

Original Article

Are there Opportunities for a Specialist Menopause Pharmacist in Libya?

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**ABSTRACT**

Background and objectives: Menopause is the permanent cessation of menses following the loss of ovarian follicular activity. It occurs usually in women in the age range of 45-58 years. The focus of this study was to evaluate the knowledge of Libyan pharmacists about menopause, and its management. The other aim is to determine the attitude towards menopause and Hormone Replacement Therapy (HRT) among Libyan women. **Materials and Methods:** A prospective, structured face-to-face interview was conducted between November 2017 and February 2018. Two different questionnaires were designed; the first one was distributed to 100 women aged ≥ 44 years, and the second designed to pharmacists (n = 100) surveyed their knowledge, basic skills and treatment choices of menopause. All participants were selected randomly. **Results:** The results show that 54% of women experienced menopause at age 49 to 53 years, the most symptoms reported were irregular menstruation (89.65%) and hot flushes (71.26%). (22%) of menopausal women sought medical advice and used HRT. Pharmacists had basic knowledge about usage of combination of HRT but the majority are not aware about HRT interactions with food or with other diseases. **Conclusions:** The study highlighted the general awareness of the pharmacists about menopause and HRT, but sufficient knowledge on HRT interactions and effective communication skills were lacking.

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INTRODUCTION

Menopause, or the final menstrual period (FMP), and the menopausal transition are natural processes that occur in women's lives as a part of normal aging. It becomes official after 12 months without a menstrual period. Some women reach menopause early before age 40 following surgical removal of the uterus and ovaries, chemotherapy or medical treatment [1]. The menopausal transition can span over several years, and often begins with variations in menstrual cycle length in response to rising levels of follicle stimulating hormone (FSH) [2]. During this transition, women may experience many symptoms including

hot flushes, night sweats, sleep and mood disorders, impaired memory, lack of concentration, nervousness, depression, insomnia, bone and joint complaints, and reduction of muscle mass [3]. For some women, symptoms related to menopause importantly impact their daily personal, professional, and social lives, resulting in a desire to reduce any adverse symptoms [4,5]. It is well established that HRT is an effective means of treating postmenopausal symptoms and preventing long term complications [6]. The HRT usage rate is low, largely because majority remains poorly informed about this therapy [7]. The pharmacy profession experienced a change from traditional

drug-oriented services, such as drug distribution and preparation towards patient oriented services. Among these patient oriented services is the Specialist Menopause Pharmacist (SMP) program [8].

The main aim is to assess the knowledge of Libyan pharmacists to menopause, HRT and to see if there are any opportunities for developing a SMP program in Libya. The other aim was to explore attitudes of Libyan women towards menopause and the use of HRT.

METHODS

This study was approved by the dean of the faculty of pharmacy at University of Tripoli and the managers of the selected hospitals permitting for data collection.

This current study has conducted for 16 weeks between November 2017 and February 2018 and 200 participants were involved in the study. All participants were selected randomly from 20 private pharmacies and two main hospitals (the University hospital and Elkhadra hospital) in Tripoli city, Libya. Two different questionnaires were designed after reviewing literature for similar studies [2,5,8,9]. The first questionnaire was given to 100 women aged between 40 to 60 years old. It was designed in Arabic and consisted of 19 questions with closed, open-ended and multiple-choice formats. This four-page questionnaire was given to women and containing queries about demographic data, marital status, medical family history, menstrual regularity, their attitudes towards the menopausal transition and their opinions about menopause as a natural event. Other questions dealt with menopausal symptoms and the use of HRT. Meanwhile the second questionnaire was directed to pharmacists (n= 100) with a work experience from 1-10 years. It was written in English, comprised of twenty-five items regarding the pharmacists' knowledge on the consequences of menopause, treatment options, risks, and the use of Complementary and Alternative Medicine (CAM). In addition to questions related to pharmacists, opinion

on the services they might provide to assist women in their transition through menopause and beyond.

The interviews were held by trained staff and confidentiality of participant's data was assured. The collected data were entered Microsoft Excel software, and descriptively analyzed by means of counts and percentages.

