

Coping Strategies to the Problems Associated With the Postmenopausal Women

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Abstract

Background: All post-menopausal women go through estrogen deficient years, which can manifest in both physical and emotional ways. **Aim:** The aim of study is to assess the problems of postmenopausal women and detect the coping strategies used **Subjects and methods:** This is a descriptive study A total of 100 post-menopausal women were randomly recruited from postmenopausal women attending outpatient clinic of Sohag Public Hospital and AwladElyas Health Unit in Assiut . A well designed questionnaire was prepared and test of reliability showed its validity. The participants were asked to fill in a questionnaire of 5domains; domain 1included socio-demographic data, domains 2and 3included prevalence of physical menopausal symptoms and coping strategies adopted and finally domains 4and 5included sexual and psychological menopausal symptoms and the adopted coping strategies to relieve these symptoms **Results:** Majority of women experienced Bones pain, headache and hot flushes came on top of menopausal symptoms .On the other hand, sexual and urinary symptoms were the least likely to be reported .Coping strategies were relatively successful for relieving headache , fatigue and night sweating **Conclusion:** The high prevalence rates of menopausal symptoms and the relative incapability of coping with them **Recommendations** Enhance women's awareness about menopause problems and coping with them through educational program .

Keywords: *Coping & Menopausal Symptoms.*

Introduction

Menopause is the permanent shutting down of the female reproductive system, a considerable length of time before the end of life span. The term menopause simply refers to the last menstrual period which is defined by not having had a period in 12 months. Although a technical definition of menopause refers to the last period, it is not an abrupt event but a gradual process. Menopause is a natural transition encompassing not only the biological changes but also the social and cultural changes associated with the aging process. Post-menopause refers to a woman's time of life after menopause has occurred (**Discigil et al., 2006 & Abdul Rahman et al., 2010**). Cessation of menstrual cycles at menopause is accompanied by many physiological changes such as hot flushes, cold sweats, dizziness, faintness, nausea, vomiting, breast tenderness, bloating, weight gain, skin and hair disorders, anorexia nervosa, edema, swelling, pelvic discomfort, headaches or migraines, changes in bowel habit and reduced coordination. These in turn are thought to increase the risks of various chronic diseases including heart diseases and osteoporosis (**Dimkpa, 2011& El Shafie et al., 2011**).

As these biological changes may coincide with considerable psychosocial events, menopause is described as a period of psychological difficulties. Common psychological symptoms of menopause

include mental stress, mood disturbances, panic attacks, depression, irritability, crying spells, anxiety, sleep disturbances, concentration difficulties, feeling of stress, fatigue, confusion, lowered judgment, lowered motor coordination, forgetfulness, insomnia, distractibility, restlessness, tension and loneliness. The substantial biological and psychosocial changes occurring in 50 - 85% of women during menopause can cause great stress and disability (**Dimkpa, 2011& El Shafie et al., 2011**).

The menopausal symptomatic reaction can be taken to be the sum of the impact of the three main components of (a) the amount of estrogen depletion and the rate at which estrogen is withdrawn (b) the inherited and acquired propensities to succumb or withstand the imposition of the overall aging process and (c) the psychological impact of aging and the individual's reaction to the emotional implications of a change of life (**Williams et al., 2009**).

The psychological or psychosomatic symptoms are sometimes grouped together as the menopausal syndrome and their causal relation with estrogen is uncertain. It is also known that many postmenopausal women obtain inadequate sleep and that sleep problems are common during the menopausal transition (**Abdul Rahman et al., 2010**)

The role of nurses should focus on educating women who do not have the necessary knowledge about postmenopausal symptoms. The nurse should also ensure that postmenopausal women have all the information they need and to be able to discuss the risks and benefits of various therapeutic options for individual women, and know where to direct women to receive them.

Significance of the study

Following recent medical advances and the consequent increase in life expectancy, the number of menopausal women is a rapid rise. According to the WHO, the population of women aged over 50 years will exceed one billion in 2030 (Rubinstein, 2013). The incidence of menopause-associated symptoms in Egyptian women is higher than in the West, probably because of the different 'socio cultural attitudes' towards the menopause in different communities (Moustafa, et al., 2015). The present study focuses on an age group which always has special needs and passes a critical period physiologically, biologically and emotionally. Menopause, an important stage within the continuum of the health in a woman's life, has gained a lot of attention since the last century.

