Saúde e Pesquisa, Maringá (PR)
DOI: 10.17765/2176-9206.2020v13n4p779-787

FACTORS ASSOCIATED WITH QUALITY OF LIFE IN ELDERLY POST-MENOPAUSE WOMEN

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ABSTRACT: The climacteric is a phase in a woman's life marked by the end of reproductive life and the beginning of senescence. Current study evaluated how physical and physiological changes in menopause influence the quality of life of postmenopausal females. Menopause Rating Scale questionnaire was used to assess quality of life. The sample consisted of 100 females, mean age 67.2±8.3 years old. The onset of menopause was at 48.06±8.06 years old. In the Menopause Rating Scale, symptomatology was present in 91% of participants; the intensity was moderate in each domain; the dominant symptoms were physical and mental exhaustion and vaginal dryness. In the correlation between complaints and comorbidities, the result was significant ($p = 0.05$). Results show symptoms present in the post-menopause do not directly influence the quality of life of these women.

KEY WORDS: Aging; Climacteric; Menopause; Quality of life.

FATORES ASSOCIADOS À QUALIDADE DE VIDA EM MULHERES IDOSAS PÓS-MENOPAUSA

RESUMO: O climatério é uma fase da vida da mulher que se caracteriza pelo final da vida reprodutiva e o início da senescência. O objetivo deste estudo foi avaliar como as alterações físicas e fisiológicas da menopausa influenciam a qualidade de vida das mulheres, para tanto, foi utilizado o questionário *Menopause Rating Scale*. A amostra foi composta por 100 mulheres, com média de idade de 67,2 (±8,3) anos. O início da menopausa foi aos 48,06 anos (±8,06). No *Menopause Rating Scale*, houve presença de sintomatologia em 91% das participantes, a intensidade frequente foi a moderada, em cada um dos domínios, os sintomas dominantes foram as queixas locomotoras, o esgotamento físico e mental e a secura vaginal. Na correlação entre as queixas e comorbidades, o resultado foi significativo ($p=0.05$). Conclui-se que os sintomas apresentados na pós-menopausa não influenciam diretamente a qualidade de vida dessas mulheres.

PALAVRAS-CHAVE: Climatério; Envelhecimento; Menopausa; Qualidade de vida.

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Received in: 04/05/2020
Accepted on: 19/06/2020

INTRODUCTION

Increase in life expectance is a fact in developed and developing countries, a crucial factor for the growth of the number of elderly people worldwide. Brazil has more than 28 million elderly people over 60 years old, or rather, 13% of the population.[1] According to research by the Center for Social Policies of the Fundação Getúlio Vargas (FGV Social), 10.53% of Brazilians are 65 years old or more.[2] Percentage tends to double within the next decades, according to the Population Projections published in 2018 by the Instituto Brasileiro de Geografia e Estatística (IBGE).[3] Further, the World Health Organization (WHO) estimates that till 2050 world population over 60 years old will pass from 841 million to 2 billion.[4] Consequently, it is highly important to discuss the life quality (LQ) of this population.

The United Nations (2014)[4] has underscored that strategies are required to improve prevention and administration of chronic conditions through the availability of accessible care to all elderly people while taking into account the physical and social environment concerned. As the National Health Policy for Elderly People states, health professionals and the community must perceive that prevention and health promotion are not the sole privilege of young people. Health promotion does not end on the 60th year of age and prevention activities, primary, secondary and tertiary should be incorporated to health care at all ages.[5]

Within this context, increase in females´ life expectance throughout the centuries may be detected, which, associated with the increase of the female population by age group, underscores the period as a priority in public health.[3] The older human beings become, the greater is the possibility of having diseases that compromise their independence and autonomy and contribute towards physical, mental, social and emotional suffering.[1] In 2012, human proportion lay at approximately 1.01 males for 1 female. In Asia, especially in China and India, there is a higher proportion of males, whilst in the West, such as the US, UK and Brazil, the number of females is slightly greater than that of males. It may be verified that, for the same year, 7.9% of world population is more than 65 years old.[6] Consequently, according to data of the National Research by Continuous Sampling per Home (PNAD), published by IBGE in 2018, the number of females in Brazil corresponds to 51.7%, whereas 8.6% are more than 60 years old.[3]

