

Gynecology & Reproductive Health

Relationship between Menstruation and Fertility: Perception and Knowledge of Nigerian Women

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Received: 05 Feb 2022; **Accepted:** 07 Mar 2022; **Published:** 12 Mar 2022

Citation: Gbadegesin A, Olalere, Haleemah FD, et al. Relationship between Menstruation and Fertility: Perception and Knowledge of Nigerian Women . Gynecol Reprod Health. 2022; 6(1): 1-5.

ABSTRACT

Background: Cultural and religious bias, myths, taboos and misconceptions about menstruation are rife in many developing countries. Adequate scientific based knowledge about menstruation and its relationship to fertility is crucial in attaining optimal reproductive health.

Aim: We evaluated the perception and knowledge of African Nigerian women towards the relationship between menstruation and fertility.

Materials and Methods: It was a prospective cross-sectional household survey with multi-staged cluster sampling design in which 230 randomly selected, consenting women in September and October 2012 were assessed about their perception of menopause using a structured questionnaire.

Findings: We found that 59% of women thought that if a woman does not menstruate, she definitely cannot have a baby, 24% claimed that women with menstrual pain are likely to have miscarriages, while 21% believed that women with menstrual pain will have delay/difficulty getting pregnant. About 3/4 was of the opinion that it is morally wrong to have sex while menstruating and 76 (33.6%) of the women were of the opinion that women who take medications to stop their period are likely to develop cancer later in life. One-fifth of the women think there is no link between menstruation and family planning.

Conclusion: Perceptions and knowledge about menstruation is varied among many Nigerian women, with widespread misconceptions and inadequate knowledge about its relationship with fertility. Universal enlightenment to disabuse the minds of Nigerian women from related myths, taboos and misconceptions is needed to promote reproductive health.

Keywords

Menstruation, Fertility, Menstruation and Fertility, African Women.

Introduction

Menstruation is a physiologic phenomenon unique to females during their reproductive years and its onset heralds the beginning

of a woman's reproductive capability [1]. Menstruation is a necessary occurrence, among some other changes, that characterize the transition phase of the girl child into adulthood [1]. The average age of menarche is 13 years and usually coincides with the onset of secondary education in Nigeria [2]. Approximately 52% of the female population is within the reproductive age group, and most of which menstruate each month [3].

Menstruation is an entirely natural and physiologic process; however, misconceptions and myths about menstruation abound among girls and women in developing countries and have been associated with negative health outcomes [4,5]. These myths, taboos and traditional beliefs acquired during adolescence can persist into adulthood due to inadequate reproductive education in many low- and middle-income countries [6,7].

A proper understanding of menstruation and its relationship with fertility will help women avoid unintended pregnancy, plan conception and improve their reproductive health [8]. This study assessed the perception and knowledge of Nigerian women about menstruation and its relationship with fertility.

Materials and Methods

This was a cross-sectional survey with a 2-stage cluster sampling design, which involved 230 consenting women between September and October 2012. Modified multistage random sampling was used to select respondents within urban and semi-urban, clusters. This included random selection of entry point into the cluster, random selection of starting point, and random selection of building and respondent who met the survey inclusion criteria.

Data collection was with the aid of a structured questionnaire designed for the study. The data obtained were analyzed using SPSS, version 16.0; a statistical computer program. Descriptive statistics (minimum, maximum, mean and standard deviation) were calculated for continuous variables. Percentages and proportions were calculated for categorical variables. Cross tabulations were used for examining relationships between categorical variables. Bar charts were used for graphical illustration.

Results

The largest proportion (38.0%) of our respondents were aged 25-34years, while only 14 (6.1%) of the women were 55 years and above. The mean age was 32.87 ± 10.8 years (Table 1). Over half 132 (57.4%) of the women were married and most of the women 171 (74.3%) practiced Christianity (Table 1). Only 1.8% of the women had no formal education while 16.4% had post-graduate qualification. About one-quarter (27.6%) of the respondents were students or unemployed, while 97 (43.9%) were self-employed or owned their own businesses (Table 1).

Table 1: Socio-demographic characteristics of respondents.

Age category	Frequency	Percent
18 - 24 years	57	24.9
25 - 34 years	87	38.0
35 - 44 years	54	23.6
45 - 54 years	17	7.4
55 years and above	14	6.1
Marital Status		
Single	87	37.8
Married	132	57.4
Divorced	4	1.7
Widowed	7	3.0
Religion		
Christianity	171	74.3
Islam	58	25.2
Traditional	1	0.4

Highest Educational Qualification	Frequency	Percent
No formal education	4	1.8
Primary Incomplete	3	1.3
Primary Complete	5	2.2
Secondary Incomplete	7	3.1
Secondary Complete	73	32.3
University/Poly Incomplete OND	35	15.5
University/Poly Complete HND	47	20.8
Post University Incomplete	15	6.6
Post University Complete	37	16.4
Occupation category		
Student/Unemployed	61	27.6
Employee (low or middle management staff)	44	19.9
Employee (top management staff)	17	7.7
Employer (CEOs/MD/Chairman)	2	.9
Self employed/business woman	97	43.9

