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## The quality of sexual life of women with menopause

### Abstract

**Introduction.** The approach to women, menopause and its consequences have changed – the perimenopausal period has stopped being treated as the end of femininity, career and sexual activity. However, symptoms coexisting with menopause influence health and female's life quality. A decrease of sexual activity is observed as one of the most frequent symptoms, and it is induced by physiological and psychological factors.

**Aim.** Assessment of sexual life quality among women with menopause and defining the main factors influencing this area.

**Material and methods.** Thanks to an original questionnaire composed of 28 questions, single and multiple choice, 200 women in the perimenopausal period were examined between July and September 2017.

**Results.** The number of 200 women in perimenopausal period were chosen accidentally. The questionnaire was filled out via the Internet. Statistically significant factors occurred to be: level of education – higher education is connected with more frequent sexual activity, professional activity – 81% of working women remain sexually active while 73% of non-working females deny being sexually active. Hormonal Replacement Therapy does not influence the frequency of sexual contact but it alleviates vagina dryness, and provides a higher level of agitation during cohabitation.

**Conclusion.** Higher educated and professionally active women declare better life satisfaction and see themselves as attractive. However, marital status remains meaningless as well as Hormonal Replacement Therapy. It was observed that men from rural areas and towns initiate sexual contact more often.

**Keywords:** women, menopause, hormone replacement therapy, sexual activity.

DOI: 10.2478/pjph-2018-0021

### INTRODUCTION

According to North American Menopause Society (NAMS), natural menopause is defined as the last menstrual period followed by 12 months without vaginal bleeding, which is not caused by any pathological reason. In reference to the World Health Organization (WHO), perimenopausal period covers from 2 to 8 years preceding last period and one year after [1,2]. In Europe, 50 years of age is an average age of menopause. Considering the fact that women's length of life extends (in Poland, in 2010 average life expectancy was 80,5 year), it occurs that postmenopausal period constitutes 1/3 of it. The average age when menopause comes among the Polish population is between 44 and 56 years old. It occurs earlier in those who smoke tobacco [3]. Pathological is treated such a situation when menopause occurs before 40 and after 60 years old [1].

Menopause can be divided into three periods: premenopause, menopause and postmenopause [2,5]. Premenopause is classified as 3-4 years before the last period. Sometimes, it is also defined as a whole reproductive period, from menarche to menopause. Although the first meaning prevails. Overlapping hormonal and metabolic changes are caused by ovarian aging. Typical features of this time are irregular cycles. Menopause,

as mentioned, is the last vaginal bleeding followed by 12 months without a period. During this time, women often experience symptoms like hot flashes, sweating, reddening of the skin or vaginal dryness, which are all connected with fluctuated levels of gonadotrophins [4,13]. Postmenopause follows 12 months after the last period. Then climacteric symptoms alleviate. Unfortunately, constant lack of estrogens increases the risk of atherosclerosis and cardiovascular diseases [6].

Due to mitigating onerous menopausal symptoms, it becomes more common to use Hormone Replacement Therapy (HRT) or looking for other more unconventional methods [7,8]. The aim of the HRT is to increase the level of estrogens. This therapy has two components: estrogen, like estradiol and progesterone or progestins [9]. Progesterone is dedicated to women having a uterus because this hormone reduces the risk of endometrial cancer [5,10]. Nowadays, an individual approach in choosing which kind of therapy is crucial. Also, an important aspect is to inform the patient about regularity during therapy and compliance with the gynecologist's instructions.

The inclusion criteria for HRT are listed below:

1. Age for initiating therapy: 50-59 years old.
2. Maximal length of treatment: 5 years.
3. Inducing minimally lowest dose.
4. Adequately chosen route of drugs' administration [5,10].

Correctly selected and conducted therapy positively influences not only patient's comfort but it also reduces unpleasant symptoms, prevent osteoporosis and atrophy of the urinary organs. Before starting the therapy, it is crucial to perform a gynecological examination, cytology, uterus ultrasonography or mammography. Additionally, blood tests, lipids, coagulation and liver tests should be performed. [11,12].

Absolute and relative contraindications to HRT:

1. history of infarct or stroke
2. endometrial cancer
3. venous thrombosis
4. estrogen-dependent malignant tumors
5. undiagnosed vaginal bleeding [12,13].

