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The North-East Moroccan physicians' management of menopause: Prescription vs. nonprescription of hormonal treatment

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Abstract

This study examined the management of North-East Moroccan physicians of menopause. The poll was carried out on a representative sample of physicians in the Nador region. The sample included gynecologists and general practitioner physicians in both public and private medical sectors. The survey contained focused and open-ended questions on the good knowledge or not of physicians about menopause, their patient population, their prescribing practices, their perceptions, and the different medical approaches to managing the symptoms of menopause. Among the general practitioners interviewed, only 16% of physicians are very knowledgeable about the management of menopause and only 3 physicians have followed continuous training. The others have mainly acquired their information from the internet, medical journals, and scientific magazines. Only one-third of physicians interviewed prescribe menopausal hormonal treatment in this region. The treatment is mainly prescribed to cope with hot flashes (97.1%) and menstrual cycle disruption (85.7%). Others are in favor of non-hormonal treatments and advise women to change their bad daily habits to relieve symptoms. In this region of Morocco, hormonal treatment for menopause is not very common and the majority of general practitioners are not familiar with menopause. *(Afr J Reprod Health 2022; 26[6]:116-124).*

Keywords: Management of menopause; Moroccan physicians; prescription/nonprescription of hormonal treatment

Résumé

Cette étude analyse le système de prise en charge de la ménopause par les médecins du Nord-Est marocain. Le sondage a été réalisé sur un échantillon représentatif de médecins de la région de Nador. L'échantillon comprend des gynécologues et des médecins généralistes exerçant dans les domaines publics et privés. L'enquête contient des questions ouvertes focalisées sur leur niveau de connaissance de la ménopause, leur population de patientes, leurs pratiques de prescription, leurs perceptions et leurs différentes approches médicales pour gérer les symptômes de la ménopause. Parmi les médecins généralistes interrogés, seulement 16% sont bien informés sur la ménopause et 3 suivent des formations continues. Les autres ont principalement acquis leurs informations sur Internet, des revues médicales et des magazines scientifiques. Seul un tiers des médecins interrogés prescrivent un traitement hormonal de la ménopause dans cette région. Le traitement est principalement prescrit pour faire face aux bouffées de chaleur (97,1%) et aux perturbations du cycle menstruel (85,7%). D'autres sont favorables aux traitements non hormonaux et conseillent aux femmes de changer leurs mauvaises habitudes quotidiennes pour soulager les symptômes. Dans cette région du Maroc,le traitement hormonal de la ménopause n'est pas très courant et la plupart des médecins généralistes ne sont pas bien informés sur la ménopause. *(Afr J Reprod Health 2022; 26[6]:116-124).*

Mots-clés: Ménopause; prise en charge par les médecins Marocains; prescription/non prescription; traitement hormonal

Introduction

Menopause is accompanied by symptoms that are not easily tolerated by menopausal women. The medication to reduce the pain of these symptoms has reflected and reinforced traditional views on the role of hormones in women's behavior[1]. What this means is that although menopause was normal, cessation of ovarian function leads to the onset of symptoms that can completely disrupt the normal

balance of even a well-balanced individual[2]. These symptoms include hot flashes, night sweating, headaches, weight change, memory impairment, emotional instability, vaginal dryness, delirium, sleep disorders, dizziness, disturbance, melancholy, agitation, depression, and suicidal tendencies among others[3,4]. There is a therapeutic arsenal to stop or calm menopausal pain through hormonal or non-hormonal treatments. Hormonal treatments for menopause (HTM) or hormone replacement therapy (HRT) were widely prescribed until the early 2000s. Indeed, massive research in the 80s and 90s revolutionized opinion on HTM, and medical voices have been raised to encourage postmenopausal women to take estrogen[5-22]. In these studies, women treated with estrogen were shown to live longer than women without treatment[9,12-14], and epidemiological studies indicated protective effects on mineral bone density and cardiovascular disease[15,16]. The attitude towards estrogen treatment among gynecologists and general practitioners has become more favorable both in medical practice and for the treatment of their partners[17]. However, studies published in the early 2000s questioned HTM[23-24]. They showed that most learned societies have issued recommendations modifying the indications and prescription methods of HRT. The increased risk of stroke and venous thromboembolism has been well demonstrated[25]. Estrogens alone increase the risk of endometrial cancer, while micronized progesterone has no beneficial effect on this risk[26]. Then, HRT must be prescribed after information on the benefit/risk ratio, respecting the contraindications at the minimum effective dose and avoiding the oral route for estrogens as much as possible[27]. In the case of a contraindication to HRT, numerous drug alternatives behavioral therapies help to reduce climacteric symptoms and improve quality of life[28].

