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The European Menopause Survey 2005: Women's perceptions on the menopause and postmenopausal hormone therapy

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Abstract

Objectives. To identify and describe current women's thoughts about the menopause, hormone treatment (HT) and perceptions about breast cancer.

Methods. Between December 2004 and January 2005, 4201 postmenopausal women in seven European countries were interviewed via a standardized computer-aided telephone interview protocol.

Results. Almost all women reported to have experienced climacteric symptoms, and 63% of the women rated them as being severe. Only 52% of women were aware of the benefits of HT for relief of climacteric symptoms. Although 84% felt that severe symptoms should be treated, only 40% had used HT at some point in time. Thirty-four percent of the women preferring treatment with natural products did so because of the risk of breast cancer associated with HT. HT was recognized by 59% of the women as one of the most important contributors to an increased breast cancer risk. Most women received their information about HT and breast cancer risk from the media.

Conclusions. This European survey reveals that the majority of women experience climacteric symptoms but that their decision whether or not to use HT is highly dependent on their concern about breast cancer risk. An increase in knowledge of the benefits and risks of HT is required for women to make appropriate decisions about hormone use.

Keywords: *Menopause, breast cancer, survey, compliance*

Introduction

Over the past decade there has been considerable controversy about the use of hormone therapy (HT) among postmenopausal women. The results of the Heart and Estrogen/Progestin Replacement Study (HERS) in 1998 [1], its extension study (HERS II) in 2002 [2,3] and in particular the results of the Women's Health Initiative (WHI) study in 2002 [4] had significant impact as they reported that long-term use of conjugated equine estrogens (CEE) 0.625 mg/day plus medroxyprogesterone acetate (MPA) 2.5 mg/day did not protect against cardiovascular disease and may increase the risk of breast cancer. The WHI study was discontinued prematurely and the resulting widespread coverage of the results in the professional and lay media created an unprecedented HT scare among prescribers and women. In addition, although it was stated that the results reported for continuous combined CEE/MPA might not be applicable to other preparations [5,6], regulatory authorities issued advice to health professionals and women, and HT guidelines were updated [6–8]. As a consequence of the fear and confusion that followed, many women abandoned HT or were taken off HT by their prescribers despite criticism of the WHI study and the far-reaching conclusions that were drawn from it [9–12].

In the aftermath of the WHI publications, a number of surveys have appeared investigating the impact of the WHI study on postmenopausal women [11,13–18] as well as on physicians [16,19]. Moreover, several investigations have been published on the changed HT prescription behavior [20–24]. Most of the investigations in postmenopausal women, with the exception of two surveys [13,15], were performed in the USA.

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The impact of the WHI was initially more dramatic in the USA than in Europe and it generated significant local media attention and because CEE- and/or MPA-containing preparations were the most prescribed menopausal hormone treatments in the USA at that time [24].

Unfortunately, in only one of these surveys [15] were women themselves interviewed in detail about their attitudes and fears with respect to the menopause and HT. Moreover, the findings apply only to a limited degree to the situation in Europe because the HT controversy in Europe was further fuelled in 2003 when a large observational study from the UK (the Million Women Study) also reported an increased breast cancer risk with HT [25]. Finally, the ramifications of the discontinuation of the estrogen-only arm of the WHI [26] have not been included in any of the above mentioned surveys.

The objective of the European Menopause Survey 2005 was to provide current insights into women's opinions and attitudes about the menopause and HT with a focus on perceptions of breast cancer and breast cancer risk. This information is important since unjustified fear may be a main reason for women not to consider HT treatment, especially when women are not fully informed about the benefits of HT. This may result in a decreased quality of life and increased osteoporosis risk in postmenopausal women.

Methods

This cross-sectional survey was conducted between December 2004 and January 2005 in seven European countries (Belgium, France, Germany, Netherlands, Spain, Switzerland and the UK). A stratified sample of 4200 women ($n = 600$ per country) aged 45–60 years was interviewed via a standardized computer-assisted telephone interview protocol by a professional independent market research organization (TNS NIPO, Amsterdam, The Netherlands). Women included in the survey had to be postmenopausal and not longer than 5 years beyond menopause. Participation was voluntary, confidential and anonymous. The selection procedure was based on automatic random digit dialing and quotas were used for age, regional distribution and educational level to ensure that the sample was representative of the overall population of women from the seven participating European countries.

