Scientific Research Publishing

Open Journal of Obstetrics and Gynecology, 2023, 13, 1938-1948
https://www.scirp.org/journal/ojog
ISSN Online: 2160-8806
ISSN Print: 2160-8792

Sociodemographic and Clinical Aspects of Climacteric Syndrome of Menopause in the City of Kati in Mali Involving 113 Women

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How to cite this paper: Camara, D., Fané, S., Sylla, Y., Oulogem, A.D., Samaké, B., Sidibé, A., Ismaël, S., Traoré, S.O., Amaguiré, S., Diarra, D., Bocoum, A., Diakaridia, K., Sema, K., Coulibay, M., Ramatoullaye, H., Téguetté, I. and Traoré, Y. (2023) Sociodemographic and Clinical Aspects of Climacteric Syndrome of Menopause in the City of Kati in Mali Involving 113 Women. *Open Journal of Obstetrics and Gynecology*, **13**, 1938-1948.
https://doi.org/10.4236/ojog.2023.1312164

Received: September 17, 2023
Accepted: December 16, 2023
Published: December 19, 2023

Abstract

Objective: This paper aims to study the sociodemographic and clinical aspects of menopausal climacteric syndrome in the city of Kati in Mali. **Patients and Methods:** This was a quantitative descriptive and cross-sectional study, conducted in the city of Kati from February 1 to July 31, 2021. We included 112 menopausal women. Women were selected from a household survey using the sampling step. We were interested in conjugal, family and professional life, self-esteem and the state of health of women in general. **Results:** More than half of the women in our study were already postmenopausal (52.2%); the mean age was 50.5 years with the extremes ranging from 41 to 62 years. The majority of them were married (69.9%), housewives (43.4%) and Bambara (53.1%). The most common climacteric syndromes were: joint pain (65.5%), hot flashes (62.8%) and night sweats (56.6%). Genital-urinary syndromes (42.5%) were dominated by decreased libido (41.7%), urinary disorder (23%) and vaginal dryness (14.6%). Genitalia-urinary syndromes increased the frequency of disagreements; Pearson's Chi-square = 33.63; ddl = 1; P = 0.001. There was a statistically significant relationship between night sweat, genital-urinary syndromes, joint pain, and increased disease frequency with, respectively: Pearson's chi-square = 4.660; ddl = 1; P = 0.031; Fisher's

exact test, P = 0.001, Pearson's Chi-square = 8.434; ddl = 1; P = 0.004. There was no statistically significant relationship between climacteric syndrome and family life, work life and self-esteem. Changes in the professional relationship between women and their co-workers included, respectively: arguments (50%); disagreements (25%) and disobedience (25%). **Conclusion:** Menopause deteriorates the quality of life of women who suffer in silence, hence the need to pay special attention to them.

Keywords

Menopause, Climacteric Syndrome, Quality of Life, Kati, Mali

1. Introduction

Menopause is a natural phenomenon that usually occurs in women between the ages of 45 and 55. It is defined by the WHO as the permanent cessation of menstruation, resulting from the loss of ovarian follicular activity for at least 12 months [1] [2]. Perimenopause is the period before menopause, characterized by menstrual irregularities and hormonal disorders. This period lasts from 3 to 11 months, during which we can experience a variety of symptoms called climacteric syndrome. The latter is characterized by hot flashes, night sweats, genitourinary syndromes, and joint pain [3]. These four signs that form the climacteric syndrome will lead secondarily, either by domino effect or by central effect, to sleep disorders, anxiety disorders, an increase in depression, mood disorders, skin disorders and also a decrease in libido [3]. It is recognized that quality of life is proportional to the degree to which needs are met and goals are achieved in an individual's life. It measures the intensity or severity of the physical, mental and partially social symptoms of the climacteric syndrome [4] [5]. According to data from the French Study Group on Menopause and Hormonal Aging (GEMVI) in 2018: 88% of women aged 45 to 60 have at least one climacteric symptom, and 65% of women have had hot flashes. Vaginal dryness also occurred in 36% of women, 40% had decreased sexual desire, and 52% also had joint problems [3]. In Mali according to EDSM VI, 8% of women are in menopause [6], there are very few studies that have focused on the problem of menopause in Mali, however we can note the study on the isoflavone of sodia "Inoclim" in the improvement of menopausal symptoms in women in Bamako [7] and hospital studies carried out at the CSREF CV [8] and CHU-GT [9] on the epidemiological and clinical aspect. However, none of these studies looked at this specific aspect of women's quality of life during these periods of perimenopause and confirmed menopause, hence the motivation for our research. The objectives of this study were to investigate the sociodemographic and clinical aspects of menopausal climacteric syndrome in the city of Kati in Mali. We were interested in marital and family life, professional life, the decrease in women's self-esteem and the state of women's health in general.

