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Prevalence of Dyspareunia and Its Effect on Sexual Life among Gynaecological Clinic Attendees in Alex Ekwueme Federal University Teaching Hospital Abakaliki, Nigeria

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Abstract

Introduction: Dyspareunia is one of the most common complaints in gynaecologic practice with tremendous effect on both quality of life and sexual relationship of women. **Objectives:** To determine the prevalence of dyspareunia and its effect on sexual life among gynaecology clinic attendees in Alex Ekwueme Federal University Teaching Hospital, Abakaliki. **Materials and Methods:** A cross-sectional study was conducted on consenting participants between 12th May 2016 and 25th July 2016. Anonymous self-administered questionnaires were used collection information on dyspareunia and its effect on sexual life at the Gynaecology clinic. The data was analyzed using Epiinfo version 7.1.5. **Results:** One hundred and four (104) women participated in this study. Most of the women studied were Igbos (95.19%), and were mainly between the age ranges of 21 - 30 years (66.35%). Most of them were married (89.42%), and were also mainly of the Pentecostal denomination (40.78%). The mean age at coitarche was 20.6 ± 3.95 years. Prevalence of dyspareunia was 36% and only 16% sought medical help. The various responses to dyspareunia were avoidance of sex 11%, reduced frequency of intercourse 8%, less desire for sex 19%, while majority of women with dyspareunia tolerated it (62%). **Conclusion:** The prevalence of dyspareunia is high in our society afflicting young women in their reproductive years with associated enormous stress on their sexual life.

Keywords

Prevalence, Dyspareunia, Sexual Life, Clinic, Attendees, Abakaliki

1. Introduction

Dyspareunia is one of the sexual dysfunctions found among women and it is referred to as painful sexual intercourse and is associated with poor quality of life [1].

Dyspareunia though highly prevalent is under-recognized in practice [2] The lack of public health information about dyspareunia and the reluctance of health care providers to inquire about sexual problems may contribute to many women delaying treatment for a serious health problem with potential negative biopsychosocial outcomes [3].

The causes of dyspareunia may be mixed between physiological and psychological, interpersonal and sociocultural causes [4]. The common physical causes of dyspareunia include interstitial cystitis, pelvic inflammatory disease and chronic pelvic pain [5]. Psychological causes could result from fear of pain, interpersonal disturbance, sexual abuse, stress and anxiety from work and family responsibilities, concern about about sexual performance, conflicts in relationship with partner, depression, unresolved sexual orientation issues, previous traumatic sexual or physical experience, body image and self-esteem problems [6] [7].

Female dyspareunia is a serious impairment with prevalence of up to 39.5%, imposing a significant burden on women's health, relationship and quality of life [7]. When not in a relationship, dyspareunia may prevent a woman from approaching new partners or starting a new relationship. They may feel ashamed and embarrassed and therefore isolate themselves. It may be the presenting symptom of variety of disease states with components of both physical and organic dysfunction [8]-[18].

This study aims to determine the prevalence of dyspareunia among women of reproductive age group attending gynaecology clinic. In addition, the effect of dyspareunia on their sexual life will also be sought for. No study of this sort has ever been conducted in this environment, hence the necessity to do so.

2. Materials and Method

Study Background: Ebonyi state is one of the five states in the South East Geopolitical zone of Nigeria. It has a population of about 2.1 million people and is inhabited mainly by the Igbo speaking community. Majority of the population are rural dwellers and farmers. Alex Ekwueme Federal University Teaching Hospital (formerly known as Federal Teaching Hospital), Abakaliki is located within the centre of the state capital. It receives referral from all parts of the state and neighbouring states of Abia, Benue, Cross-River, and Enugu. The Gynaecology clinic holds daily Mondays through Fridays and is run by consultant Obstetricians and Gynaecologists and resident doctors in the department of Obstetrics and Gynaecology.

Study Population: This included all sexually active women between ages of 15 - 60 years who presented at the gynaecology clinic were recruited into the study.

