Health-Social Factors as Correlates of Family Planning Methods among Married Female University Students

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Abstract
The study examined health-social factors as correlates of family planning methods among married female university students. Five research questions and five hypotheses guided the study. The linear correlational research design was used. The population of the study was made up of all the students numbering 21,169 in Imo State University, Owerri for 2016/2017 academic session. The sample for this study is made up of 221 student mothers. Purposive and haphazard/accidental sampling techniques were used for the sampling. Two instruments were used to collect data for the study. They are: Cultural Belief Examination Scale (CBES) and Family planning Methods Scale (FPMS). The instruments were validated and tested for reliability. The two instruments CBES and FPMS were trial tested for reliability using the Cronbach’s Alpha Statistic with indices of 0.80 and 0.79 respectively. The research questions were answered using the Pearson, “r” statistics but the hypotheses were tested using the t-test significance of correlation a p<0.05 level of significance. The study found among others that cultural belief correlated very highly with family planning. It was also revealed that there is a high significant relationship between poor quality services to the health facilities and university student mothers’ family planning methods. Based on the above findings, the study recommended that among others that since it was found out that there is very high significant relationship between cultural belief and university students’ mothers’ family planning methods, the society should be sensitized that their cultural belief may mar or promote their health in the issue of family planning method.

Keywords: Family planning, social factors, cultural factors, fertility.

Introduction
Family planning helps to limit the size of the family. The above objectives/aims are based on the premises that having many children increases the health risks of pregnancy and childbirth (Briggs, 2001). Again, the risk of death of mothers and children is increased if the space between births is short or less than two years. Family planning can play a major role in protecting the lives of infants, children and the family as a whole. Those benefits provide the main rationale for family planning programme. Omado (2000), stated that family planning started in 1956 under the marriage council as a result of many cases of unwanted pregnancy, abandoned babies and abortions in Lagos. The pathfinder Fund Agencies in USA sponsored it in 1958, the first family planning clinic was opened with all the family planning method under Dr. Adeniyi Jones.
Family planning services and its methods, despite its long existence in the country is not still well accepted. To emphasize more on its importance, one time head of state President Ibrahim Babangida launched the National Population Policy in April, (1988) with the law that state, one woman to four children in order to control and check population explosion and also to reduce maternal mortality. Many of these agencies for example Pathfinder USA has helped so much in the areas of man power development and supply of equipment’s to enhance family planning in Nigeria.

Samuel (2010) defined family planning as the practice that helps individuals or couples to attain certain objectives such as avoiding unwanted pregnancies, bringing about wanted babies at the right time, regulating, the interval between pregnancies, controlling the time at which birth occurs in relation to the ages of parents and determining the number of children in the family. Family planning is a means of reproductive health. In-spite of the hue and cry in and outside Nigeria about family planning or birth control, many people are still confused about its meaning, the methods involved, the advantages and disadvantages and the factors hindering it's wide application in Nigeria (Iffih & Ezeah, 2004). Family planning may encompass sterilization, as well as pregnancy termination. It also includes raising a child with methods that require significant amount of resources namely: time, social, financial and environmental. Family planning measures are designed to regulate the number and spacing of children within a family, largely to curb population growth and ensure each family has access to limited resources.

Family planning is very beneficial to families as it is an effective tool for controlling the excessive population growth which is affecting the ability of a country to achieve its social and economic growth. In certain countries the rate of population increase is becoming an important problem in their economic and social development and many government now have polices to try to show the rate of population growth. Consequently, many governments now accept family planning as a necessary ingredient to socio-economic development and as an important contribution to any effort aimed at improving the quality of life of the people. There include efforts to, achieve food self-sufficiency, reduce unemployment, provide adequate and effective health services, increase gross domestic product per capital, achieve qualitative education and provide enough housing and other services. Despite the benefits, it has being discovered that there are health-social factors that could relate to family planning methods among final year student mothers in tertiary institutions in Imo State.