2. Patients and Methods

This was a quantitative descriptive and cross-sectional study that took place in the city of Kati from February 1 to July 31, 2021. It concerned postmenopausal women who met our inclusion criteria: women aged 40 or over who have had a total absence of menstruation for at least 12 months, in the absence of any pregnancy, without any notion of taking contraception, residing in the city of Kati and who agreed to answer our questionnaires. The sample concerned 113 women in semi-structured interviews through a household survey respecting the sampling step. The sample size [10] was determined according to the SCHWARTZ formula: $n = \left(\left(Z \times Z\right) P\left(1-P\right)/\left(d \times d\right)\right) \times 100$.

This study focused on the clinical, familial, social, occupational and psychological aspects of menopausal symptoms.

We considered as independent variables: The onset of climacteric syndrome and for dependent variables: increase in marital and family conflicts, decrease in self-esteem, increase in diseases in women.

The climacteric syndromes studied included hot flashes, night sweats, joint pain and genitourinary syndrome (vaginal dryness, urination disorder and decreased libido). The woman's quality of conjugal and family life was assessed in relation to disagreement with the husband and other family members, and her intimacy with the husband. The quality of working life concerned disagreements, arguments and disobedience in the daily work of women, whether paid or not. Self-esteem was based on three pillars: self-love, self-assertion and self-confidence. The general state of women's health was assessed in relation to the occurrence of more diseases now than in the past.

We took the ethical aspect into account by informing each respondent of the value of this study and leaving them willing to choose to participate. All the women surveyed made a commitment through a consent form. This form was read in front of the respondent in order to have his voluntary membership and the possibility of withdrawing at any time. We submitted the protocol of this study to our local ethics committee, which after its approval the investigation was carried out. It should be noted that no financial incentive was proposed as a condition of participation in this study.

We performed univariate and bivariate analysis to interpret the data. We used SPSS.20 software for data entry and analysis. Pearson's Chi-square and Fisher's test were used to compare the variables, with significant P if less than 0.05.

3. Results

3.1. Socio-Demographic Aspects

More than half of our included women (52.2%) were already in confirmed menopause compared to 47.8% of perimenopausal women.

The mean age was 50.5 years with the extremes ranging from 41 years to 62 years (**Table 1**).

Table 1. Socio-demographic profile of the women surveyed.

Socio-demographic profile	N = 113	Percentage %
Age		
40 - 44	6	5.3
45 - 49	41	36.3
50 - 54	52	46.0
55 - 59	12	10.6
Greater or = 60	2	1.8
Marital status		
Married	79	69.9
Divorcee	4	3.5
Widow	29	25.7
Bachelor	1	0.9
Matrimonial property regime		
Monogamous	54	47.8
Polygamist	25	22.1
Not in a relationship	34	30.1
Household size		
More than seven people in the family	83	73.5
Five to six people in the family	20	17.7
Three to four people in the family	10	8.8
Profession		
Housewife	49	43.4
Salesperson	28	24.8
Employed	7	6.2
Artist	2	1.8
No profession	27	23.9
Ethnic group		
Bambara	60	53.1
Malinke	20	17.7
Fulani	15	13.3
Soninke	7	6.2
Sonraih	4	3.5
Senufo	2	1.8
Dogon	2	1.8
Others (Mossi, Kasso, Yoroba)	3	2.6

3.2. Clinical Aspects

Genital-urinary syndromes (42.5%), were dominated by decreased libido (41.7%), urination disorder (23%) and vaginal dryness (14.6%). All these signs appeared mainly during the confirmed menopausal period with: respectively: 77% for joint pain; 64.8% for hot flash; 68.7% for night sweat; and 75% for genital-urinary syndromes (Table 2).

