

\* Original article

## **Women's Life in Climaterium: Mapping of Manifested Changes**

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DOI:10.3395/reciis.v5i3.430en

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### **Abstract**

A cross-study, with a quantitative and qualitative approach, aiming to identify the changes manifested by women in climacterium, as from mapping in the municipality surveyed. One hundred and twenty-three women aged between 40 and 60 years, at a reference Basic Health Unit in a downtown district sited at a municipality of Santa Catarina's South Region, as well as in residences, through home visits. An interview plot was used, with open and closed questions. Among all variables, anxiety stood out, with 74.8% (n=92) within the sample reached. The variables, through multivaried analyses, fell in two groups (anxiety and depression 35.8% (n=44) X insomnia/headaches/fatigue/irritability 26.8% (n=33); however, through Pearson's chi-square test, there occurred no significant comparative result. The

Nurse's role in orienting and promoting women's health in climacterium is supplying support and orientation on this new life stage.

**Keywords:** Women's health; Climacterium; Menopause; Nursing.

## **Introduction**

Life expectancy of Brazilian population has grown significantly in recent years and, according to the IBGE (Brazilian Geography and Statistics Institute), "the Brazilian population has been in an aging process for 30 years" (RAMOS, 2005, p.1).

Specifically regarding women, life expectation is about 72.4 years. With a history of higher life expectancy for the female population, there also happens an increase in the number of women who may reach the climacteric period, and who will consequently experience the consequences of hypoestrogenism, followed by signs/symptoms such as fatigue, hot flashes and night sweats, insomnia, and others, thus needing to learn to live with them. For such, women can take important steps every day such as exercise, good nutrition, drug treatments if necessary, this primary prevention being performed by individual health services.

Menopause is usually divided into: pre-menopausal, peri-menopausal and postmenopausal (ALMEIDA; BORRELLI, 2007). Pre-menopause usually begins after age 40, with decreased fertility in this period. The perimenopause, a period marked by hormonal changes, takes place two years before the last menstrual period, extending itself to one year afterwards. Post-menopause begins one year after the last menstrual period, this period being divided into early (up to five years before the last menstrual period) and late (more than five years after the last menstrual period) (FERNANDES; BARACAT; LIMA, 2004).

Menopause, according to Brasil (2004, p.43), "means only the end of the fertile period. It is not the end of life or production capacity, nor the end of sexuality." With the decrease in estrogen production, it is a time marked by irregular cycles and symptoms specific to this hormonal condition (FREITAS; PIMENTA, 2006).

Thus, we believe that many expenses with hospitalization and drug therapies could be avoided if information and education to women were enhanced, especially about self-care, the need for habit changes on natural therapeutic alternatives, the essentiality of seeking medical advice to prevent diseases resulting from this period, and the perception of these events as inherent to life, which alleviates its effects, improving the life quality of these women.

Nursing care was assigned as a key part in breaking down myths and taboos related to menopause. The professional nurse, when providing guidance to women in this period, provides assistance to a new stage adaptation of the female life cycle (DIAS; LIMA, 2008).

Thus, we established as research question: Which changes are expressed by women during menopause? However, we assume that the major physiological changes manifested by women during menopause are hot flashes, dyspnea, anxiety, irritability, depressive symptoms, sexual dysfunction, insomnia and fatigue, since it is estimated that approximately  $\frac{3}{4}$  of women in menopause have some degree of symptoms related to hypoestrogenism.

In search of answers to the research question, we propose as overall aim identifying changes expressed by postmenopausal women, from mapping the municipality of Southern Santa Catarina region. It was necessary, for such, to characterize the researched sample according to age, time of menopause, marital status and number of children; identify physiological changes manifested by women within the menopause age; investigate the lifestyle of these women, including physical exercise, smoking, alcoholism and cervix cancer prevention tests, as well as breast examination; and investigate the occurrence of estrogen use by women participating in the research.

## **Methodological procedures**

This was a cross-sectional study with qualitative and quantitative approach, since it sought to present data from an objective and subjective mapping of the changes expressed by the women in the climacteric period, under research, by using an interview script (technical structured self-report). This survey was conducted after approval by the Ethics Committee of the Universidade do Extremo Sul Catarinense, through opinion No. 158/2010.

