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Assessment of family function in perimenopausal women in Ibadan

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Abstract

Background: The perimenopause is often accompanied by distressing symptoms which may take their toll on the woman and her family. This study aimed to assess the possible association of the perimenopause with poor family functioning.

Methods: It was a cross-sectional, descriptive study of 132 women aged ≥40 years, carried out at the Department of Family Medicine of the University College Hospital, Ibadan, Nigeria. The questionnaire included the General Functioning Scale of the Family Assessment Device, a self-report measure of family functioning that describes emotional relationships and functioning within the family. Explanatory variables were demographic data parameters and onset of menstrual irregularities, outcome variables were presence or absence of good family functionality. Categorical and continuous variables were analysed with chi-square test and students't-test, respectively. Data analysis was with IBM SPSS Statistics 20. Ethical approval was obtained from the institutional ethical committee.

Results: Most (80.3%) of the 132 respondents were already experiencing irregular menses. The General Functioning scale scores ranged from 1.08 to 3.08. The modal score was 1.92 which was within the range of good function. Applying a standard cut-off point of 2.17, 92 (69.7%) reported good family functioning, while 40 (30.3%) reported poor family functioning. Of all socio-demographic variables assessed, being in a monogamous marriage was the only observed one significantly associated with good family functioning ($p<0.01$).

Conclusion: These middle-aged women mostly had significant association; the reasons for this may be further explored.

Keywords: *Perimenopause, climacteric, family*

Résumé

Contexte: La péri ménopause est souvent accompagnée de symptômes pénibles qui peuvent porter atteinte à la femme et à sa famille. Cette étude visait à évaluer l'association possible de la péri ménopause avec un fonctionnement familial médiocre.

Méthodes: Il s'agissait d'une étude transversale et descriptive de 132 femmes âgées de plus de 40 ans, menées au Département de Médecine Familiale du Collège Hospitalier Universitaire, Ibadan, Nigeria. Le questionnaire comprenait l'Echelle de Fonctionnement Générale du Dispositif d'Evaluation Familiale, une mesure d'auto-évaluation du fonctionnement de la famille qui décrit les relations émotionnelles et le fonctionnement au sein de la famille. Les variables explicatives étaient les paramètres de données démographiques et ' l'apparition d'irrégularités menstruelles, les variables de résultat étaient la présence ou l'absence de bonnes fonctionnalités familiales. Les variables catégorielles et continues ont été analysées respectivement avec le test du chi-carré et le test t- d'élève. L'analyse des données a été effectuée avec IBM SPSS Statistiques 20. L'approbation éthique a été obtenue auprès du comité d'éthique institutionnel.

Résultats: La plupart (80,3%) des 132 répondants connaissaient déjà des règles irrégulières. Les scores de l'échelle des fonctions générales variaient de 1,08 à 3,08. Le score modal était de 1,92 qui était dans la gamme de bonne fonction. En appliquant un point de coupure standard de 2,17 ; 92 (69,7%) ont déclaré un bon fonctionnement de la famille, tandis que 40 (30,3%) ont signalé un fonctionnement familial médiocre. De toutes les variables sociodémographiques évaluées, l'existence d'un mariage monogame était la seule observée qui était significativement associée au bon fonctionnement de la famille ($p <0,01$).

Conclusion: Ces femmes d'âge moyen avaient surtout un bon fonctionnement familial. La monogamie était une association importante; Les raisons de cela peuvent être explorées d'avantage.

Mots clés: *Péri ménopause, climatérique, famille*

Introduction

Menopause is a life-changing event. The reproductive changes of menstrual irregularity followed by

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amenorrhoea are obvious and often anticipated; however, the emotional and psychological changes may be unexpected, bewildering and extreme [1, 2], affecting the balance of the entire family. Puberty is noted to affect these other aspects [3, 4]; similarly, this can also be the experience at menopause, the other extreme of reproductive life. Furthermore, about the time of menopause, middle-aged women may also develop concurrent medical disorders that require long-term lifestyle changes or may have poor prognosis [5]. There may also be family changes [5] such as loss of a spouse, children leaving home or getting married, which leads to them becoming grandmothers. All these happening at the same time may constitute a stress to perimenopausal women and their families [6, 7].