Study Design: This was a descriptive cross sectional study. Inclusion criteria include: sexually active women in heterosexual relationship. Individuals with chronic conditions like hypertension, diabetes mellitus or on any medication that affects sexual function will be excluded. Chronic alcoholics or those who smoke will be excluded as they affect sexual function in various ways. In addition individuals who decline consent were excluded. The study was done using questionnaire administered in English language (see Appendix 1). The questionnaire was pretested. The first part contained sociodemographic data of participants. Information extracted from the participants includes; Age, marital status, parity, religion, educational attainment, occupation and ethnicity. Participants were also asked questions to determine the prevalence and impact of dyspareunia on their sexual life. Dyspareunia in this study was defined as recurrent or persistent pain during or after sexual intercourse.

Sample Size Calculation: The sample size for the study was determined using a prevalence rate of 7% found in a study by Nwagha *et al.* [9] in Enugu, Nigeria. $N = p(1 - p)z^2/d^2$. N = sample size, z = z-score, d = desired error margin, p = prevalence. Using 95% confidence interval and prevalence 7%, $d = 0.05$, $z = 1.96$, $p = 0.07$. $N = 0.07(1 - 0.07)1.962/0.052 = 100$. Sample size = 100% + 20% attrition = 120% Gynaecology clinic attendees.

Data Analysis: The information obtained was analyzed using EpiinfoTM version 7.1.5 of 2015 CDC Atlanta Georgia USA. Chi-square test was used for proportions. Significance was established at p value of <0.05.

Ethical Consideration: The ethical clearance for the study was sought and obtained from Research and Ethics Committee of Alex Ekwueme Federal University Teaching Hospital, Abakaliki.

3. Results

A total of 120 women were interviewed using the questionnaires. One hundred and four (104/120), 86.7% of the questionnaires were included in the analysis. The rest of them (13.3%) were either not retrieved or had incomplete data. The prevalence of dyspareunia in this study was 37 (36%).

The sociodemographic data are shown in Table 1. Most of the participants were Igbos (95%) within age range 18 - 50 years. Greatest proportion (66.35%) of the respondents was within age range of 21 - 30 years while the least proportion (3.85%) was 41 - 50 years. Most (89.42%) were married and nulliparous (34.62%). Pentecostal denominations had greatest population (40.78%) and the least (3.85%) were Muslims. Most (50%) had tertiary education and were unskilled (42.31%).

Table 2 shows the mean age of coitarche as 20.6 ± 3.95 years with prevalence of dyspareunia at first sexual intercourse seen in 87.50%. The prevalence of dyspareunia within the past 6 months was 36% (Figure 1) while only 6 (16.2%) sought medical help. The various responses to dyspareunia were avoidance of sex (11%), reduced frequency of intercourse (8%), and less desire for sex (19%)

(Figure 2). Majority (62%) of women with dyspareunia lived with condition without medical assistance.

Prevalence of dyspareunia according to various sociodemographic and obstetric characteristics is shown in Table 3. Respondents between the ages of 21 and 30 years and nulliparous women had the highest prevalence of 80% and 57% respectively. When considered based on educational attainment, respondents with only primary education (20) had the highest prevalence of dyspareunia. Participants who were unskilled workers were found to have highest prevalence (17). Demographic characteristics like age, parity, educational attainment and occupation did not show any statistical significance for dyspareunia.

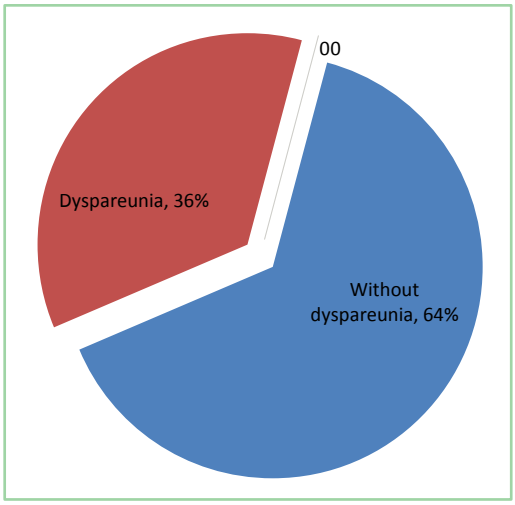

Figure 1. Pie chart showing prevalence of dyspareunia within past 6 months.