Aim of study

The study aims to assess the physical, sexual and psychological problems of postmenopausal women and to identify the coping strategies adopted by postmenopausal women to relieve such symptoms.

Research questions

The study should give overwhelming answer on two main questions

- What are the most disturbing manifestations postmenopausal women usually complain of?
- What are the coping strategies mostly used by postmenopausal women to adapt to these manifestations?

Subjects & Methods

Research Design: A descriptive cross-sectional study

Setting

The study was conducted at outpatient gynecological clinic of Sohag Public Hospital and outpatient clinic of Awlad-Elyas Health Unit in Assiut in the period between June 2015 and January 2016.

Sample Size

A total of 100 post-menopausal women were randomly recruited to take part in the study using a classical random simple method.

Sample Size Justification

All subjects who were eligible to the inclusion criteria, attended the clinic and the health unit during the days of study and accepted to take part of the study were included.

Sampling: Random sampling technique.

Inclusion Criteria

- The women whose age group between 45 and 55 and attained menopause.
- The women who are residents of Sohag and Assiut.

Exclusion Criteria

Women who attained menopause surgically (overectomy, hysterectomy) or via chemotherapy

Data Collecting Tool

The participants were asked to fill in a questionnaire of 5 domains; domain 1 included the socio-demographic data of the participants, domains 2 and 3 included prevalence of physical menopausal symptoms amongst women and coping strategies adopted and finally domains 4 and 5 included sexual and psychological menopausal symptoms and the adopted coping strategies to relieve them. The questionnaire is well-designed and was revised many times for accuracy and consistency. All comments and opinions were taken into consideration during its design.

Pilot study

A pilot study was conducted earlier on about 10% of the sample size and their results were included in the final sample.

Reliability

Reliability of the data collecting tool was tested and Kappa was 0.77.

Data Collection steps

Data collection was done by all authors. First the authors were subjected to the same training on the methods of data collection in order to avoid inter and intra data collection bias.

Then, explanatory workshop was given to the participants to give them an overwhelming view on the steps of the study, its purposes and the benefits which can be achieved throughout this study.

Later, questionnaires were filled by the authors via individually interviewing the subjects. First the authors asked the participants about the basic personal data and socio-demographic background. Second, patients were questioned about the physical menopausal symptom and which coping strategies they mostly use to counterpart these symptoms. Finally, patients were asked about the psycho-sexual manifestations of menopause and which coping strategies they usually use.

Patients who failed to mention any kind of coping strategies were considered not coping.

Ethical Considerations

The study was approved by the ethical committee of the Faculty of nursing, Sohag University and to carry out this study, official approval was obtained from of the manager of Sohag Public Hospital and the manager of Awlad-Elyas Health Unit. Verbal consents were obtained from the participating woman before filling in the questionnaire. We also explained the purpose of the study to women, assuring privacy will be kept.

Statistical Analysis

Data were analyzed using the software, Statistical Package for Social Science, (SPSS) version 19. Frequency distribution with its percentage and descriptive statistics with mean and standard deviation were calculated. Chi-square, t-test, correlations were done whenever needed. P values of less than 0.05 were considered significant.

Results

Table (1): Socio-demographics of the participants (n=100).

Variables	N	%
Age (years)		
Range	45 – 55	
Mean ± Sd	50.0±2.7	
Age groups		
45-49	36	36.0
50-55	64	64.0
Educational Level		
Illiterate	72	72.0
Primary	17	17.0
Preparatory and secondary	8	8.0
University	3	3.0
Occupation		
Work	3	3.0
House wife	97	97.0
Residence		
Urban	21	21.0
Rural	79	79.0
Marital Status		
Married	70	70.0
Widow or divorced	30	30.0

Table (2): Distribution of the menopausal symptoms amongst the participants (n=100).

Menopausal Symptoms	Yes		No	
	n	%	N	%
Hot flushes	89	89.0	11	11.0
Insomnia	54	54.0	46	46.0
Night sweating	87	87.0	13	13.0
Fatigue and exhaustion	86	86.0	14	14.0
Loneliness	48	48.0	52	52.0
Depression	48	48.0	52	52.0
Headache	92	92.0	8	8.0
Tension and difficulty to concentrate	62	62.0	38	38.0
Urinary incontinence	38	38.0	62	62.0
Vaginal dryness	39	39.0	61	61.0
Dyspareunia	21	21.0	79	79.0
Bones pain	95	95.0	5	5.0
Skin dryness	61	61.0	39	39.0

#More Than one Answer

Table (3): Coping Strategies of participants with the physical changes of menopause.