RESULTS

Results of the menopausal women questionnaire:

This study included 100 women aged ≥ 40 years interviewed at different pharmacies to answer the queries related to menopausal status of them, 24% were single while 76% were married. The mean age of the participants was 49 ± 4.0 years [Figure 1]. Menopausal status was determined based on the reported length of time since last menstrual period. Women with slight change in the length of cycle were considered in perimenopause stage, women whose menstruation just ceased after irregularity was considered as menopause, while women whose last menstrual period occurred 12 months or more ago were categorized as post-menopause. As shown in (Table 1); 14% of women were in perimenopause stage, 19% of them were at menopause stage and 67% were in post menopause stage.

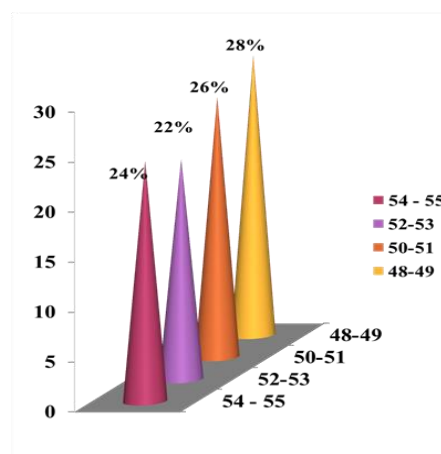


Figure 1. Age of menopause in the participating women (%)

Table 1. Socio-demographic characteristics of the study population.

Women Characteristics		Percentage (%)
Marital Status	Married	76
	Single	24
Health status	Healthy	58
	Un- healthy	42
Menopausal age	48-49	28
	50-51	26
	52-53	22
	54-55	24
Stages of menopause	Perimenopause	14
	Menopause	19
	Postmenopause	67

Women asked about their menstruation and whether they underwent hysterectomy or not, we found that more than three quarters of women (79%) stated that their cessation of menses was due to non-pathological reason (natural cause), 12% of them had hysterectomy and 9% answered that they were using of chemotherapy / radiotherapy as shown in [Figure2].

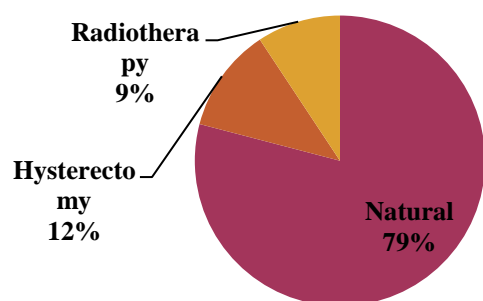


Figure 2. Causes of menopause in the participating women (%)

The current analysis also represented that 86% of survey respondents reported that menopause is a natural stage that occur in all women at certain stage of their life. 87% of the participants had experienced menopausal symptoms, such as irregular menstruation (90%) and hot flushes (71%) (Table 2).

Table 2. Women-experience with menopause symptoms.

Women symptoms	Respondents (n)	Percentage (%)
Women-experience menopausal symptoms	No	13
	Yes	87
Irregular menstruation	78	89.65
Hot flushes	62	71.26
Vaginal dryness	32	36.78
Irregular sleep	39	44.82
Mood swings	47	54.02
Women knowledge of Menopause as a transitional phase	No	14
	Yes	86
Women knowledge of non-pharmacological therapy	No	39
	Yes	61
Healthy food	50	81
Limited caffeine	34	56
Regular sleep	23	37
Exercise	40	66
Women visited physician	29	33.33
Women visited pharmacist	13	14.94
Women contacted relative / friend	45	51.72
Women -use of HRT	Yes	22
	No	78
Women -use of non-hormonal therapy	Yes	71
	No	29

Other women experienced some troublesome symptoms such as vaginal dryness (37%), mood swings (54%) and sleep disturbance (45%). Interestingly, the participating women ignored the question about the reduction in their sexual activity.

