


QUALITY OF LIFE IN CLIMACTERIC WOMEN IN A MUNICIPALITY IN WESTERN BRAZILIAN AMAZONIA <https://doi.org/10.56238/sevened2024.031-073>**Walesca Viana Ribeiro¹, Mariana Santos de Sá Galina² and Alan Patricio da Silva³****ABSTRACT**

Objective: To evaluate the quality of life of climacteric women who are or are not using hormone replacement therapy. **Method:** A quantitative, descriptive, cross-sectional study was carried out with the application of a questionnaire to all women between 40 and 65 years of age registered in the Family Health Program of the Senador Adalberto Sena Family Health Unit in Cruzeiro do Sul (Acre) from August to October 2023. The research instrument used to evaluate was the Medical Outcomes Study 36-item Short Health Survey (SF-36) and to evaluate climacteric symptoms, the Menopause Rating Scale (MRS) was used. **Results:** When evaluating the domains of the questionnaire on quality of life (SF-36), it was noticed that the variables pain, general health status, social aspects are the most cited with mean values above 50% and MSR above 90% in all domains, except heart discomfort with 85.2%. **Conclusion:** Facing the climacteric brings many anxieties, doubts and fear on the part of women. It was observed that almost all of the women in this study have symptoms related to the climacteric and are not being treated. Better attention, care and guidance are needed so that women have quality of life at this stage of life.

Keywords: Climacteric. Menopause. Women's Health.

¹ Student of the Graduate Program in Public Policies and Local Development, School of Sciences of Santa Casa de Misericórdia de Vitória - EMESCAM.

E-mail: walescavr@yahoo.com.br

² Undergraduate student, Nursing Course, School of Sciences of Santa Casa de Misericórdia de Vitória-EMESCAM

³ Professor of the Graduate Program in Public Policies and Local Development, School of Sciences of Santa Casa de Misericórdia de Vitória - EMESCAM.

E-mail: alan.silva@emescam.br



INTRODUCTION

During her life, women go through several processes that are marked by biological changes, which favor the manifestation of some diseases, clinical or endocrine, which can often leave women more vulnerable to various types of problems, whether psychological or metabolic. Among them, the climacteric stands out, which is characterized as the change from the reproductive to the non-reproductive phase (SOUZA et al., 2017).

The climacteric is a period in a woman's life that represents the transition from the reproductive to the non-reproductive phase. It begins when there is a decline in ovarian function and the announcement of menopause. Menopause is the permanent cessation of menstruation, that is, the last menstrual flow, proven through spontaneous amenorrhea for 12 consecutive months (ALBUQUERQUE et al., 2019).

The World Health Organization had vague definitions that used the words premenopause, perimenopause, menopausal transition, and climacteric as synonyms, thus causing a lack of clear and objective criteria to describe the stages of reproductive aging. And to understand the staging of reproductive aging, the Stages of Reproductive Aging Workshop (STRAW) was created in 2001, a system for staging reproductive aging and 10 years later STRAW +10 was made, which divides the staging into 7 stages and it is not necessary for all phases to occur and, if they do, they may not follow the sequence (AMBIKAI RAJAH, WALSH, CHERBUIM, 2022).

The climacteric, as it is a physiological process in a woman's life and is influenced by several factors involving the hypothalamic-pituitary-ovarian axis, where there is a decrease in ovarian functions and menstrual cycles become irregular until they cease completely at menopause, where the ovaries reach complete follicular exhaustion, and clinically speaking, the hormonal changes that occur at this stage, they are directly linked to women's health, with different intensities in each one and loss of quality of life at different levels for each of them (MINKIN, 2019; GUERRA et al., 2019).

The climacteric is a phase in which the woman experiences several changes in her body, and therefore the importance of the participation of the multiprofessional team in the care of women in this period, through the performance of actions with a holistic view, having their needs met efficiently (SILVA, et al., 2019).

In this cycle experienced by them, physical, psychic, mental, social and cultural changes also occur, and there is no family/marital support and attention from health professionals, these changes can trigger associated diseases (SILVA, et al., 2019).

