

Predisposing Factors In Adoption And Utilization Of Natural Family Planning Methods Among Women In Owerri Main Market, Imo State Nigeria

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Abstract—The study investigates the predisposing factors in adoption and utilization of Natural Family Planning (NFP) methods among women in Owerri Main Market. The main objectives were to determine the physiological basis of NFP methods, the advantages and disadvantages of NFP methods and to identify the predisposing factors in adoption and practice of NFP among women. 250 women were selected for the study through random sampling technique. A questionnaire was developed: Market Women Questionnaire on Natural Family Planning (MWQNFP) which was used to collect relevant data. Data analysis was done using percentage (%) and Chi-square (X²). The result showed that all the respondents have heard of NFP before and its practice occurred only in 22 women (8.8%) while the remaining women practice other Family Planning methods. knowledge of the physiological basis of NFP methods significantly influence its adoption and use (Chi-Square= 20.311, p-value < 0.001). Lack of time for daily monitoring and charting (20.7%), less partner co-operation and compliance (5.7%), irregular/unpredictable menstrual cycles (1.4%) and ignorance are the key factors found to militate against NFP practice among women. This statistically had a significant influence on the adoption and use of NFP methods (Chi-square=24.577, p-value <0.001). The study concluded that NFP practice among women would be improved by wider dissemination of information on NFP through public lectures and electronic medias; training of Family planning counselors to facilitate grassroots coverage; universal entrenchment of NFP counseling into routine antenatal clinic activities with emphasis on female education and empowerment; and encouraging men's involvement in Family planning.

Keywords—Predisposing, factors, adoption, utilization, NFP, women in market

I. INTRODUCTION

Family planning entails deciding the number of children you want to have, planning when you want to have them and deciding how to space your children [1]. The World Health organization [2]; identifies family planning as the planning of when to have children and the use of birth control and other techniques to implement such plans. The advantages arising from the practice of family planning are stressed below:

Women; Family planning helps women to protect themselves from unwanted pregnancies. As a result, many women lives have been saved from high risk pregnancies and unsafe abortions [3]. [1] noted that between 13 and 15 million children under age 5 die each year. If all children were born at least 2 years apart, 3-4 million of these deaths would be avoided. Thus family planning saves the lives of children by helping women space births.

Men; [4]; [1], reported that men around the world say that planning their families helps them to provide a better life for their families, thus; family planning improves family wellbeing, the family standard of living and the stability of the home.

Nation; Family planning according to [1], helps nations develop. In countries where women are having fewer children than their mothers did, people's economic situations are improving faster than in most other countries.

In General, [5]; [6], opt in that effective birth control/family planning provide primary prevention for a host of major public health problems, including unwanted pregnancy abortions, sexually transmitted infections (STIs) and other medical conditions.

There are different types of Family Planning (FP) methods. Some methods are temporary while some are permanent. Temporary methods are used to space pregnancies and can be stopped at any time one desires to have a baby; while permanent methods are used if one do not want any more children. [7]; [1]. Among all the FP methods is the Natural Family Planning (NFP), also known as Fertility Awareness Methods (FAM). Natural family planning according to [8] refers to a variety of methods used to prevent or plan pregnancy based on