Coping strategies with Physical Menopausal Symptoms	Pattern of Coping	N	%
Hot flushes (n = 89)			
Wearing light cotton clothes	Coping	6	6.7
Taking shower		13	14.6
More than one way		18	20.3
	Total coping	37	41.6
Nothing	Not coping	52	58.4
Insomnia (n= 54)			
Avoid afternoon sleeping	Coping	3	5.5
Fixed time to sleep		5	9.3
Drugs administration		6	11.1
	Total coping	14	25.9
Nothing	Not coping	40	74.1
Night sweating (n = 87)			
Sleep in cool place and using air conditioner or fan	Coping	7	8.0
Wear light cotton clothes		45	51.8
Drinking cold fluids at night		2	2.3
More than one way		6	6.9
	Total coping	60	69.0
Nothing	Not coping	27	31.0
Fatigue and exhaustion (n= 86)			
Taking rest	Coping	57	66.3
Drugs administration		4	4.7
	Total coping	61	70.9
Nothing	Not coping	25	29.1
Bones pain (n= 95)			
Making massage or comfortable application	Coping	4	4.2
Drugs administration		42	44.2
	Total coping	46	48.4
Nothing	Not coping	49	51.6

Coping strategies with Physical Menopausal Symptoms	Pattern of Coping	N	%
Skin dryness (n= 61) Drinking water Taking hormonal therapy Apply skin cream	Coping	5	8.2
		5	8.2
		8	13.1
	Total coping	18	29.5
Nothing	Not coping	43	70.5
Headache (n= 92) Drink cup of tea Drugs administration	Coping	53	57.6
		23	25.0
		Total coping	76
	Nothing	Not coping	16

Table (4): Coping Strategies of participants with the psychological and sexual changes of menopause.

Coping strategies with Psychological and Sexual Menopausal Symptoms	Pattern of Coping	N	%	
Sense of loneliness (48) Visiting family and friends Watching TV	Coping	8	16.7	
		13	27.1	
		Total coping	21	43.8
	Nothing	Not coping	27	56.2
Depression (n= 48) Seeing a doctor Drugs administration	Coping	5	10.4	
		8	16.7	
		Total coping	13	27.1
	Nothing	Not coping	35	72.9
Tension and difficulty to concentrate (n= 62) Asking doctors or drugs administration Taking rest	Coping	27	43.5	
		13	21.0	
		Total coping	40	64.5
	Nothing	Not coping	22	35.5
Urinary incontinence (n= 38) Drugs administration	Coping	5	13.2	
		Total coping	5	13.2
		Nothing	Not coping	33
	Vaginal dryness (n = 39) Using vaginal cream Drinking water	Coping	2	5.1
3			7.7	
Total coping			5	12.8
Nothing		Not coping	34	87.2
Dyspareunia (n= 21) Using gel	Coping	1	4.7	
		Total coping	1	4.7
		Nothing	Not coping	20