Perimenopause is the period 'prior to the menopause (when the endocrinological, biological and clinical features of the approaching menopause commence) and the first year after menopause' [8]. The prevalent symptoms of the perimenopause and menopause are well-described [2, 9]; they are often discomfiting and women may respond in a variety of ways, which may take its toll on their family life. The psychological and emotional symptoms include anxiety, depression and easy irritability [2]. The latter will expectedly affect people in close proximity to the woman, which includes their families.

In comparison to other gynaecological conditions, anecdotal experience shows there are not many menopause-related hospital consultations in Nigeria. This may be due to the fact that women who perceive menopause as being normal are not likely to seek medical attention [10] while those who see it as being abnormal or as a result of a supernatural force may be inclined to seek help from the traditionalist [11] or from patent medicine dealers [10]. The authors did not find any indexed research on the impact of menopause on the well-being of the Nigerian family.

Researchers have noted from focus group discussions, the fears of women about post-menopausal sexual intercourse causing ill health. The discussants mostly agreed that menopausal women should abstain from sex [11, 12]. Some also feel sex during this phase can harm their husbands, while others state that their husbands feel that sex with a menopausal wife would harm them [11]. A husband, who still desires sexual activity may find other partners, or marry a younger woman. This may cause strife and rancour in the family. For a woman to function well in her traditional role as a family care-giver, she ought to be as healthy as possible at every stage of her life.

The Family Assessment Device (FAD) is a validated self-administered tool directed at assessing family functioning; based on the McMaster Model of Family Function [13-16]. The model identifies six dimensions of family functioning: problem solving, communication, roles, affective responsiveness, affective involvement and behaviour control. A seventh scale (general functioning) assessed general health or pathology of the family. It is recommended that the FAD is administered to all family members older than 12 years [13]. However, it has also been used with only one family member in clinical settings [13, 17]. The FAD consists of 53 items [13]. The FAD has been assessed for use by family physicians; with a conclusion that these doctors have sufficient skills to carry out the process [14]. The tool used in this study was modified from the original FAD—it is the 12-item General Functioning Scale (GF) of the FAD [17]. The GF has been validated for use in survey research. As described above, it is the portion of the FAD that assesses the general health or pathology of the family. The GF has been used in several settings: patients with medical or psychiatric disorders and their families [18], children [19], and in non-clinical college undergraduates [20] and adolescents [21].

The study aims to determine the effect of the perimenopause on the families of women attending a family practice clinic, and therefore assess the need for anticipatory care and counselling to these women.

Materials and method

The study employed a cross-sectional, descriptive design. It was carried out at the Family Medicine Department of the University College Hospital, Ibadan, located in South-west Nigeria. It is situated in the central, urban area of the city, and also serves peri-urban and rural communities of Ibadan and its environs. A minimum sample size of 98 was calculated from a formula for cross-sectional studies, using a prevalence of 6.8%. This was derived from the proportion of women who were unhappy about the menopause [22] in a previous study in Ibadan. Women aged 41 years and over, who attended the clinic over a four-week period and gave written consent, constituted the study population. Women with debilitating illness were excluded. Ethical approval was obtained from the joint University of Ibadan/ University College Hospital Ethical Committee.

The interviewer-administered study questionnaire sought information on demographic and other characteristics, and included the 12-item

General Functioning Scale (GF) of the Family Assessment Device. The GF is a self-report measure of family functioning that describes emotional relationships and functioning within the family [17]. The possible range of scores for each item is from one to four points; representing 'strongly agree', 'agree', 'disagree' and 'strongly disagree', respectively. It utilizes the reverse scoring system for the negatively-worded items (which are also odd-numbered: 1, 3, 5, 7, 9 and 11). The total obtainable score ranges from 12 to 48 points. The participant's family functioning score is the average of the 12 items. On this scale, using a standard cut-off of 2.17, high mean scores depict unhealthy 'pathologic' family functioning, while lower scores depict healthy family function [17]. In an attempt to further assess the effect of the perimenopause on the participants' families, they were asked to recall their family life up till they were 40 years old and fill the GF retrospectively into a second copy of the tool.