identifying a woman fertile period. For all NFP methods, abstinence or avoiding unprotected intercourse during the fertile day is what prevents pregnancy. NFP is safe, healthy, 99% effective in avoiding pregnancy, useful in achieving pregnancy, marriage building, reversible, moral and cheap [9]. This was supported by [6] when he stressed that FAM are not associated with any significant side effects and pose no serious health risks. Despite the above advantages, many women do not practice NFP methods rather they prefer the artificial methods, [8]. In another report from [10], it was noted that only 2-3% of the World's reproductive age population use periodic abstinence to avoid pregnancy. Use of NFP in developed countries is low even among Catholics, which made up 24% of the U.S population. [11] observed that despite the well-established social, medical and economic benefits arising from NFP, it is both underutilized and poorly utilized in the United States where about half of all pregnancies are not intended. [9] noted that most couples don't want to follow the strict regimen of determining their ovulation and are not willing to accept a small risk of pregnancy, so they choose a variation that suits their needs. [12]; [13] and [7] identified some of the health problems and side effects associated with artificial methods of Family Planning, particularly hormonal methods to include: weight gain, menstrual irregularity, bloatedness, breast tenderness, mood swings, amenorrhea, nausea, functional ovarian cysts etc. The health problems and abortifacient (deliberate ending of pregnancy) properties of pills, IUCDs and Norplants according to [9] have been documented but seldom disseminated to patients. This ugly menace has left many women ignorance of these problems associated with Artificial Family Planning (AFP) methods and others, thereby minimizing their adoption and utilization of NFP methods which present no serious health risks. These situations according to [6] underscore the need for improved contraceptive education, access and options to clear up patients fear and misconceptions and improve their satisfaction and thus, their compliance with an effective method. Based on the information available, the researcher was motivated to investigate the predisposing factors in adoption and utilization of NFP methods among women in Owerri main market. This study is

important as the findings will provide an insight for women to learn more about their bodies and fertility, be more reliance on their own resources rather than other source of contraception that has potential medical risks or side effects, as well as the contribution of NFP methods in encouraging partner communication and intimacy, thereby enhancing marriage building.

METHODOLOGY

A survey design was used and approval was given by research ethical committee of Federal University of Technology Owerri, Imo state, Nigeria. Consent was got from the market chairman of Owerri Main Market Amalgamated Traders Association (OMMATA). The study population involves approximately 850000 women in Owerri main market and who are into any type of business, buying and selling. The market comprises of 85 lines with 20 shops in each line, making a total of (85x20) = 1700 shops. The population of the market was estimated as 1.5 million people with estimate of 650000 men and 850000 women. 25 lines were randomly sampled from the 85 lines. The next stage was the use of simple random sampling to sample 10 women from each line. Thus from the 25 sampled lines, 250 women were randomly sampled. The instrument used was validated and reliable questionnaire. Section A of the questionnaire sought information on personal/demographical data of the respondents, Section B was designed to obtain the women knowledge on Family Planning and its methods as well as the one or type they are using. Also the advantages and disadvantages of the NFP methods were sought out, and Section C sought to obtain their responses to the predisposing factors in adoption and utilization of NFP methods. Responses to these items were structured and weighted four point scales of Strongly Agree (SA) 4, Agree (A) 3, Disagree (DA) 2, and Strongly Disagree (SD) 1.

A trial test of the instrument was done on 20 market women from one community which was not included in the main study. The Test-Retest reliability technique was adopted in testing the reliability of the instrument. The Correlation Coefficient of $r = 0.89$ was got indicating that the instrument was highly reliable. Administration of the instrument lasted for three months and data analysis done using percentage and Chi-square.

RESULTS

Table 1. Socio-demographic characteristics of the respondents

| Socio-demographic characteristics | Frequency (N=250) | Percentage (%) |
|-----------------------------------|-------------------|----------------|
| Age group (years) | | |
| 20 – 30 | 103 | 41.2 |
| 31 – 40 | 74 | 29.6 |
| 41 – 50 | 47 | 18.8 |
| 51 – 60 | 26 | 10.4 |
| Marital status | | |
| Single | 66 | 26.4 |
| Married | 175 | 70.0 |
| Separated/Divorced | 9 | 3.6 |
| Religion | | |
| Catholic | 84 | 33.6 |
| Anglican | 68 | 27.2 |
| Pentecostal | 94 | 37.6 |
| Traditional/Pagans | 4 | 1.6 |
| Level of Education | | |
| No Formal education | 13 | 42.0 |
| Primary | 105 | 36.0 |
| Secondary | 90 | 16.8 |
| Tertiary | 42 | 5.2 |
| Type of Business | | |
| Textile | 78 | 31.2 |
| Food stuff | 57 | 22.8 |
| Cosmetics/Jewelries | 49 | 19.6 |
| Provision | 31 | 12.4 |
| Others | 35 | 14.0 |