**Statement of the Problem**
Effective practice of family planning methods among university student mothers in Nigeria is low and it varies by demographic and socio-economic characteristics. This calls for a study to verify what obtains in Tertiary Institutions in Imo State. The use of family planning methods among student mothers will reduce unwanted pregnancy, mortality and morbidity associated with abortion among mothers. Sexually transmitted infection incidence among student mothers of reproductive age will also be minimized, thus, enhancing their health. The issue unwanted pregnancy, rape and sexual harassment in the society are on the increase, and the society wonders that poor family planning could be linked to such problem among families and married female students. With the above, one begins to ponder what health-social factors could relate to family planning method among university student mothers in Imo State.

**Scope of the Study**
This study involved all the student mothers in Imo State University (IMSU), Owerri. The study focused on health-social factors as correlates of family planning methods among university
student mothers in Imo State. It also focused on the following areas of health-social factors: cultural belief, poor quality services to the health facilities, misconceptions about family planning, people’s desire for more children and fear of return to fertility. The researcher correlated the above variables to family planning methods. The university student mothers include mainly matured undergraduate mothers and that of post graduate mothers. The choice of IMSU was because the researcher has a better access to the respondents therein.

**Purpose of the Study**
The general purpose of this study is to examine health-social factors as correlates of family planning methods among married university students in Imo State. In specific terms, the study achieved the following objectives, to ascertain the;

1. Relationship between cultural belief and university student mothers’ family planning methods,
2. Coefficient of relationship between quality services to the health facilities and university student mothers’ family planning methods,
3. Index of relationship between misconceptions about family planning and university student mothers’ family planning methods,
4. Extent of relationship between people’s desire for more children and university student mothers’ family planning methods, and
5. Linear relationship between fear of return to fertility and university student mothers’ family planning methods.

**Significance of the Study**
The findings of this study will be beneficial to university student mothers, individual families, society at large, government, service providers, health educators and counselors, policy makers, curriculum planners, lecturers and future researchers, when the study is complete and published. The findings of this study will be beneficial to women who will be made more aware of modern family planning methods and whose health will be improved as they utilize these facilities

The findings of this study would enlighten the government agencies that initiate, finance and control all family planning programmes on the need to target both married and unmarried rural dwellers. It will also help government to plan on socio-economic development through information that will be provided by student-mothers in universities and will also help them to control population.

The result generated from this study will enable service providers, health educators and counsellors to develop appropriate health talks to persuade and convince the university student mothers to adopt positive attitude to modern family planning and subsequently use the methods irrespective of any health-social related factors.

The service providers may use the findings during health talk to step up the practice of non-applicance, while health educators may use the results to organize workshops and seminars to give correct and adequate information; in order to encourage positive practices of non-applicance method and discourage negative ones.

Policy makers may benefit from the findings by using the information to make policies that will guarantee high level practice of modern family planning, thus limiting the number of children to a woman and allowing freedom of use of family planning for all. Curriculum planners may benefit immensely from these findings by using the information to plan for family planning education and its content curriculum that will be appropriate to individual level of education, to enhance positive attitude and discourage negative ones.
Lecturers may use the findings by identifying practice-gaps to be filled, based on level of education and will guide students, parents and non-teaching staff, on how to improve upon their practice of family planning. The findings will contribute to the existing research on the health-social factors as correlates of family planning methods among university student mothers in Imo State, thereby serving as an empirical study and as a relevant material to subsequent researchers who might be carrying out a related topic to this.

**Research Questions**
The following research questions were posed to guide the study:

1. What is the relationship between cultural belief and university student mothers’ family planning methods?
2. What is the coefficient of relationship between poor quality services to the health facilities and university student mothers’ family planning methods?
3. What is the index of relationship between misconceptions about family planning and university student mothers’ family planning methods?
4. What is the extent of relationship between people’s desire for more children and university student mothers’ family planning methods?
5. What is the linear relationship between fear of return to fertility and university student mothers’ family planning methods?