Alternatives for HRT could be changing of lifestyle, improvement of psychological condition and health [18,14]. Physical activity reduces the risk of bones' mineral density loss and prevents fractures. Also, exercise eliminates hot flashes, stress [8,14] and ensures better sleep. From a dietary point of view, every woman after menopause should eliminate alcohol, caffeine, and saturated fats because these substances weaken the ability to absorb estrogens [8,14].

### MATERIAL AND METHODS

The research involved gathering data from about 200 women in menopausal period. The answers were collected in 3 months, from July to September 2017. The authors used an original questionnaire which was distributed via the Internet and it was built from 28 questions both, single and multiple choice. The statistical analysis involved the frequency tables with a percentage value, the descriptive statistics and a parametric and nonparametric test. The parametric data was prepared by using descriptive analysis which contained: frequency, medians (M), standard deviation (SD), minimal and maximal value. Preparation of data was done in Statistica 12 and Excel's worksheet. The nonparametric test was Pearson's chi-squared test. Results with  $p < 0.05$  were assessed as statistically significant. The analyzed data of an examined group of females was compared to the results presented in the international references.

### RESULTS

The number of 200 women in perimenopausal period participated in this study. They were chosen randomly, and the questionnaire was filled out via the Internet.

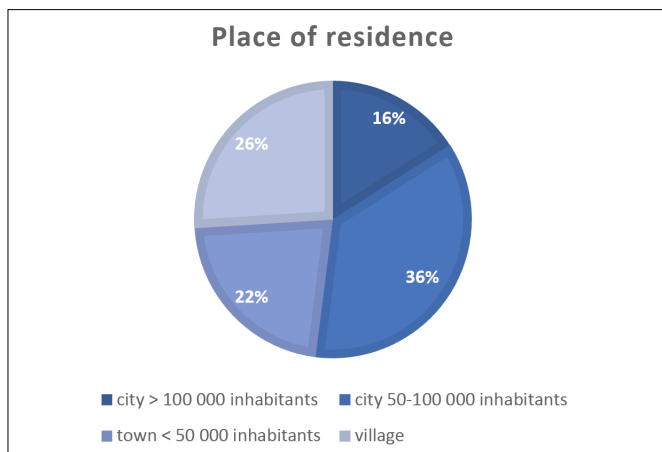


FIGURE 1. Percentage of respondents divided by their place of residence.

In the examined group, 72 women (36%) come from the city with 50 000-100 000 citizens, 52 (26%) live in a village, 44 respondents (22%) live in the town with no more than 50 000 inhabitants and 32 of them (16%) are from the city with more than 100 000 people living there. Only 14 (7%) females declare the basic level of education, the rest of group have vocational, secondary or higher education.

TABLE 1. Dependence between marital status and sexual activity.

	Marital status					Total	
	Wife	Miss	Window	Divorced	In partnership		
Are you sexually active?	YES (number)	92	2	4	18	25	141
	YES (%)	75%	22%	29%	82%	76%	70%
	NO (number)	30	7	10	4	8	59
	NO (%)	25%	78%	71%	18%	24%	30%
Total	122	9	14	22	33	200	
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	

Table 1 presents dependence between marital status and sexual activity which is statistically significant ( $\chi^2=0.6$ ;  $p=0.003$ ). Being sexually active is the most often declared by divorcees. Among the presented group, 122 (61%) respondents are married, 33 (16.5%) live in partnership, 22 (11%) women are divorced, 14 (7%) are widows and there are 9 (13%) singles.

Based on our data, it occurred that place of residence does not influence women's sexual activity ( $\chi^2=3.2$ ;  $p=0.878$ ), but education does: better-educated respondents declare to be more sexually active ( $\chi^2=1.2$ ;  $p=0.000$ ).

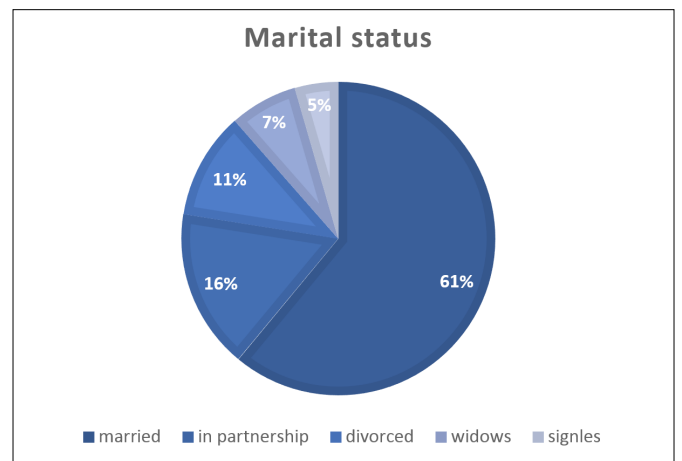


FIGURE 2. Percentage of respondents divided by their marital status.