Out of 87 women who had symptoms linked with menopause, only 13 women (15%) had counseled community pharmacists for advice, whereas 29 (33%)

of them visited medical professionals (gynecologists/obstetrics) or general practitioners. While 45 (52%) asked their relatives or friends for advice.

It was noted from the current findings that only 22% of the respondents had being treated with HRT and realized that the use of HRT could relieve their menopausal symptoms and prevent long term health risks, in compare to (78%) who had not used any HRT or treatment for menopausal complaints, and they had no knowledge of this aspect. Results suggested that more than half of the women 61% believed that modification in life style such as eating healthy food, exercise and regular sleep could effectively reduce menopause symptoms while 39 of them had answered no.

Results of the pharmacists' questionnaire:

The second group for this study was the 100 pharmacists that answered a survey in order to examine their knowledge and opinions regarding menopause and HRT. This group was further classified into 50 community pharmacists working at private pharmacies and 50 hospital pharmacists at the gynecological department. As shown in (Table 3), Approximately, 76% of pharmacists were familiar with the term menopause and 60 % were aware of the symptoms. The majority of pharmacists (96%) knew that the average age of menopause is 49 years and 91% of them were aware that hot flushes are the most common symptoms associated with menopause. Most of the respondents (90%) knew the long term implications of menopause such as decrease in bone density (osteoporosis) and an increased risk of cardiovascular diseases. Approximately, forty-two percent of the pharmacists were aware that depression and night anxiety are related to menopause. Out of 100 pharmacists, 56 had knowledge about non-pharmacological therapy in decreasing menopause symptoms and 87% of pharmacists were aware of HRT. Also the results showed that 32% of pharmacists

thought that using estrogen only is the first line of treatment while 56% of them were aware that using combined HRT is the first option and has more benefits than using estrogen alone.

Table 3. Knowledge of pharmacists on menopause.

Pharmacists demographics and knowledge		n (%)
Pharmacist Working Site	Community pharmacist	50
	Hospital pharmacists	50
Work experience	1- 5 year	58
	5-10 years	24
	> 10 years	18
Knowledge of Menopause as a term	Familiar	76
	Non-familiar	24
Knowledge of stages of menopause	Yes	63
	No	37
Knowledge of Physiological changes associated with menopause	Yes	60
	No	40
Knowledge of menopausal age	Yes	96
	No	4

Only 4 pharmacists did not consider any treatment of menopause and were skeptical of the combined HRT use as shown in [Figure 3].

On the other hand, 28% of pharmacists reported that combined HRT is the second line treatment of menopause while 47% of them knew that treatment with estrogen only is the second option [Figure 4].

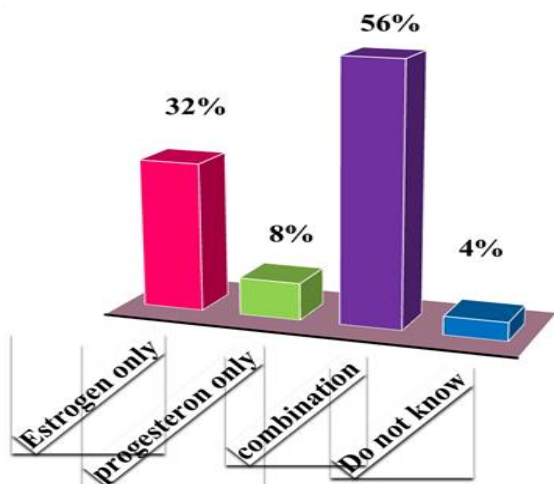


Figure 3. Pharmacists` knowledge of Menopause-First line treatment.

