# Ethnicity and attitude toward menopause and hormone replacement therapy in Northern Israel

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## **Summary**

Purpose: The aim of the study was to assess the knowledge, perception and attitude towards menopause and hormone replacement therapy (HRT) among women of different ethnic groups in Israel.

Methods: 292 postmenopausal women attending primary health-care centers in northern Israel were recruited. All women completed a questionnaire, which included information on demographics, health status, menopausal symptoms, attitude toward menopause, adequacy of counseling and experience with HRT.

Results: Thirty-five percent of women were Arabic women. Most of the population categorized menopause as a positive and natural event, only 26% of the Arabic women thought of menopause as an illness-oriented event compared to 7.7% of the Jewish women. Half the Arabic women had never received information or been counseled about menopause and HRT, compared to 18% of the Jewish women. Menopausal symptoms showed a statistically significant improvement with HRT. However, only 40% of the Jewish women and 24% of the Arabic women used HRT.

Conclusions: Only a relatively small percentage of Arabic women know about menopause and HRT use, probably because of the relatively low rate of counseling and information provided about menopause and HRT, and their lack of knowledge. Greater efforts are needed to promote a positive attitude to aging and menopause, increase awareness and knowledge. Providing greater access to information and support are essential steps in improving the women's health of the Arabic population in Israel during menopausal

Key words: Menopause; Hormone replacement therapy; Attitude; Ethnicity.

# Introduction

Menopause is associated with biological and psychological changes that affect women's health, well being and quality of life [1]. It is also attributable to the individual's inherited and acquired propensities to withstand the aging process [2]. Attitudes to menopause have generally been measured using rating scales or checklists. However, Woods et al. [3] reported that these measures might not reflect women's true feelings about this stage of life, which are multivariable. Aside from the long-term risks of hormone replacement therapy (HRT), the long-term benefits of HRT in alleviating vasomotor symptoms and preventing osteoporosis have been established in the literature by observational studies [4, 5]. However, only 12-16% of all menopausal women use HRT [6, 7].

There is little information available about how menopause is experienced by women of different ethnic groups in Israel and on the prevalence of HRT among women in Israel. Previous study published in 1977 by Maoz et al. [8] showed that the attitude to menopause varied with different cultural origins, especially with regard to husband-wife relationships. Blumberg et al. [9] reported that the majority of Israeli women had a positive attitude to menopause, and knowledge about menopause and HRT, but only 12% were currently using HRT. The present study was conducted in the northern part of

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Israel, originating from different ethnic and cultural backgrounds. In these areas the population is served by general practitioners who served as the first care providers for menopausal women, and referred them as necessary to gynecologists and other specialists in nearby towns. We hypothesized that factors such as religion, tradition, culture (e.g., husband's dominance), level of knowledge of physicians and patients, and availability of information, may all play an important role in patients' attitudes toward menopause and HRT in these unique groups of women.

The aim of the present study was to assess the knowledge and perception of menopause as measured by access and availability to information. Another aim was to evaluate self-reported menopausal symptoms and determine the attitudes toward menopause and HRT between two different ethnic groups in the northern part of Israel.

#### **Patients and Methods**

The study-limited population consisted of 292 postmenopausal women, aged 45-75 years, attending a primary health-care outpatient clinic in the northern part of Israel from January 1998 until January 1999 for an annual check-up or to seek advice from their gynecologist or general practitioner.

A 24-item questionnaire survey was administered on an anonymous basis to women in the postmenopausal age range during clinic visits. All women completed the questionnaires which were collected at the end of their visits. The survey covered information about sociodemographic background, general health and health history, life-style, menopausal symptoms, attitude to menopause, adequacy of counseling about menopause, and experience with HRT. The questions about menopausal symptoms were based partly on questions from the Kupperman index [10] and the Short-Form health survey (SF-36) [11]. The entire questionnaire appears in Appendix I.

For statistical analysis results were calculated as frequencies or mean + standard deviations. The Pearson correlation coefficient (r) and its significance (p) were calculated between variables. In order to evaluate statistically significant differences in categorical variables (e.g., family status, use of mammography, etc.) between Jewish and Arabic populations, the Chi-Square or Fisher's Exact test was used, as required. In order to evaluate statistically significant differences in mean continuous parameters (e.g., age, number of children, age at menopause, years of education) between two categorial groups (i.e., Jewish vs Arabic; mammography - yes or no) the Student's t-test was used. The data was separated and evaluated by ethnicity; p values less than or equal to 0.05 were considered statistically significant.

#### **Results**

A total of 292 women from northern Israel completed the questionnaire (100% response rate). It was a crosssectional, retrospective, self-reported survey.