3.3. Climacteric Syndrome in Relation to Conjugal and Family Life

Of all the climacteric syndromes studied, there was only a statistically significant relationship between urinary genital syndromes and marital disagreement; Pearson's Chi-square = 33.63; ddl = 1; P = 0.001. However, there was no statistically significant relationship between climacteric syndrome and family life (Tables 3-5).

3.4. Climacteric Syndrome in Relation to Work Life

Almost a quarter of the women surveyed (24.8%) reported the change in the work relationship. The main reasons for these changes were: more absenteeism at work (47.1%), more absenteeism and less availability (31.4%), and less attendance at

Table 2. Distribution of women surveyed by presence of climacteric syndrome.

Climacteric syndrome	N = 113	Percentage %
Hot flush	71	62.8
Night sweat	64	56.6
Urinary genital syndromes	48	42.5
Joint pain	74	65.5

Table 3. Change in conjugal and family life.

Change in marital and family life	N = 113	Percentages %
Change in the quality and frequency of sexual intercourse	50	44.2
Change of relationship with husband	39	34.5
Marital disagreement with husband	32	28.3
Marital disagreement with husband that is a source of violence	23	20.4
Change in relationship with other family members	07	6.2

Table 4. Type of marital disagreement.

Type of marital disagreement	N = 32	Percentages %
Frequent quarrelling	16	50
Financial Restriction	7	21
Dispute and Financial Restriction	6	18.7
Arguments, speech restrictions and financial restrictions	3	9.4

Table 5. Relationship between urinary genital syndrome and disagreement with husband.

Urinary genital syndromes	Disagreement with the husband		Total
	Yes	No	
Yes	27	20	47
No	5	61	66
Total	32	81	113

work (21.5%). Compared to the change in relationship with co-workers, only 3.5% of women noticed a change in relationship with co-workers compared to 96.5% who saw absolutely nothing. The types of change in professional relationship noted by the women surveyed concerned respectively: dispute (50%), disagreement (25%) and disobedience of their superiors (25%). However, there was no statistically significant relationship between climacteric syndrome and working life.

3.5. Climacteric Syndrome Related to Self-Esteem

Among the elements related to self-esteem, 91.1% of women said they were able to play the role of wife, while 39.8% confirmed that they were appreciated by other colleagues and 22.1% already had an idea of mental decline. There was no statistically significant relationship between climacteric syndrome and self-esteem, but there was a relationship between urinary genital syndromes and self-esteem. Fisher's exact test, P = 0.000.

3.6. The Onset of Climacteric Syndrome in Relation to an Increase in the Frequency of Diseases

The main diseases found in the women surveyed were osteoarthritis (22.1%), high blood pressure (15.1%), diabetes (16.8%), low back pain (7.1%) and urinary incontinence (1.8%). However, no disease was found in 33.6% of the women.

There was a statistically significant relationship between night sweat and increased disease frequency. Pearson's chi-square = 4.660; ddl = 1; P = 0.031, between urinary genital syndromes and increased disease frequency. Fisher's exact test, P = 0.001; and between joint pain and increased disease frequency. Pearson's Chi-square = 8.434; ddl = 1; P = 0.004. However, there is no statistically significant relationship between hot flashes and increased disease frequency. Pearson's Chi-square = 0.516; ddl = 1; P = 0.473.

4. Discussion

4.1. Socio-Demographic Aspects

Our present study on the sociodemographic and clinical aspects of menopausal climacteric syndrome in the city of Kati in Mali is the first of its kind in Mali. It consisted of conducting a household survey to recruit women during this period in order to assess climacteric syndrome. However, menopause is said to be con-

firmed by the total absence of menstruation for at least twelve months, this accounted for just over half (52.2%) in our series. According to EDSM VI [6], 8% of women were in menopause. According to Blaise M *et al.* [11], 76% of women aged 45 to 65 years reported perimenopause or confirmed menopause. This difference can be explained by the fact that our study covered the city of Kati and only women in perimenopause and already menopausal, unlike the EDSM which covers the entire population of Mali [6].