**Hypotheses**
The following null hypotheses were formulated and were tested at 0.05 level of significance:

- **H01:** The relationship between cultural belief and university student mothers’ family planning methods is not significant.
- **H02:** The coefficient of relationship between poor quality services to the health facilities and university student mothers’ family planning methods is not significant.
- **H03:** The index of relationship between misconceptions about family planning and university student mothers’ family planning methods is not significant.
- **H04:** The extent of relationship between people’s desire for more children and university student mothers’ family planning methods is not significant.
- **H05:** The linear relationship between fear of return to fertility and university student mothers’ family planning methods is not significant.

**Methodology**

**Design of the Study**
The design of this study is linear correlational type. This design is one in which a researcher establishes the degree or extent of relationship existing between two or more variables of a study (Amin, 2005).

**Population of the Study**
The population of the study was made up of all the students numbering 21169 in Imo State University, Owerri for 2016/2017 academic session. See Appendix II, p.93.

**Sample and Sampling Technique**
The sample for this study is made up of 221 married female students. Purposive and haphazard/accidental sampling techniques were used for the sampling. The researcher purposely chose student mothers from the university. She further used haphazard/accidental sampling technique to obtain the 221 for the study. In this case the researcher made use of ‘take them where you found them’ method. She however, used student mother she accidentally came
in contact with. Some of them were accosted on the university pathways, classrooms, along the corridors and other meeting places in the university.

**Instrument for Data Collection**

Two instruments were used to collect data for this study. They are: two researcher-structured rating scales. The rating scales were meant to be rated by the student mothers. They are titled: “Health-Social Factors Scale (HSFS)” for student mothers and “Family Planning Methods Scale (FPMS)” for student mothers. HSFS has 25 items while FPMS has 5 items. The rating scales contained item statements with a stem of an item to introduce the statements. The scales consisted of items relating to the research questions using the 4–point rating type scale of Strongly Agree = 4points; Agree = 3points; Disagree = 2points and Strongly Disagree = 1point. (See appendix I, p.89 for a copy of the instrument).

**Validation of the Instrument**

For the purpose of this study, both the face and content validity of the instrument was ensured. To ensure validity of the rating scale, the initial draft of the instrument was scrutinized by three specialists in measurement and evaluation and health science education who were required to check for all non-technical flaws in the instrument. The specialists were given a copy of the validation form containing the study’s title, purpose of the study, research questions, hypotheses and instruments. At first, the total items in the rating scales were 17 in number but were later increased to 30 based on the inputs made by the specialists. Such inputs enhanced a thorough validation in order to ensure that the instrument actually measured what it was intended to measure in relation to the research questions raised. Based on the suggestions and comments of these specialists, the necessary corrections were made and the final version of the instrument was drafted. See Appendix III, p.94.

**Reliability of the Instrument**

To establish the reliability of the research instruments, the instruments were administered to 30 student mothers from Federal University of Technology, Owerri using one shot test method. The responses of the student mothers were analyzed using Cronbach alpha statistic which gave an index number of 0.87 and 0.76 for HSFS and FPMS respectively indicating that the instruments are reliable for the study (See page 5 and 7 of SPSS appendix).

**Method of Data Collection**

A Direct Administration Technique (DAT) method also called face to face method was employed for administration of the instrument in which the researcher with the help of two trained research assistants went to different departments. This face to face encounter enabled the researcher to guide the respondents on the filling of the rating scale. The researcher with the help of the two well-trained research assistants administered the copies of the rating scales to the selected sample for the study, and on the spot collection was made in order to ensure maximum return as 100% rate. At the end, all the copies were administered and all of them were retrieved and these collected copies were used for the analysis.

**Method of Data Analysis**

The research questions were answered with Pearson r statistic so as to establish the extent of linear relationship between the variables in the study. The hypotheses were tested using t-test significance of correlation so as to establish the significance of the relationship at 0.05 level of significance.
**Decision Rule:** The bases for the decision for the research questions’ conclusion were as follows: 0.00-0.19=very low relationship, 0.20-0.39=low relationship, 0.40-0.59=moderate relationship, 0.60-0.79=high relationship and 0.80-1.00=very high relationship. The acceptance or rejection of null hypotheses was based on the calculated value of the t-test of correlation “r” analysis. When the t-calculated is greater than the t-tabulated, the null hypothesis was rejected but if otherwise, the null hypothesis was accepted.