Many women live the climacteric without complaints or need for medication. Other women have symptoms varying in diversity and intensity that can happen in the short,



medium or long term. The estrogen deficiency that sets in with the aging of women plays an important role in physiological changes and in the potential for developing pathological states (PERREIRA, 2016; FERREIRA, 2020).

Some studies have mapped the classic symptoms of the climacteric: hot flushes, irritability, decreased libido, insomnia, forgetfulness, vaginal dryness. The authors consider listening to women's complaints as an important tool for choosing interventions with the aim of improving women's quality of life in this period of life (RIBEIRO, et al., 2024; ALBUQUERQUE, 2019; BITTENCOURT, 2011).

The changes that women experience in the climacteric affect their physical, social, spiritual and emotional balance. These changes occur due to the gradual drop in hormones resulting from ovarian failure, leading most women to experience signs and symptoms that bring discomfort to a greater or lesser degree (FREITAS, 2004).

According to the Brazilian Institute of Geography and Statistics (IBGE), the Brazilian population is living longer. The life expectancy of women is around 78.8 years. With female aging, women are more likely to have diseases that are related to the degeneration of the body through aging, such as cancer and cardiorespiratory diseases, among others. In this scenario, women perceive the fragility of their own lives, suffer from physical, psychosocial and cultural changes, perceive the loss of youth, physical attraction, fertility, the decline of sexuality, feel fear and anxiety (IBGE, 2015).

It is important to inform the female population about the climacteric, since this period presents intense changes in women. Knowing what to expect from this period, she will be able to adapt to this new body (FREITAS, SILVA, SILVA 2008).

The climacteric is a phase in which the woman experiences several changes in her body, and therefore the importance of the participation of the multiprofessional team in the care of women in this period, through the performance of actions with a holistic view, having their needs met efficiently (SILVA, et al., 2019).

In this cycle experienced by them, physical, psychic, mental, social and cultural changes also occur, and there is no family/marital support and attention from health professionals, these changes can trigger associated diseases (SILVA, et al., 2019).

One should go beyond the symptoms manifested by women, exploring other factors that can affect their well-being at this stage of life, such as diet, physical activity, mental health, sexuality, family and social relationships. Adopting, then, a comprehensive biopsychosocial approach, focused on improving the quality of life and needs of each woman, seen as active subjects in the achievement and maintenance of an adequate health status throughout her life (SILVA, PONTES, 2020).



In view of the above, this study aims to evaluate the quality of life of women who are going through the climacteric with or without the use of hormone replacement therapy (HRT).

METHOD

This is a quantitative, descriptive, cross-sectional study carried out in a Family Health Unit in the city of Cruzeiro do Sul, a Brazilian municipality located in the interior of the state of Acre. 133 women were analyzed and they were invited to undergo an appointment with the gynecologist, from August to October 2023 to carry out the interviews.

Women aged between 40 and 65 years who agreed to participate in the study after signing the informed consent form were included in the study. Those who did not follow up on the study and women who did not fully answer the questionnaires presented were excluded. 10 women who were not able to contact after 3 attempts and 1 who had a physical disability (sequelae stroke).

Three instruments were used to meet the objectives of the present research. To identify and characterize the user, an interview form was created with closed questions, which is an identification instrument with clinical, behavioral and sociodemographic data.

To assess quality of life, a validated instrument called *the Medical Outcomes Study 36-item Short Health Survey (SF-36)* was used, which aims to provide a profile of scores that is useful for understanding population differences in physical and mental health status, chronic diseases and other medical conditions, and serves to assess the effects of treatments on general health status, making it possible to compare the findings with others that use the SF-36 or to calculate the scores in future investigations (LAGUARDIA, et al., 2013).

It consists of twelve items derived from the SF-36 and evaluates eight different dimensions of quality of life, considering the individual's perception of their health in the last four weeks. Each item has a group of answers distributed on a graded Likert scale, and the final score also ranges from zero to 100. The data obtained are classified into two domains – physical and mental health. Thus, after the transformation of the calculation of the scores in each domain, subjects with a score greater than or equal to 51 are considered to have good physical/mental health, while those with a final score less than or equal to 50 are considered to have worse physical/mental health (SILVEIRA et al., 2013).