The outcome variables were the presence or absence of good family functionality. The explanatory variables were demographic data such as family status parameters and onset of menstrual irregularities. Categorical variables were analysed with chi-square tests, while continuous variables were analysed with students' t-test. Data analysis was done with IBM SPSS Statistics 20.

Results

One hundred and thirty-eight eligible women filled the questionnaire. However, only the 132 (95.7%) that completed all 12 items of the GF were included in the analysis. Their demographic characteristics are depicted in Table 1. Most of the study population (81.1%) were already within the perimenopause, inferred by the onset of menstrual irregularity.

Twenty-four respondents (18.2%) reported being more irritable than usual within the past year. Ten (7.6%) of them feel it had affected their relationship with their partner, while 7 (5.3%) felt it had affected their relationship with their children. Twenty-seven (20.5%) reported having had sex within a week of the interview, 36 (27.3%) within a month, 26 (19.7%) within six months, and the rest (43; 32.5%) had abstained longer than that. Thirty-two of the women (24.2%) had previously been diagnosed with medical illnesses, of which hypertension (22; 16.7%) was the most prevalent.

The range of GF scores of these women were 1.08 to 3.08, with most of them scoring 1.92. On applying a cut-off of above 2.17 for poor functioning; 92 (69.7%) reported good family functioning, while 40 (30.3%) reported otherwise. Selected demographic characteristics were cross-tabulated with good versus poor family functioning to evaluate possible associations (Table 2). Being married, having children, medical co-morbidity or having transited into perimenopause were not associated with family functioning. Being in a monogamous marriage was the only observed variable significantly associated with good family functioning ($p<0.01$).

The previous and current GF scales were compared (Table 3). The mean scores were similar in both sets, with no statistical difference (t-test: 95%

Table 1: Demographic characteristics of respondents

Variable	N (%)
Age (years)	
41-45	73 (55.3)
46-50	41 (31.1)
51-55	18 (13.6)
Marital status	
Single	5 (3.8)
Married	108 (81.8)
Separated/divorced	6 (4.5)
Widowed	13 (9.8)
Type of marriage	
Monogamous	68 (51.5)
Polygamous	40 (30.3)
Parity	
0	1 (0.8)
1-2	18 (13.6)
3-4	47 (35.6)
e"5	66 (50.0)
Tribe	
Yoruba	81 (61.4)
Igbo	13 (9.8)
Hausa	34 (25.8)
Other tribes	4 (3.0)
Religion	
Christianity	71 (53.8)
Islam	59 (44.7)
Traditional	2 (1.5)
Occupation	
Unemployed	6 (4.5)
Unskilled	86 (65.1)
Skilled	34 (25.8)
Professional	6 (4.5)
Level of education	
None/informal	33 (25.0)
Primary	31 (23.5)
Secondary	25 (18.9)
Tertiary	43 (32.5)
Irregularity/cessation of menses	
Yes	107 (81.1)
No	25 (18.9)

Table 2: Possible explanatory factors for respondents' perception of family functioning

Variable	'Good' family function (N= 92)	'Pathologic' family function (N=40)	*P*
Marital status			
Married	74 (68.5)	34 (31.5)	0.53
Unmarried	18 (75.0)	6 (25.0)	
Type of marriage			
Monogamous	56 (82.4)	12 (17.6)	<0.01
Polygamous	18 (45.0)	22 (55.0)	
Has living children			
Yes	91 (70.5)	38 (29.5)	0.22*
No	1 (33.3)	2 (66.7)	
Medical co-morbidity			
Yes	22 (68.8)	10 (31.2)	0.89
No	70 (70.0)	30 (30.0)	
Presence of menstrual irregularities			
Yes	74 (69.8)	32 (30.2)	0.98
No	16 (69.6)	7 (30.4)	

**Fishers' exact test*

Table 3: Comparison of family function scores before and during the perimenopause

	'Good' family function N(%)	'Pathologic' family function N(%)	*P*
Before climacteric	82 (69.5)	36 (30.5)	0.67
During climateric	79 (66.9)	39 (33.1)	

CI= -0.05 – 0.01; p=0.19). There was no difference in chi-square test either, when categorized and 'good' or 'pathologic' functioning (p=0.67).