Aging is a natural human process, called senescence, occurring at the individual level. As age progresses, structural and functional alterations occur, which, although they vary from one person to another, may be found in all age groups and are proper to human aging. Aging brings about the progressive decrease of the body´s functions.[7] However, such mechanism may be delayed when associated with an active and healthy lifestyle. For example, in females, changes comprise physical, cognitive and social loss, essentially during the climacteric period[4], which is a transition phase by which females pass from the reproduction to the post-menopause phase. Ovarian functions decrease and menstrual cycles become irregular till they cease completely.[8]

Female clinical evaluation should focus on the present and past health state and involves multidisciplinary teams. Attention to this period, principally during the post-menopause period, helps in their perception of health conditions. It is also a fundamental factor to adopt preventive strategies and health promotions to avoid diseases and, consequently, a better life quality during this life phase.[9,10] Current assay evaluates how physical and physiological changes in menopause affect the life quality of post-menopause females.

METHODOLOGY

Current observational, descriptive and transversal study comprises the collection of data with participants of the Support Department for Elderly Care (DATI) in Passo Fundo, state of Rio Grande do Sul, Brazil, with the approval of the institute´s authorities, between August and September 2019. Females who voluntarily accepted to participate in the research, above 50 years old, residents in Passo Fundo, whose menstruation cease naturally were included. Males and women aged less than 50 years were excluded; females using medicine, as for example, hormone treatment, and any other type of medicine that would affect treatment, or those who have had a

physiotherapeutic intervention, provoked menopause through chemotherapy or radiotherapy or any other incapacity to answer the interview and questionnaire were also excluded.

Prior to data collection, the risks and benefits, rights and guarantees were explained to participants and their free consent to participate in current research was asked. Free Consent Form was read and signed (TCLE).

Data were retrieved at DATI of each district. Filling of the form, which lasted 30 min on average, was done by researchers from the information given by the participants. One hundred and sixty-five females were invited, of whom 50 refused, and 15 did not comply with criteria. Only 100 females participated.

Data collection tool comprised evaluation card with identification data, main complaint, clinical and obstetric clinic, gynecological antecedents, functionality, medicines in use, and the questionnaire *Menopause Rating Scale* (MRS).[11]

MRS is a questionnaire that evaluated LQ and symptoms of the climacteric period, translated and validated for Portuguese in 2003, with 11 questions distributed into three sub-scales: somato-vegetative symptoms (lack of air, sweating, heats, heart malaise, insomnia, muscular and joint problems); psychological symptoms (moody and somewhat depressive conditions, irritability, anxiety, physical and mental weariness); and uro-genital symptoms (sexual and bladder issues and vaginal dryness).

Females had to choose one out of five possible answers, in ascending form with regard to severity of symptoms: 0 = absence; 1 = slight; 2 = mild; 3 = severe; 4 = very severe. Score for each subscale was the product of the sum of scores of items varying between zero (no symptoms) and 44 (highest score associating severe symptoms and the worst LQ). It is the result of the sum of total scores of the three sub-scales. Symptoms may be classified in a) asymptomatic or rare (0-4 scores); b) slight (5-8 scores); c) mild (9-15 scores); d) severe (over 16 scores).

Data were verified by descriptive statistical analysis calculating means and standard deviation of variables 'age' and 'age of menopause', while absolute and percentage frequencies were calculated for the other variables. Spearman´s Coefficient of Co-relationship was employed to calculate the co-relationship between main complaints and co-morbidities ($p \leq 0.005$).

Cronbach´s Alpha was used to verify reliability of responses. It stimulates the reliability of a questionnaire applied to a research and measures the co-relationship between responses through an analysis of answers given by participants, with a mean co-relation between the questions.

Current study was approved by the Committee for Ethics in Research with Humans of the Universidade de Passo Fundo (CEP-UPF), n. 2.766.633, following guidelines by Resolution n. 466/2012 of the National Health Council.

RESULTS

One hundred and sixty-five females were enrolled, but 15 did not comply with the inclusion criteria and 50 refused to participate. One hundred females participated (Figure 1).

Participants´ minimum age was 52 years old and maximum 86 years old – mean 67.2±8.3 years. Data on marital status showed 36% were married (n=36), followed by 32% (n=32) widows. Regarding to schooling level, the group featuring complete basic education was predominant (n=47; 47%). With regard to profession, most were retired (n=59; 59%), followed by housewives (n=23; 23%).