To assess climacteric symptoms, the Menopause Rating Scale (MRS) was used, being of quick application and direct and specific in terms of data validation, being of great value in the evaluation of the most prevalent symptoms for this phase of female life. "This



scale was initially standardized in Germany by Heinemann et al, having been translated into several languages, including Portuguese, and validated in Brazil in 2002" (ANDRADE, et al., 2019).

The data were organized and analyzed in Excel and presented through tables and figures for better assimilation and exposure. A descriptive statistic was performed, where the variables were illustrated in absolute (n) and relative (%) frequencies. The results were presented using tables and figures, prepared according to the tabular presentation standards of the Brazilian Institute of Geography and Statistics.

The present study was presented to the ethics committee because it is a study involving human beings. An opinion from the Research Ethics Committee (CEP) of the School of Sciences of Santa Casa de Misericórdia de Vitória (EMESCAM) was requested for consideration. This study was approved by the Institutional Ethics Committee under opinion number 5.784.540, CAAE 65026022.0.0000.5065.

RESULTS

In the first categorization are the sociodemographic characteristics, where of the 122 women included in the study, 39.3% are aged between 40 and 45 years, 73% declared themselves brown, with 29.5% with complete primary education, 78.7% married, 64.8% consider themselves Catholic, 66.4% of them work outside the home, 43.8% in general services, followed by 31.6% in education, at the moment 82% live with the first generation and with a family income of less than one minimum wage (56.6%) (Table 01).

Table 01 – Characterization of the groups according to sociodemographic characteristics

Variable	Frequency (n=122)	Percentage (%)
Age		
40-45 years	48	39,3
46-50 years	40	32,8
51-55 years	21	17,2
56-60 years	13	10,7
Self-declared color		
White	23	18,8
Brown	89	73
Black	10	8,2
Schooling		
No	15	12,3
Incomplete Elementary School	36	29,5
Complete Elementary School	39	32
Incomplete High School	03	2,5
Complete High School	12	9,8
Incomplete Higher Education	00	0
Complete Higher Education	17	13,9
Marital Status/Marital Status		
Single	00	0
Married woman	96	78,7
Widow	08	6,6

Legally separated	07	5,7
Consensual union	11	9
Religion		
No	01	0,8
Catholic	79	64,8
Evangelical	41	33,6
Testemunha of Jeová	01	0,8
Works outside the home		
Yes	41	33,6
No	81	66,4
Profession		
Health	07	17,6
Education	13	31,6
General Services	18	43,8
Other	02	4,7
Not informed	01	2,3
Arrangement and housing		
Alone	02	1,6
With 01 generation	100	82
With 02 generations	20	16,4
Family Renda		
Less than 1 minimum wage	69	56,6
From 1 to 2 minimum wages	33	27
Greater than 3 minimum wages	20	16,4

Source: Prepared by the authors (2023)

With regard to gynecological history, 83.6% of the women had their menarche between 10 and 15 years of age, 42.6% did not have menstrual cycles, 89.3% had an active sexual life, 54.1% had more than 3 pregnancies, 86.6% had normal deliveries and 26.7% had cesarean deliveries and 25.8% had an abortion. At the time of the interview, 13.1% were pregnant and of these, 86.9% did not plan their pregnancy (Table 02).

Table 02 – Distribution of gynecological antecedents

Variable	Frequency (n=122)	Percentage (%)
Age of menarche		
Before the age of 10	18	14,8
From 10 to 15 years old	102	83,6
After 15 years	0	0
Don't remember	2	1,6
Regular cycles		
Yes	22	18
No	48	39,4
No cycles	52	42,6
Sexual activity		
Yes	109	89,3
No	13	10,7
Number of pregnancies		
From 1 to 3 pregnancies	54	44,3
More than 3 pregnancies	66	54,1
No	02	1,6
Normal deliveries		
From 1 to 3	44	36,6
More than 3	60	50,0
None	16	13,4
Cesarean deliveries		

From 1 to 3	31	25,8
More than 3	1	0,9
None	88	73,3
Abortions		
From 1 to 3	31	25,8
More than 3	1	0,9
None	88	73,3
Is currently pregnant		
Yes	16	13,1
No	106	86,9
Pregnancy was planned (n=16)		
Yes	1	6,3
No	15	93,7

Source: Prepared by the authors (2023)

Of the women interviewed, only 49 are in menopause, with 16.4% entering between 40 and 45 years old and 23.8% entering between 46 and 50 years of age, 75.5% entered menopause less than 5 years ago, 73.4% it was natural, followed by 20.4% due to hysterectomy surgery, only 01 (0.8%) had oophorectomy. At the moment, 45.1% use some contraceptive method, but most have bilateral tubal ligation as a contraceptive method (43.6%), with contraceptive use of more than 10 years (83.6%). When asked about hormone replacement, only 04 (4.1%) performed it (Table 03).