The women were interviewed in their native language by trained female interviewers. The translations of the questionnaire were prepared from the original English version by translators experienced in health-related surveys and then back-translated into English to validate the translation. The questionnaire itself was validated in a pilot study in 45 women in The Netherlands, Germany and the UK ($n = 15$ per country).

The average duration of the interviews was approximately 15 min. The questionnaire consisted mainly of multiple-choice questions and some open-ended questions.

The questions can be divided into the following categories:

(1) Characterization of the study population;
(2) Postmenopausal symptoms (prevalence, impact);
(3) HT (usage, knowledge, women's attitude and opinion);
(4) Sources of information on the menopause and risk factors of HT;
(5) Ideas and concerns about breast-related topics.

The questions were divided in two panels: (A) menopause and HT and (B) breast-related issues. In order to avoid bias, half of participants started with Panel A, followed by Panel B, and the other half answered the questions in reverse order.

Statistical analyses are descriptive, with percentages and quantitative variables compared using the χ^2 test. All statistical comparisons with $p < 0.05$ are considered to be statistically significant.

Results

Characterization of the study population

The women included were between 45 and 59 years of age, with the number of women in the 50–54 and 55–59 age ranges being about twice that in the 45–49 age range. A description of the study population is presented in Table I. Not all women included in the study were postmenopausal, but 82% were more than 1 year since their last menstruation (69%) or surgically menopausal (13%). Since current or former use of HT or other treatment for menopausal symptoms may influence the women's answers in this survey, these data are also relevant in the description of the study population. In the sample, 20% were current users of HT, 40% had ever used HT, and 58% had never used HT. For natural treatments these percentages were more or less similar.

Postmenopausal symptoms

Most women included in this survey experienced one or more postmenopausal symptoms, and 63% of them rated these symptoms as being severe. It was noted that more women in the UK reported postmenopausal symptoms (overall and severe symptoms) compared to the other European countries.

The prevalence of the individual symptoms over the past 5 years is presented in Table II. The most frequently reported symptoms were hot flushes (74%), sleeplessness (58%), mood changes (57%), irritability (53%) and reduced sex drive (45%).

Table I. Description of the study population (% of subjects).

	Total ($n=4201$)	UK ($n=611$)	France ($n=600$)	Spain ($n=600$)	Germany ($n=596$)	Switzerland ($n=600$)	Belgium ($n=594$)	Netherlands ($n=600$)
Age (years)								
45–49	20	16	18	21	30	20	22	13
50–54	42	42	43	43	40	39	42	45
55–59	38	42	39	36	30	41	36	42
Menopausal status								
Still menstruating	8	5	8	3	17	9	10	6
Last menstruation <1 year ago	3	2	2	3	5	4	5	2
Last menstruation >1 year ago	69	64	80	72	58	65	69	80
Hysterectomy	15	15	11	10	23	22	12	13
Oophorectomy (including hysterectomy/oophorectomy)	13	20	13	16	9	8	13	7
Highest level of education								
Primary school (or less)	17	2	12	44	28	12	7	20
Secondary school (including apprenticeship)	53	60	66	32	46	62	54	53
Higher education/university	26	38	22	24	26	26	38	8
Unknown	3	0	0	0	0	1	1	20
Geographic distribution								
Large city	22	17	19	38	24	18	13	24
Small city	32	38	33	29	35	32	27	28
Village	36	35	34	30	30	40	45	42
Countryside	10	10	14	3	12	9	15	6
Marital status								
Married/living with a partner	74	64	84	84	71	58	86	74
Single (divorced/widowed/unmarried)	26	36	18	17	29	41	15	25
Other	0	0	0	0	0	3	0	1
Number of children								
0	11	8	6	8	11	22	9	13
1	18	17	14	15	28	20	24	12
2	43	40	40	45	44	40	41	53
>3	27	36	41	33	18	18	27	22

Table II. Prevalence (%) of postmenopausal symptoms in the past 5 years ($n=4201$) per country, with **highest** and *lowest* frequency per country.