The sociodemographic characteristics of the study population are presented in Table 1. Mean age for the Jewish women was 55.3 + 6.9 years and 55.9 + 7.0 for Arabic women (p = 0.018). Most of the Arabic women (98%) had been compared to 92% of the Jewish women (p = 0.03). The Arabic women had a significantly higher mean number of children compared to the Jewish women (7.3 + 2.8 vs. 3.2 + 2.3 children, p = 0.0001). Half the study population had only a primary education; these accounted for 91% of the Arabic women and 28% of the Jewish women (p = 0.001). The diffe-

Table 1. — Demographic characteristics of the study population (292 patients).

	Jewish		Arabic	
Mean age (years)	$55.9 \pm 7.0$		$53.9 \pm 6.7$	p = 0.018
Religions	65%		35%	
Family status	Ever-married Single	92% 8%	98% 2%	p = 0.03
Education (years)		28% 72%	91% 9%	
Mean years of education (years)	$12.4 \pm 3.9$		$4.9 \pm 3.9$	p = 0.0001
Parity (number of children)	3.2 + 2.3		7.3 + 2.8	p = 0.001
Health problems	None 39%		49%	p = 0.08
Smoking	None 44%		53%	p = 0.067
Exercise	None 44%		55%	
Mammography	55%		90%	p = 0.001

rence in mean years of education was statistically significantly higher for the Jewish women compared to the Arabic women (12.4 + 3.3 vs. 4.9 + 3.9 years, respectively; p = 0.0001). There was a negative statistically significant correlation between religion and number of children and religion and education (r = -0.61 and -0.66; respectively; p = 0.0001).

Findings for the life-style variables showed that almost half the women had never smoked, did not exercise regularly (53% Arabic vs 44% Jewish women, p = 0.067), took no medication (54%), and had no current specific health problems (50%). Twenty-five percent had chronic high blood pressure, 6% had diabetes mellitus, and the rest had other health problems. Screening mammography was done annually by 76% of the study population; 90% of the Jewish women and 55% of the Arabic women (p = 0.001). There was a positive and statistically significant correlation between religion and having an annual mammography (r = 0.4, p = 0.0001). Mean years of education was statistically significant higher for the women who had an annual mammography (10.7 + 4.9 vs 6.7 + 4.9 years<sup>x</sup>; respectively; p = 0.0001).

Postmenopausal status was defined as absence of menses for at least one year which was self-reported by these women. Mean age at menopause was reported 48.3 + 4.2 years for the Arabic women and as 48.6 + 4.1 years for the Jewish women (p = 0.64). Attitude toward menopause was categorized as a positive and natural event by 84% of the women: 90% of the Jewish women and 74% of the Arabic women (p < 0.01). Twenty-six percent of the Arabic women thought of menopause as a negative and illness-oriented event and also had negative expectations of this life stage (as a harbinger of old age) compared to 7.7% of the Jewish women (p = 0.001).

Findings for the menopausal period were most frequently menopausal symptoms such as hot flushes and fatigue (in more than 70% of all subjects), while 12% of the total sample reported no menopausal symptoms. Analysis of the baseline self-reported menopausal symptoms showed that after controlling for religion by menopausal symptoms there was no significant difference between Arabic and Jewish women, but there was a statistically significant improvement reported by these women in most of the menopausal symptoms with the use of HRT (p = 0.009) in both groups.

More than 50% of the Arabic women had never received information or been counseled about menopause and HRT, compared to 18% of the Jewish women (p < 0.001). The majority (60%) who had received information and counseling rated it as adequate, and 40% of the study population thought that the information they had received as inadequate or non satisfactory. Most of the access to information and knowledge was provided by doctors (66%), followed by the media (21%), and friends (13%).

Regarding treatment for menopause only 35% of the entire study population currently or had ever used HRT; 40% of the Jewish women and only 24% of the Arabic women (p = 0.009). Most of the responders (70%) used HRT for the relief of vasomotor symptoms; 82% of the Jewish women vs 62% of the Arabic women (p = 0.058).

The remaining women (20%) were following their doctor's recommendation and only 10% reported using HRT for prevention of osteoporosis or cardiovascular disease. In addition, 68% of the Jewish women but only 37% of the Arabic women were aware of the importance of HRT, including the expected preventive effect with long-term use (p = 0.0001); the remaining women had no opinion about why they were using HRT. Most of the study population (80%) who did use HRT found it satisfactory for alleviating menopausal symptoms and improving quality of life.

Compliance depended on the subject's recognition of the need for treatment and understanding of the possible benefits. Results showed that 70.1% of the Jewish women who started HRT were current users (more than one year) compared to only 41.5% of the Arabic women (p = 0.009). The main reasons for stopping use of HRT before one year were fear of acquiring breast cancer and side-effects, such as breast tenderness, vaginal bleeding, and weight gain. Sixty percent of the study population never used HRT. The reason given by these women for not using HRT was mainly "believed it to be not important". Fear of breast cancer was noted by only 13% of the Jewish women and by 8% of the Arabic women.