Discussion

The middle-aged women in this study reported good family functionality, which was not affected by the perimenopause. The only identified association was being in a monogamous marriage. The participants of this study had fairly well-distributed demographic characteristics. These middle-aged women were mostly already experiencing menstrual irregularities, so it may be reasonable to assume they are mostly perimenopausal—irregular periods are one of its main clinical features [23, 24]. Most families represented in this study were reported to have good functionality. Demographic data that may constitute confounders to these findings were not found to be associated: for instance, having a medical co-morbidity, being unmarried or being childless. Health issues during middle age have been shown to make the reproductive transition more challenging [5]; however, associated illnesses did not translate into poor family functioning in the index study. Studies also show that marriage and children improve women's experience of the menopause by providing social support [25, 26], but this does not extrapolate to improved family functioning in this study.

With regards to the unmarried respondents, it is unusual for older women to live alone in Nigeria, where strong family networks exist. Even if she was never married and never had children, she would likely have younger relatives she had fostered, or may live with a member of her extended family. This explains why these participants were able to complete the GF in the first place, and may also somewhat explain the lack of difference with married women. Monogamy was the only factor that was identified as an association to improved family function. This is not surprising, as the information was elicited from the woman's point of view. Several studies show that women in polygamous marriages are more likely to report reduced life satisfaction, less marital satisfaction, poorer family functioning, more mental health symptomatology and less self-reported health than monogamous women [27, 28

29]. Social support reduced the chances of the last two problems listed [29].

About a fifth of respondents considered themselves having been more irritable in the past year. Easy irritability is an established symptom of the menopause [30], and is not unusual in the perimenopause. A significant proportion of women had also not been having sexual intercourse regularly, despite mostly being married. Research in the study area showed that many middle-aged women have diminished interest in sexual intercourse, and decreased sexual activity in direct proportion to increasing age [31]. Several reasons were proffered for this, including: reduced sexual desire, cultural beliefs about sex, dyspareunia and availability of other co-wives to satisfy their husbands' sexual needs. Despite the irritability and diminished sexual activity, few women felt that menopause affected their relationship with their husbands or children in this study. This finding was similar to an earlier study in Ibadan [22]. The latter study also found that 18% of sexual-abstaining respondents stopped having intercourse because they had no further desire for procreation [22]. Any or all of these reasons may partly explain the abstinence practiced by some of this study's respondents. Perimenopause does not seem to affect families remarkably either, probably showing the strength of family relationships in the locality, or that these families may have coping strategies which are effective.

Comparison of the family's current general functioning score to the recalled score showed a small, but statistically insignificant, change towards pathologic functioning over time. This change was also not clinically relevant, as the mean scores remained below the cut-off point. This implies that the perimenopause was not a significant family stressor in this survey. Families are often able to pull together and support each other through stressful events, so this might not be surprising. Nigerian women generally expect these changes as a rite of passage to old age, so appear to be well-adjusted to them [32]. This study also corroborates that women's perception of family functioning was not influenced with transition into the perimenopause (in this case, heralded by menstrual irregularity).

The interpretation of this study is limited by the recall bias and the fact that only one family member was interviewed for family functioning. The tool is however described for use if only one family member is available in a clinic setting [13,17]. Also, the clinic setting limits generalization of the study findings. However, a family practice clinic represents primary care, which is more likely to represent the community than a specialist clinic, and may thus make these findings more acceptable.

In conclusion, the middle-aged women in this study basically had good family functioning, irrespective of their varied demographics. Being in monogamous marriages was the only factor that influenced this. Perimenopausal changes did not affect function. The specific details that associate monogamy with good family function may be further explored. Counselling and support may ameliorate the effects of polygamy on women affected by this.

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