The non-hormonal treatment is based on the fact that menopause is not an illness, but it can be a difficult step for a postmenopausal woman. As in the case of HTM there is also an arsenal of non-hormonal therapy. It includes lifestyle modifications, diet and food supplements, non-hormonal medications, and alternative and complementary therapies. These alternative treatments may be offered to relieve symptoms of menopause[29]. They most often contain plant extracts with or without phytoestrogens, including herbal medicine and aromatherapy. Some have contraindications, side effects, or precautions for use[30]. Homeopathy, which has the advantage of presenting a minimum of risks, requires clear pharmaceutical advice, given the number of strains available and the choice of dilution[31]. Sport, yoga, and gymnastics can be solutions to relieve menopause problems. Anything that can provide some relaxation will be beneficial to the female body[32-35]. It is important to know that one should also watch the weight and avoid being disturbed or annoyed and hot weather. The most commonly used non-hormonal drug so far is abufene or beta alanine. It is an amino acid that is somewhat more effective than a placebo. There are also three antidepressants that may decrease the effect of hot flashes. There is also acupuncture which is used one to two weeks apart as soon as symptoms appear. To all this, is added homeopathy, which is recommended when hot flashes originate in the abdomen, and if they occur in the morning upon awakening[32]. One should not forget about food supplements based on natural plants. These plants include sage, black cohosh, red clover, or hops. They have a positive effect on the hormone[29].

In 2003, HRT prescriptions in the US and Canada dropped to between 50 and 60%. In France, while at least a quarter of women aged 50 to 60 were treated in 2000 and 2001, this type of treatment decreased by 62% between 2002 and 2006[36]. In Spain the frequency of HRT prescription is high[37]. Finally, the North American Menopause Society (NAMS) put out new guidelines in 2017 saying that for most women with bothersome menopausal symptoms, the benefits of hormone therapy outweigh the risks in women less than 60 years old or within 10 years of being menopausal[38]. In the same way, the World Health Organization very recently put out guidelines saying that the menopause hormonal treatment is an effective therapy that offers more advantages than disadvantages for women aged less than 60 years or who have had menopause for less than 10 years[39]. In Morocco, according to a study carried out in 2002, the frequency of use of HTM is relatively low

because of recourse to health care to manage menopausal symptoms is relatively infrequent[40].

Our work was therefore meant to shed light on how physicians, in the North East of Morocco, deal with menopause. Do they prescribe hormonal or non-hormonal treatment to women reporting symptoms of menopause? On the other hand, are they for or against the hormonal treatment? This study represents the first survey carried out in this region.

Method

Study design and participating physicians

The survey was carried out in the region of Nador. This region, of the North-East of Morocco, contains 164 private and 114 public physicians for a population of more than 591507 inhabitants[41]**.** This study was performed in collaboration with the division of the Ministry of Health in the region. It was carried out in different areas with different economic and social levels. It covered all public medical centers and hospitals in the region and different private practices ranging from poor to wealthy neighborhoods. An official list of registered physicians provided the sampling frame for this study. This representative sample contains 100 general practitioners and gynecologists from private and public sectors selected from the most frequently consulted by women. The questionnaire was anonymous and confidential. The physician's consent was obtained either by telephone or by direct contact after explaining the objectives of the study. The questionnaire was distributed and explained to the nurse to help the physician complete it. It is picked up a week after its distribution.