Table 03 – Distribution of gynecological antecedents

Variable	Frequency (n=122)	Percentage (%)
Menopause time		
Less than 05 years old	37	75,5
From 05 to 10 years old	07	14,2
More than 10 years	05	10,3
Type of menopause		
Natural	36	73,4
Surgical	10	20,4
Radiotherapeutic	2	4,1
Chemotherapy	1	2,1
Fez hysterectomy		
Yes	10	8,2
No	112	91,8
Fez ooforectomia		
Yes	01	
No	121	99,2
Uses contraception		
Yes	55	45,1
No	67	54,9
If so, which one?		
Oral contraceptive	22	40
Injectable contraception	01	1,8
SAYS	02	3,6
LTB	24	43,6
Condom	06	11,0
Time of use		
From 1 to 3 years	01	1,8
From 4 to 6 years old	05	9,1
From 10 to 10 years old	03	5,5
More than 10 years	46	83,6
Take hormone replacement		

Yes	4	4,1
No	118	95,9

Source: Prepared by the authors (2023)

They presented the first symptoms from 02 to 04 years ago (45.1%), with hot flashes (60.7%) being the main one, followed by menstrual irregularity (20.6%), 63 (51.6%) stated that they knew what to do to improve symptoms, where 42 (66.6%) mentioned the use of medicinal teas and 19 (30.2%) the use of hormonal therapy (Table 04).

Table 04 – Data on the climacteric

Variable	Frequency (n=122)	Percentage (%)
You know what climacteric is		
Yes	18	14,8
No	104	85,2
You know you can get pregnant in the climacteric		
Yes	18	14,8
No	104	85,2
You know what menopause is		
Yes	113	92,6
No	9	7,4
When you felt the first symptoms		
Less than 06 months	25	20,5
From 06 months to 01 year	17	13,9
From 02 to 04 years old	55	45,1
From 05 to 10 years old	13	10,7
More than 10 years	11	9,0
Don't remember	01	0,8
What is the first symptom		
Fogacho	74	60,7
Irritability	15	12,3
Insomnia	2	1,6
Decreased libido	2	1,6
Emotional Lability	2	1,6
Menstrual irregularity	25	20,6
He had no symptoms	1	0,8
You know why the symptoms happen		
Yes	63	51,6
No	59	48,4
You know what to do to improve symptoms		
Yes	63	51,6
No	59	48,4
If so, what?		
Hormone therapy	19	30,2
Teas	42	66,6
Physical activity	02	3,2

Source: Prepared by the authors (2023)

When evaluating the domains of the questionnaire on quality of life (SF-36), it was noticed that the variables pain, general health status, and social aspects are the most cited with mean values above 50% (Table 05).