## Discussion

Menopause is a unique phase in life. While the recognition of menopause as a physiological event has remained unchanged over the years, attitudes toward menopause and expectations have been changing with differences among various cultures and ethnic groups [12].

A total of 292 women from northern Israel participated in the study. One of the study limitations is that the sample size does not include all women living in the north and it may not be a representative sample of the true population living in this area. However Israeli law stipulates that the government subsidizes community clinics to serve all sectors of the population to cover all citizens and residents. Another limitation is that all data (e.g., age at menopause) were determined as retrospective and self-reported by the women, and thus may be unreliable.

The large majority of the Jewish and Arabic women in the present study, although there was a cultural, ethnic, and educational difference between the two groups, enjoyed good health, had a positive attitude to menopause, and viewed menopause as a normal developmental process. However, 8% of the Jewish women and 25% of the Arabic women who participated in the study thought of menopause as an illness-oriented event and had negative expectations of this life stage which may be due to differences in traditional, ethnical and cultural behavior. Avis and McKinley [13] also found that women with a negative attitude to menopause had higher symptom scores, particularly for depression, and that a negative attitude to menopause was consistently associated with negative menopausal symptoms. In the present study, women with negative feelings toward menopause

expressed fear of growing older, and 50% of these women experienced depression. Recently, Bener et al. [14] suggested that the severity of symptoms affecting a menopausal woman's quality of life may be used as an indirect measure to determine the benefit of treatment. They also reported a significantly fewer number of menopausal symptoms and a significantly lesser severity of symptoms in women with lower education, and a significantly more frequent use of HRT in women of higher socioeconomic status. In contrast, we found no significant differences between the two ethnic groups of women regarding self-reported menopausal symptoms. Most of the women (80%) that participated in the study who used HRT, reported that it almost dramatically improved their quality of life. The data were retrospective, self-reported that may be a problematic measure to assess response to HRT and thus may limit the findings of our study.

In the present study, a considerable proportion (40%) of the Jewish women were using HRT compared to 24% of the Arabic women. The main reasons why a relatively small percentage of Arabic women are using HRT, is partially attributable to the fact that more than 50% of the Arabic women had never received information or been counseled about menopause and HRT, compared to 18% of the Jewish women. Compliance depends on the subject's recognition of the need for treatment and understanding of the possible benefits and risks. Previous studies have shown that side-effects and a fear of breast cancer are the primary reasons women cite for discontinuing hormone therapy [15]. In our study, of the Arabic women who took HRT, almost half (41.5%) stopped using HRT after a few months, mostly because of fear of breast cancer. Coope and Marsh [16] suggested that appropriate intensive counseling could improve compliance with long-term ERT. Recently, Domm et al. [17] showed that both level of education and race are associated with the ability to obtain information about menopause, which may contribute to the between-group differences in our survey in the use and compliance with HRT. Most probably poorly motivated patients who received little information and support from their health care provider are unlikely to comply with treatment in the long term.

We believe that stronger efforts are needed in Israel to promote positive attitudes to aging and menopause, and to increase public awareness and knowledge of HRT, for example by effective medical education programs for women to learn about menopause. Courses and lectures geared to both patients and physicians should be encouraged and a better use of printed information and electronic media needs to be disseminated to the public. The medical community should organize regular counseling programs, free of charge to encourage the use of HRT. Our results show that support for women should be regarded as an essential step in improving women's health of the Arabic population in Israel during the menopausal years. The doctors should devote more effort toward public education. Since public education has been helping to change worries, attitudes and expectations to HRT and experience, it will hopefully bring about an increase in the compliance of menopausal women.

## Appendix I: The Questionnarie

Thank you for completing the following questions about menopause and hormone replacement therapy (HRT). All your answers will be kept confidential and the results of this survey will be used to design a program to provide information about menopause in your community.