The questionnaire included three parts. The first part concerns the socio-demographic and professional characteristics of physicians like: sex, age, and years of practicing. The second part focuses on attitudes and practices regarding menopause. In this part, we asked how many people have consulted for menopausal problems during the last 12 months. Physicians were asked how many prescriptions a month they write for HTM, how they justify their prescriptions and what they think about the risks or benefits of HTM. The third part in our questionnaire concerns the opinion and perception of the physician about menopause. The questionnaire has been pre-tested on some physicians to assess the questions clarity. The results were analyzed using the statistical package for the social sciences (SPSS Program 10.0). The obtained results are presented as percentages and means ± standard deviations (SD). The Chi square test was used to test the association between the modalities of the qualitative variables based on the numbers by considering p values <0.05.

Results

Characteristics of interviewed physicians

Of 137 physicians, practitioners, and gynecologists, invited to take part in this study, 100 agreed to participate. The characteristics and the profile of these physicians are presented in Table 1. The proportion of men is a little larger than that of women (57% for men and 43% for women). The age of the interviewed physicians is between 26 and 63 years old. Two thirds of whom are general practitioners and one third are gynecologists. The majority of gynecologists are men (72.7%) while the proportion of men and women in the case of general practitioners is relatively similar. The distribution between public health and private sector is about 51% and 49% respectively. Regarding the experience of the questioned physicians, almost two thirds have more than 10 years of medical practice (65.5 %) and 25% have 20 years of experience. In this survey, 84% of the physicians interviewed are in the urban area, and only 16% work in the peri-urban sector.

The number of women who consult for menopausal symptoms is on average 60.6 women per year per physician. This number varies significantly according to the profile of the physicians (Table 2). It appears, from this Table, that menopausal women consult male doctors, whether generalists or gynecologists, than female ones. This is probably: i) because of the prejudices made by women on the experience and professional competence of female doctors that lead them to prefer male gynecologists; ii) the majority of

Table 1: Characteristics of interviewed physicians

Characteristic	Modality	Percentage
	Women	43.0
sex	Men	57.0
	Less than 39 years old	38.0
	40 to 49 years old	25.0
Age	More than 50 years old	37.0
Specialty	Generalist	67.0
	Gynecologist	33.0
Years of practicing	Lowest thru 10 years	34.5
	10 to 20 years	40.5
	More than 20 years	25.0
Practice place	Private physician office and clinic	49.0
	Hospital and Public Health center	51.0
Geographical area of work	Urban	84.0
	Peri-urban	16.0

doctors in the region are male. We note also that general practitioners are consulted by about twice of menopausal women than gynecologists because of the price of a consultation with a gynecologist is higher than that of a general practitioner and nowadays usually, general practitioners have a certificate in gynecology and ultrasound which allows them to make almost the same diagnosis as a gynecologist.

The relationship between the result and each of the predictor variables was explored using the Student t-test. Statistical significance was set at $p < 0.05$. The average was estimated with the OR with a confidence interval (CI) of 95%.

Characteristics of menopausal women reported by physicians

By age, we presented in Figure 1 the women who consulted physicians for menopausal reasons in the last 12 months. It clearly appears that women between 50 and 54 years of age consult the most for menopausal problems with a frequency of around 20 women per year. This is in agreement with other studies of the same type[37]. It should be noted that the frequency of consultation for premenopausal and postmenopausal problems, which is approximately 12 women, is relatively the same for the two age groups (45-49 years old) and (55- 59 years old). Very few women between 35 and 44 years old consult for menopause problems. Over 60 years, an average of more than 6 women continue to consult for menopausal disorders.

According to doctors, the main causes for the consultation were essentially hot flushes (65.37%) followed by the disturbances of the menstrual cycle with 42.08% (Figure 2). 40% of menopausal women consult for physical problems, like weight gain, osteoporosis, and joint pain. Emotional, urogenital, and sexual problems are the last symptoms to be complained of by menopausal women. There does not appear to be an association between the degree of the medicalization of menopause and the frequency with which women report hot flashes, as also noted by Obermeyer et al.[42] in a comparative study of the frequency of menopause symptoms reported by women from Lebanon, Morocco, Spain, and the United States.