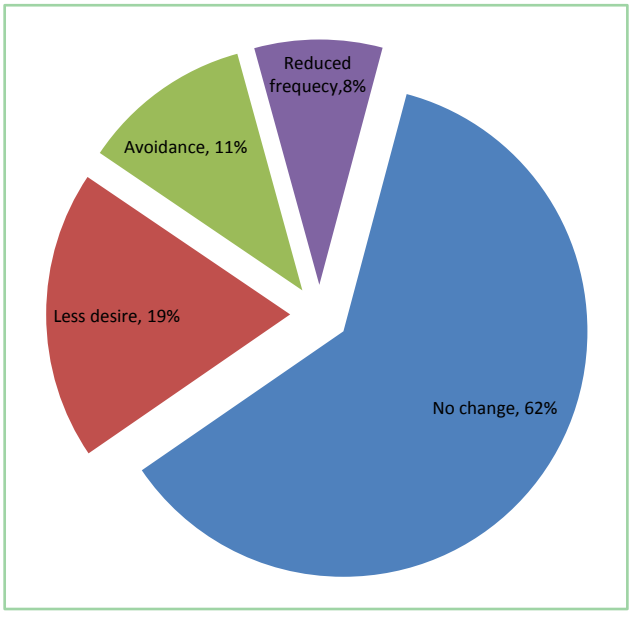

Figure 2. Pie chart showing the distribution of effects of dyspareunia in the past 6 months.

Table 1. Sociodemographic characteristics of the study participants.

Variable	Frequency	Percentage (%)
Age		
<20	5	4.81
21 - 30	65	66.35
31 - 40	26	25
41 - 50	4	3.85
Marital status		
Single	93	89.42
Married	11	10.58
Divorced	0	0
Educational qualification		
No formal education	0	0
Primary	18	17.31
Secondary	34	32.69
Tertiary	52	50
Occupation		
Unemployed	24	23.08
Unskilled	44	42.31
Skilled	24	23.08
Professional	12	11.54
Ethnic group		
Igbo	99	95.19
Hausa/Fulani	2	1.92
Yoruba	0	0
Others	3	2.88
Parity		
0 - 1	50	48.08
2 - 3	37	35.58
4 - 5	12	11.54
>5	5	4.8

Table 2. Dyspareunia and its effect on sexual life of the study participants.

Variable	Frequency	Percentage (%)
Mean age of coitarche (years)	20.6 ± 3.95	
Dyspareunia at coitarche		
Yes	19	87.5
No	13	12.5
Dyspareunia within past 6 months		
Yes	37	36
No	67	64

Continued

Effect of dyspareunia on sex within past 6 months		
Avoidance	4	11
Reduced frequency	3	8
Less desire	7	19
No change	23	62
Consulted a Doctor		
Yes	6	16.2
No	31	83.8
Condition after consultation		
Satisfactory	4	67
Good	0	0
Fair	1	16.5
No change	1	16.5
Worse	0	0

Table 3. Relationship between presence of dyspareunia and sociodemographic characteristics of the study participants.

Variable	Dyspareunia	No Dyspareunia	p-Value
Age (years)			
<20	4	1	0.17
21 - 30	20	45	
31 - 40	10	16	
41 - 50	3	5	
Parity			
0	11	26	0.24
1	8	6	
2	8	11	
3	5	13	
4	1	6	
≥5	4	6	
Educational qualification			
No formal education	0	0	0.14
Primary	9	9	
Secondary	8	26	
Tertiary	20	32	
Occupation			
Professional	4	8	0.31
Skilled	5	19	
Unskilled	17	32	
Unemployed	11	13	

4. Discussion

Dyspareunia still remains a common sexual problem of women in our society and constitutes a huge public health concern [8]. Most cases of dyspareunia appear to be under-reported and many afflicted women are reluctant to discuss their sexual concern with their physician.

In this study, the prevalence of dyspareunia was 36%. This is higher than prevalence of 7% in Enugu state, Nigeria [9] but however, within the range of prevalence in Turkey 7.8 - 47.2% with 46.9% and 54.5% by Sobhgol *et al.* in Iran [15]. The difference in prevalence between Enugu study and the index study may be due to their different study population characteristics. Enugu study considered women in campus community while the present study surveyed gynaecological clinic attendees with clinical problems. The relatively high prevalence of dyspareunia is not a surprise since most afflicted women scarcely discuss their sexual predicament.

Among thirty seven (37%) of women with dyspareunia in this study, only 6 (16%) had consulted their doctor on this matter while the remaining 84% never sought for help. This is, however, marginally lower than that in a survey by Danielsson *et al.* [16] where 28% of those with dyspareunia consulted their doctors. This attests to the reluctance with which women discuss their sexual difficulty with their caregiver especially in our environment where such discussions may be viewed as a taboo. The respondents who consulted doctors might have done so because of unbearable symptoms or awareness of availability of treatment.