The study subjects comprised 123 women aged between 40 and 60 years. The search of the sample of women for the trial took place by convenience, since we knew, through medical records or information from the health team, that the women approached were aged compatible with the desired and proposed targets of the research. The interviews took place at home visits, and also by approaching the patients in the targeted age group, at the Basic Health Unit, during the research period. Women who participated in the survey were not only living downtown, where the Basic Health Unit is located, as, although the latter is undergoing ESF implementation, also meets and will continue serving, via referral from other units located in the same city, specialties such as gynecology and pediatrics.

The survey was developed based on Resolution 196/96 of the National Health Council setting forth the basis for research with human subjects in Brazil. All women approached were informed about the research, objectives, goals, and non-mandatory participation. Thus, those who accepted, signed an Informed Consent Form to authorize their participation in the research and dissemination of data, since identity is kept confidential.

Data were collected through an interview script (technical structured self-report) with open and closed questions, containing preset answers for participants to select, divided into four parts: 1) Sample Characterization (socio-demographic data and life style and habits-related data); 2) Menopause Symptoms (closed and open questions about symptoms for those going through menopause); 3) Menopause Physiological Changes (open and closed questions about changes from the time of menopause); and 4) Changes occurring in life after menopause (closed and open questions about changes in life in relation to menopause).

Data were confidentially processed, protecting the identity of the participants, not exposing them socially, since the intention was not to expose people, but rather to gather information through them. Thus, we chose to use the symbol M, which means woman in Portuguese ("mulher"), followed by the same number represented in the sample (1 to 123) for the times when we put the recorded lines.

In the qualitative approach, four (04) steps were proposed by Morse and Field: **Understanding:** from lectures, readings for meaning search in the lines; **Synthesis:** data

screening performed, selecting and assembling important pieces for analysis; **Theorizing:** organized and schematized distribution of data, when the researcher explains them, and adds their analysis; and, finally **Recontextualization:** time of theory deepening, addressing contextualization of findings (POLIT; BECK; HUNGLER, 2004).

The quantitative data were organized and condensed using the SPSS (Statistical Package for the Social Sciences, SPSS Inc, Chicago) program, version 17.0 for Windows. We used non-parametric analysis from tests revealing the p value, Pearson chi-square, mean and absolute frequency, depending on the information being worked on and discussed, after data were exposed from the descriptive analysis and used in figures, tables and charts for the final presentation.

### Presentation and discussion of results

Regarding **age**, the research entailed 123 women between 40 and 60 years of age, 49.6% (n = 61) of whom ranged from 40 to 50 years of age, and 50.4% (n = 62) ranged from 51 to 60 years of age. This shows a balanced women's age number.

Regarding **menopause time** in which that these women were, we see that, in Table 1 53.6% (n = 66) were in the first years of this period. From these, 57.6% (n = 38) are women aged between 40 and 50 years, and 42.4% (n = 28) between 51 and 60 years.

**Table 1:** Menopause Time (absolute and relative frequency)

Age	Time of Menopause - in yrs					Total
	<= 1 n=66	1-5 n=27	6-10 n=17	11-15 n=6	>=16 n=7	
40-50	57.6% (n=38)	62.9% (n=17)	17.7% (n=3)	33.3% (n=2)	14.2% (n=1)	61
51-60	42.4% (n=28)	37.1% (n=10)	82.3% (n=14)	66.7% (n=4)	85.8% (n=6)	62

**Source:** Research data, 2010.

We found that most women are starting menopause, which may leads to anxieties and doubts, in addition to biological, psychological and social disturbances to which they may be exposed, so we find that the intervention point can and should be preventive, before estrogen decrease brings about changes not understood by women.

Nurses can provide health education and, in meetings, guide the women on what is happening with their bodies and how they might behave with decreasing hormones. In addition, self-care knowledge becomes essential they avoiding possible complications (BRASIL, 2008). We can also plan the development and monitoring of women during their adaptation to this phase (VALENÇA; GERMANO, 2010).