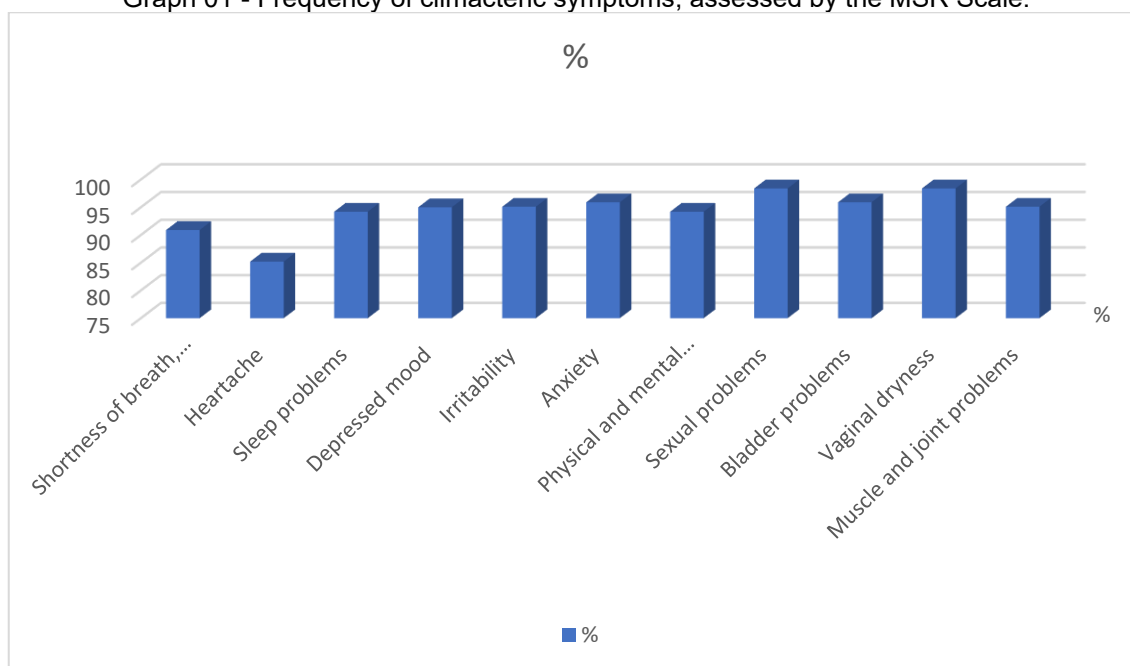
Table 05 – Description of the values of the domains evaluated by the SF-36 in a population of climacteric women

Variable	Average	Standard deviation	Minimal	Median	Maxim
Functional capacity	49,9	28,0	0	40,0	100,0
Physical aspects	40	46,3	0	0	100,0
Dor	54,4	24,9	0	51	94,0
General health status	56,07	12,6	20	57	92,0
Vitality	31,3	26,3	0	25	90,0
Social aspects	54,2	25,7	0	50	100,0
Emotional Aspects	31,9	46,4	0	0	100,0
Mental health	32,6	24,9	0	28	84,0

Source: Prepared by the authors (2023)

And when the symptoms were evaluated using the MSR Scale, all symptoms had values higher than 90%, except for heart discomfort (85.2%) (Graph 01).

Graph 01 - Frequency of climacteric symptoms, assessed by the MSR Scale.



Source: Prepared by the authors (2023)

DISCUSSION

In the present study, most of the women are aged between 40 and 45, brown, with a partner, of Catholic religion, with only complete high school, work outside the home and have a family income of less than one minimum wage.

In gynecological history, most women had their menarche between 10 and 15 years of age, more than 40% no longer had menstrual cycles, almost 90% had an active sexual life, more than half had more than 3 pregnancies, most of which were normal deliveries, and more than 25% had an abortion.



A similar result was found in the study by Santos et al (2021) carried out in the municipality of Três Lagoas - MG, which showed an average of 40-50 years, with a partner (56.9%, self-declared brown (54.6%), Catholic (52.5%), 61.3% did not have an occupation and with an income of up to two minimum wages for 70.7% of them. A similar result was found by Melo Filho and Lopes (2022) in the study carried out in the rural area of the municipality of Buriti dos Montes-PI.

In the study by Ribeiro et al. (2024), the mean age of women was 53 years, 73.7% are married, in terms of education, most had completed higher education (50.6%) and had a family income of more than four minimum wages (29.5%). This contrast in self-declared color may be associated with Brazil being a mixed country, and with greater predominance in the north and northeast regions, in relation to income, Brazil has an average real monthly income of 2,533 and the state of Acre has an income of 1,960 in 2021, which represents only 1.5 minimum wages per person (IBGE, 2021).

During the research period, only 49 women were already in menopause, which occurred at the age of 40 to 45 years, and another 20% had menopause due to some surgical procedure and only 4% were taking some type of hormone replacement. When it comes to symptoms that indicate the climacteric period, they include decreased libido, vaginal dryness, hot flashes, muscle and joint pain, urinary incontinence, sleep disorders, irritabilities, stress, headache, lack of memory and concentration, skin problems, and fatigue (MONTELEONE, et al., 2018; SANTOS, MOREIRA, SOUZA, 2023).