A majority (84%) of females deny taking the Hormonal Replacement Therapy (HRT) and the main reason seems to be lack of such need (54%). A significant group of women (24%) is afraid of side effects.

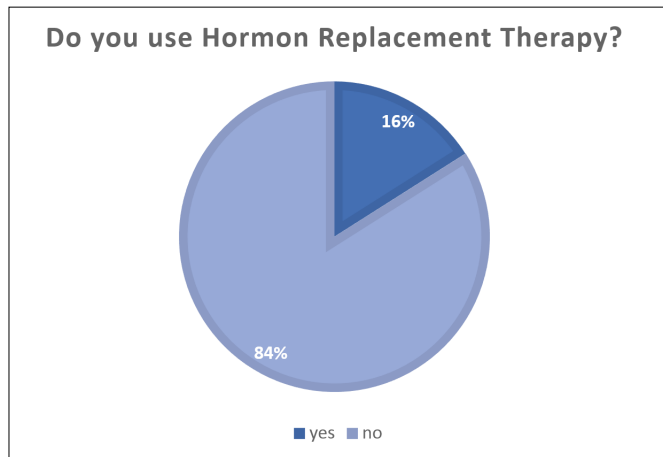


FIGURE 3. Percentage of respondents divided into group of taking and non-taking Hormone Replacement Therapy.

After comparing two groups of women applying and not applying HRT, there was no statistically significant difference in sexual activity ( $\chi^2=4.2$ ;  $p=0.684$ ), but it was observed that HRT alleviates vagina dryness ( $\chi^2=1.6$ ;  $p=0.001$ ) and provides a higher level of agitation during cohabitation ( $\chi^2=2.2$ ;  $p=0.000$ ). As many as 43% of women taking HRT admit they always feel desire. To compare, among a group of women who do not take HRT, only 20% declare sexual excitement. Before menopause, 82 women out of 200 (41%) had sex several times monthly, 34% declare being sexually active a couple times a week, 4% admit having had sex almost every day. After menopause, this proportion does not change although only 133 women confirm sexual activity.

In 56% of cases, it is a man who initiates sex, in 36% relationships both partners do, and 11 women (8%) claim to provoke sex contact by their own.

TABLE 2. Dependence between sense of physical attractiveness and women’s sexual activity.

	Do you feel physically attractive?		Total	
	Yes	No		
Are you sexually active?	YES (number)	109	27	136
	YES (%)	87%	36%	70%
	NO (number)	16	48	64
	NO (%)	13%	64%	30%
Total		125	75	200
		100.00%	100.00%	100.00%

Table 2 presents dependence between sense of physical attractiveness and women’s sexual activity. Females who feel attractive definitely more often declare having sexual intercourse ( $\chi^2=2.2$ ;  $p=0.003$ ). On the other hand, women, who do not believe in their attractiveness, rather do not have sex.

Majority of females (66%) after menopause do feel attractive. Also, it was observed that women belonging to this group more frequently have sex a couple times a month ( $\chi^2=1.4$ ;  $p=0.003$ ).

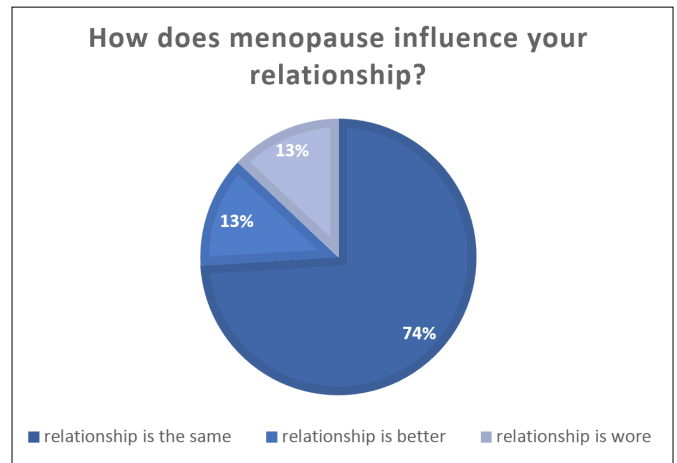


FIGURE 4. Percentage of respondents divided by the influence of the menopause on social relationships.

