



Original Research Article

Frequency, perceptions and complications of sexual activity during pregnancy among a group of Nigerian women

Ajen Stephen Anzaku^{1*}, Okoye Florence Ngozi², Bulus Ayuba Dabu¹, Edem Bassey Edet³

¹Department of Obstetrics and Gynecology, College of Medicine and Health Sciences, Bingham University, Jos Campus, Jos, Nigeria

²Department of Obstetrics and Gynecology, Plateau State Specialist Hospital, Jos, Nigeria

³Department of Anesthesia, Federal Medical Centre, Makurdi, Nigeria

*Corresponding author email: steveanzaku@gmail.com

How to cite this article Ajen Stephen Anzaku, Okoye Florence Ngozi, Bulus Ayuba Dabu, Edem Bassey Edet. Frequency, perceptions and complications of sexual activity during pregnancy among a group of Nigerian women. IAIM, 2015; 2(6): 54-63.

Available online at www.iaimjournal.com

Received on: 19-05-2015

Accepted on: 28-05-2015

Abstract

Background: Hormonal, emotional and physical changes that occur in pregnancy as well as cultural influences in our society may impact on women's sexual responses and influence their sexual practices and perceptions regarding sexual intercourse during pregnancy.

Aim: This study was undertaken to evaluate the frequency, practices, perceptions and safety of sexual intercourse during pregnancy among pregnant women in Jos, Nigeria.

Materials and methods: This was a cross-sectional study of 204 healthy pregnant women at term over a 6-month period. They anonymously completed self-administered questionnaires regarding sexual activities during pregnancy. Data collected included coital frequency, perceptions and concerns of sexual intercourse during pregnancy, its benefits and problems encountered. Statistical analysis was done using SPSS version 16. Descriptive statistics was performed and chi square test was used to ascertain associations between categorical variables. $P < 0.05$ was considered significant.

Results: All women were sexually active throughout pregnancy but with overall decrease coital frequency compared to the pre-pregnancy period. Most adopted sexual positions included side-by-side, man on top and rear positions. Advanced maternal age > 35 years ($P = 0.67$, OR 1.19, 95% CI 0.54 – 2.65), primigravidity ($P = 0.52$, OR 0.80, 95% CI 0.40 – 1.60) and nulliparity ($P = 0.60$, OR 0.83, 95% CI 0.43 – 1.62) had no influence on coital frequency. More than 90.0% of them opined that sex



during pregnancy is safe and beneficial including widening of the birth canal, maintenance of emotional attachment between couples, satisfaction of sexual desire and prevention of spousal infidelity. Only 32 (15.7%) of the women developed transient sexual problems including vaginal bleeding and discharge, soreness/pain in the vagina and abdominal pain.

Conclusion: There was an observed decrease coital frequency among pregnant women in this study, nevertheless many still have positive attitude towards it, albeit with few misconceptions. Hence, Health providers should include sex education into antenatal care programs so as to dispel fears and clear these sexual misconceptions.

Key words

Pregnancy, Sexual intercourse, Sexual positions, Perception, Nigeria.

Introduction

Discussion about sex generally especially during pregnancy in our society is secretive probably because of the culture's tendency to exclude pregnant women from issues of sexuality. Enormous physical, emotional and psychological changes occur during pregnancy which may influence sex life among pregnant women [1]. These changes in conjunction with social, cultural, and religious factors affect sexual feelings, expression and experiences during pregnancy [2, 3, 4]. Nausea and vomiting and fatigue during the first trimester and physical bodily awkwardness late in pregnancy with attendant decrease attractiveness due to increasing size of the abdomen often impose restrictions on sexual activities [1].

