

## Research Article

# Perception and Acceptance of Pre-Marital Fertility Screening among Final Year Students of College of Health Sciences at a University in North Central, Nigeria

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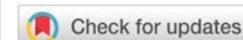
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## Abstract

Premarital screening is a worldwide activity that aims to diagnose and treat unrecognized disorders and reduce the transmission of diseases to couples and children. This study was aimed at assessing the perception and acceptance of premarital fertility screening among final year students of the college of health sciences, University of Ilorin, Kwara state. A descriptive research design with a structured, self-designed questionnaire was employed in the study to select a sample of 220 final year students purposively. Results showed that the respondents had adequate knowledge of pre-marital fertility screening but some of the respondents still have negative perception. The majority 79.5% of the respondents were positive about going for premarital fertility screening if it was available. Conclusively, policymakers should implement policies that support hitch-free screening processes. Nurses should comply with ethical principles and be able to health educate people to undergo fertility screening before marriage.

## Background

Starting a family and laying the foundation for a successful professional career usually take place in women's most fertile years [1]. Premarital screening is a worldwide activity that aims to diagnose and treat unrecognized disorders and reduce the transmission of diseases to couples and children, it is considered as the primary preventive approach for couples who planned for conception. Premarital care includes premarital counselling and a general medical examination [2]. The premarital examination can particularly be important in the prevention of the spread of disease [3]. Premarital Examination (PME) and history taking provide a baseline assessment of future married couples. It has proved to be a helpful and effective measure to detect and

diminish the burden of reproductive problems, communicable diseases, and hereditary illness [4]. Premarital Investigation (PMI) is a multidimensional concern that has a significant role in reducing marital difficulties caused by inherited and infectious diseases. It aims to detect and treat unrecognized disorders and decrease the spread of diseases to couples and children. Premarital counselling is one of the tools to make knowledge and skills available for motivating individuals to make better and healthy lifestyle choices, especially when correctly targeted. It is also the most appropriate process, as it is generally acceptable from the religious and ethical point of view [5].

Gharaibeh. et al. [6], reported university students had



a considerable knowledge of premarital testing, but still had a limited knowledge about certain aspects and negative perceptions towards other aspect of premarital testing. Al Farsi, et al. [5], found out that despite the relatively high level of knowledge, about one third of the participants were still reluctant to carry out premarital testing. Majority of students do not know that it is possible to determine their ovarian reserve, which is not surprising because ovarian reserve testing is not routinely offered in Germany [1] despite being one of the fertility screenings. Studies from the USA [7] and France [8] observed that more female students were interested in having access to screening technologies for ovarian reserve, which corresponds with the observation of [1]. Abubakar and Yusuf [9], in a study conducted in Usman Danfodiyo university teaching hospital, Sokoto, Nigeria, 198 infertile patients were evaluated. The prevalence of infertility was 15.7%. The previous history of evidence of genital infection including lower abdominal pain, vaginal discharges were common. Female gender-related causes of infertility accounted for 42.9%; male causes accounted for 19.7%. Both partners contributed to infertility in 16.7% while no cause was found in 20.7% of the patients. With the above statistics in Sokoto, Nigeria, it can be deduced that the cause of infertility is not limited to one gender, and some causes of infertility could be detected early enough through fertility screening and possibly treated to prevent infertility.

Fertility is understood to decline in line with age for men and women, delayed marriages have pushed up the number of people struggling with infertility. Although most people who have premarital health check-ups are women, medical tests for men are also drawing attention. According to [10], young people in Egypt need more information on reproductive health and access to PMC services before they have their first child. Although their attitudes towards sexual matters are liberal, their knowledge about reproductive health and premarital care is still limited. "Infertility is a global health problem and a socially destabilizing condition for couples carrying several stigmas and a cause of premarital disharmony" [9]. "At least 30 million men worldwide are infertile with the highest rate in Africa and Eastern Europe" [11]. With the statistic above in which Nigeria is part of Africa, the issue of infertility cannot be overemphasized. Previous researches dwelt well of the knowledge and attitude of students which found out that there is still a reduced knowledge about premarital fertility testing [12]. This study therefore seek to assess the knowledge of premarital fertility screening, examine the perception and acceptability among the final year medical students.