The climacteric is a physiological and normal phenomenon in the life of any and is divided into phases such as pre-menopause, perimenopause and post-menopause, and this includes the presence of various symptoms that can affect their health and quality of life and appear in women's lives when they play important roles in society, in the family and in the workplace (MONTELEONE, et al., 2018; SANTOS, MOREIRA, SOUZA, 2023).

However, many signs and symptoms presented in the climacteric are often not related by women to the period of decreased ovarian function, with the main symptoms reported by them in several studies being hot flashes (64.9%), tiredness (49.4%), (RIBEIRO et al., 2021), while Melo Filho and Lopes (2022) identified that only 35.6% of women had hot flashes, however, the main sign reported by them was still the main sign, followed by back or limb pain (32.8%) and vaginal dryness and 23.3%.

In addition to the symptoms mentioned, others of paramount importance are those of a psychological nature, such as difficulty concentrating, memory loss, mood swings, and sleep disorders, especially in the first year after menopause (Lima, et al., 2019). Bacelar and Pinto Jr (2019) state that throughout the climacteric there is a reduction in total sleep



time, which can also be altered due to emotional instability, and it is evident that women with moderate to severe dysmenorrhea have episodes of insomnia coinciding with the menstrual cycle, confirmed by the study by Zhou et al., (2021) in which 96.4% of the patients had a sleep disorder.

Another point is depressive symptoms, which are high even in women without a history of major depressive disorder, but more evident in those who have already had an episode before perimenopause and it is also not known whether these data are relevant in women who have undergone surgical menopause, being increased or decreased in these cases, however, current studies reveal that these women have an elevated risk of depression in women after hysterectomy with or without oophorectomy (MAKI, et al., 2018).

Regarding treatments to reduce symptoms, the study showed that most women reported the use of teas and only 3.3% women used hormones, where Ribeiro et al., (2024) shows the combination of food supplementation, herbal medicines, and hormone therapy, however, what has shown the greatest evidence is hormone therapy.

Pompei et al., (2022) evidenced in their study that hormone therapy is a first-line treatment for vasomotor symptoms when not contraindicated for estrogen and progesterone therapy, corroborating with the Menopause Society (2022), but the treatment will always take into account symptoms, preferences, risk factors, absolute contraindications, and cost availability, the latter being one of the factors that led to the non-treatment with hormones by the women in the current study.

In the same study by Pompei et al., (2022) observed that only a small part started hormone treatment, with a shorter hormonal duration for one year, being longer lasting for a higher socioeconomic class. However, with caveats, where Joann (2020) says that after 3 to 5 years, gradual reduction and treatment should be interrupted and if symptoms persist, doses should be reduced and periodic reassessment of risks and benefits should be reassessed.

According to the Menopause Society (2022) the risks of hormone therapy differ depending on the type, dose, duration of use, route of administration, timing of initiation, and whether a progestin is used. Treatment should be individualised using the best available evidence to maximise benefits and minimise risks, with periodic assessments.

For a long time, the concern with regard to climacteric women was restricted only to biological aspects, not considering everything else involved, hence the importance of care by a multidisciplinary team working in primary health care, including mental professionals (PEIXOTO, et al., 2022). Therefore, health professionals, especially in Primary Care, should



pay attention to the life cycle and dynamics of women who seek care, evaluating the possibilities of intervention and support for them (LEMOS, GUIMARÃES, SENNE, 2022).

When the domains were evaluated by the SF-36 and the MSR scale, several studies have shown that the best quality of life score was 61.6, with the physical domain having the best score with 63.3 and social relationships with the lowest score of 59.9 (Andrade et al., 2019); in the study by Miranda, Ferreira and Corrente (2014) they had a higher frequency of climacteric symptoms of mild to moderate intensity and social aspects had a score below 50.