Physicians who prescribe hormonal treatment

Thirty-five percent of doctors prescribe hormones and sixty-five percent don't. Physicians who don’t prescribe HTM are of two categories. About thirty-eight per cent are against HTM, and forty-five per cent are not well informed about the treatment and seventeen per cent prefer to prescribe alternative treatments like homeopathy, vitamins, dietary supplement. It is to note that physicians had prescribed HTM to approximately a little more than one women corresponding to 36.88% (SD=44.44) of doctors who are in favor of HTM. When doctors were asked for how long they would recommend that women continue the hormonal treatment, more than 61% recommend 36 to 48 months. This result is very different from that of others countries like USA where 28% of doctors recommend more than 10 years of treatment, Spain (Madrid), Lebanon (Beirut) and Morocco (Rabat) where physicians prescribe HTM for a short duration[42].

Table 3 summarizes the characteristics of physicians who are for the HTM and those who are against. It appears, from this table, that the prescription of HTM was significantly associated with all considered characteristics. Regarding the influence of the sex of physicians, it appears that male doctors prescribe HTM (45.6%) more than female (20.9%). Regarding the specialty, gynecologists prescribe HTM more than generalist

Table 2: Number of women consulted physicians according to their sex, specialty and years of practicing

Variables	Modalities	Number[a]	Average[b]	Standard deviation	Test
Sex	Female	35	37.86	32.27	[c]t = 2.62*
	Male	49	76.84	83.61	
Specialty	Generalist	57	49.39	69.73	[c]t = 2.19*
	Gynecologist	27	84.26	64.25	
Years of practicing	Less than 10 years	23	36.04	38.41	[d]F = 2.18 ns
	10 to 20 years	31	64.93	46.70	
	More than 20 years	30	74.93	98.86	

[a]:Total number of women who had gone to the doctor for some reason related to menopause. [b]: The average of women who have consulted the doctor for some reason related to menopause; [c]:Student test, [d]:Snedecor test, *: $p < 0.05$, ns: not significant

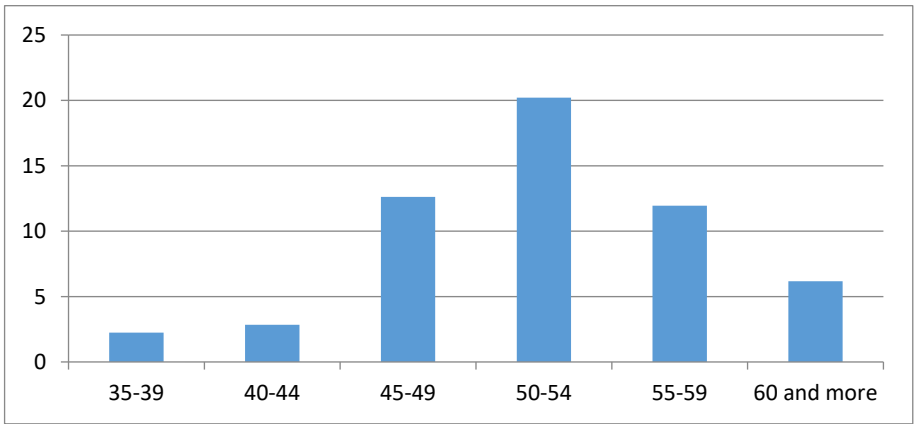

Figure 1: Number of women according to their age groups who consulted physicians for menopausal reasons in the last 12 months