Regarding menstruation and fertility, 70% of the women concur that it is possible for a woman to be pregnant and still bleed, 50% agree that if a woman bleeds while pregnant, it is most likely a miscarriage, 45% believe that menstruation has nothing to do with how fertile a woman is, 34% believe that a woman cannot get pregnant if she has sex while having her period and likewise only 34% think that if a woman does not menstruate, it does not mean she can not have a baby (Figure 1).

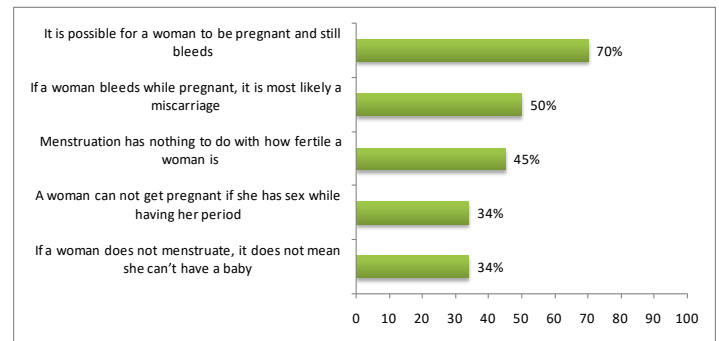


Figure 1: Perception about menstruation and fertility.

Assessment of some common myths about menstruation and fertility showed that 59% of the women think that if a woman does not menstruate, she definitely cannot have a baby, 24% think that women with menstrual pain are likely to have miscarriages, while 21% believe that women with menstrual pain will have delay/difficulty getting pregnant (Figure 2).

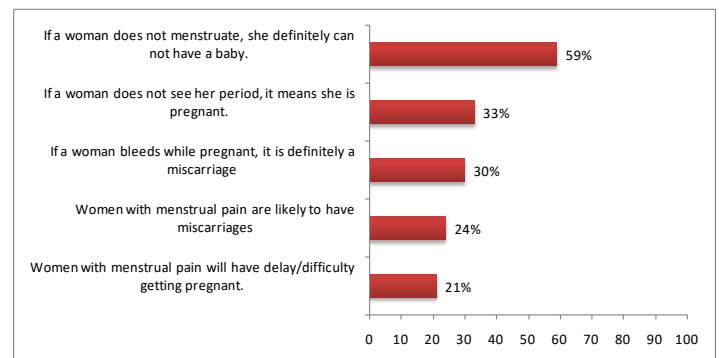


Figure 2: Myths about menstruation and fertility.

A large proportion of the women 170 (74.2%) are of the opinion that it is morally wrong to have sex while menstruating while 35 (15.3%) disagreed. Eighty-two (35.9%) of the women claimed that their religion does not permit them to have sex during menstruation. Eighty-five (60.4%) of the women agreed that having sex during menstruation predisposes a woman to infection and diseases while 42 (18.5%) disagreed. Fifty-three (23.0%) women were of the opinion that menstruation period is the best time to have sex because of the reduced likelihood to get pregnant (Table 2).

Eighty per cent of the women are of the opinion that having sex during menstruation is simply unhygienic while 74% are of the opinion that it is morally wrong to have sex while menstruating. Only 12% of the women agreed that having sex during menstruation reduces menstrual pain (Figure 3). One hundred and fifteen (50.6%) of the women agreed that injectable contraceptives do not allow some women have their menstruation regularly, while 76 (33.6%) of the women were of the opinion that women who take some medication to stop their period are likely to have some