Table 2. General Knowledge of Family Planning Methods

| | Frequency (N=250) | Percentage (%) |
|--------------------------------------|-------------------|----------------|
| Have heard of Family Planning | | |
| Yes | 250 | 100.0 |
| Source of Awareness | | |
| Hospital | 109 | 43.6 |
| Television | 77 | 30.8 |
| Radio | 41 | 16.4 |
| Newspaper/Magazine | 4 | 1.6 |
| Others | 19 | 7.6 |

The results in Table 1 and 2 showed the socio-demographic characteristics of the market women and their general knowledge of family planning methods. Majority of the respondents were between the age group of 20-30 years (41.2 percent) while married respondents were 175 (70.0 percent). In religion, Pentecostal constituted the highest frequency of 94 (37.6 percent). In educational level, majority, 105 (42.0 percent) of the respondent had only primary education, followed by those of secondary education, 90 (36.0 percent). Most of the

women are into textile business, 78 (31.2 percent) followed by food stuff, 57 (22.8 percent). All the women claimed to have heard of FP before with hospital been the most common source of information, 109 (43.6 percent). Majority of the respondents makes use of condom, 58 (23.2) percent followed by pills, 52 (20.8 percent). NFP methods were only practiced by 22 (8.8 percent) of the women with abstinence having the highest frequency of 7 (31.8 percent).

TABLE 3. Relationship between the physiological basis of NFP method and its adoption and utilization among women in Owerri main market

| Knows when ovulation occurs | NFP method use (%) | | Total |
|-----------------------------|--------------------|------------------|------------|
| | Yes | No | |
| Yes | 19(18.4) | 84(81.6) | 106 |
| No | 3(2.0) | 141(98) | 144 |
| Total | 22(8.8) | 228(91.2) | 250 |

$X^2 = 20.311$, $df = 1$, $p\text{-value} = 0.000$. N/B: percentage and totals are based on responses.

| Ovulation Sign Experienced | NFP method use (%) | | Total |
|----------------------------|--------------------|------------------|------------|
| | Yes | No | |
| Clear mucus | 7(16.3) | 36(83.7) | 43 |
| Wet mucus | 7(20.0) | 28(80.0) | 35 |
| Stretchy mucus | 8(33.3) | 16(66.7) | 24 |
| Dry mucus | 0 | 2(100) | 2 |
| Cloudy mucus | 0 | 2(100) | 2 |
| Total | 22(8.8) | 228(91.2) | 250 |

$X^2 = 3.892$, $df = 4$, $p\text{-value} = 0.421$. N/B: Percentage and totals are based on responses.

Table 3 shows the responses of the women on the relationship between the physiological basis of NFP methods and its adoption and utilization. 106 (42.4 percent) of the women attested that they know when their ovulation occurs while the remaining, 144 (57.6 percent) conceded ignorance of this. This statistically had a significant association between the knowledge of time of ovulation occurrence and the adoption and utilization of NFP methods by the women. (Chi-

square= 20.311; $p\text{-value}=0.000$). On the other hand, there is no statistical significant association between sign of ovulation experienced and the use of NFP method by the women at a 5% level of significance. (Chi-square= 3.892; $p\text{-value}=0.421$). Women who observe stretchy mucus during ovulation, 8 (33.3 percent) make a higher use of NFP methods when compared with other signs like wet mucus, 7 (20.0 percent).