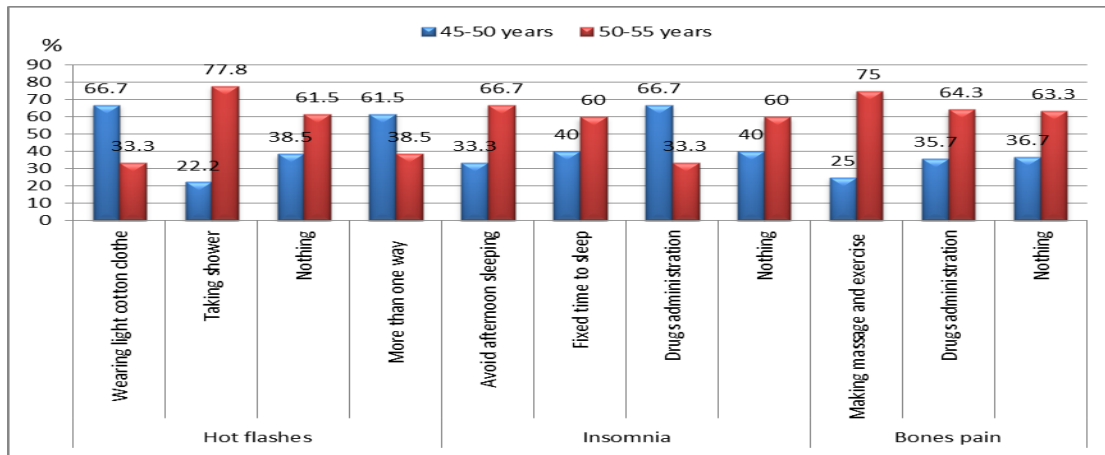


Figure (1): Distribution of some physical coping strategies by age category

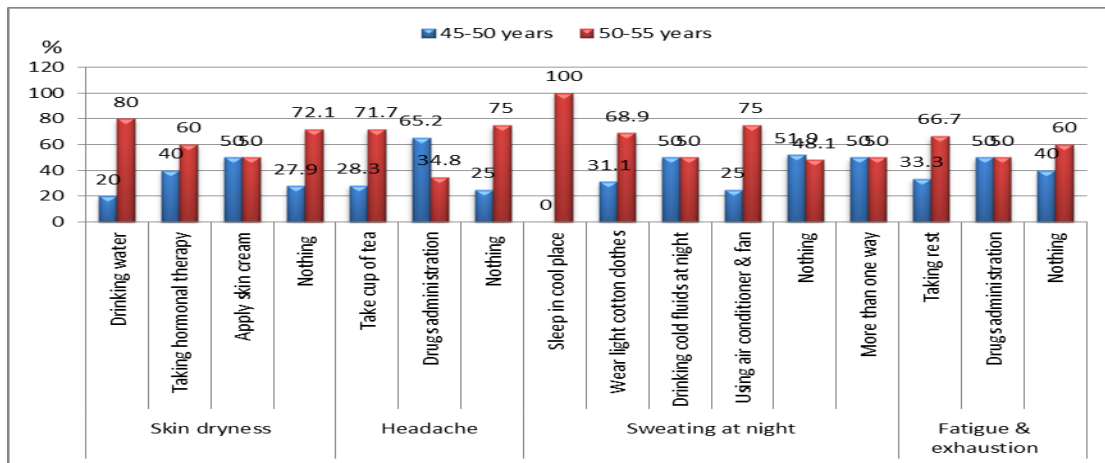


Figure (2): Distribution of some physical coping strategies by age category

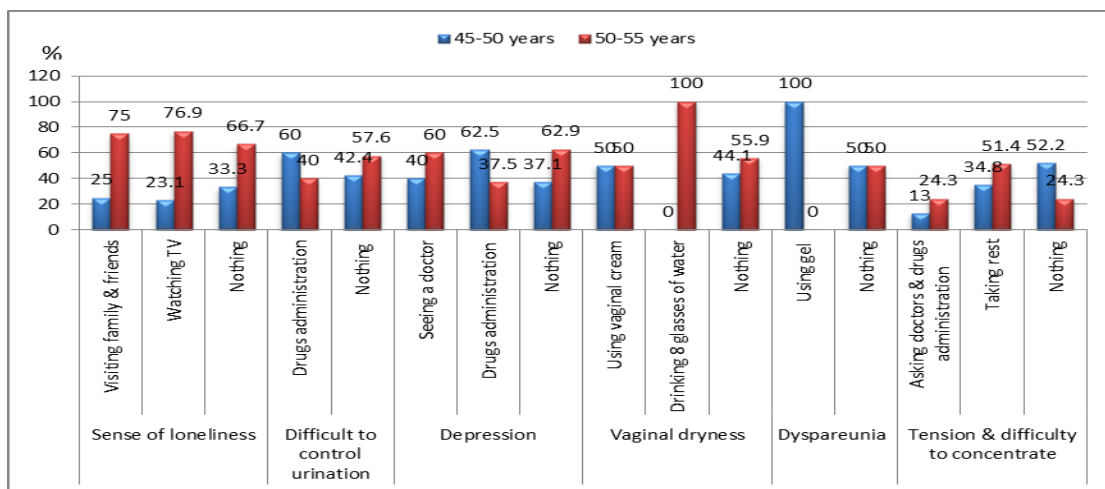


Figure (3): Distribution of some psychological and sexual coping strategies by age category

Table (1): shows the socio-demographic characteristics of the participating women. The age of subjects ranged between 45 and 55 years with a mean age 50.0 ± 2.7 years, distributed in two groups; 36% between 45 and 49 years and 64% between 50 and 55 years. 72% could not read or write while the remaining portion was distributed among the different educational level. Only 3% of the women were working by the time of the study. Also, 79% of the women were residing rural areas compared to 21% living in urban suburbs. The table also shows that 70% of the women were still married by that time while 30% were widows or divorced.