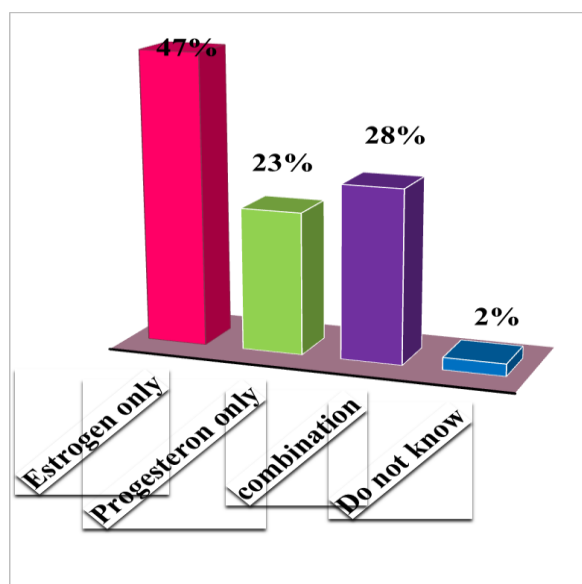


Figure 4. Pharmacists` knowledge of menopause-second line treatment.

patients and more than half (57%) of the pharmacists were able to interpret HRT profile, while 56% of them could advise the postmenopausal women about non-pharmacological therapy. Sixty-nine percent of the responding pharmacists stated that they counsel their patients about HRT adverse reactions. Although there were 48% of pharmacists counseled menopausal women about HRT interactions with other drugs such as cimetidine and antibiotics (e.g. clarithromycin)[®], only 10% of them were aware of HRT-food interactions and 17% of them knew about HRT-disease interactions (e.g thromboembolic, liver diseases, breast cancer and undiagnosed vaginal bleeding). There were only 37% of the participating pharmacists who replied that they educate their patients about non-hormonal therapies for menopause which is available in their pharmacies such as gabapentin, sertraline and fluoxetine. However, 63% of the pharmacists considered menopause women as depressed patients and they did not consistently relate their psychological symptoms to menopause.

Table 4. Pharmacists –Counsel Skills to Menopausal Women.

Pharmacists –counsel skills to menopausal women	N (%)
Counseling on HRT benefits and risks	87
Counseling on HRT side effects/ adverse reactions	69
Counseling on HRT-drug interactions	48
Counseling on HRT- disease interactions	17
Counseling on HRT- food interactions	10
Interpretation of HRT profile	57
Counseling on non-hormonal drugs	37
Counseling on non-pharmacological therapy	56

Table 4 summarizes results with respect to pharmacists’ ability to counsel patients concerning HRT, their ability to understand and interpret scientific knowledge concerning HRT, providing information about HRT-interactions and their ability to counsel menopausal women regarding alternatives to HRT. The study revealed that 87% of pharmacists were able to explain benefits and risks of HRT to their

DISSCUSION AND CONCLUSION

The present study investigated the knowledge, attitudes of Libyan pharmacists toward menopause and evaluated the awareness level of menopause among Libyan women.

The obtained data showed that the average age of menopause in Libyan women was 49 ± 4 years and 86% of them were aware of menopause and had understanding of menopausal transition. The most reported symptoms were irregular bleeding and hot flashes. Our findings were similar to previous Libyan reports which surveyed women about their experience regarding menopause and its associated symptoms [9,10]. The study was also in line with earlier studies conducted in Morocco and in Alexandria which indicated a median age of menopausal women of 48.4 years and 46.7 ± 5.44 years, respectively [11,12]. Moreover, it is consistent with other studies in different nations [13-15].

The present study showed that the participating women neglected the question about the decrease in sexual activity, this may be attributed to the culture of Libyan women where sex is considered as a sensitive topic to discuss particularly for unmarried women. Unlike other Libyan studies which documented that the sexual activities of the studied samples were decreased by 61 % and 48.8%, respectively [9,10].

It was established that the frequency of sexual activity may vary according to race and ethnicity. In a large study on middle-aged and older women, Asian women tended to report less frequent sexual activity than the White women [16,17]. According to other studies in Chile and Nigeria the prevalence of sexual dysfunction during menopause were 51.3% and 40.4%, respectively [18, 19].

Outcomes of the current study found that awareness of menopausal women to use hormone replacement therapy was low since 78% of the women were not taking any medicine to treat their symptoms, this is due to the fact that many women held the opinion that the climacteric phase is a normal phase in a woman's life and it is not a disease that needs to be treated with medication. This in agreement with results of other large studies which revealed that only 13.6% of women were aware about HRT [20, 21]. This is also

supported by a research carried out in Scotland on 1500 women, which showed that the women had a poor knowledge of the potential risks and benefits of HRT [22].