In the domains evaluated by the SF-36 in the study by Lemos, Guimarães and Senne (2022), the physical, social, psychological and environmental aspects of women's lives are interconnected, have a positive and directly proportional association with each other, however they undergo changes with the aging process, especially after the onset of the climacteric, with a tendency to worsen the parameters in the subjective assessment. In the present study, these domains described by the authors did not present similar parameters, since the social aspects stand out with an average of 54.2 and, together with pain, with an average of 54.4, while the physical and psychological aspects are on average 40.0 and 31.9, although they still have positive aspects.

When referring to climacteric symptoms assessed by the MSR Scale, women had a percentile above 90% in almost all of them, except for heart discomfort with 85.2%, and the most cited were sexual problems and vaginal dryness with 98.4%, respectively. In the study by Andrade et al. (2018) it was shown that the women who participated in the research had an MRS score of 18, indicating severe symptoms during the climacteric, where urogenital symptoms were the most severe and psychological and somatovegetative symptoms the most moderate. On the other hand, the women's perception of QoL showed that the social relationships domain reflected the worst evaluation score, allowing the detection of the facet of the social relationships domain that presented the greatest fragility in terms of QoL, which is social support.

CONCLUSION

Most women are aged between 40 and 45, brown, with a partner, Catholic, with only a high school diploma, work outside the home and have a family income of less than one minimum wage. More than 90% did not use alcoholic beverages and were not smokers, and none used illicit drugs, but only 12% performed some type of physical activity.

With regard to gynecological history, most women had their menarche between 10 and 15 years of age, no longer had menstrual cycles, had an active sexual life, with more



than 3 pregnancies, most had normal deliveries and 25.8% had an abortion. During the research period, only 49 women were already in menopause, which occurred at the age of 40 to 45 years, and another 20% had menopause due to some surgical procedure.

The analysis of the quality of life indicators identified in the sample of climacteric women in the city of Cruzeiro do Sul shows that there are 122 women who are not under continuous follow-up by the FHS and do not receive regular clinical care. And this can lead to such a significant number of women who do not take some type of hormone replacement that it is considered an effective therapy both for vasomotor symptoms and to minimize risks, taking into account the individuality of each woman.

The symptoms, when presented very frequently and with intensity, can affect both the personal and professional lives of women, as they often leave them complaining, and misunderstood by family, friends, co-workers, bosses and especially by health professionals.

It was observed that almost all of the women in this study have symptoms related to the climacteric and are not under clinical follow-up or hormonal treatment. Better attention, care and guidance are needed so that women have quality of life at this stage of life.



REFERENCES

1. Souza, S. S., et al. (2017). Mulher e climatério: concepções de usuárias de uma unidade básica de saúde. **Reprod Clim.**, 32(2), 85-89.
2. Albuquerque, G. P. M. de, et al. (2019). Qualidade de vida no climatério de enfermeiras atuantes na atenção primária. **Rev. Bras. Enferm.**, 72(Supl. 3), 154-161.
3. Ambikairajah, A., Walsh, E., & Cherbuin, N. (2022). A review of menopause nomenclature. **Reprod Health**, 19(1), 29.
4. Minkin, M. J. (2019). Menopause: Hormones, lifestyle, and optimizing aging. **Obstetrics and Gynecology Clinics**, 46(3), 501-514.
5. Guerra Júnior, G. E. S., et al. (2019). Quality of life in climacteric women assisted by primary health care. **PloS One**, 14(2), e0211617.
6. Silva, A. S., et al. (2019). O cuidado farmacêutico em mulheres climatéricas e menopáusicas que fazem tratamento farmacológico: uma revisão. **Anais - VI Congresso Internacional de Envelhecimento Humano**.
7. Ribeiro, L. S., et al. (2024). Percepção das mulheres sobre o climatério e menopausa. **Research, Society and Development**, 13(3), e3913345281.
8. Bittencourt, C., et al. (2011). Vida da Mulher no Climatério: Um mapeamento das alterações manifestadas. **Revista Eletrônica de Comunicação, Informação e Inovação em Saúde**, 5(3).
9. Freitas, K. M., Silva, A. R. V., & Silva, R. M. (2004). Mulheres vivenciando o climatério. **Acta Scientiarum**, 26(1), 121-128.
10. IBGE (BR). (2015). **Mudança demográfica no Brasil no Início do Século XXI: Subsídios para as projeções da população**. Rio de Janeiro.
11. Freitas, K. M. de, Silva, Ângela R. de V., & Silva, R. M. (2008). Mulheres vivenciando o climatério. **Acta Scientiarum. Health Sciences**, 26(1), 121-128.
12. Silva, A. P. A. A., & Pontes, L. S. (2020). Assistência de Enfermagem à Mulheres no Climatério. Trabalho de Conclusão de Curso (Bacharel em Enfermagem), Centro Universitário do Planalto Central Aparecido dos Santos – UNICEPLAC.
13. Laguardia, J., et al. (2013). Dados normativos brasileiros do questionário Short Form-36 versão 2. **Rev Bras Epidemiol**, 16(4), 889-897.
14. Silveira, M. F., et al. (2013). Psychometric properties of the quality of life assessment instrument: 12-item health survey (SF-12). **Ciênc. Saúde Coletiva**.
15. Andrade, R. L. A., et al. (2019). Avaliação da qualidade de vida de mulheres climatéricas atendidas em ambulatório especializado. **Braz. J. Health Rev.**, 2(1), 66-90.
16. Santos, M. A., et al. (2021). Qualidade do sono e sua associação com os sintomas de menopausa e climatério. **Revista Brasileira de Enfermagem**, 74(2), e20201150.