The researcher presented the result of data analyses with respect to the specific objectives of the study.

Relationship between cultural belief and university student mothers’ family planning methods

Table 1:
Sample size (n), correlation coefficient index (r), alpha level (α), degree of freedom (df) and t-test of significance of correlation between variables

<table>
<thead>
<tr>
<th>n</th>
<th>R</th>
<th>α</th>
<th>df</th>
<th>t_cal</th>
<th>t_tab</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>221</td>
<td>0.93</td>
<td>0.05</td>
<td>219</td>
<td>36.538</td>
<td>1.96</td>
<td>Very High + Relationship: Reject H₀</td>
</tr>
</tbody>
</table>

Table 1 answered the research question and tested the hypothesis on the relationship between cultural belief and university student mothers’ family planning methods. The table indicated that the correlation coefficient is 0.93. This implies that there is a very high positive relationship between cultural belief and university student mothers’ family planning methods. When tested with t-test of significance of correlation, it was shown that the t_cal of 36.538 is greater than the t_tab of 1.96, indicating that the relationship between cultural belief and university student mothers’ family planning methods is significant.

Coefficient of relationship between poor quality services to the health facilities and university student mothers’ family planning methods

Table 2:
Sample size (n), correlation coefficient index (r), alpha level (α), degree of freedom (df) and t-test of significance of correlation between variables

<table>
<thead>
<tr>
<th>n</th>
<th>r</th>
<th>α</th>
<th>df</th>
<th>t_cal</th>
<th>t_tab</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>221</td>
<td>0.60</td>
<td>0.05</td>
<td>219</td>
<td>11.108</td>
<td>1.96</td>
<td>High + Relationship: Reject H₀</td>
</tr>
</tbody>
</table>

Table 2 answered the research question and tested the hypothesis on the coefficient of relationship between poor quality services to the health facilities and university student mothers’ family planning methods. The table indicated that the correlation coefficient is 0.60. This implies that there is a high positive relationship between poor quality services to the health facilities and university student mothers’ family planning methods. When tested with t-test of significance of correlation, it was shown that the t_cal of 11.108 is greater than the t_tab of 1.96, indicating that the coefficient of relationship between poor quality services to the health facilities and university student mothers’ family planning methods is significant.

Index of relationship between misconceptions about family planning and university student mothers’ family planning methods

Table 3:
Sample size (n), correlation coefficient index (r), alpha level (α), degree of freedom (df) and t-test of significance of correlation between variables

<table>
<thead>
<tr>
<th>n</th>
<th>r</th>
<th>α</th>
<th>df</th>
<th>t_cal</th>
<th>t_tab</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>221</td>
<td>0.89</td>
<td>0.05</td>
<td>219</td>
<td>28.096</td>
<td>1.96</td>
<td>Very High + Relationship: Reject H₀</td>
</tr>
</tbody>
</table>
Table 3 answered the research question and tested the hypothesis on the index of relationship between misconceptions about family planning and university student mothers’ family planning methods. The table indicted that the correlation coefficient is 0.89. This implies that there is a very high positive relationship between misconceptions about family planning and university student mothers’ family planning methods. When tested with t-test of significance of correlation, it was shown that the $t_{cal}$ of 28.096 is greater than the $t_{tab}$ of 1.96, indicating that the index of relationship between misconceptions about family planning and university student mothers’ family planning methods is significant.

Extent of relationship between people’s desire for more children and university student mothers’ family planning methods

Table 4:

| Sample size (n), correlation coefficient index (r), alpha level ($\alpha$), degree of freedom (df) and t-test of significance of correlation between variables |
|---|---|---|---|---|---|---|
| n | r | $\alpha$ | df | $t_{cal}$ | $t_{tab}$ | Remarks |
| 221 | 0.53 | 0.05 | 219 | 9.326 | 1.96 | Moderate Relationship: Reject H$_0$ |

Table 4 answered the research question and tested the hypothesis on the extent of relationship between people’s desire for more children and university student mothers’ family planning methods. The table indicted that the correlation coefficient is 0.53. This implies that there is a moderate positive relationship between people’s desire for more children and university student mothers’ family planning methods. When tested with t-test of significance of correlation, it was shown that the $t_{cal}$ of 9.326 is greater than the $t_{tab}$ of 1.96, indicating that the extent of relationship between people’s desire for more children and university student mothers’ family planning methods is significant.

