptive benefits and side effects

Parameters	Frequency	Percentage
Awareness of the benefits of contraception		
Child spacing	108	34.8
Limiting family size	104	33.5
Prevent unplanned pregnancy	124	40.0
Lower risk of endometrial cancer	24	7.7
Reduce menstrual cramps	12	3.9
Control heavy menses	16	5.2
Prevent STI	88	28.4
Awareness of the side effects of contraceptive		
Mood change	40	12.9
Irregular bleeding	64	20.6
Nausea & vomiting	40	12.9
Skin rash	16	5.2
Weight change	60	19.4
Low libido	11	3.5
Stomach up set	56	18.1
Breast pain	32	10.3

Table 4 shows that most of the women know that contraception is vital for the prevention of unwanted pregnancies. one-third, 104 (33.5%). of the respondents know about limiting family size as one of the benefits of contraceptive methods, 124 (40.0%) stated prevention of STI as one of the benefits of using contraceptive methods. Twenty percent of the respondents believe or have experienced irregular bleeding with the use of contraceptive, 40 (12.8%) of the respondents complained of nausea and vomiting as side effects of contraceptive method.

In table 5, the 40-49 years age group is most aware of contraceptive methods (95.2%) closely followed by the 30-39 age group (92.5%). All the respondents with tertiary educational level have heard about while those with zero formal education are expectedly least aware of contraceptive methods (42.5%). The table also shows that general contraceptive use by respondents is 33.5% while oral contraceptives has the highest use rate at 18.1%. The largest proportion at 44.2% believed that the use of contraception was to prevent sexually transmitted infection (STI) while 36.5% said contraceptives are used for pregnancy prevention.

Table 5 Sociodemographic characteristics in relation to awareness, knowledge and use of contraceptives

Parameters	Yes	No
Have you ever heard of contraceptive method		
Age at last birthday (years)		
19 and below	2(25%)	6(75)
20-29	89(92.7%)	7(7.3)
30-39	100(92.5%)	8(7.5)
40-49	80(95.2)	4(4.8)
50-58	6(75)	2(25)
Level of education		
None	17 (42.5%)	23
Primary	18(69.2)	8(30.7)
Secondary	177(37.8)	11(62.2)
Tertiary	20(100)	0.0
Total	252(85.7)	42.0
Do you use contraception		
Yes	104	33.5
No	206	66.5
Total	310	100.0
Contraception used by respondents		
Implants	16	5.2
Oral contraceptive	56	18.1
Condom	40	12.9
Natural method	28	9.0
Reason for using a method		
It is safe	88	28.4
Affordable	44	14.2
Self-administered	16	5.2
Reliable	28	9.0

Less side effect	56	18.1
Best time to use a condom		
Before sex	124	40
Not sure	4	1.3
Contraception use after sex		
No response	237	76.5
Condom	12	3.9
Postinor-2	44	14.2
Withdrawal method	17	5.5
Use of contraception to prevent		
Unwanted pregnancy	113	36.5
HIV	60	19.4
STI	137	44.2
Total	310	100.0

3. Discussion

Women between age 30-39 years had the highest use of modern contraception method (35.06%). This was similar to findings of a study done by many authors¹⁹⁻³⁶, within and outside Nigeria. The similar result could be attributed to the high fertility rate among this age group.

It was discovered from this study that the use of modern contraceptive methods was higher among the non Catholic respondents, as other Christian denominations had no restriction to the use of contraception. Envuladu et al¹¹, obtained similar finding in their work done in Jos, North central Nigeria.

Our study also revealed a high level of use of modern contraceptive methods among women with secondary school education. This was also reported by Envuladu et al¹¹, in Jos, Nigeria, where majority of their respondents had secondary school education.

The positive effect of education on contraceptive use could be associated with delay in early marriages and first pregnancies, and increased women's understanding of reproductive health issues caused by education.⁶

The level of awareness of contraceptive methods among the female traders was quite high, majority of the respondents were actually aware of one form of modern contraceptive or the other. Although the general level of awareness was high, some contraceptive methods were more popular than others.

Among the most popular methods were the oral contraceptive pills followed by the male condom and female condom. Vasectomy was not so popular, only few of the respondents were aware of vasectomy. Other methods that were not so popular among the respondents were: withdrawal method and implants.

However a study in Uganda by Nattabi et al¹⁴ found male condom, oral contraceptive pills and injectables to be the most popular methods of contraception used by the female traders.

Despite the high level of awareness of contraceptives. Majority of the respondents were not using contraceptives to control fertility. The low level of contraceptive use found in this study 34%, was however far higher than the figure recorded by the Nigerian Demographic and Health Survey of 2008 that was put at 15% and also higher than the level found in a study conducted among women in Enugu, Eastern Nigeria by Obi et al³⁶. The higher rates may be because of the higher literacy and also the cost effectiveness of the most commonly used method in our study.

Despite the low level of use of modern contraceptive methods in our study, a lower prevalence of contraceptive use have been reported in a predominantly rural Muslim area of North India by Gaur et al¹⁶.

It was also noted that despite the high knowledge of contraceptives, majority of the respondents do not use it.

4. Conclusion

Despite the high knowledge of modern contraception by the adult female traders in International Market Orlu, in Orlu Local Government Area of Imo State, South East Nigeria, the usage rate is low. Reasons for none use include: it is against their faith, it causes excessive weight gain and some of them said they are still expecting more pregnancy.

Recommendation

Health Education on the importance of the use of modern contraceptives should be given to the female traders, the clergy and members of general public to encourage usage.

Government at all levels should ensure that the various methods of modern contraception are made affordable and accessible at designated centres.

Compliance with ethical standards

Acknowledgement

It is hereby acknowledged that each author contributed significantly to the research and eventual production of the manuscript and publication of the article. We are grateful to BCA, POA and FCA who designed the study, produced the data collection tool and organized the data collection. Thanks to HNC, HCC and BEE for data cleaning, analysis and write up. We acknowledge VCC for spear heading the proof reading of the manuscript.

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of ethical approval

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Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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