17. Melo Filho, J. L. C., & Lopes, I. M. R. (2022). Qualidade de vida de mulheres no climatério na atenção básica de saúde. **Research, Society and Development**, 11(10), e250111032814.
18. Ribeiro, C. T., et al. (2024). Análise da qualidade de vida da mulher na menopausa e os medicamentos utilizados. **Brazilian Journal of Implantology and Health Sciences**, 6(1), 1888-1902.
19. IBGE. (2021). **Instituto Brasileiro de Geografia e Estatística. @Cidades. Cruzeiro do Sul/Acre**.
20. Monteleone, P., et al. (2018). Symptoms of menopause - global prevalence, physiology and implications. **Nat Rev Endocrinol.**, 14(4), 199-215.
21. Santos, A. S., Moreira, A. B., & Souza, M. L. R. (2023). Prevalência e severidade de sintomas em mulheres na menopausa: um estudo descritivo. **DEMETRA: Alimentação, Nutrição & Saúde**, 18, e72182-e72182.
22. Ribeiro, L. L., et al. (2021). Processo de trabalho de enfermeiras na consulta ginecológica. **Rev Enferm Contemp.**, 10(1), 51-59.
23. Lima, A. M., et al. (2019). Perda de qualidade do sono e fatores associados em mulheres climatéricas. **Revista Ciência & Saúde Coletiva**, 24(7).
24. Bacelar, A., et al. (2019). **Insônia: do diagnóstico ao tratamento**. Difusão Editora; São Paulo: Associação Brasileira do Livro.
25. Zhou, Q., et al. (2021). Investigation of the relationship between hot flashes, sweating and sleep quality in perimenopausal and postmenopausal women: the mediating effect of anxiety and depression. **BMC Women's Health**, 21(1).
26. Maki, P. M., et al. (2018). Guidelines for the evaluation and treatment of perimenopausal depression: summary and recommendations. **Menopause**, 25(10), 1069-1085.
27. Pompei, L. M., et al. (2022). Profile of Brazilian climacteric women: results from the Brazilian Menopause Study. **Climacteric**, 25(5), 523-529.
28. Menopause: The Journal of The North American Menopause Society. (2022). **Menopause**, 29(7), 767-794.
29. Joann, V. P. (2022). Menopausa. **University of Virginia Health System**. Disponível em: <https://www.msdmanuals.com/pt-br/casa/problemas-de-sa%C3%BAde-feminina/menopausa/menopausa>. Acesso em: 10 jan. 2024.
30. Peixoto, C., et al. (2022). Perdas, Luto e Sofrimento Mental em Mulheres no Climatério. **Rev. Psicol. Saúde**, 14(2), 117-130.
31. Lemos, A. R., Guimarães, C. R., & Senne, H. (2022). Qualidade de vida das mulheres no climatério e na pós-menopausa. **Revista Eletrônica Acervo Médico**, 12, e10503.