Linear relationship between fear of return to fertility and university student mothers’ family planning methods

Table 5:

| Sample size (n), correlation coefficient index (r), alpha level ($\alpha$), degree of freedom (df) and t-test of significance of correlation between variables |
|---|---|---|---|---|---|---|
| n | r | $\alpha$ | df | $t_{cal}$ | $t_{tab}$ | Remarks |
| 221 | 0.62 | 0.05 | 219 | 11.708 | 1.96 | High + Relationship: Reject H$_0$ |

Table 5 answered the research question and tested the hypothesis on the linear relationship between fear of return to fertility and university student mothers’ family planning methods. The table indicted that the correlation coefficient is 0.62. This implies that there is a high positive relationship between fear of return to fertility and university student mothers’ family planning methods. When tested with t-test of significance of correlation, it was shown that the $t_{cal}$ of 11.708 is greater than the $t_{tab}$ of 1.96, indicating that the linear relationship between fear of return to fertility and university student mothers’ family planning methods is significant.

Summary of the Findings

From the above analysis, the following findings were made that:

1. There is a very high positive and significant relationship between cultural belief and university student mothers’ family planning methods,
2. There is a high positive and significant relationship between poor quality services to the health facilities and university student mothers’ family planning methods,
3. There is a very high positive and significant relationship between misconceptions about family planning and university student mothers’ family planning methods,
4. There is a moderate positive and significant relationship between people’s desire for more children and university student mothers’ family planning methods, and
5. There is a high positive and significant relationship between fear of return to fertility and university student mothers’ family planning methods.

Discussion of Findings

Relationship between cultural belief and university student mothers’ family planning methods

It was revealed in this study that there is a very high significant relationship between cultural belief and university student mothers’ family planning methods. This implies that it could mean that some women are not given the opportunity to practice some family planning methods and some believe that woman cannot take decision on child spacing. This could affect family planning methods among couples. This finding is in agreement with Apanga and Adam (2015) which revealed that cultural parity and educational level of respondents were positively associated with usage of family planning services. Lasisi, Bassey, Ita and Awoyemi (2014) found that the traditional core of Ibadan was three times more likely to predict the use of family planning. On the other hand, Ashimi, Amole, Ugwa and Ohonsi (2016) revealed that the use of family planning methods was significantly associated with respondents’ ethnicity. However, Oluwatosin and Abimbola (2015) results showed that only family type had significant influence on abstinence method. Contrarily, Olaitan (2011) findings revealed that cultural norms do not influence the choice of family planning among couples. The similarities and differences recorded could have been influenced by location of the studies.

Coefficient of relationship between poor quality services to the health facilities and university student mothers’ family planning methods. It was also revealed that there is a high significant relationship between poor quality services to the health facilities and university student mothers’ family planning methods. This finding implies that poor quality services to the health facilities could lead to poor family planning methods, thus implying that there is a high association between poor quality services to the health facilities and university student mothers’ family planning methods. That is to say that effective family planning is grossly affected by poor accessibility to the health facilities because there may not be good equipment for family planning service rendered and poor finance could as well be linked to this. This finding is in line with that of Alege, Matovu, Ssensalire and Nabiwemba (2016) which revealed that government (27.6%) and private (21.1%) health facilities were the main sources of modern FP methods, thus, sixty two per cent of women reported current use of any FP method. The similarities in the findings could be attributed to similar use of family planning methods by women the areas.

Index of relationship between misconceptions about family planning and university student mothers’ family planning methods.