	Total ($n=4201$)	UK ($n=611$)	France ($n=600$)	Germany ($n=596$)	Belgium ($n=594$)	Netherlands ($n=600$)	Switzerland ($n=600$)	Spain ($n=600$)
Hot flushes	74	**82**	76	*67*	**82**	76	75	71
Sleeplessness	58	**70**	*52*	59	*52*	60	57	48
Mood swings	57	**61**	*52*	57	57	57	56	57
Irritability	53	**62**	49	50	52	57	*48*	*48*
Reduced sex drive	45	**49**	41	*40*	46	48	42	52
Headaches/migraine	39	**49**	*30*	44	31	38	35	32
Depression	33	**43**	25	33	*22*	30	28	36
Vaginal pain/dryness	29	29	**33**	19	**33**	31	29	40
Involuntary loss of urine	28	**38**	*23*	28	26	**38**	*23*	25

Most women indicated that 'hot flushes' was the symptom that most affected their lives (48%), followed by 'sleeplessness' (23%) and 'mood swings' (16%). This is reflected in the symptoms that were reason to seek treatment; hot flushes being the most frequently mentioned reason (62%), followed by sleep problems (20%) and mood swings (17%) (Figure 1). Forty-six percent of the respondents felt affected by the menopause (range: 33%, France to 58%, Germany), and 22% (range: 16%, Switzerland to 30%, UK) reported a decrease in their quality of life. Most women (84%) agreed with the statement that severe postmenopausal symptoms should be treated.

Hormone therapy

Over 80% of all interviewed women had ever heard, seen or read anything about HT. Awareness was

significantly higher in the UK (97%) and lower in The Netherlands (57%) compared with the other European countries and over 80% of all interviewed women knew about natural (herbal and homeopathic) treatments.

When being asked about their perceptions of benefits and risks of HT, 52% of the above subgroup mentioned alleviation of postmenopausal symptoms in general, followed by improving general well-being and quality of life by 33% (range: 17%, Netherlands to 51%, Germany). Prevention of osteoporosis was mentioned by only 12% (range: 3%, Netherlands to 19%, Spain), whereas 22% of the women (range: 13%, UK to 30%, Spain) were unable to mention any benefits of HT (Figure 2).

The most frequently mentioned risk of HT was breast cancer (62%; range: 49%, Spain to 73%, France), followed by cancer in general (22%; range: 12%, UK to 27%, France) and unwanted events (17%; range: 7%, Netherlands to 24%, Switzerland/Belgium) (Figure 3). The overall feeling about HT in the women in this subgroup was positive in 46%, negative in 44%, and 10% did not know.

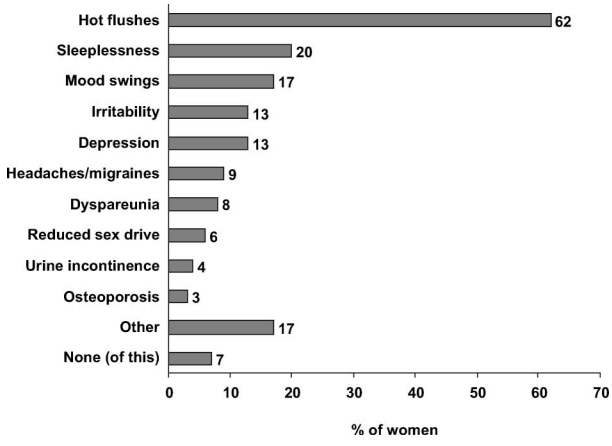

Figure 1. Postmenopausal symptoms as reason to seek treatment ($n = 2721$).