Therefore, there is a need to look into the perception and acceptance of final year students as well as assessing their knowledge about premarital fertility screening.

## Methods and materials

A cross-sectional descriptive survey, with a purposive nonprobability sampling technique was used. Population was 220 final year students in college of medicine. Data was collected with a questionnaire instrument. The study was approved by the ethics and research committee of the institution and all other ethical principles and considerations were observed. The

data analysis was assisted with Statistical Package for Social Sciences (SPSS) version 21 for windows using descriptive statistics; percentages and frequency distribution and inferential statistics of chi-square for correlation coefficient.

## Result

Table 1 reveals the socio-demographic characteristics of the respondents with 75.8% of the respondents were between the ages of 19 and 24 years. The female respondents constituted a greater proportion of 54.2% of the total number. Majority of the respondents 59.5% of the sample practised Islam.

Table 2 reveals that majority of the respondents 83.7% had adequate knowledge of pre-marital fertility screening, while few of the respondents 16.3% do not have knowledge of the premarital fertility screening.

Table 3 shows that 75.8% of the respondents consented that undergoing pre-marital fertility screening is morally and religiously justifiable. In total, 66.8% believed that Pre-marital fertility screening should be encouraged among singles. More than half of the participants 67.9% agreed that pre-marital fertility screening should be done to know one's fertility status before marriage. Fifty-nine dot five per cent (59.5%) of the respondents agreed that pre-marital fertility screening should be done by both males and females intending to conceive when married. More than half the number of respondents 60.5% agreed with the fact that knowing suitor(s) fertility status

**Table 1:** Socio-demographic variables of participants (N= 190).

Variables	F	%
Age grade		
19 – 24	144	75.8
25 – 29	41	21.6
30 – 33	5	2.6
Gender		
Male	87	45.8
Female	103	54.2
Religion		
Islam	113	59.5
Christianity	77	40.5
Marital status		
Single	180	94.7
Married	10	5.3
Department		
Nursing	61	32.1
Medicine	37	19.5
Physiology	56	29.5
Anatomy	36	18.9

**Table 2:** Knowledge of Pre-marital fertility screening (N= 190).

Level of knowledge	F	%
Adequate	159	83.7
Inadequate	31	16.3



should take precedence before accepting a marriage proposal. Also, 41.6% disagreed that Premarital fertility screening should be obligatory before marriage and 38.9% disagreed with premarital fertility testing being enforced by the law before marriage. However, many of the respondents 60% believe that premarital fertility screening should be optional.

Table 4 shows that 94.7% of the respondents accepted to undergo pre-marital fertility screening, 64.7% accepted to disclose the results to their confidant. Majority 91.6% of the respondents consented to get married regardless of the outcome of the screening. Also, 81.1% felt they could disclose their fertility status to their prospective spouses. If any disorder is diagnosed, the majority 94.7% of the respondents want to get treated.

The result in Table 5 shows the relationship between the respondents' perception and acceptance of pre-marital fertility testing. The result reveals no statistically significant relationship between participant's perception and acceptance of pre-marital fertility testing ( $X^2(1) = 0.39, pv = 0.53$ ).

### Discussion

The finding from the study revealed that the respondents had adequate knowledge of premarital fertility screening. This was opposed to the previous study by [12] who reported inadequate knowledge about premarital fertility testing. The increased knowledge reported in this study may be attributed to the advent of social media and the level and kind of students that were interviewed. The study revealed that students from the nursing department were more informed than those from other departments in the college of health sciences. This level of knowledge is however in synchrony with a study conducted by [13] showed that 65.9% of the studied sample had adequate knowledge of about premarital fertility screening.

Also, findings reveal that respondents had a good perception of pre-marital fertility screening as 66.8% of the respondents believed that Pre-marital fertility screening should be encouraged among singles, 67.9% agree that pre-marital fertility screening should be done to know one's fertility status before marriage, 59.5% agreed that Pre-marital fertility screening should be done by both males and females intending to conceive when married, 60.5% agreed with the fact that knowing suitor(s) fertility status should take precedence before accepting a marriage proposal. However, 60% believe that Premarital fertility screening should be

optional. These findings agree with the findings from [14] which also revealed that most of the respondents had a good perception of premarital fertility screening.