Regarding **marital status**, we found single, married, separated/divorced and widowed women. Among the women studied, we found that the most evident marital status is married, with 60.97% (n = 75). This is important because there may be changes in marriage due to the physiological changes related to sexuality x menopause.

Oliveira, Jesus and Merighi (2008) in their qualitative study "*Climatério e sexualidade: a compreensão dessa interface por mulheres assistidas em grupo*" (*Menopause and sexuality: an understanding of this interface by women assisted in group*), held with eight (n = 8) menopausal women in a Basic Health Unit with Family Health Strategy in Minas Gerais, brings reflections on their experiences regarding sexuality in the climacteric period. Changes in sexuality have been identified as vaginal dryness and loss of interest in sex, in which they become uncomfortable during sexual intercourse with a partner.

In our study, this fact must be highlighted, since it is clear that, within the 123 women surveyed, 35% (n = 43) have vaginal dryness and 10.6% (n = 13) showed loss of interest in sex. Of those 13 women who have lost interest in sex, 23.1% (n = 3) also had vaginal dryness, but 76.9% (n = 10) did not show associations between the two variables.

Concerning **number of children**, an average of 04 (four) children (SD  $\pm$  1.13) was found, ranging from the minimum 01 and maximum 06 children in the sample under study. It must be emphasized that 4.9% (n = 6) did not have children, from 01 to 02 (one two) children 39.9% (n = 49) and more than 03 (three) children 55.3% (n = 68).

As for lifestyle, regarding **smoking** and **alcoholism**, out of the 123 women in the study, 2.43% (n = 3) use alcohol, and 18.69% (n = 23) are smokers. Calculating these two variables (smoking and alcohol) in the respective age groups (40 to 50 years and 51 to 60 years), smoking is more common in women aged 51 to 60 years (n = 61), while alcohol, although on a small scale, in general, was expressed at higher levels in younger women from 40 to 50 years (n = 62).

The smoking issue is important for this research because the habit of smoking and alcohol use has been described as "risk factors for the onset of hot flashes, possibly by the effect on estrogen metabolism or thermogenic effects of nicotine" (FREITAS; PIMENTA, 2006, p. 766).

Out of the 23 women who smoke, 69.6% (n = 16) had hot flashes. This is a relevant research data and for which the nurse can establish action strategies through guidance.

In the practicing physical activity approach, only 17.07% (n = 21) versus total respondents (n = 123) reported physical activity. Regarding the frequency of physical exercises, out of 21 women, 57.14% (n = 12) reported exercising 5 times/week (M21, M42, M46, M50, M54, M56, M63, M64, M73, M76, M96, M104), and 14.28% (n = 3) reported exercising 4 times/week (M8, M36, M122). The remaining 28.57% of women (n = 6) refer exercising 2-3 times/week.

The fact that few women practice physical activity becomes a concern regarding the quality of life and increasing the degree of predisposition to diseases.

In the self-care approach related to **mammograms**, **breast self-exams** and **cervical cancer screening test**, a high rate of 76.4% (n = 94) was found in women who did not "touch themselves", ie. do not perform a self-examination. In addition, 56.1% (n = 69) of women do

not submit to annual **mammograms** as proposed by the government: thus, they risk late detection of this disease.

When we asked the reason for not performing the tests every year, we found simple answers, which refer to lack of information, since the women claim not to need them, or they do them when they find necessary, they feel nothing, or fear, because their doctors did not request such tests. We can see the information deficit of women in the study on the benefits/advantages of submitting to mammograms and breast self-examination: *There is no need* (M1, M3, M8, M56). *I only do it when I find necessary* (M23). *I don't feel anything* (M32, M36, M57). *I haven't done it for two years now, because there was nothing wrong last time* (M38).

Regarding the **cervix cancer prevention tests**, the total sample of women (n = 123), 61.8% (n = 76) reported never having performed the exam, while only 2.4% (n = 3) perform it annually, with an approximate time of two years since the last test for 2.4% (n = 3) of women.

When investigating the reason why the women did perform the test annually, expressions of "laughter" or even "shame" were seen during the interviews, being sometimes represented in the responses: *I get sick during the procedure* (M57). *I don't have time for that* (M50). *I never had altered results* (M60). *I don't do the test because I don't feel anything wrong* (M65). *I think there is no need* (M25).