About 86 -100% of women are sexually active during pregnancy probably to preserve their emotional relationship and sexual needs. However, the frequency of sexual intercourse is variable and tends to decrease with increasing gestational age [3, 5, 6]. For some women, the reduction in sexual activity is only experienced towards the third trimester compared to the pre-pregnancy period [4, 7]. Only a few women report increase frequency of sexual intercourse [8] while about one-fifth report no change in sexual frequency [3, 9]. Physical complaints such as morning sickness, heartburn, backache and

hip pain and constipation can make sexual intercourse uncomfortable and occasionally painful [1, 10]. Some women may have to experiment with various sexual positions to find those that are comfortable for them. These positions include missionary position, woman on top, rear entry, and side by side positions [1].

Some women perceive sexual activity during pregnancy to be important apart from emotional and psychological attachment to their spouses. Widening of the birth canal which help in facilitating vaginal delivery as well as the need to keep their husbands at home and so prevent marital disharmony are some of the reported benefits of sex during pregnancy [11, 12]. There are also conflicting reports on the effect of sexual intercourse on the cervix (bishop score) and onset of labour because of increased levels of prostaglandins in the seminal fluid [13, 14].

Though sex in pregnancy is said to be safe and promote emotional and psychological intimacy among couples, most sexually active pregnant women are often concern about complications that may arise as result of coital activities [4, 15, 16]. Conflicting reported negative outcomes of sexual intercourse in pregnancy include vaginal bleeding, preterm delivery, placental abruption and venous thromboembolism [17, 18, 19].



Discussion about sex especially during pregnancy in the northern part of Nigeria is restricted and often looked at as a taboo. To the best of our knowledge, there are no published studies from North-central Nigeria on sexual activity during pregnancy and its complications. This study was undertaken to ascertain our women sexual activities, perceptions and complications faced during sexual intercourse in pregnancy. The findings may reveal information that will warrant institution of sex education and counseling on sexual matters as part of health education during antenatal care at this clinical setting.

Materials and methods

This was a descriptive cross-sectional study of pregnant women at 37 or more weeks of gestation between September 2014 and February 2015, recruited consecutively at the antenatal clinic of Bingham University Teaching Hospital, Jos, Nigeria. We assured the women of confidentiality of the study and each woman was recruited after verbal consent was obtained. Included in the study were married women in steady relationships co-habiting with their husbands. The exclusion criteria included pregnant single women, women staying away from their husbands due to their jobs or other reasons, those with history of underlying diseases (diabetes mellitus, hypertension, and other systemic diseases), and obstetric complications including antepartum hemorrhage, recurrent miscarriages and preterm deliveries.

The tool for data collection was a pre-tested structured questionnaire eliciting information on the socio-demographic and obstetric features of the respondents, rating of frequency of sexual intercourse compared to the pre-pregnancy period, frequency of sexual intercourse per week, the practice of specific sexual activities, coital positions adopted during sexual

intercourse, perceptions and concerns regarding sexual intercourse in pregnancy, problem (s) encountered if any and whether such problem (s) was discussed with a health provider. Also, inquiry was sought on their opinion regarding usefulness of health talk on sex during pregnancy as part of health education in the antenatal clinic and benefit (s) if any of sexual intercourse in pregnancy. The questionnaires were self-administered, completed anonymously and returned but for the few that could not complete it by themselves, it was administered by a Nurse and the responses documented on their respective questionnaires.

Data was analyzed using SPSS version 16 for windows ((SPSS Inc., Chicago, IL, USA). Continuous variables were expressed as mean and standard deviation. Categorical data were expressed by percentages and comparisons between variables were made by chi square test. Level of statistical significance was set at $P < 0.05$. The institution Human Research and Ethics committee granted approval for the study.

Results

During the six-month study period, 227 consented and filled the questionnaires, out of which 204 did so correctly with required information and this constituted the study population. The women were recruited at an average gestational age of 37.4 ± 1.2 weeks with a range of 37 – 40 weeks. They were aged between 20 – 45 years with a mean age of 31.0 ± 5.1 years. About 26.5% (54/204) of the subjects were primigravidae while 28.9% (59/204) were nulliparous. Most of the women were of Igbo [27.9% (57/204)], Yoruba [8.8% (18/204)] and Irigwe [7.4% (15/204)] ethnic groups. Majority [196 (96.1%)] were Christians while 8 (3.9%) were Muslims. One hundred and thirty five of the women had tertiary education (66.2%), 60 (29.4%) had secondary education

while only 9 (4.4%) had primary education. Socio-demographic and obstetric features of the study population were as per **Table - 1**.