Finally, finding reveals a reasonable acceptance of premarital fertility screening among the final year students. This finding is in line with finding from a study conducted by [15]. This reasonable acceptance of premarital fertility screening among the final year students may be accounted for the high-level knowledge on premarital fertility screening demonstrated by the study respondents because acceptance of premarital fertility screening depends solely on its knowledge.

This study has limitations worth stating. The study was confined to the college of health sciences, University of Ilorin, Ilorin, Kwara State, Nigeria only, which means the generalization of the result is limited to the sampled population. The recruitment of the respondents was done through a non-random sampling method. Hence, selection bias should not be ignored, and the result of this study cannot be generalized to the entire university students' population in the town, state or country. The cross-sectional design adopted cannot establish a cause-effect relationship.

### Conclusion

We conclude that the respondents had adequate knowledge of premarital Fertility screening and reasonable acceptance of premarital Fertility screening. However, some of the respondents still have a negative perception of premarital Fertility screening. Therefore, students should be taught the implications of marriage without premarital Fertility screening.

**Table 4:** Acceptance of Pre-marital fertility screening (N= 190).

Pre-marital fertility screening acceptability	Yes		No	
	f	%	f	%
I can undergo pre-marital fertility screening	180	94.7	10	5.3
I can disclose the results to my confidant	123	64.7	67	35.3
Regardless of the outcome, I can still get married	174	91.6	16	8.4
I can disclose my fertility status to a prospective spouse	154	81.1	36	18.9
If any disorder is diagnosed, I will want to get treated	180	94.7	10	5.3

**Table 5:** Chi-square relationship between perception and acceptance of premarital fertility screening.

Perception of fertility screening	Pre-marital fertility screening acceptance		$X^2$	Df	Sig
	Yes	No			
Positive	108	5	0.39	1	0.53
Negative	72	5			

**Table 3:** Perception of Pre-marital fertility screening (N= 190).

Pre-marital facility screening view	SA		A		U		D		SD	
	f	%	F	%	F	%	F	%	f	%
Undergoing pre-marital fertility screening is morally and religiously justifiable	77	40.5	67	35.3	42	22.1	0	0.0	4	2.1
Pre-marital fertility screening should be encouraged among singles	50	26.3	77	40.5	56	29.5	6	3.2	1	0.5
Pre-marital fertility screening should be done to know one's fertility status prior to marriage	69	36.3	60	31.6	54	28.4	6	3.2	1	0.5
Pre-marital fertility screening should be done by both males and females intending to conceive when married	67	35.3	65	34.2	48	25.3	9	4.7	1	0.5
Knowing suitor(s) fertility status should take precedence before accepting marriage proposal	49	25.8	66	34.7	50	26.3	21	11.1	4	2.1
Premarital fertility screening should be optional	39	20.5	75	39.5	48	25.3	21	11.1	7	3.7
Premarital fertility screening should be obligatory before marriage	38	20.0	41	21.6	47	24.7	44	23.2	20	10.5
Premarital fertility testing should be enforced by the law before marriage	28	14.7	43	22.6	45	23.7	39	20.5	35	18.4



It is advised that future surveys or studies should be conducted on the level of utilization of premarital fertility screenings in hospitals, as well as factors influencing premarital fertility screening patronage/utilization.

### The implication of findings to nursing practice

Although the awareness about the premarital fertility screening is quite satisfactory, its uptake is still very suboptimal, hence the need for health education for young people of marriageable age. Nurses could use these findings to advocate for the clients and make policies as regards the cost and discomfort associated with some procedures based on the do no harm principles. The nurses should create an enabling environment where youths can easily trust them and get adequate information about premarital fertility screening. Confidentiality is a key issue when dealing with sensitive topics such as premarital fertility screening. The results, procedures and patient information should be handled with the highest level of confidentiality.

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