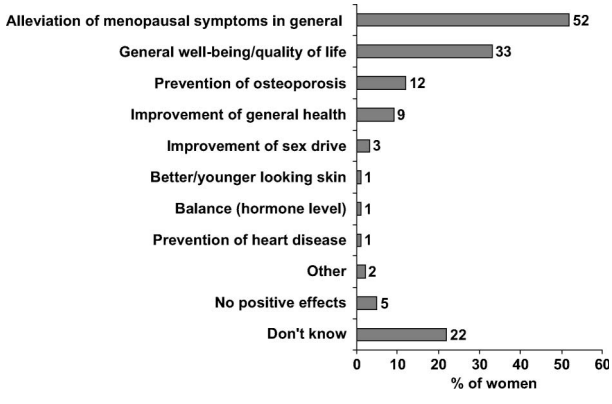

Figure 2. Perceived benefits of hormone therapy (HT) in the subgroup of women who were aware of HT as a treatment option for menopausal symptoms ($n = 3497$).

The percentage of the total study population having ever taken HT was 40% (range: 15%, Netherlands to 52%, UK), whereas current use of HT was 20% (range: 5%, Netherlands to 28%, Belgium). Use of natural (herbal or homeopathic) treatments was similar to that of HT (20% current users, 33% ever users). Nearly 60% of the women did not take any treatment currently.

In the subgroup of women not using any treatment for their postmenopausal symptoms ($n = 1309$), the main reasons for not using treatment were that the postmenopausal symptoms were not severe enough or did not bother them enough (80%) or that they hardly experienced any symptoms (18%). In only 10% of this subgroup were the reasons for not taking treatment (perceived) treatment-related risks.

In the subgroup of women currently using non-hormonal treatment for their postmenopausal symptoms ($n = 953$), the main reasons not to use HT were the increased risk of breast cancer (34%) and the possibility of side-effects (31%). Because of this fear of HT-related risks 57% of the women in this subgroup would not feel confident to use HT even if their doctor advised it.

Half of the women who ever used HT (current and previous users) had (temporarily) stopped treatment one or more times. The average time since stopping HT treatment was 25.8 months. Most frequently reported reasons for stopping HT were adverse events (28%), risk of breast cancer (21%), being advised on medical grounds (21%), lack of effect (17%) or negative news about HT (15%) (Figure 4). The majority of women who re-started treatment did so because their menopausal symptoms had returned (80%). The average duration of stopping was 10.7 months.

Sources of information on the menopause and risk factors of hormone therapy

Of all the women interviewed, 82% felt well informed about the menopause in general and nearly all of them felt satisfied with the information. The main

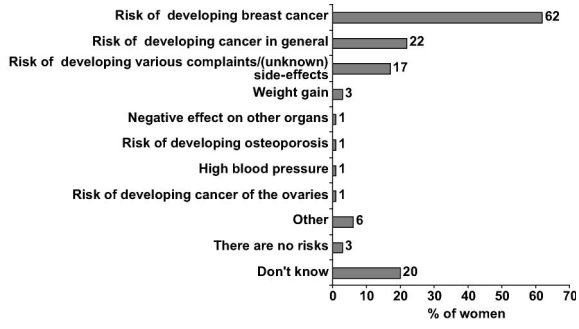

Figure 3. Perceived risks of hormone therapy (multiple answers possible; $n = 3497$).

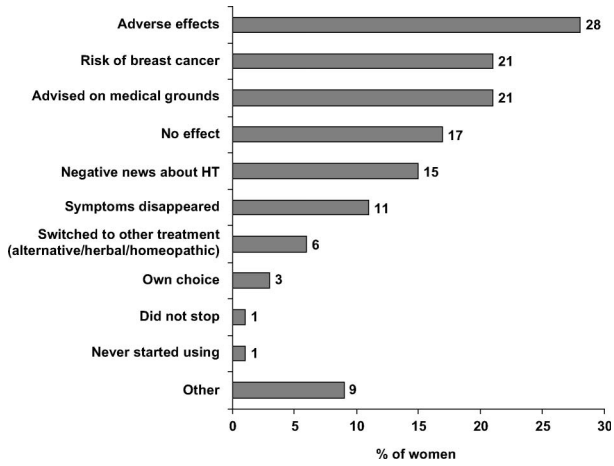

Figure 4. Reasons for stopping hormone therapy (HT) (multiple answers possible; $n = 1157$).