Table 4. Relationship between the advantages and disadvantages of NFP and its adoption and Utilization among Women in Owerri Main market

| Advantages derived from NFP Practice | NFP method use (%) | | Total |
|--|--------------------|------------------|------------|
| | Yes | No | |
| Increased self awareness | 8(13.3) | 52(86.7) | 60 |
| Increased knowledge of your fertility | | | |
| Reduced re-supply cost | 9(13.0) | 60(87.0) | 69 |
| Freedom from artificial substances | | | |
| Freedom from side effects or medical risk of other methods | 2(15.4) | 11(84.6) | 13 |
| | 0 | 85(100) | 85 |
| | 3(13.0) | 20(87.0) | 23 |
| Total | 22(8.8) | 228(91.2) | 250 |

$X^2 = 12.505$, $df = 4$, $p\text{-value} = 0.14$. N/B: Percentage and totals are based on responses.

| Limitations experienced From NFP practice | NFP method use (%) | | Total |
|--|--------------------|------------------|------------|
| | Yes | No | |
| Fear of sexually transmitted infection | 0 | 27(100) | 27 |
| Irregular or unpredictable menstrual cycles | | | |
| Less partner co-operation and compliance | 1(1.4) | 68(98.6) | 69 |
| Lack of time for daily monitoring and charting | | | |
| Others | 3(5.7) | 50(94.3) | 53 |
| | 18(20.7) | 69(79.3) | 87 |
| | 0 | 14(100) | 14 |
| Total | 22(8.8) | 228(91.2) | 250 |

$X^2 = 24.577$, $df = 4$, $p\text{-value} = 0.000$. N/B: Percentage and totals are based on responses.

Table 4 shows that freedom from artificial substances, 85 (34.0 percent) was found to be the most advantage derived from NFP practice. (Chi-square=12.505, p-value=0.14). Advantages derived from NFP practice was not statistically significant associated with NFP practice and use of NFP methods at 5% level of significance. On the other hand, the disadvantages/limitations experienced from

NFP practice shows that fear of STI was the most factor for not using NFP practice, 27 (100 percent) followed by irregular or unpredictable menstrual cycle, 68 (98.6 percent). This indicates that there is a statistically significant association between limitations experienced from NFP practice and use of NFP methods at 5% level of significance. (Chi-square=24.577, p-value=0.000).

DISCUSSION

Out of the 250 women from Owerri Main market enrolled in the study, only 22 women representing 8.8 percent of respondents were considered eligible to be used for further analysis as they attested through the questionnaire to have adopt and utilize NFP methods. Majority 7 (31.8 percent) agreed on abstinence while basal body temperature, 1 (4.5

percent) was the least commonly proposed type. This may be due to the fact that majority of the women had only primary school education, 105 (36.00 percent) as shown in Table 1. It may also be due to their sources of awareness or information of FP methods available. The common source of information was the hospital, 109 (43.6 percent) as shown in Table 2. These findings agrees with [9] who opted that the health problems and abortifacient

properties of pills, IUCDs and norplant have been documented but seldom disseminated to patients (especially when they visit health centers and hospitals). The study also conforms to what [8] found in his study of predictors of practice of NFP methods that a woman level of education is an indicator towards identifying the fertile time during the menstrual cycles. Women who are enlightened apart from training can learn NFP solely on their own from books, newspapers, magazines and other self-help guide resources.

On the physiological basis of NFP methods, 100 (42.4 percent) claimed to know when ovulation occurs. Those who observed stretchy mucus during ovulation make a higher use of NFP methods. The result showed that there is a significant association between the physiological basis of NFP methods and its adoption and utilization among women, (p-value = 0.000). [8] in her study also emphasized that natural methods of FP use one or more indicator to identify the beginning and end of the fertile time during the menstrual cycles (and this involves observing cervical secretions and monitoring the changes on the position and feel of the cervix) thereby facilitating the use of these indicators by women for NFP practice.

CONCLUSION

Most women despite being aware of Family Planning (FP), they decline from actual use of Natural Family Planning (NFP) methods. Regardless of which method of FP they use, every woman and even men will find value in learning fertility awareness based methods. Hence, efforts should be made for the development of new guidelines for simpler new regimens of NFP that can be integrated into FP services delivery settings towards a reversal of this phenomenon. Furthermore, reinforcement of behaviors change and maintenance towards NFP practice should be advocated through repeated dissemination of information and a well publicized health campaign.

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