Following consultation, 4 (64%) was satisfied while the remainder had results ranging from little improvement to no change in their conditions. This agrees with study by Brotto *et al.* [16] where over half of the women (54.8%) reported significant improvement in dyspareunia following treatment. In study by Danielsson *et al.*, 20% recovered after treatment [17].

Treatments of dyspareunia depend on the underlying causes identified. If it is due to infection antibiotics or antifungals may be necessary. Inflammatory causes may resolve with sitz baths while skin conditions like lichen sclerosus and lichen planus often improve with steroid creams [17]. Vulva vestibulitis are typically treated using topical oestrogen cream, low-dose pain medications, and physical therapy with biofeedback to lower the muscle tension in the pelvic floor [18]. Endometriosis may be treated with non-steroidal anti-inflammatory drugs, oral contraceptive pills, gonadotropin realizing hormone analogue or surgical procedures [7] [18]. However, psychological counselling may be all that is needed to address stress or anxiety associated with sexual intercourse without apparent aetiology.

The response of women with dyspareunia in this survey varied from avoidance 4 (11%), reduced frequency of intercourse 3 (8%), less desire for sex, 7 (19%). In over half 23 (62%), dyspareunia did not alter their sexual life. Brotto *et al.* [16] noted 38% avoidance of sexual intercourse. In another study by Glatt *et al.* 17 48% of the women reported a decrease in sexual frequency and 53.7% re-

ported important adverse effect on their relationships as a result of dyspareunia. The fewer incidence of negative influence of dyspareunia observed in index study might be due to male dominance in our society and the fear of being considered sexually weak.

An accurate determination of prevalence of dyspareunia is vital in understanding the burdens among women and women with risk factors for prevention efforts. The practicing Gynaecologist should recognize that asking about such difficulties like dyspareunia should be a routine part of clinical practice. The tactful and comfortable discussion of such issues is important in helping the patient maintain good quality of sexual life. Early attention to sexual difficulties may help prevent the development of more severe problems like marital disharmony.

This study has some limitations. The findings in this survey may not give a broad picture of burden of dyspareunia in our society because the population studied was already perceived to have gynaecological problems. Furthermore, dyspareunia is just one of the gamuts of sexual concerns of women which may coexist and have a synergistic effect on each other thereby influencing the effect of various abnormalities when considered singly.

5. Conclusion

In conclusion, dyspareunia is an important sexual dysfunction among women with a high prevalence in our society. Few of the affected women are willing to discuss their problems with their caregiver. The appreciably high improvement following treatment lays credence to the importance of medical consultation for these women. There is a need for a high index of suspicion among caregivers to inquire on possibility of sexual difficulty of their clients since most of them may not initiate the discussion.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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Appendix 1

Questionaire: To Assess the Prevalence of Dyspareunia and Its Effect on Sexual Life among Gynaecological Clinic Attendees in Federal Teaching Hospital, Abakaliki

1) Date ____

2) Age < 20 ☐ 21 - 30 ☐ 31 - 40 ☐ 41 - 50 ☐ >50 ☐

3) Marital status. Single ☐ married ☐ Divorced ☐ widowed Married/separated ☐

4) Parity _____

5) Religion. Catholic Protestant ☐ Muslim Pentecostal Traditional ☐ Others ☐

6) Level of Education. No formal education ☐ Primary Secondary, ☐ Tertiary ☐

7) Occupation. Unemployed ☐ Unskilled Skilled ☐ Professional ☐

8) Ethnic group. Ibo ☐ Hausa/Fulani ☐ Yoruba ☐ Others ☐

9) At what age did you have first sexual intercourse? ☐

10) Was it painful? Yes ☐ No ☐

11) Have you had painful intercourse in the past 6 months? Yes ☐ No ☐

12) What was your response if yes to (11) what was your response to sex? Avoidance ☐ Reduce frequency ☐ Less desire ☐ Had no effect ☐ Others (specify)_____

13) Did you seek for medical help? Yes ☐ No ☐

14) How did you feel following consultation? Satisfactory good ☐ Fair ☐ No change ☐ Worse ☐