All the women were sexually active (vaginal intercourse) throughout the trimesters of pregnancy ranging from 0 – 5 times every two weeks with an average of 1.4 ± 0.5 . About one-third of the women (31.4%) reported that sometimes they do not engage in any sexual intercourse over a two-week period while 4 (2.0%) reported sexual intercourse of up to five times or more. When compared to the pre-pregnancy period, about half [113 (55.4%)] of them reported reduction in sexual frequency, 60 (29.4%) reported no change while 31(15.2%) had increased rate of sexual intercourse during the pregnancy. Advanced maternal age > 35 years ($P = 0.67$, OR 1.19, 95% CI 0.54 – 2.65), primigravidity ($P = 0.52$, OR 0.80, 95% CI 0.40 – 1.60) and nulliparity ($P = 0.60$, OR 0.83, 95% CI 0.43 – 1.62) had no statistical influence on reduction of frequency of sexual intercourse among the subjects.

All the women were practicing vaginal intercourse with the adoption of varied sexual positions with the side-by-side and the male on top positions as the most common. Apart from vaginal intercourse, they were also engaging in other sexual activities including kissing and oral intercourse but none reported involvement in anal sex. Frequency, types of non-coital activities and sexual positions adopted during vaginal intercourse by the women were as per **Table - 2**.

On assessing their perceptions about sexual intercourse during pregnancy, majority of them [190 (93.1%)] felt that sex have no negative impacts on pregnancy while 14 (6.9%) opined that sex during pregnancy had negative effects. Perceived negative effects of sex during pregnancy included vaginal bleeding and

miscarriage. Most of the study population [172 (84.3%)] experienced no sexual problem throughout the pregnancy while 32 (15.7%) had various problems including vaginal bleeding and discharge, soreness/pain in the vagina and abdominal pain. Among those that experienced sexual problems during pregnancy, most of them [25 (78.1%)] did not discuss the sexual problem(s) with their doctors for various reasons while 7 (21.9%) complained to their health provider. The perceived negative effects of sex, actual sexual problems experienced during pregnancy and reasons for not discussing them with health providers were as per **Table - 3**.

Majority of the women [199 (97.5%)] believed that sexual intercourse during pregnancy is beneficial while 5 (2.5%) believed that sex has no benefit during pregnancy. Almost all the women [201 (98.5%)] felt that health talk about sex during pregnancy should be part of routine health education offered during antenatal care while only 3 (1.5%) believed sexual matters are private to couples and should not be discussed publicly in the antenatal clinic. The perceived benefits of sexual intercourse during pregnancy by the study population were as per **Figure - 1**.

Discussion

This study population was fairly heterogenous with wide range of reproductive age groups, obstetric features, ethnic groups, educational backgrounds and religion. All the pregnant women were engaged in vaginal intercourse throughout the pregnancy but over half of them reported reduction in frequency of sexual intercourse per week compared to the pre-pregnancy period. In addition, about one-third of them disclosed that sometimes they do not engage in any sexual intercourse and activity over a period of two weeks. This finding is consistent with reports from other researchers in various parts of the world [2, 4, 10, 11, 16, 17,

20, 21]. This reduction in frequency of sexual intercourse in pregnancy may be attributed to the physiological, psychological and emotional changes that occur in pregnancy leading to reduction in sexual desire [4, 7, 16]. Also, the sense of decreased attractiveness as well as usual aches and pains of pregnancy, nausea and vomiting may contribute to reduced frequency of sexual intercourse among pregnant women.