Prevention and health promotion require adherence to strategies for early detection of breast cancer and cervical cancer, screening being the most effective method, via self-breast examination, mammography and Pap smear test used the most used (BRASIL, 2008).

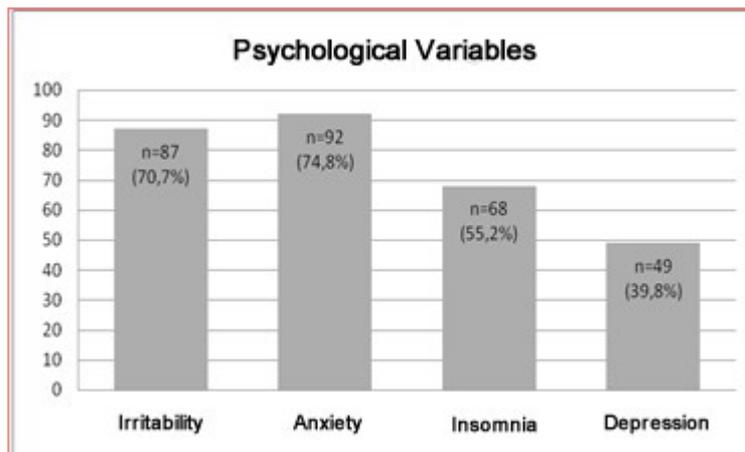
## **Key Signs and Symptoms Manifested by Women: Psychological and Biological Changes**

### ***Psychological Changes***

A cross-sectional study entitled "*Associated Factors of Climacteric Symptoms*", conducted with 254 postmenopausal women in a Menopause Clinic of Caxias do Sul, focuses on identifying factors of menopausal symptoms. The most important symptom was irritability with 87.1% (n = 221) and insomnia with 66.5% (n = 169) (LORENZI *et al.*, 2005).

In our research, from the 123 women surveyed, 74.8% (n = 92) display **anxiety**, especially as a supernatant symptom of the research, as shown in Figure 1. However, in the research by Dias and Lima (2008), the symptom most emphasized are hot flashes (69%).

**Figure 1:** Representation of Psychological Variables.



**Source:** Research data, 2010.

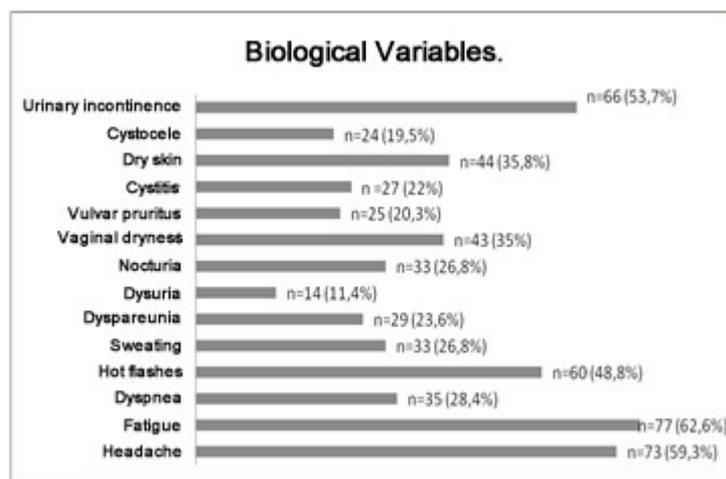
The higher prevalence of **irritability, anxiety and depression** deserve attention because they approach the women's mental state. Both were manifested in most women, and may be related to changes in behavior. They would also affect women's social relationships (OLIVEIRA; JESUS; MERIGHI, 2008).

In these cases, we believe that Nursing can intervene in care planning from the therapeutic demands and follow-up by health care professionals.

### Biological Changes

In the current research, **hot flashes** represent 48.8% (n = 60), ie. almost half the total sample (n = 123), as shown in Figure 2. In the research by Lorenzi *et al.* (2005), with 254 women in Caxias, hot flashes accounted for 60.2% (n = 153), later reaching most of the total sample. Thus, one can see the relevance of this symptom in the groups of women studied, and emphasize the importance of professional nurse orientation, so that postmenopausal women who present this symptom can learn to deal positively with this event originated from menopause.