Table (2): shows the distribution of menopausal symptoms among the study sample. As shown, bones pain, headache and hot flushes came on top of menopausal symptoms list with 95%, 92% and 89%, respectively followed by night sweating 87% and fatigue 86%. On the other hand, sexual and urinary symptoms were the least likely to be reported not exceeding 40%. For psychological symptoms, depression and feeling lonely were stated by 48% each.

Table (3): shows the strategies adopted by women to cope with the physical symptoms of menopause. Generally, coping strategies were relatively successful for relieving headache 82.6%, fatigue 70.9% and night sweating 69%. For headache, drinking a cup of tea was the most likely strategy to relieve headache. Taking rest was stated by most females who could cope with fatigue while wearing light clothes was the first choice of women for combating night sweating. The table also shows that women found difficulty coping with skin dryness, hot flushes, insomnia and bones pain. However, women suffering from hot flushes resorted to wearing light clothes and taking cool showers .while taking drugs was the choice number one for women with bones pain. Women who could cope with insomnia said that they tried to have a fixed time of sleeping, avoided afternoon sleeping or had drugs.

Table (4): shows the strategies women usually use to cope with psychological and sexual symptoms of menopause Surprisingly, apart from relieving tensions and concentration difficulties, women could not cope with other manifestations. According to the table, 64.5% of women could beat their tensions by medical consultation or taking rest. On the other hand, the great majority of participants could not cope with dyspareunia and difficulties in urination. However those who could cope with such problems relied on medications to relieve their sufferings. Women who felt lonely resorted to visiting friends and relatives or watching television. The most worrisome finding is that almost 73% of the sample

could not cope with depression which may lead to further drawbacks.

Figure (1): Show the relation between the strategies adopted by women to cope with the hot flashes , insomnia and bones pain and age of women . It was found that 77.8% of women at age group 50-55 taking shower to relives hot flashes compared to 22.2% of age groups 45-50. Regarding to coping with insomnia 66.7% of women at age group 45-50 use drugs to relives insomnia compared to 33.3% of age group 50-55 used drugs . 57% of women at age group 50-55 making massage and exercise to relives bones pain compared to 25 % only of age 45-50 used massage and exercise.

Figure(2): Reveals the relation between the strategies adopted by women to cope with other physical symptoms and age of women . It was found that 72.1% of woman at age group 50-55 not used anything to relives skin dryness . 71.7 % of women at age group 50-55 take cup of tea to relive headache. Regarding to sweating at night the women at age group 50-55 more used coping strategies than women at age group 45-50 years.

Fig (3): Regarding the relation between strategies women use to cope with psychological & sexual symptoms of menopause and age of study sample. It shows that 75% & 76.9 of women at age group 50-55 visiting family & friends and watching TV respectively to relives sense of loneliness compared to 25 % & 23.1% of women at age group 45- 50 use the same coping strategies. As regard to vaginal dryness no difference between age groups in using of vaginal cream to relives vaginal dryness. To relives dyspareunia 100% of women at age group 45-50 using gel .

Discussion

Menopause, sometimes called a second puberty, is a critical stage in every woman's life (**Yazdkhasti et al., 2015**). Certain characteristics of this multidimensional evolutionary process affect women's quality of life and put them at high risk of developing various health conditions (**Nosek et al., 2012 & Harris, 2013**).). Despite the mentioned improvement in life expectancy, menopause age has remained relatively constant, that is, postmenopausal years constitute about one-third of women's lives (**Al-Safi & Santoro, 2014**). Therefore, menopause can potentially be a major health issue. Postmenopausal women experience a variety of symptoms including hot flashes, night sweats, sleep disorders, anxiety, irritability and mood swings (**Brandt, 2013**). All post-menopausal women go through estrogen deficient years, which can manifest in both physical

and emotional ways leading to impairment of the quality of life (**Discigil et al., 2006**).