The study also found that there is a very high significant relationship between misconceptions about family planning and university student mothers’ family planning methods. This finding means that misconceptions about family planning go a long way to influence university student mothers’ family planning methods. That is to say that some people believe that no matter the way family planning method is practiced, it leads to infertility in female especially with use of pills and injection. This finding is in line with Apanga and Adam (2015) who revealed that one of the major motivating factors to the usage of family planning service is misconceptions about family planning. Also, Anyanwu, Ezegbe and Eskay (2013) found that reasons for not using contraception for 10.48% as against misconception about contraception. This implies that a
misconception about family planning truly is a predictor of university student mothers’ family planning methods.

Extent of relationship between people’s desire for more children and university student mothers’ family planning methods. The researcher also revealed that there is a moderate significant relationship between people’s desire for more children and university student mothers’ family planning methods. This implies that people’s desire for more children to a moderate extent determines university student mothers’ family planning methods. That is to say that people’s desire for more children could be an influencing factor to university student mothers’ family planning methods. This finding is in consonance with Anyanwu, Ezegbe and Eskay (2013) who found that reasons for not using contraception for 56.48% was desire for more Children, 20.16% as need not felt, 10.48% as against religion and misconception about contraception and 0.80% as mother in law opposition, lack of information and fear of side effects. Also, Akokuwebe and Ojo (2016) indicated that forty-three percent of the respondents desired to have at least four children. The study further revealed that factors predictive of uptake of family planning were number of children and level of education.

Linear relationship between fear of return to fertility and university student mothers’ family planning methods. It was finally revealed that there is a high significant relationship between fear of return to fertility and university student mothers’ family planning methods. This could be explained that readiness of the body reproductive system to return to hormonal production grossly affects the practice of family planning methods. That is to say that delay of return to fertility is a barrier to effective practice of family planning method. This is in consonance with Lasisi, Bassey, Ita and Awoyemi (2014) result which showed that fear of infertility, associated side effects and husband’s influence were major barriers to women use of family planning measures. In another way, Etokidem, Ndifon, Etowa and Asuquo (2017) findings suggest that family planning uptake would increase if couples make joint decisions in the regard of fear of return to fertility. The similarities in the findings could be attributed to similar use of specific objectives.

**Educational Implication**

Many factors contribute to unwanted pregnancy in Nigeria, and a very important factor is the low level of family planning methods among mothers (university student mothers inclusive). In addition, a desire to limit family size to enable the family to provide a better education for the children, the increased participation of women in the labour force, and urbanization are other factors leading to the desire of Nigerian women to have a predetermined number of children. Family planning methods have correlated with health-social factors and this implies that people with low family planning method prevalence rates are also linked with health-social factors and with very high maternal mortality ratios. Nigeria has one of the highest maternal mortality ratios in sub-Saharan Africa, and ranks as the country with the second highest number of maternal deaths in the world, with illegal and unsafe abortions contributing 20%–40% of about 60,000 maternal deaths that occur yearly in Nigeria. Similarly, the rate of induced abortions is a good indicator of the current state of medical care and family planning in any country. The use of family planning methods translates into the prevention of unwanted pregnancy and subsequent abortions. If contraceptive use in the population increases among Nigerian men and women who are sexually active, there will be a significant reduction in unwanted pregnancies and abortions leading to reduced maternal mortality. This will help to educate the society of the relationship between health-social factors and family planning methods among university student mothers.

**Limitations of the Study**
The generalizations made with respect to this study are subject to the this limitation; since the study is a correlational design and involved samples of student mothers from Imo State University, Owerri, the generalization of the findings should be done with caution. This is because what is applicable in other states may not be strictly the same in the present area of study. This study is limited to the fact that it was carried out only in Imo State University, Owerri, therefore the findings could only be restricted to this area since the study is a correlational study.

Recommendations
Based on the findings from the study, the following recommendations are made:

1. The society should be educated on the fact that their cultural belief may mar or promote their health in the issue of family planning method.
2. The government and other agencies should endeavour to provide quality services and health facilities that will promote family planning methods.
3. Misconceptions of people about family planning should be discouraged through campaign and sensitization programmes which can be organized by health service providers.
4. Family planning methods, proper guidance should be given to mothers by guidance and counsellors on how they desire for more children in their family.
5. Fear of return to fertility by mothers should be discouraged by health counselors and medical doctors because, this will help to improve their practice of family planning method.

References
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