Some researchers also believed that reduction in vaginal intercourse may also be attributed to increased dyspareunia as well as decreased sexual stimulation, satisfaction and achievement of orgasm by pregnant women [8, 10, 17]. Advanced maternal age, primigravidity and nulliparity have been found to influence reduction in sexual intercourse among pregnant women [7] but this is contrary to the findings in this study. The non-influence of these factors may be due to the fact that most women from this study are from Christian background and so by implication in monogamous settings which leaves the husband with no option of sexual gratification but his pregnant wife unlike what is obtainable in polygamous families.

As a result of changing bodily structure in pregnancy especially due to increasing size of the abdomen, women often experiment or practice different sexual positions that are more comfortable during vaginal intercourse. In this study, the women were involved in different sexual positions including side-by-side and rear entry positions during vaginal intercourse which may be more convenient as against the traditional husband on top position. This adoption of varied sexual positions were also reported elsewhere [2, 22] but reported most common adopted sexual position was the man superior position in Ibadan, Nigeria [23]. Hence, the physical awkwardness and obstruction posed by the abdomen with its attendant discomforts may limit the conventional man or

female superior sexual positions as noted in this study.

Apart from vaginal intercourse, the women were also engaging in other forms of sexual activities. Non-genital sexual activities such as kissing and caressing/cuddling were practiced by the women, few were engaged in masturbation and oral intercourse but no anal intercourse was reported among the women. These activities were also found among pregnant women in other studies [2, 3, 23, 24, 25]. However, practice of anal intercourse was reported among women in Portugal and southern Nigeria [3, 23] which is contrary to the finding in this study. Women often engage in other non-vaginal sexual activities probably because of fears of pregnancy complications that may occur with vaginal intercourse [4, 15].

The women had diverse perceptions about vaginal intercourse during pregnancy. Majority of the women felt that it is safe while about 6.9% opined that it predisposes to complications such as vaginal bleeding, miscarriage and preterm labour. These perceptions were also noted in studies from southern Nigeria and Tehran, Iran [22, 23, 26]. However, among the study population, only about one-sixth of them experienced minor transient problems of abdominal pain, vaginal bleeding and discharge and pain/soreness in the vagina following vaginal intercourse as reported elsewhere [17]. Majority of the women did not discuss the problems with their doctor because they were uncomfortable bringing up the issues by themselves. This non health seeking behaviour about sexual problems among pregnant women were also reported by other researchers [4, 7, 27].

Most of the women believed that sexual intercourse during pregnancy is beneficial including widening of the birth canal thereby



easing delivery, maintenance of emotional attachment between couples, satisfaction of sexual desires and prevention of spousal infidelity. Similar benefits of sex in pregnancy were also reported by pregnant women in other studies [2, 6, 11, 12, 23]. Also, most of the women had positive attitudes toward health education about sex during pregnancy as part of routine health talk in the antenatal clinic but few opined that sexual matters are private and should not be discussed publicly. This positive attitudes toward discussion about sex in pregnancy was also noted in other studies [11, 23]. It appears that health professionals need to initiate this discussion and encourage women to discuss it and reveal any sexual problem (s) experience during pregnancy.

Conclusion

In conclusion, frequency of sexual intercourse during pregnancy decreases among our women, engaging in more convenient sexual positions while some of them had some misconceptions about the safety and benefits of sex during pregnancy. Routine sex education and counseling in the antenatal clinic is advocated among the women especially to correct some of these misconceptions.

Acknowledgment

We wish to appreciate Mary David Atu for her contribution in distributing the questionnaires to the women and administering it on some of them.

References

1. Nagrath A, Singh M. Sex during pregnancy. In: Nagrath A, Malhotra N and Shikha S (eds.) Progress in Obstetrics and Gynaecology-3, 1st edition. New Delhi, Jaypee Brothers Medical Publishers (P) Ltd, 2012; 156 – 68.