The mean age of the women surveyed was 50.5 [41 - 62] years. This result is similar to that of Diarra L.S. [8], Camara D. [9] and Senouci *et al.* [12] who found a mean age of onset of menopause of 52 [38 - 67] years and 48.2 [47.8 - 48.6] years, 48 ± 3 years, respectively. These studies were very often carried out in a healthcare setting, unlike ours, which was a household survey. All these results corroborate with some data from the literature where the age of menopause is between 45 and 50 years [1] [2].

Married women were the most represented with nearly 7 out of 10 cases (69.9%) and were mostly housewives with 43.4%. According to Blaise M *et al.* [11], the majority of women (45%) were inactive (without a profession) [11]. The population of the city of Kati is mainly composed of Bambara, this ethnic group accounted for more than half of the cases (53.1%), followed by Malinke (17.7%) and Fulani (13.3%) [13]. Perimenopause or confirmed menopause is a very difficult period for women because of the presence of so-called climacteric disorders, the presence of a spouse could help the woman to bear some of these discomforts especially for a harmonious couple. However, almost half (47.8%) of women were in a couple with their husbands and 30% of women were single. Just over 7 in 10 women lived in a family of more than seven. According to Senouci *et al.* [12], out of 131 women interviewed, 81% were married and 62% had more than four children, 47% of women were heads of household, 29% were employed and 71% were housewives. The presence of a significant number of women in the family could improve the woman's chances of cohabitation.

4.2. Clinical Aspects

The prevalence of symptoms in menopause differs between studies depending on several factors such as sample size, conception, hormone status, and country [14]. Hormonal disorders leading to menstrual irregularities during perimenopause were much more observed in our women interviewed, with respectively: joint pain (65.5%), hot flashes (62.8%), night sweats (56.6%). Decreased estradiol levels have significant adverse effects on sexual functioning, desire, and responsiveness (arousal, sexual pleasure, and orgasm). In our series, urinary genital syndromes (42.5%) were dominated by decreased libido (41.7%), followed by urinary disorder (23%) and vaginal dryness (14.6%). Our results can be superimposed on certain studies carried out in sub-Saharan Africa and the Maghreb such as those of Amoussou M. [15] in Cotonou in 2004: hot flashes (82.4%), excessive sweating (74.4%), libido disorders (67%), and joint pain (38.8%). Cissé

C.T. *et al.,* [16] in 2006 in Dakar, found hot flashes (83.1%), decreased libido (83%), asthenia (74.3%), arthtralgia (74%), night sweats (73.4%), insomnia (65), dyspareunia (25.6%). According to a comparative overview of menopause in Tunisia and France [17], in 2012, the most frequent symptoms were hot flashes and pain in muscles and joints (74.4%). For Blaise M *et al.* [11] in 2013, hot flashes (60%), night sweats (46%), libido disorders (26%) and joint pain (14%). Although our study did not carry out a large-scale study like these, there are hardly any major differences with the data already known in the literature.

4.3. Climacteric Syndrome in Relation to Conjugal and Family Life

Among the changes in marital life that occurred during climacteric syndrome, change in the quality and frequency of sexual intercourse was more represented (44.2%) in our series. Sexuality, being an important element in the couple, is strongly correlated with the change of relationship with the husband (34.5%). According to Cissé C.T. *et al.* [16], the dominant symptom was decreased libido and accounted for 83% of women. Marital disagreements and disagreements associated with violence accounted for nearly half (48.7%) of the couples of our women surveyed. Regarding the types of marital disagreements, arguments accounted for 50% of cases and those associated with speech and financial restriction 9.4%. According to Elisabeth Petit [18], 21% of men living with a woman between the ages of 48 and 60 are affected by their partner's menopause and feel that it has consequences on their life as a couple." Since she went through menopause, my wife has been less patient and more irritable, and I can't explain why. I'd like to help him, but I'm afraid I'm being clumsy unintentionally. What can we do to support them in the best possible way?"