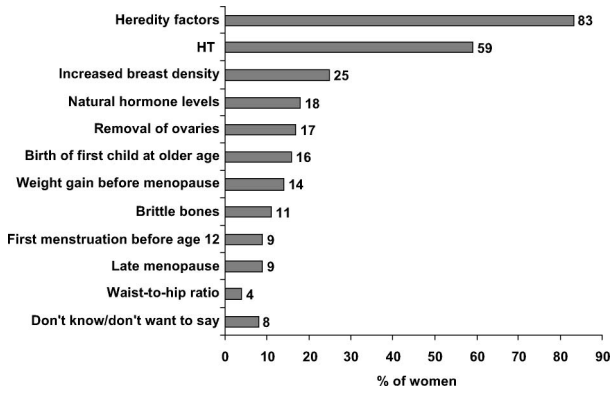

Figure 5. Perceived risk factors for developing breast cancer (multiple answers possible; $n = 4201$). HT, hormone therapy.

sources of information on the menopause for this group of women were their doctor (63%) and magazines/newspapers (52%), followed by information coming from (girl)friends, relatives or colleagues (26%). The Internet was used by only 7% of the women.

Information on risks of HT was obtained mostly from magazines/newspapers (49%) and television/radio (32%), with only 28% of the women obtaining this information from their doctor.

Only 2% of the women were aware of differences in the effect of compounds (e.g. estrogen-only therapy versus estrogen plus progestogen combinations) on the breast.

Ideas and concerns about breast-related topics

The large majority of respondents had no problems in discussing breast-related topics and the most frequently discussed issues (reported by more than 50% of the women) included risk of breast cancer, breast tenderness/breast pain and size of breasts. About 55% of subjects were worried about getting breast cancer.

The main reason for having a mammogram was to take part in a preventive screening program. About a third of the women considered getting a mammogram disturbing/alarming, with about 16% being extremely worried. Being recalled for a mammogram was considered alarming in 58% of the women, with 37% being extremely worried.

Discomfort of the breast after 45 years of age was reported by 31% of the respondents, and included breast pain (65% of this subgroup), suspicious tissue or lump in the breast (25%), breast inflammation (9%), increased breast density (7%) and changes in breast appearance (3%). Presence or a history of breast cancer was reported by 3% of the women. Women were also questioned about their knowledge on risk factors for breast cancer (Figure 5). The most frequently recognized risk factors were heredity factors (83%), followed by HT. The majority of women underestimated the chance of staying disease-free within 5 years after breast cancer treatment: only 9% estimated the 5-year survival rate correctly at 76–100%.

Discussion

The European Menopause Survey 2005 is the first large European survey to investigate opinions, attitudes and perceptions of postmenopausal women on the menopause in general, treatment of menopausal symptoms and breast-related issues after publication of the WHI study results in 2002 and 200 [4,26] and the Million Women Study results in 2003 [25].

The survey revealed that nearly all women experienced postmenopausal symptoms and that women feel affected by the menopause. It should be noted that there were substantial differences between countries in both the prevalence of (severe) symptoms and their impact on daily life. For instance, many more women in the UK reported (severe) menopausal symptoms and significantly more women felt affected by the menopause, leading to a larger decrease in quality of life. In France and Spain the impact of the menopause was significantly lower. Although real differences in symptom prevalence cannot be excluded, the greater part of the observed difference is probably related to cultural diversity in expectations about the menopause and in perception of symptoms.

Overall awareness of HT as a treatment option for climacteric symptoms was quite high (83%) but varied between countries; however, about 40–50% indicated that their general feeling on HT was negative.

Use of HT also differed between countries. The percentage of 'ever users' was significantly higher in the UK, France and Belgium, whereas current use of

HT was significantly higher in Belgium, Switzerland, Germany and France. Use of HT in The Netherlands and Spain was significantly lower. No information was obtained on the duration of treatment. Differences between the countries may be attributed to differences in the way women experience postmenopausal symptoms, in awareness of HT, in availability and acceptability of HT products and to cultural differences as well as to national prescription guidelines. The observation that countries with a higher percentage of 'ever use' of HT are not the same as those with a higher percentage of current use may be due to other ways of media coverage of the results of the WHI and the Million Women Study. Moreover, the average time since stopping hormone therapy was 25.8 months which, if calculated back from the time of the interview, was in the first months after publication of the WHI results.