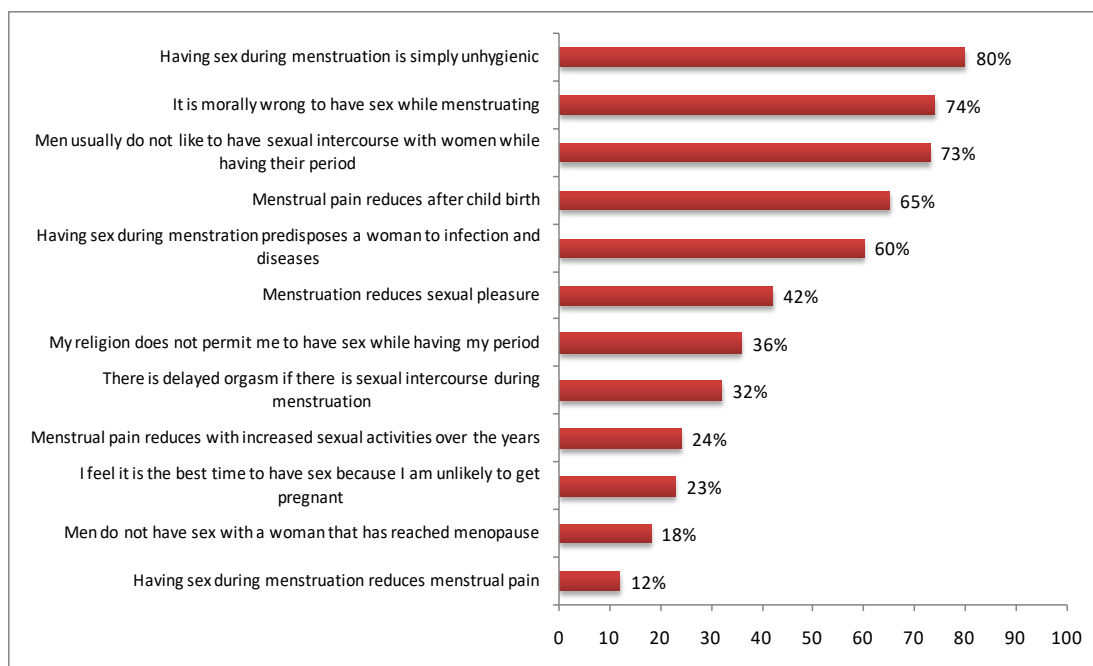


Figure 3: Perception of women on menstruation and sex.

Table 2: Perception of Women on Menstruation and Sexuality.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
		Freq (%)	Freq (%)	Freq (%)	Freq (%)	Freq (%)
a	It is morally wrong to have sex while menstruating	15 (6.6%)	20 (8.7%)	24 (10.5%)	77 (33.6%)	93 (40.6%)
b	My religion does not permit me to have sex while having my period	52 (22.8%)	72 (31.6%)	22 (9.6%)	50 (21.9%)	32 (14.0%)
c	Having sex during menstruation predisposes a woman to infection and diseases	12 (5.3%)	30 (13.2%)	48 (21.1%)	100 (44.1%)	37 (16.3%)
d	I feel it is the best time to have sex because I am unlikely to get pregnant	42 (18.3%)	71 (30.9%)	64 (27.8%)	44 (19.1%)	9 (3.9%)
e	Menstruation reduces sexual pleasure	21 (9.1%)	35 (15.2%)	78 (33.9%)	67 (29.1%)	29 (12.6%)
f	Men usually do not like to have sexual intercourse with women while having their period	7 (3.1%)	21 (9.2%)	35 (15.3%)	101 (44.1%)	65 (28.4%)
g	Having sex during menstruation is simply unhygienic	7 (3.1%)	11 (4.8%)	28 (12.3%)	83 (36.6%)	98 (43.2%)
h	There is delayed orgasm if there is sexual intercourse during menstruation	12 (5.3%)	20 (8.9%)	122 (54.2%)	60 (26.7%)	11 (4.9%)
i	Having sex during menstruation reduces menstrual pain	57 (24.9%)	55 (24.0%)	89 (38.9%)	24 (10.5%)	4 (1.7%)
j	Menstrual pain reduces with increased sexual activities over the years	32 (14.0%)	42 (18.4%)	99 (43.4%)	49 (21.5%)	6 (2.6%)
k	Menstrual pain reduces after child birth	8 (3.5%)	26 (11.4%)	46 (20.2%)	85 (37.3%)	63 (27.6%)
l	Men do not have sex with a woman that has reached menopause	74 (32.2%)	63 (27.4%)	51 (22.2%)	30 (13.0%)	12 (5.2%)

Table 3: Perception of Women on Menstruation and Family Planning Method.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
		Freq (%)	Freq (%)	Freq (%)	Freq (%)	Freq (%)
a	Injectable contraceptives do not allow some women to see their period regularly	4 (1.8%)	20 (8.8%)	88 (38.8%)	80 (35.2%)	35 (15.4%)
b	Women who take some medication to stop their period are likely to have some cancer	10 (4.4%)	17 (7.5%)	123 (54.4%)	62 (27.4%)	14 (6.2%)
c	Women who take some medication to stop their period are not likely to have some cancer	30 (13.3%)	22 (9.8%)	130 (57.8%)	35 (15.6%)	8 (3.6%)
d	Oral contraceptive pills do not affect my period in any way	22 (9.9%)	38 (17.1%)	122 (55.0%)	29 (13.1%)	11 (5.0%)
e	Some women do not see their period when breast feeding	4 (1.8%)	3 (1.3%)	63 (27.8%)	89 (39.2%)	68 (30.0%)
f	IUCD contraceptive increases menstrual flow	2 (0.9%)	12 (5.3%)	127 (56.2%)	63 (27.9%)	22 (9.7%)
g	There is no link between menstruation and family planning	44 (19.6%)	58 (25.8%)	79 (35.1%)	37 (16.4%)	7 (3.1%)
h	Oral contraceptive pills make period comes regularly	17 (7.6%)	30 (13.3%)	125 (55.6%)	41 (18.2%)	12 (5.3%)