**Figure 2:** Representation of Biological Variables.



**Source:** Research data, 2010.

In the survey, when asked about the changes occurring in life after menopause concerning hot flashes, 19.5% (n = 24) reported using lighter and shorter clothes even in winter; 2.4% (n = 4) reported shyness from hot flashes or sweating in the presence of friends, family or society; and 2.4% (n = 4) reported changing clothes several times during the night.

**Urinary incontinence**, which is relevant in the present study, with 53.7% (n = 66), most often as per Dahlke, Dahlke and Zahn (2005), does not allow women to have aggressive manifestations such as coughing, sneezing, or even laughing at some situations. It causes hard and strenuous routine change, with few moments of leisure and pleasure.

The results of the study by Dias and Lima (2008) show that the least-cited symptoms were cystitis and dry skin and nails, with 3%, which differs from the current study, which depicted significant numbers, not being the least being mentioned, as cystitis is present for 22% (n = 27), and dry skin for 35.8% (n = 44) of women.

Other symptoms were also mentioned by the women, such as dizziness (M24, M60), heat in the feet (M42), body pain (M34). In addition, through the self-report, we realized that the most frequently-mentioned symptoms were nervousness (M5, M26, M84, M94, M102), leg pain (M73, M79, M81, M89, M118) and discouragement (M5, M38, M55, M115).

Nurse practitioners have a crucial role in caring for women during the climacteric period as well as after menopause. Contact throughout their lives at the Health Unit facilitates the approach, enabling exchange of experiences and information, so that women can achieve self-worth, well being and a better management of the climacteric phase (BERNI; LUZ; KOHLRAUSCH, 2007).

### **Most Significant and Converging Symptoms of the Survey**

#### ***Relationship of Anxiety associated with insomnia, Fatigue, Depression, Hot flashes, Sweating, Nocturia and Dyspnea***

When performing a Pearson chi-square, the variable **anxiety**, a major physiological change revealed in this study, has become relevant with a total of 74.7% (n = 92). It was compared, during the non-parametric tests with other variables outlined in Table 2, and shown to be associated with insomnia, fatigue, depression, hot flashes, sweating, nocturia, dyspnea.

In a descriptive qualitative study, entitled "*Knowledge, Perceptions and Health Care of Women During Menopause*", conducted with 15 women, aged between 41 and 59 years, in the city of Canoas in Porto Alegre/RS, discusses the these women's menopause experiences. In the category perceptions of menopause, the authors noted that "some women report feeling anxiety and discomfort connected with hot flashes, and feel that anxiety stems from perspiration" (BERNI; LUZ; KOHLRAUSCH, 2007, p.303).

**Table 2:** Degree of Association Between Variables

Variable in analysis: Anxiety				
Variables	N	f	(%)	P value

Insomnia	68	59	86.7	0.001
Headache	73	56	76.7	0.554
Fatigue	77	66	85.7	0.000
Dyspnea	35	32	91.4	0.007
Irritability	87	68	78.1	0.182
Depression	49	44	89.7	0.002
Hot flashes	60	51	85	0.011
Sweating	33	30	90.9	0.013
Dyspareunia	29	23	79.3	0.522
Dysuria	14	13	92.8	0.098
Nocturia	33	29	87.8	0.043
Vaginal dryness	43	34	79	0.424
Vulvar pruritus	25	20	80	0.502
Cystitis	27	24	88.8	0.056
Dry skin	44	30	68.1	0.207
Cystocele	24	18	75	0.980
Urinary incontinence	66	50	75.7	0.792

**Source:** Research data, 2010.

Given the results above, we could not find enough bibliography to subsidize this association between variables, but they draw attention, in our study; Valença and Germano (2010) state that the neuropsychiatric symptoms and insomnia, in the climacteric period, are not discussed enough, ie., there are few studies addressing this period.