Both HT awareness and use of HT in the present survey were higher than in a previous survey by Strothmann and Schneider, which was conducted in over 8000 women in Germany, France, Spain and the UK [15], with most prominent differences observed for France and Spain. This may be related to differences in study population (the study by Strothmann and Schneider included women aged 45–75 years, with nearly 50% of the women over 60 years of age), but continuing education on menopause and HT by public and scientific media may also play a role.

Given the high prevalence of postmenopausal symptoms it is interesting to know why not all women sought treatment for their symptoms. In the subgroup of women not using any kind of treatment the main reason was that their symptoms were not severe enough or did not bother them enough, whereas in the women who opted for natural (herbal, homeopathic) products, the majority did not choose HT because of the risks (breast cancer, side-effects). Similar reasons were mentioned by women who (temporarily) discontinued HT.

It is interesting to compare the perceptions of postmenopausal women with the current views of clinical experts as published by professional societies involved in menopause – the North American Menopause Society (NAMS), the International Menopause Society (IMS) and the European Menopause and Andropause Society (EMAS). All three societies conclude that individualized estrogen-based HT is the appropriate treatment for women with vasomotor symptoms. NAMS and EMAS indicate this treatment specifically for 'distressing' or 'moderate to severe' symptoms, whereas IMS does not relate treatment to severity of the symptoms [8,27,28]. Most of the women in our survey agreed with the statement that severe postmenopausal symptoms should be treated. Unlike the recommendations of the professional societies, almost half of the women chose to treat their symptoms with natural products instead of HT.

The findings of the survey show that, despite the fact that women feel they are well informed, their knowledge on HT, its benefits and actual risks (including breast cancer) is not always correct and complete. For instance, the majority of women did not know specific details about differences between compounds and especially with regard to their effect on breast: 98% of the women were not aware of the different effects of different formulations on breast (prompted answers). Especially the difference in effect between treatments on breast density and mammographic density [29] was not recognized, whereas the majority of women reported to be 'alarmed' if getting a recall for a mammography. Most women were aware only of heredity factors (83%) and HRT (59%) being risk factors for breast cancer, but not of other important factors like increased breast density, birth of first child at older age, early first menstruation, late menopause and postmenopausal obesity [30–32].

Information on the risks of HT was obtained mainly from non-medical sources (magazines, television or radio), which may not always reflect proper scientific balance. This may have led to a substantial group of women leaving their postmenopausal symptoms unnecessarily untreated, using less effective treatment options or discontinuing HT prematurely.

Like in the study by Strothmann and Schneider [15], breast cancer is the major topic of concern in relation to HT. However, the percentage of women reporting an association between HT and risk of breast cancer has increased when comparing results of the two surveys. This difference may be related to continued media attention on the relationship between HT and breast cancer, including publication of the results of the WHI and Million Women Study, with subsequent coverage by the public mass media. A relationship with differences in study population or use of HT (users tend to be more aware of treatment-related risks) may also play a role.

Meanwhile, a partial rehabilitation of HT by the media has taken place due to follow-up publications of the WHI trial [26,33] and editorials putting the results into perspective for the European woman using HT [34]. To what extent this will have a positive influence on women's fears remains to be seen, and women's perceptions and attitudes is a subject requiring continuing research.

Conclusion

The European Menopause Survey 2005 reveals that many women experience severe climacteric symptoms and the majority of women feel that severe symptoms should be treated. However, many women

either opt not to use any treatment or use a herbal/natural remedy driven by fear of breast cancer. Detailed easy-to-understand information, both on the epidemiology of breast cancer and its known risk factors, as well as on the actual HT-related risk of breast cancer, is essential in allowing women to make balanced choices on the use of treatment for their postmenopausal symptoms.

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