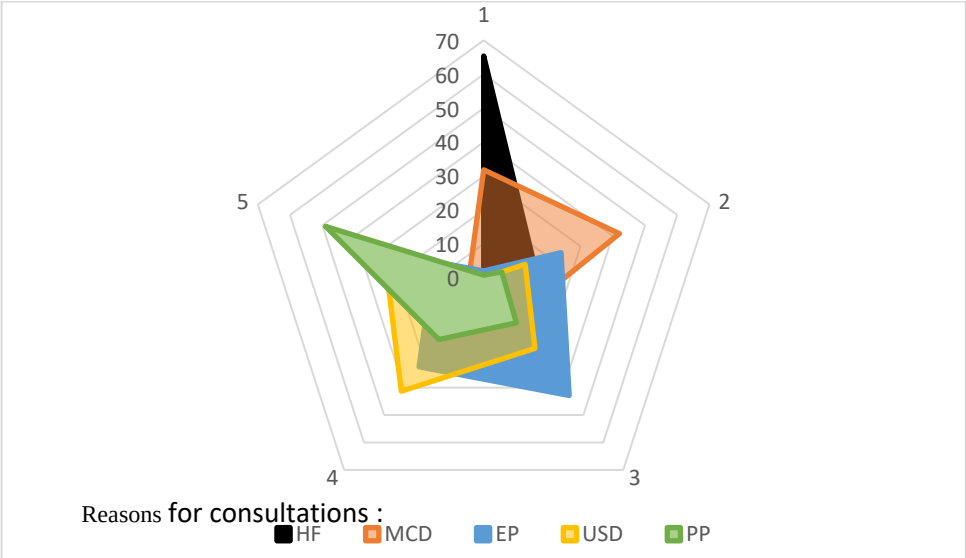

Figure 2: Physicians ranking of the causes consultations. HF: Hot Flush, MCD: Menstrual cycle disruption, EP: emotional problems, USD: Urogenital and sexual disorders, PP: Physical problems

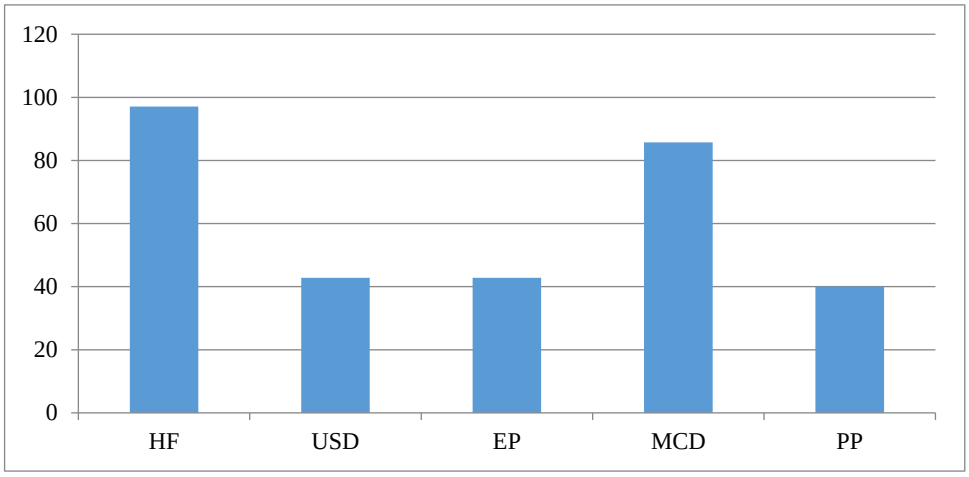

Figure 3: Factors related to hormonal treatment prescription. HF: Hot Flushes, MCD: Menstrual cycle disruption, EP: emotional problems, USD: Urogenital and sexual disorders, PP: Physical problems

Table 3: Characteristics of physicians who are for and those who are against the HTM

Characteristics		N	For (%)	Against (%)	Chi-square
Sex	Female	43	20.9	79.1	6.56*
	Male	57	45.6	54.4	
Status	Generalist	67	28.4	71.6	3.93*
	Gynecologist	33	48.5	51.5	
Age	Less than 39 years old	31	16.1	83.9	15.13***
	40 to 49 years old	20	30.0	70.0	
	More than 49 years old	30	63.3	36.7	
Years of practice	Less than 10 years	29	13.8	86.2	14.84***
	10 to 20 years	34	35.5	64.7	
	More than 20 years	21	66.7	33.3	
All doctors		100	35.0	65.0	9**

Values of chi2 significant at: probability p≤ 0.5 = *; p≤0.01= ** and p≤0.001= ***. ddl = degree of freedom

practitioners, 48.5% against 28.4%. In addition, older and more practiced doctors prescribe hormone therapy more than others. Prescribing hormones is relatively more pronounced among physicians who are over 49 years old, 63.3%, compared to 16.1% for those less than 39 years old. It is also to note that physicians who have more than 20 years of experience prescribe hormone therapy (66.7%) more than those who have less than 10 years of experience (13.8%).