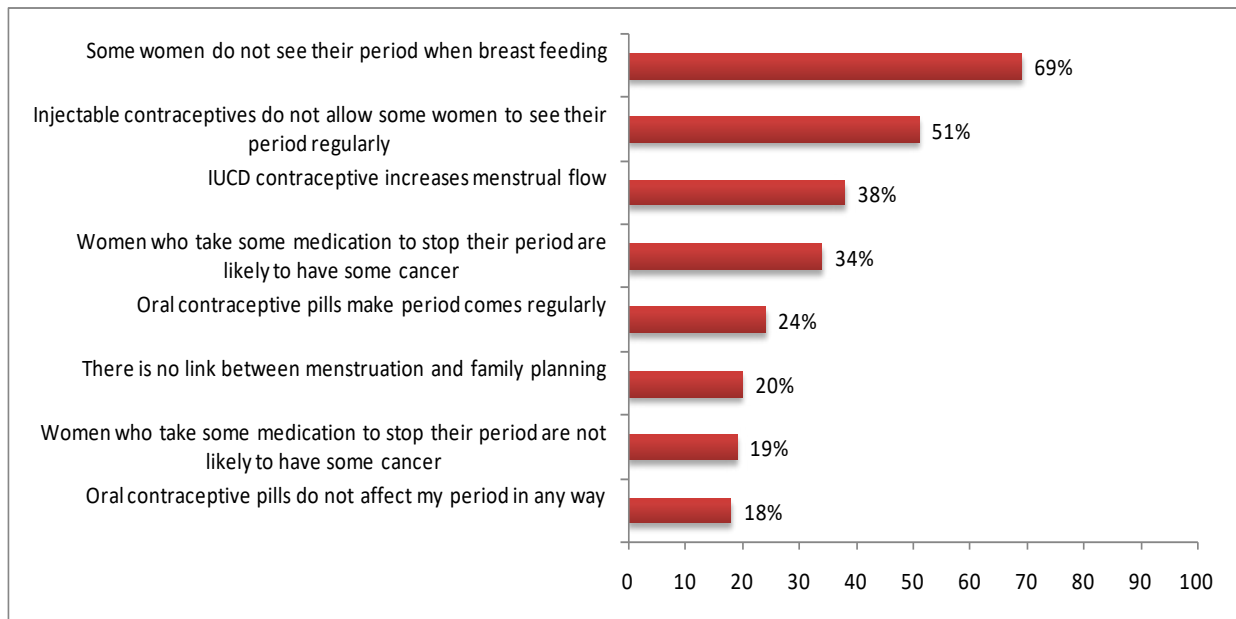


Figure 4: Perception of Women on Menstruation and Family Planning Method.

cancer (Table 3). One-fifth of the women think there is no link between menstruation and family planning (Figure 4).

Discussion

This study assessed the knowledge of women about menstruation and its relationship with fertility and showed many unfounded beliefs, misconceptions and misinformation, on this subject matter, in many of the women surveyed. Many other women in many developing countries like Nigeria probably share this. We observed that 24% of the study population think that women with menstrual pain were more likely to have miscarriages and 21% believed that women with menstrual pain would have delay/difficulty in getting pregnant (Figure 2). Our findings are similar to those of studies in some low- to middle- income countries that have suggested such inaccurate information among women [1,8,9].

A large proportion of women (60%) were of the opinion that sexual intercourse during menses may contribute to transmission of some sexually transmitted disease. This partly stems from cultural and religious notions that a woman is either “dirty” or “impure” during menstruating [10,11]. However, scientifically it is known that the actual cause of menstruation is ovulation followed by missed chance of pregnancy that results in bleeding from the endometrial vessels and is followed by preparation of the next cycle [11]. However, susceptibility for increased risk for sexually transmitted disease in women engaged in sexual intercourse during menses could be explained by the sexual behavior itself and/or by hampered response of innate immune system during menses[12].

As regards menstruation and fertility, 45% of the survey participants agreed that menstruation has nothing to do with

how fertile a woman is and about two-third of the respondents are either unsure or believe that a woman can get pregnant if she has sex while having her period. One-fifth of the women think there is no link between menstruation and family planning. These undoubtedly highlight the need for more sexual and reproductive education among our girls and women.

Conclusion

In conclusion, perceptions and knowledge about menstruation is varied among many Nigerian women, with widespread misconceptions and inadequate knowledge about its relationship with fertility. Universal enlightenment to disabuse the minds of Nigerian women from related myths, taboos and misconceptions is needed to promote reproductive health.

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