In the case of co-morbidities, Systemic Arterial Hypertension (SAH) (n=20; 20%) associated with diabetes, thyroid disease, hypercholesterolemia and depression (n=19; 19%). Most females complained of pain in the lower members (LMs) and the spine (n=13) (13%, respectively, for each symptom), followed by 12% (n=12) with general muscular pain; 35 participants (35%) did not mention any complaint. With regard to lifestyle, all reported physical activities, but underscored that most do so at the TEC. Most participants denied smoking and taking alcoholic beverages (Table 1).

When main complaints (pain in the HMs, LMs, spine and general muscular pain) were co-related with co-morbidities, results by Spearman´s test were significant ($p = 0.05$).

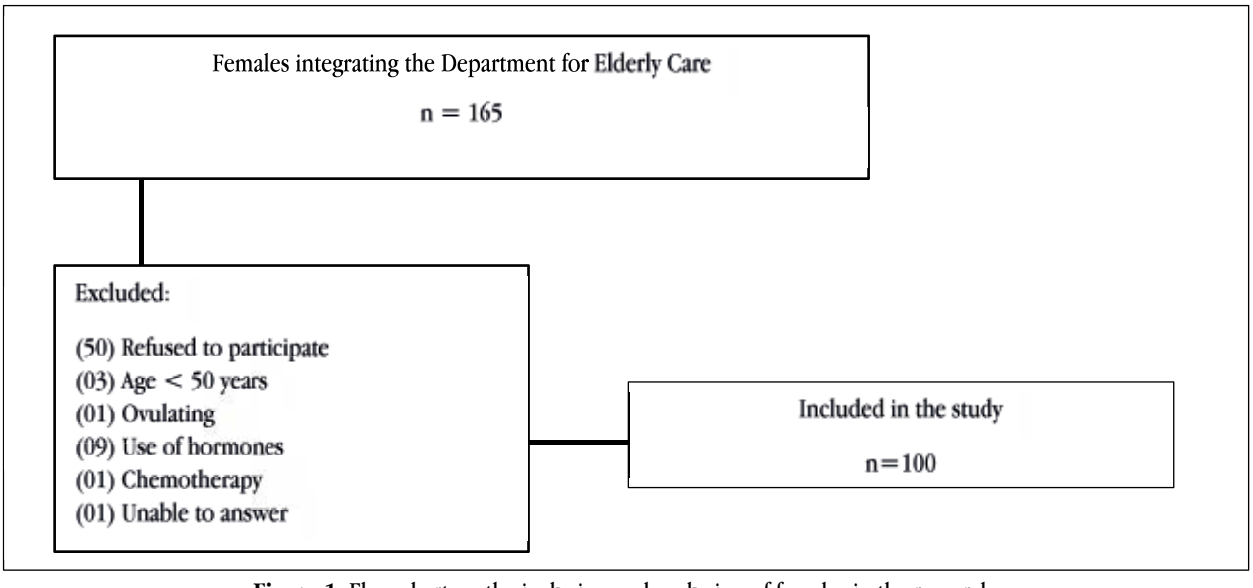

Figure 1. Flow chart on the inclusion and exclusion of females in the research.
Source: authors, 2020.

Table 1. Characterization of the sample

(Continuation)

Variables	N	%
Marital status		
Married	36	36.0%
Single without stable marital union	10	10.0%
Single with stable marital union	9	9.0%
Divorced	13	13.0%
Widow	32	32.0%
Schooling		
Incomplete primary	27	27.0%
Complete primary	47	47.0%
Complete high school	20	20.0%
Complete Higher Education	6	6.0%
Profession		
Retired	59	59.0%
Housewife	23	23.0%
Nursing technician	2	2.0%
Farmer	4	4.0%
Commerce	4	4.0%
General service worker	2	2.0%
Other	6	6.0%
Co-morbidity		
Without co-morbidity	41	41.0%
Arterial hypertension	20	20.0%
Diabetes	3	3.0%
Thyroid diseases	2	2.0%

(Conclusion)

Variables	N	%
Hypercholesterolemia	2	2.0%
Depression	1	1.0%
Associated former co-morbidities	19	19.0%
Others	12	12.0%
Main complaint		
Without complaints	35	35.0%
Pain in HMs	9	9.0%
Pain in LMs	13	13.0%
Pain in spine	13	13.0%
Muscular pain	12	12.0%
Other complaints	18	18.0%
Physical activities		
Pratices physical activities	100	100%
Does not practice physical activities	0	0%
Smoking		
Yes	13	13.0%
No	87	87.0%
Alcoholic beverages		
Yes	4	4.0%
No	96	96.0%

Source: the authors, 2020.