In fact, 97% of spouses said they were satisfied with their relationship with their partner. Nevertheless, 28% believe that menopause has a fair or very significant impact on their sex life, and 2% on their relationship with their partner [19].

There was only a statistically significant relationship between urinary genital syndrome and marital disagreement. Pearson's Chi-square = 33.63; ddl = 1; P = 0.001. According to Eloy Moral *et al* [20], the majority of women (75%) reported that vaginal atrophy had a negative impact on their lives, including sexual intimacy (64%), romantic relationship with a partner (32%), overall quality of life (32%), feeling healthy (21%), and feeling attractive (21%). In our Malian context, because of the state of their wives, some husbands will be tempted to look for a second wife, especially if they have only one to satisfy their sexual needs. The second wife, who is very often the same age as their daughter, is seen by the husband as a solution to his problem, and is very often the real source of disagreement with the first wife and her children at this age. Other husbands at this age who do not have the courage to remarry will be tempted to look for a "*second office*" companion and *finally many "grins" of men aged* 50 *and over justify themselves as a solution at this time.*

4.4. Climacteric Syndrome in Relation to Professional Life

Of the women surveyed, 24.8% said they had changed their work relationship, compared to 75.2% who reported nothing. Of those who reported changes in their employment relationship, these changes mainly concerned increased absenteeism at work (47.1%), more absenteeism and less availability (31.4%), and less attendance at work (21.5%). When it comes to changing relationships with co-workers, only 3.5% of women noticed a change in their relationship with co-workers compared to 96.5% who saw absolutely nothing. The types of change in professional relationships noted by the women surveyed concerned respectively: Dispute (50%); disagreement (25%) and disobedience of their superiors (25%). However, there was no statistically significant relationship between climacteric syndrome and working life. Most of the time, menopause has little to no impact on a person's ability to do their job, and employers may not notice these changes. However, for others, menopause can have an impact on health, performance and attendance at work [19].

4.5. Climacteric Syndrome Related to Self-Esteem

Among the elements related to self-esteem, 91.1% of women said they were able to play the role of wife, while 39.8% confirmed that they were appreciated by other colleagues. There was no statistically significant relationship between climacteric syndrome and self-esteem, but there was a relationship between urinary genital syndromes and self-esteem. Fisher's exact test, P = 0.000. Different experiences of menopause are related to social class and degree of male dominance. A certain level of independence and emancipation allows women an identity beyond their reproductive function and a status unaltered by menopause [21].

Melo *et al.* [21] found low self-esteem and decreased quality of life in women, causing problems in their personal and professional relationships showing the importance of the role of health professionals, especially nurses, in promoting educational strategies and supporting women at this stage of women's lives. The assessment of this parameter depends from one study to another depending on the type of study.

4.6. Climacteric Syndrome Related to the Increased Frequency of Diseases

Estrogen deficiency during this period can lead to chronic and degenerative diseases, however, in our study osteoarthritis disease, diabetes and high blood pressure were the most common among the women surveyed with: 22.1%, 16.8% and 15.1% respectively. There is a statistically significant relationship between night sweats, urinary genital syndromes and joint pain and increased disease frequency. Women can expect to spend more than a third of their lives after menopause and from the sixth decade onwards, many chronic diseases will begin to appear, affecting both the quality and quantity of a woman's life. Thus, the

onset of menopause paves the way for prevention strategies aimed at improving quality of life and increasing longevity. Obesity, metabolic syndrome and diabetes, cardiovascular disease, osteoporosis and osteoarthritis, cognitive decline, dementia and depression as well as cancer are the main diseases of concern [22].

5. Conclusion

Menopause is a difficult time for many women because of the severity of climacteric disorders. Most of them are silent about their suffering, hence the need to pay special attention to women during this period by their husbands, their families and the community in order to help them overcome their suffering.

Conflicts of Interest

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

References

[1] (1995) Flammarion Dictionary. 5th Edition, 2nd Edition, Flammarion Médecine Sciences, Paris, 1010 p.