TABLE 3. Dependence between influence of menopause on relationship and women’s sexual activity.

	How menopause influence your relationship?			Total	
	our relation got worsen	our relation does not change	our relation got better		
Are you sexually active?	YES (number)	12	101	25	138
	YES (%)	40%	70%	100%	70%
	NO (number)	18	44	0	62
	NO (%)	60%	30%	0%	30%
Total		30	145	25	200
		100.00%	100.00%	100.00%	100.00%

Table 3 presents the influence of menopause on relationship. It occurs that every female declaring improvement in relationship remains sexually active ( $\chi^2=0.8$ ;  $p=0.000$ ). Women admit worsening of their relation are not sexual active ( $\chi^2=3.2$ ;  $p=0.001$ ).

Menopause differently influences every relationship. As many as 148 (74%) respondents claim their relation does not change, 26 (13%) of women observe improvement and exactly the same percentage of females admit that their connection with the partner got worsen. Women, declaring improvement of the relationship with their partner, have sex a couple times a week (75%). To compare, females who estimated their relations as worse, declared to be sexually active several times a month (80%). As many as 100% of women who admitted improvement of their relationship had regular sex. Professional activity constitutes a statistically significant factor: 81% of working women remain sexually active, while 73% of non-working females deny being sexually active ( $\chi^2=0.8$ ;  $p=0.001$ ).

**DISCUSSION**

Menopause is an inevitable condition for every middle-aged woman; it is connected with physiological and psychological consequences. Among organic changes there are vasomotor symptoms, reducing bone density and atrophy of organs such as the vagina or clitoris. The psychic sphere is strained by problems with sexuality, self-acceptance, enlarged irritability, poor memory, or mood swings. All of these aspects influence quality of sexual life. Presented research includes the impact of

Hormone Replacement Therapy, menopause and its influence on a relationship, marital state, education, place of residence, professional activity and sense of physical attractiveness.

In research conducted by Żołnierczuk-Kieliszek and co-authors, it was proved that people professionally active have a substantially higher quality of sexual life. Instead, unemployed and pensioners are less satisfied with their life [15]. Based on an examined group, it remains clear that working women declare the highest sexual life satisfaction, while unemployed females in 73% admit that their life quality remains disappointing.

Following Łukasiewicz and Lew-Starowicz, anorgasmia touches 24% of women, especially those unmarried [16]. Presenting research proved that 42% of married women achieve orgasms often, 50% of widows rarely do. Surprising is the fact that informality of a relationship does not impact frequency of orgasms and 75% of women in this kind of relationships have orgasms often. Łukasiewicz and Lew-Starowicz underline that lack of orgasm is connected with lower level of education [16] what was not observed in presented research but what was observed is the fact that after menopause 67% of women have sex. So that 37% of examined group declare lack of sexual contact. Mentioned below authors also induce HRT as a solution for decreased sexual activity. Opposite results were obtained in the presented studies, HRT seems not to influence sexual activity ( $p < 0.05$ ), satisfaction coming from sex ( $p < 0.05$ ) or frequency of cohabitation after menopause ( $p < 0.05$ ). Although the research showed that more than 50% of women taking HRT admitted better moisturizing of the vagina. HRT has a positive impact on sexual desire – 43% of women always feel it and 30% sometimes do.

Research of Makara-Studzińska and coauthors treats the influence of HRT on life quality and level of depression among women in perimenopausal age. It showed that 85.5% of respondents taking HTZ do not report any symptoms of the mentioned condition and 13.5% submit only gentle manifestations [17]. To compare, this research proved that females taking HRT less often complained of lack of satisfaction coming from sex.

## CONCLUSIONS

Thanks to an analysis of the factors like physiological, psychological, psychosocial changes, it is possible to clarify their impact on the women's quality of sexual life. Presented aspects could be distinguished as positive, negative and neutral.

1. Higher educated females more often declare that they remain sexually active.
2. Hormone Replacement Therapy occurred to be insignificant for cohabitation's frequency.
3. Marriage and partnership seem to be the most favorable for reaching an orgasm.
4. Although marital status remains meaningless for satisfaction coming from sex.
5. Most women living in villages and smaller towns acknowledge that their partners dominate in initiating sexual contacts.

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