Average age at start of menopause was 48.0±8.06 years old (minimum age 21; maximum 62 years old). Table 2 provides the participants´ obstetric and gynecological history: most had two or three births – 29% (n=29) and 35% (n=35), respectively –, most births were normal (n=61; 61%). When asked about the type of menopause, 81% (n=81) said it was spontaneous and 19% (n=19) it was induced – in the latter case, it was due to gynecological surgery, such as hysterectomy, sling and sterilization.

Table 2. Participants´ obstetric and gynecological history

History		n	%
Births			
	No births	7	7,0%
	One birth	5	5,0%
	Two births	29	29,0%
	Three births	35	35,0%
	Four births or more	24	24,0%
Type of birth			
	No births	7	7,0%
	Normal	61	61,0%
	Caesarean	15	15,0%
	Both	17	17,0%
Type of menopause			
	Spontaneous	81	81,0%
	Induced	19	19,0%

Source: authors, 2020.

In the case of the evaluation of climacteric symptoms, total score identified symptoms in 91% (n=91) of participants and 9% (n=9) were asymptomatic. Mild symptoms (n=36; 36%) was followed by severe (n=33; 33%) and slight (n=22; 22%). When LQ was evaluated, minimum rate was 0 score and maximum at 38 scores, with mean 13.45(±7.92 scores.

Results on the three dominions in the MRS questionnaire were: with regard to somato-vegetative symptomology, there was a predominance of locomotive complaints, with 80% (n=80) – muscular and articulation pain; psychological symptoms comprised physical and mental weariness (n=56; 56%), involving a general decline in development, lack of concentration and memory; urogenital symptoms, with 44% (n=44), with predominance of vaginal dryness, with a feeling of dryness and burning in the genital region and problems during sexual relations (Table 3).

Table 3. Life quality for climacteric symptoms, according to MRS

Dominion	Symptoms	n		%	
		No	Yes	No	Yes
Somato-vegetative symptoms	vasomotor phenomena	52	48	52.0%	48.0%
	Heart complaints	60	40	60.0%	40.0%
	Insomnia	38	62	38.0%	62.0%
	Locomotion complaints	20	80	20.0%	80.0%
Psychological symptoms	Depression	50	50	50.0%	50.0%
	Irritability	49	51	49.0%	51.0%
	Anxiety	48	52	48.0%	52.0%
	Physical and mental weariness	44	56	44.0%	56.0%
Urogenital symptoms	Sexuality	65	35	65.0%	35.0%
	Urinary complaints	61	39	61.0%	39.0%
	Vaginal dryness	56	44	56.0%	44.0%

Source: authors, 2020.

The three components of MRS questionnaire are consistent, evaluated by Cronbach´s Alpha at 0.70, indicating that each component measures a specific aspect of the general construct.

DISCUSSION

Most of the participating females in current study were elderly, married, housewives and retired people, with complete basic education. Data are corroborated by a control-case study in Caxias do Sul RS Brazil, in which aspects related to LQ of post-menopause females were compared. Mean age was 60.5±6.9 years old, married (64.4%) and complete basic schooling (72%).[12]

Results on SAH coincide with those in post-menopause females attended by basic health care in Brazil, according to which 46% of participants had high indexes of the pathology. In current study, it amounts to 20% of the sample. In this study in basic care in Brazil[12] on the issue physical activity, 31% of females admitted they were sedentary, 12.8% declared to be very active and 55.5% said they were active at irregular periods. Current study shows that 100% of participants practiced physical activities regularly.

Most participants in current study admitted they did not smoke (87%) and did not intake alcoholic beverages (96%). Data are good when compared to an integrative revision study which evaluated social health habits during menopause in 2019[13] and reported that smoking may affect menopause age, or rather, female smokers have the pathology earlier. The study shows that smoking and other drugs are a very important cause of early menopause.[13]

With regard to the start of the menopause period, average age is corroborated by Shadyab *et al.*,[14] in 2019, who evaluated whether age in menarche and menopause and reproductive period had any relationship with females´ longevity. Initial average age was 49 years old. Age at the start of menopause normally varies between 40 and 65 years old; it is early before 40 years old and late after 55 years old.[3] However, it must be underscored that one participant experienced menopause at 21 years old due to hysterectomy. However, natural menopause is the most prevalent.