- 1. Name of the village (address)
- 2. Age (date of birth)
- 3. Religion (Jewish, Muslim, Christian, Druses)
- Familial status (single/ever-married), and number of children.
- 5. Number of children
- 6. Education (years) and profession
- 7. Medical history (hypertension, diabetes, other)
- 8. Use of: medication, cigarettes, exercise (1 = yes, 0 = no)
- Previous gynecological surgery (hysterectomy, ± oophorectomy)
- 10. Mammography screening (if done when was the last time)
- 11. Age at menopause
- 12. Menopausal symptoms and their intensity (0 = no, 1 = yes): Hot flushes, parasthesia sleep disturbances, mood changes (irritability, depression), dizziness, fatigue, joint and muscle pain, headache, palpitations, vaginal dryness
- 13. What is your attitude to menopause (positive event natural episode or negative event pathological process)?
- 14. What are your sources of information about menopause and HRT? (0 = no information, 1 = yes) if yes, *Please circle one answer*: (doctor, media, family, friends)
- 15. Was the information satisfactory or you were interested in more? (0 = not satisfactory, 1 = satisfactory).
- 16. Have you ever received HRT?
- 17. What kind of HRT treatment was prescribed (pills, skin patches, other)
- 18. Who recommended you starting the treatment? *Please circle one answer*: (GP, gynecologist, family/friends)
- 19. What was the reason for beginning the treatment? (Symptoms, doctor's advice, cardioprotective effect/prevention of osteoporosis)
- 20. Do you believe the treatment is important? (Important / not important)?
- 21. Are you satisfied with the treatment? Does it improve your quality of life (yes it does / no it does not)
- 22. Period of treatment (months) of HRT use
- 23. Did you interrupt / stop the treatment? What was the reason? Refuse any medication, doctor's decision, prefer alternative treatment, no need for further treatment, side-effects (breast tenderness, vaginal bleeding, weight gain) family members opposed, fear of breast malignancy, other
- 24. If you never received HRT the reason was: no need, obesity, breast engorgement, vaginal bleeding, fear of malignancy, heavy smoking, alternative treatment

## References

- [1] Morse C., Smith A., Dennerstein L., Green A., Hopper J., Burger H.: "The treatment seeking women at menopause". *Maturitas*, 1994, *18*, 161.
- [2] Greene J. G., Cooke J.: "Life stress and symptoms at the climacterium". *Br. J. Psychiatr.*, 1980, *136*, 486.
- [3] Woods N. F., Saver B., Taylor T.: "Attitudes toward menopause and hormone therapy among women with access to healthcare". *Menopause*, 1998, 3, 178.
- [4] Hilliard T. C., Whitcroft S., Ellerington M. C., Whitehead M. I.: "The long-term risks and benefits of hormone replacement therapy". J. Clin. Pharm. Ther., 1991, 16, 231.
- [5] Stampfer M. J., Colditz G. A., et al.: "Postmenopausal estrogen therapy and cardiovascular disease. Ten-years follow-up from the Nurse's Health Study". N. Engl. J. Med., 1991, 325, 756.
- [6] National Opinion Poll Survey.: "The Menopause Revolution. How far have we come?" Ciba Pharmaceuticals, Horsham, UK, 1991.
- [7] Ravnikar V. A.: "Compliance with hormone therapy". Am. J. Obstet. Gynecol., 1997, 156, 1332.
- [8] Maoz B., Antonovsky A., Apter A., Wijsenbeek H., Datan N.: "The perception of menopause in five ethnic groups in Israel". Acta Obstet. Scand. Supp., 1977, 6, 69.
- [9] Blumberg G., Kaplan B., Rabinerson D., Goldman G., Kitai E., Neri A.: "Women's attitudes towards menopause and hormone replacement therapy". *Inter. J. Gyncol. Obstet.*, 1997, 54, 271.
- [10] Kupperman H. S., Blatt M. H. G., Wiesbaden H., Filler W.: "Comparative clinical evaluation of estrogen preparations by the menopausal and amenorrhoeal indices". *J. Clin. Endocrinol.*, 1953, 13, 688.
- [11] Ware I., Sherbourne C. D.: "The MOS 36-item short-form survey (SF-36)". Med. Care, 1992, 30, 473.
- [12] Barth Olofsson A. S., Collins A.: "Psychosocial factors, attitude to menopause and symptoms in Swedish perimenopausal women". *Climacteric*, 2000, 3, 33.
- [13] Avis N. E., McKinlay S. M.: "A longitudinal analysis of women's attitudes toward the menopause: results from the Massachusetts women's health study". *Maturitas*, 1991, *13*, 65.
- [14] Bener A., Rizk D. E., Shaheen H., Micallef R., Osman N., Dunn EV.: "Measurement-specific quality-of-life satisfaction during the menopause in an Arabian Gulf country". *Climacteric*, 2000, 3, 43.
- [15] Barrett-Connor E.: "Prevalence, initiation, and continuation of hormone replacement therapy". *J. Women Health*, 1995, 4, 143.
- [16] Coope J., Marsh J.: "Can we improve compliance with long term ERT?" *Maturitas*, 1992, *15*, 151.
- [17] Domm J. A., Parker E. E, Reed G. W., German D. C., Eisenberg E.: "Factors affecting access to menopause information". *Menopause*, 2000, 7, 62.

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