2. Shojaa M, Jouybari L, Sanogoo A. The sexual activity during pregnancy among a group of Iranian women. Arch Gynecol Obstet, 2009; 279: 353 – 6.
3. Pauleta JR, Pereire NM, Graca LM. Sexuality during pregnancy. J Sex Med, 2010; 7: 136 – 42.
4. Bartellas E, Crane JMG, Daley M, Benneth KA, Hutchens D. Sexuality and sexual activity in pregnancy. BJOG, 2000; 107: 964 – 8.
5. Adeyemi AB, Fatusi AO, Makinde ON, Omojuwa I, Asa S, Onwudiegwu U. Changes in sexual practices and responses among antenatal clinic attendees in a Nigerian Teaching Hospital. J Obstet Gynaecol, 2005; 25: 796 – 802.
6. Orji EO, Ogunlola IO, Fasuuba OB. Sexuality among pregnant women in South west Nigeria. J Obstet Gynaecol, 2002; 22; 166 – 8.
7. Fok WY, Chan LY, Yuen PM. Sexual behavior and activity in Chinese pregnant women. Acta Obstet Gynecol Scand, 2005; 84: 934 – 8.
8. Sacomori C, Cardoso F. Sexual initiative and intercourse behaviour during pregnancy among Brazilian women: A retrospective study. J Sex Marital Ther, 2010; 36: 124 – 36.
9. Serati M, Salvatore S, Siesto G, Cattoni E, Zanirato M, Khullar V, et al. Female sexual function during pregnancy and after childbirth. J Sex Med, 2010; 7: 2782 – 90.
10. Von Sydow KV. Sexuality during pregnancy and after children: A meta-content of 59 studies. J Psychosom Res, 1999; 47: 27 – 9.
11. Naim M, Bhutto E. Sexuality during pregnancy in Pakistani women. J Pak Med Assoc, 2000; 50; 38 – 44.



12. Adinma JIB. Sexuality in Nigerian pregnant women: perceptions and practice. *Aust N Z J Obstet Gynaecol*, 1995; 35: 290 – 3.
13. Toth M, Rehnstrøm J, Fuchs AR. Prostaglandins E and F in cervical mucus of pregnant women. *Am J perinatal*, 1989; 6: 142 – 4.
14. Tan PC, Yom CM, Omar SZ. Coitus and orgasm at term: effect on spontaneous labour and pregnancy outcome. *Singapore Med J*, 2009; 50: 1062 – 7.
15. Gokyildiz S, Beji NK. The effects of pregnancy on sexual life. *J Sex Marital Ther*, 2005; 31: 201 – 15.
16. Sekumwong N, Chaovitsaree S, Rugsao S, Chandrawongse W, Yanuto S. The changes of sexuality in Thai women during pregnancy. *J Med Assoc Thai*, 2006; 89(4 Suppl): S124 – 9.
17. Kontoyannis M, Katsetos C, Panagopoulos P. Sexual intercourse during pregnancy. *Health Science Journal*, 2012; 6: 82 – 7.
18. Sayle AE, Savitz DA, Thorp JM, Hertz-Picciotto I, Wilcox AJ. Sexual activity during late pregnancy and risk of preterm delivery. *Obstet Gynecol*, 2001; 97: 283 – 9.
19. Sisti G, Flavia S, Massimiliano F. Inherent dangers of orogenital sex during pregnancy. *J Basic Clin Reprod Sci*, 2013; 2: 3 – 5.
20. Onah HE, Iloabachie GC, Obi SN, Ezegwu FO, Eze JN. Nigerian male sexual activity during pregnancy. *Int J Gynecol Obstet*, 2002; 76: 219 – 223.
21. Lee JT. The meaning of sexual satisfaction in pregnant Taiwanese women. *J Midwifery Womens Health*, 2002; 47: 278 – 286.
22. Torkestani F, Hadavand S, Khodashenase Z, Besharat S, Davati A, Karim Z, et al. Frequency and perception of sexual activity during pregnancy in Iranian couples. *Int J Fertil Steril*, 2012; 6: 107 – 110.
23. Bello FA, Olayemi O, Aimakhu CO, Adekunle AO. Effect of pregnancy and childbirth on sexuality of women in Ibadan, Nigeria. *ISRN Obstetrics and Gynaecology*, 2011; doi: 10.5402/2011/856586.
24. Liu HL, Hsu P, Chen KH. Sexual activity during pregnancy in Taiwan: A qualitative study. *Sex Med*, 2013; 1: 54 – 61.
25. Sossah L. Sexual behavior during pregnancy: A descriptive correlational study among pregnant women. *European Journal of Research in Medical Sciences*, 2014; 2: 16 – 27.
26. Erylmaza G, Egeb E, Zincirb H. Factors affecting sexual life during pregnancy in Eastern Turkey. *Gynecol Obstet Invest*, 2004; 57: 103 – 108.
27. Trutnovsky G, Haas J, Lang U, Petru E. Women's perception of sexuality during pregnancy and after childbirth. *Aust N Z J Obstet Gynaecol*, 2006; 46: 282 – 287.