### **Relationship between Sets of Variables: Multivariables**

When assessing the variables of the study, we sought to compare those most associated and were present in the largest possible number of 123 women. We established two sets of variables: **anxiety and depression 35.8% (n = 44) X insomnia / headaches / fatigue / irritability 26.8% (n = 33)**. Afterwards, we have compared all the variables of the study: biological, psychological and lifestyle changes; time of menopause and age; we compared them with the Chi square test p-value less than 0.05, demonstrating that the associations between some variables do exist, and the likelihood of association was not by chance.

The test showed no significant comparative result between **insomnia / headache / fatigue / irritability** and variables: dyspareunia, dysuria, vaginal dryness, vulvar pruritus, dry skin, urinary incontinence, cystocele, smoking, alcohol use, time of menopause, and

physical activity, as well as among **Anxiety / depression** and fatigue, sweating, dysuria, nocturia, vaginal dryness, vulvar pruritus, dry skin, urinary incontinence, cystocele, smoking, alcohol use, time of menopause, and physical activity.

**Table 3:** Comparative Distribution of Variables

Set of Variables	Variable	F	%	P value
Headache /fatigue /irritability 26.8% (n=33)	Hot flashes	21	63.63	0.046
	Dyspnea	15	45.45	0.011
	Sweating	16	48.48	0.010
	Nocturia	18	54.54	0.000
	Cystitis	14	42.42	0.010
Anxiety /depression 35.8% (n=44)	Dyspnea	19	43.18	0.007
	Dyspareunia	17	38.63	0.003
	Cystitis	14	31.81	0.048

**Source:** Research data, 2010.

We found through the Pearson's chi square test that this association exists between variables, but there is no sufficient bibliography to support this association. However, these associated variables deserve attention.

### **Menopause Medication**

Although feeling the symptoms, only 19.51% (n = 24) reported taking medication for menopause among the women surveyed. The remaining 80.48% (n = 99) reported never having taken any medication, even though feeling "unpleasant symptoms". Therefore, follow-up and monitoring become obviously necessary, because women feel without knowing exactly what to do and how to alleviate this situation.

However, when asked the name of the drug being used for menopausal symptoms improvement, out of the 19.51% (n = 24) who used medication, 16.66% (n = 4) administered Estradiol, 12.5% (n = 3) administered Premarin, 16.66% (n = 4) were using some medication but did not recall the name, and the remaining 54.18% (n = 13) administered Suprelle, Isoflavone and Soyfemme.

The authors Freitas and Pimenta (2006) mention that the financial condition and lack of information may be affecting adherence by women to hormone treatment and to guidelines for improving the quality of life.

## **Conclusion**

Menopause, a change and history in a woman's life, involves several changes, which most often negatively affect the quality of life of women in this period, many times often due to lack of information or monitoring and treatment.

This research has become essential in identifying the changes manifested by women in the climacteric age investigated; moreover, we were able to realize that the interview fostered the expression of feelings, difficulties and changes affecting the lives of the investigated women, such as "discouragement" (M5, M38, M55, M115), "nervousness" (M5, M26, M84, M94, M102), "desire to stay at home" (M34), loss of libido (M40, M43, M44, M50, M62, M67, M74, M91, M100, M102, M105, M121, M123).

We have not noticed or observed demonstrations of "concerns" with aging, nor with the loss of femininity, because this does not always occur because of the climacteric period. However, they outline feelings concerned with body functions, including vaginal dryness, dyspareunia and urinary incontinence.

The health care of women, especially during the climacteric period, should be directed to health promotion. Knowledge of clinical and physiological changes (menstrual, vasomotor, genitourinary, emotional and physical abnormalities) from this period is of fundamental importance for offering appropriate attention, so as to provide them quality of life with greater security and well being in this period.

However, we prefer to reflect in order to promote health education for women in the climacteric period. Do nurse practitioners provide information, health education and health promotion to women going through menopause? Do they devote their time to "prepare" and/or "follow up" for women to face this period in good conditions?

The basis of Nursing care is the activity of caring, where its specificity is the care of human beings. This care includes patient, family and community, seeking to understand and promote care, putting into practice health promotion and prevention activities. This is no different in the menopause: a woman needs care and information about what she is experiencing or will experience during this period.

The nursing professional is a human being with knowledge and skills acquired during his/her academic education, to generate the act of caring, guiding, promoting health, directing them to the pursuit of improving the quality and humanization in health.

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