Some women, 32 (32%) had identified the benefits of using HRT in menopause management, contradictory to a recently published results [23, 24]. Also, Alshogran and his co-workers have examined the awareness towards menopausal hormone therapy on 450 of premenopausal Jordanian females aged 20-40 years, and found that the majority of participants did not know the roles, benefits, and risks of HRT [25].

Regarding to opinions of women on non-pharmacological therapy, 61 of the participating women (61%) thought that eating healthy food, using natural products, decreasing caffeine consumption and exercising have good effects in reducing some menopausal symptoms. These results were also documented in other publications which have shown the health benefits of regular exercise, limitation of caffeine and tobacco cessation in treating vasomotor symptoms [26,27].

Among 87 of women who had menopausal symptoms, 45 (51.72%) declared that they were comfortable to discuss their symptoms with their female family members or friends rather than consulting health care providers (pharmacists, general practitioners and gynecologists/ obstetrician). A possible explanation that Libyan women usually welcome menopause and perceive it as a natural phenomenon that creates respect, wisdom, freedom from feminine hygiene products and pregnancy.

It was found that 71 women who had never utilized HRT, were in fact consulted at least one psychiatrist rather than a gynecologist and or used at least one non-hormonal drug. Data from the Seattle Midlife Women's Health Study suggested that nearly half of postmenopausal women report noticeable cognitive symptoms, including attention, concentration, and

memory problems [28]. Other researches also have conducted in the United States showed that 42% of postmenopausal women reported a negative change in cognition [29,30].

As regards to the pharmacists' knowledge on menopause as a term and its symptoms; 76% of pharmacists had familiarity to menopause and 60 % of them had knowledge on the long term of its complications such as osteoporosis. We found that 87% of pharmacists were knowledgeable of the benefits and risks of HRT and believed the risks versus benefits of HRT should be discussed with the patient before initiation. In addition, 69% of them were aware about HRT adverse reactions.

In contrast to the studies conducted in other countries [31-33], our data demonstrated that only (10%) of pharmacists said they could counsel women about HRT- food interactions and (83%) lacked the skills to adequately instruct their patients about HRT-disease interactions. The awareness of the surveyed pharmacists about non-hormonal therapy and HRT-drug interactions was 37% and 48%, respectively. Our findings are consistent in some respect with those of Utian, Collins and colleagues who found lack of information provided to women regarding menopause and HRT [34,35].

This survey targeted middle-aged Libyan women to assess their beliefs and experience regarding menopause and use of HRT. The mean age of menopause in Libyan women is 49 years comparable to previous reported studies in Libya, and most of menopausal women were aware of some aspects of menopause but not of hormone replacement therapy.

This study also investigated the knowledge and attitude of Libyan pharmacists with respect to menopause and the treatment options of its related symptoms. Results show that the pharmacists are knowledgeable about various topics of menopause, its long complications and to some extent have

knowledge of HRT use, and HRT- drug interactions. However, knowledge was lacking in specific areas such as HRT-food interactions and HRT-disease interactions. Furthermore, the pharmacists were lacking reliable information on the relation of menopause to the use of non-hormonal therapy and their consultation skills were poor. Nevertheless, there is a clear need for a specialized educational program for pharmacists in the field of menopause in order to be capable of providing patient counseling so that women can take informed decisions regarding HRT. That will result in reaching therapy-optimization, recommendations and lead to improvement in the quality of women life.

Limitations of the Study

Since the number of the study participants was small and the sample population was drawn from one city (Tripoli), it does not fully represent all menopausal women or all Libyan pharmacists across Libya. Thus, it is difficult to generalize the results about the menopause among Libyan women or Libyan pharmacists.

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Disclaimer

The article has not been previously presented or published, and is not part of a thesis project.

Conflict of Interest

There are no financial, personal, or professional conflicts of interest to declare.

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