[2] WHO Scientific Group (1996) Research on Menopause: A Review of the 1990s. WHO, Geneva, 117 p.

[3] Lopes, P. and GEMVI (2019) Climacteric Syndrome, Course Module II. MOOC/CNGOF.

[4] French National College of Gynecologists and Obstetricians (CNGOF) (2015-2016) Menopause: Item 55. Université Médicale Virtuelle Francophone, Paris.

[5] WHO (1946) WHO Constitution. World Health Organization, Geneva.

[6] DHS VI/Mali 2018: 6th Demographic and Health Survey. Mali August 2018.

[7] Camara, N. (2009) The Value of a Soy Isoflavone Extract (inoclim®) on Menopausal Symptoms in a Cohort of 50 Women Followed in the District of Bamako. Ph.D. in Medicine, Universities of Sciences, Techniques, and Technologies of Bamako, Bamako.

[8] Diarra, L.S. (2009) Epidemiological and Clinical Study of the Menopausal Period in the Reference Health Center of Commune V of the District of Bamako. Thesis in Medicine, FMPOS, Bamako.

[9] Camara, D. (2012) Sociodemographic and Clinical Aspects of Menopause in the Gynecology and Obstetrics Department of the Gabriel Touré University Hospital (Mali) from 2006 to 2010. End-of-Cycle Thesis, CES Gynéco/Mali FMOS, Bamako.

[10] Conceptual Framework of the Evacuation Reference of the Kati Health District, Revised in 2016 for 5 Years. (Kati CSREF Archive).

[11] Montfort, B. and Basier, A. (2013) Explorations of Women's Obstacles and Motivations for the Treatment of Menopausal Symptoms: No. 1201733, April 24.

[12] Senouci, *et al.* (2021) Sleep Quality and Its Relationship to Climacteric Symptoms and Quality of Life in Women in Menopausal Transition. *The North African Journal of Food and Nutrition Research*, **5**, 93-99. https://www.najfnr.com https://doi.org/10.51745/najfnr.5.12.93-99

[13] Archive Document of the Town Hall of Kati on the History of the City of Kati.

[14] Rossella, E. and Lachowsky, N.M. (2009) Menopause and Sexuality: Symptom Prevalence and Impact on Quality of Life. *Maturitas*, **63**, 138-141. https://doi.org/10.1016/j.maturitas.2009.03.021

[15] Amoussou, M. (2012) Menopause: Clinical and Psychosocial Aspects in Cotonou (About 2021 Postmenopausal Women Enumerated in a Sampled Population of 11669 in Cotonou) in 2004. *Annales de la SOGGO*, **7**, 19-25.

[16] Cisse, C.T., Diouf, A.A., Dieng, T., *et al.* (2008) Moreau, Menopause in Africa: Epidemiology, Lived Experience and Management in Dakar. The Gynecologist's Newsletter, No. 335.

[17] Delanoë, F. (2012) Class, Gender and Culture in the Experience of Menopause: A Comparative Survey in Tunisia and France. *Social Science & Medicine*, **75**, 401-409. https://doi.org/10.1016/j.socscimed.2012.02.051

[18] Petit Elisabeth, Menopause: How to Help Your Partner. https://www.notretemps.com

[19] Menopause in the Workplace: OSH Answers. https://www.cchst.ca>Psychosocial>Menopause

[20] Moral, E. (2018) The Impact of Menopausal Genitourinary Syndrome on Well-Being, Functioning, and Quality of Life in Postmenopausal Women. *Journal of the North American Menopause Society*, **25**, 1418-1423. https://doi.org/10.1097/GME.0000000000001148

[21] Melo, E. (2018) Influence of Climacteric Symptoms on Women's Quality of Life: An Integrative Review. *Human Reproduction Archives*, **32**, e001117. https://doi.org/10.4322/hra.001117

[22] Hooper, S.C., Marshall, B.A., *et al.* (2022) Mental Health and Quality of Life in Postmenopausal Women as a Function of Retrospective Menopause Symptom Severity. *Menopause*, **29**, 707-713. https://doi.org/10.1097/GME.0000000000001961