Since most females averaged two to three births, a study undertaken in 2002 at the Climacteric Clinic of the Universidade de Caxias do Sul (UCS) is related to current one and showed that 53.3% of participants experienced one to three births.[15] Normal birth was prevalent and did not agree with a 2016 research in the São Sebastião Maternity of the Casa de Caridade São Vicente de Paula in Mirai MG Brazil, where most births (79%) were caesarian.[16] Disagreement is due to the fact that Brazil has a 55.6% rate of caesarian births when the recommended WHO index lies at 15%.

Pain in the lower members and in the spine as main complaints was also reported in a study by the Health Unit of the Família Luiz Fogliatto in Ijuí RS Brazil, where pain in the lumbar column, knee and ankle/foot was the most frequent.[17] However, it must be underscored that research was undertaken with overweighed females and, thus, with a great overload on articulation and structural structures, causing pain at these points. According to Pai, weight overloads the bone and articulation structures, including the spine and lower members, mainly the feet which bear the body´s weight, leading towards such complications as lesions, difficulties in locomotion and pain.[18]

In current research, this fact is due to the co-relationship between the main complaints and co-morbidities, since the two are interlinked. In other words, a co-morbidity will affect the complaints by the patient and vice-versa.

In a study which evaluated the influence of physical activities on LQ and symptoms mentioned by a group of post-menopause females, the non-sedentary participants revealed they had 64.6% of slight symptomology, whereas sedentary females admitted 42.4% of mild symptoms.[12] Consequently, results show that females regularly practicing physical activities had a less occurrence of symptoms, improved their conditions and lifestyle, with a direct interference in their LQ.

However, the participants in current study undertake only basic exercises offered by the Basic Clinic. For a better performance, they have to exercise with more frequency and at different activities than those provided, with a general decrease in symptoms.

In the case of symptomology related to LQ, results demonstrate the climacteric symptoms in almost all females under analysis. Same results were provided by a study undertaken at the University Hospital of the Universidade Federal de Sergipe in 2018, with symptomatology in 73.1% of the population. However, symptoms were classified as severe (38.5%) and mild (26.9%) when classification was based on total scores.[19]

In current study, LQ of females was only slightly impaired. The higher the points in total scores, the worse is the life quality. However, even if participants had mild symptomology, it may be concluded that results did not generally affect their LQ, since total average score was low. Within the context of the somato-vegetative domain, the study presented muscular and articular problems as severest.

When the urogenital dominion was assessed with prevalent vaginal dryness, an epidemiological, longitudinal and prospective study with 40 – 65-year-old females and 5-year menopause, attended to in primary health clinics in a municipality in the hinterland of the state of São Paulo, Brazil, demonstrated the prevalence of the same symptom coupled to lack of sexual desire and satisfaction.[20] Results were similar to those in a research on the prevalence of sexual symptoms in 27,743 Asian females in the post-menopause period.[21]

Results reveal that one symptom is associated with another. If the female has vaginal dryness and burning, she will consequently have sexual problems since the lack of vaginal lubrication may be painful during sexual intercourse and trigger dyspareunia. The term is employed to describe discomfiture or pain during sexual activity which may be constant or persistent at the moment of penetration, during the sexual act or immediately after.[22]

One may perceive that there is a lack of information on the climacteric and menopause in females. Another factor is the familiar mode to deal with the theme. In positive influences, endearment, affection and a relationship of identity are underscored as primordial to cope with stress.[23,24]. Among the negative influences, lack of listening to complaints by husbands may cause conflicts. Strategies to involve husbands in the process of care in climacteric females is paramount to mitigate misunderstanding.[24,25] Such conditions directly affect social conviviality, provoking estrangements, limitations in daily activities and mainly in the life quality of the people involved.[24]

Even if there is no relationship between climacteric symptoms and LQ in females, it is highly relevant to establish programs and strategies for health promotion, mitigation of symptoms and the control of the most important secondary diseases inherent to this period. The population´s LQ will improve and will contribute so that attitudes on personal aging and perception on health and life conditions will become positive.

CONCLUSION

Physical alterations, such as muscular pain and lack of vaginal lubrication, and physiological ones, such as lack of concentration and memory, did not affect LQ of post-menopause females. Result may have been favored by the questionnaire with subjective responses even though Cronbach´s Alpha has provided good internal consistence.

Current research was limited by the size of the sample which was small since it comprised a single DATI and did not represent the whole population of the municipality. Further research should be undertaken on menopause and its impact on the LQ of females.

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