Factors leading physicians to prescribe hormonal treatment

The frequency of prescription of HTM shown in Table 3 was, on average, 36.9%. The symptoms most often mentioned by doctors leading to prescribing HTM are shown in figure 3, which are hot flashes, menstrual cycle disruption, emotional and physical problems, and urogenital and sexual disorders.

The most associated symptoms with the prescription of HTM are hot flashes with 97.1% and menstrual cycle perturbations with 85.7%. The other factors complained about by menopausal women, like physical problems (joint pain and osteoporosis), emotional, urogenital, and sexual disturbances are factors with almost identical frequencies (about 40%). On the other hand, Doctors reported abstaining to prescribe HTM in the cases of breast cancer with 97.2%, history of

thrombosis with 80.6%, and benign or malignant endometrial hyperplasia with 58.3%

Information sources of doctors to stay informed about menopausal treatment

According to our survey, the majority of physicians have mainly gathered their information about menopausal treatment from the internet, medical journals, and scientific articles. Only 16% of physicians are very knowledgeable about the management of menopause and only 3 physicians have followed continuous training. More than 50% consider themselves moderately informed. 27% are little informed and 5% are not informed at all.

Discussion

The frequency of the prescription of HTM is about 35%. A large proportion of those who prescribe HTM are gynecologists and older physicians. Younger physicians and general practitioners appeared to be even more suspicious of HTM than gynecologists. They significantly overestimate the risk of breast cancer, endometrial cancer, and other diseases related to hormonal therapy. These results agree very well with other studies where a low rate of prescription of HTM was observed by young doctors[43-45]. In our opinion, these young doctors were not practicing when HTM was prescribed to prevent cognitive impairment or the occurrence of cardiovascular events. On the other hand, they carried out their medical studies in the period when the results of experimental comparisons contradicted observational ones. These differences in the prescription of HTM by doctors are clearly a function of their specialty, their age, and the training they have received.

In comparison with another study carried out in Rabat (capital of Morocco)[40], it seems that the region plays an important role in the analysis of data because in Morocco, like in other countries, the socio-economic factor of the population is a variable that should not be overlooked. In this region, the educational level of the female is very low and the standard of living is relatively feeble. Therefore, underprivileged women seek care at public health centers because their ability to pay the consultation and medicines is very limited. This probably explains the fact that gynecologists are less consulted than general practitioners, without disregarding the fact that these women were not in school or have a very low level of education and consider that menopause is an inevitable period of the aging process. Consequently; they simply do not go to the doctor. This is in agreement with other studies[46]. The effect of sex of doctors in the prescription of HTM comes from the fact that female doctors are very afraid of breast cancer and prefer to replace it with dietary supplements[29]. This result is contradictory with other studies, which have shown that women are more favorable to HTM than men[47-49].

On one hand, we suppose that the use of menopausal treatment, in this region of Morocco, is limited to rich women reflecting the high cost of medications; on the other hand, women in this region consider menopause as a normal period of life that doesn't require medications.

The physicians interviewed report that among the reasons which lead them to prescribe HTM is the suffering of menopausal women from hot flashes and menstrual cycle disruption which, without treatment, it is difficult to get rid of it. This result is in agreement with other studies carried out in Rabat, Madrid, and Beirut[42]. Finally, physicians, in this region; still have a holdback on prescribing the HTM. It is to note that not all of them are very well informed. Only 16% are very knowledgeable about managing menopause. Several factors can be the origin of this reluctance to use hormone therapy. We cite, as examples, socio-economic, cultural, level of education, customs, and traditions without forgetting that menopause is not a health priority in the country.

Conclusion

This study has shown that the prescription of HTM by physicians in the region of the North-East of Morocco still living a phase of reluctance. Several factors are at the origin of this situation. Women don't consult doctors frequently for reasons related to menopause. On the other hand, there are doctors who are against hormone therapy. The few doctors

who prescribe HTM are gynecologists, older doctors, and male physicians.

Contribution of authors

Sara Esseffar conceptualized and conducted the study. Abdelmajid Moumen, Samia Rkha and Mohamed Loukid supervised and conducted the field research. All authors read and approved the final manuscript.

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