Source of support: Nil

Conflict of interest: None declared.

**Table - 1:** Socio-demographic and obstetric features of the study population.

Characteristics	frequency	Percentage
Age groups (Years)		
≤ 20	3	1.5
21 – 25	24	11.8
26 – 30	73	35.8
31 – 35	64	31.3
36 – 40	36	17.6
≥ 41	4	2.0
Total	204	100.0
Ethnic groups		
Igbo	57	27.9
Yoruba	18	8.8
Irigwe	15	7.4
Berom	12	5.9
Tarok	12	5.9
Ngas	9	4.4
Eggon	7	3.4
Others*	74	36.3
Total	204	100.0
Gravidity		
1	54	26.5
2 – 4	131	64.2
≥ 5	19	9.3
Total	204	100.0
Parity		
0	59	28.9
1 – 4	141	69.1
≥ 5	4	2.0
Total	204	100.0

*Other tribes include Idoma, Tangale, Hausa, Ron, Rukuba, Mwaghavul, Mada, Igala, Mushere, Mupun, Kutep, Tiv, and Bajju

Table - 2: Frequency, types of sexual activities and positions adopted by the study population.

Features	Frequency	Percentage
Two weekly frequency of sexual intercourse		
Sometimes none	64	31.4
Once	53	26.0
Twice	49	24.0
Thrice	24	11.7
Four times	10	4.9
Five or more times	4	2.0
Total	204	100.0
Non-coital activities *		
Kissing	48	49.0
Caressing/Cuddling	24	24.5
Oral intercourse	20	20.4
Masturbation	6	6.1
Total	98	100.0
Sex positions during Vaginal intercourse		
Side-by-side position	86	35.7
Husband on top	80	33.2
Rear position	50	20.7
Woman on top	25	10.4
Total**	241	100.0

* Sexual activities apart from vaginal intercourse engaged by the study population

** Some women mentioned more than one position

Table - 3: Perceived negative effects of sex, sexual problems experienced and reasons for not seeking medical assistance.

Features	Frequency	Percentage
Perceived effects of sex during pregnancy		
Vaginal bleeding	10	38.5
Miscarriage	7	26.9
Preterm labour	5	19.2
Abdominal pain	4	15.4
Total**	26	100.0
Sexual problems encountered		
Abdominal pain	10	25.6
Vaginal bleeding	8	20.5
Vaginal soreness/pain	6	15.4
Vaginal discharge	6	15.4
Painful urination	4	10.3
Nausea and vomiting	3	7.7
Generalized body weakness	2	5.1
Total**	39	100.0
Reasons for not seeking medical help		
Feel embarrassed (shyness)	15	51.7
Transient nature of the problem(s)	11	38.0
Thought they are normal feelings	3	10.3
Total**	29	100.0

** Some women gave multiple responses

Figure - 1: Perceived benefits of sexual intercourse during pregnancy by the study population.