In the present study, high prevalent rates of physical, psychological and sexual symptoms were noticed which consist with many previous findings (**Discigil et al., 2006, Asbury et al., 2006 & Moustafa, et al., 2015**). What is really worth pointing out is that the participants in the study did not refer to exercise as a method of relieving the menopausal symptoms. However, this finding can be justified by the old age of the participants in addition to the rural nature of Sohag which does not encourage females to practice exercise. This findings disagree with a study conducted by **Asbury et al., (2006)** on the importance of continued exercise participation in quality of life and psychological well-being in previously inactive post-menopausal women showed that exercise and physical activity provide a wide range of health benefits for post-menopausal women. The author concluded that healthy post-menopausal women gained significant psychological benefit from moderate-intensity exercise.

The results of the study also showed that bones pain was the main complaint of 95% of subjects and more than half of them could not cope with these pains. These findings consist with the results of **Yehia et al., (2011)** who stated that majority of pre-menopause women had been complained from bone aches. Alike, **Abdul Rahman et al., (2010)** found that bone pains was one of the most common symptoms for postmenopausal women, albeit the authors found relatively a lower rate of bone pains (80%).

In this study, 89% of the participants stated having hot flushes "one of the most distressing symptoms that women experience as they enter the menopause" and more than half of them could not cope with these flushes. This result agree with (**Yakout et al., 2011**) who mentioned that the majority (85.0%) of women have severe degree of hot flushes. However, the authors cited that hormone replacing therapy was the most effective way of relieving hot flushes. In a study by **Loutfy et al., (2006)**, who conducted the survey on postmenopausal women in Alexandria, hot flushes were the most common symptom exceeding the level of 97%.

It had long been thought that hot flushes were caused directly by the abrupt lowering of B-Estradiol levels, but recent literature showed that a woman's sympathetic nervous system is more active after menopause because of low estrogen, causing the dilation of skin arterioles and sweating, as well as the rise in body temperature and an increase in heart rate (**Discigil et al., 2006**). In the study results females resorted to having showers and wearing light clothes. This may be because of the lack of hormone

replacement therapy culture in the Egyptian society and the negative publicity of such medications.

The results of present study also referred to worrisome findings by detecting higher rates of depression and feeling lonely amongst the women (48%) and very low rates of coping with such problems. However, the high rate of widows and divorced in the study sample "30%" could an explanation for such high figures. This is agree with study conduct in Egypt by (**Moustafa, et al., 2015**) (41.2%) had sever depressed mood which heights from that reported from study done In Ebril City which revealed to that only (9.4%) of menopausal women had depressed mood (**Gazang & Jwan 2012**) in their study about perception and experience regarding menopause among menopause women attending teaching hospitals in Erbil City. this wide variation related to methodological differences and under estimation of depression in our community due to stigma and shame from mental disorders. However, according to the available literature, **Abdul Rahman et al., (2010) & Yehia et al., (2011)** concluded relatively high prevalence rates of psychological problems, especially depression and stress amongst the postmenopausal women.

In addition, headache was one of the most cited problems in present study. Regarding coping patterns that relieve headache, the present study found that the traditional coping patterns included drinking a cup of tea around two third among menopausal women, and one quarter were taking drugs. In consistence to this results, headache was one of the commonest symptoms recorded by **El Shafie et al., 2011 & Yehia et al., (2011)**. concluded relatively high rates of headache in women, however his sample stated that applying drinking a cup of tea was beneficial in decreasing headache. This difference may be explained by educational and traditional factors in addition to community's habits

Moreover, the present study showed that the great majority of females could not cope with urinary incontinence. In general, urinary incontinence is one of the most widespread chronic diseases, posing a social problem in postmenopausal women. Based on its symptoms and causes, several types of urinary incontinence are distinguished: stress incontinence, urge incontinence, mixed incontinence, overflow incontinence, and neurological incontinence. Although the disease does not present a life threat, the sphere it concerns is delicate in its nature. Apart from a disagreeable sensation of uncontrolled urine leakage, sufferers are confronted with a disagreeable odor. The intimate nature of the symptoms and their adverse effect on daily functioning imposes a significant mental burden both on the sufferers and their partners, causing the frustration of many

psychological, social and existential needs (Starczewski et al., 2008 & Yazdkhasti et al., 2015).

In addition, according to the present study, vaginal dryness as cited by menopausal women was more than one third of the sample (39%), dyspareunia 21% and urinary incontinence 38%. This result agreed with Ebrahim (2006), who found that vaginal dryness represented 30% of the complaints, and dyspareunia represented 32.3% of the complaints of his sample. These differences in result may be due to culture, residence, and education. Sexual problems in women are highly prevalent in this age and are frequently associated with personal distress and impaired quality of life.

For the skin manifestations and vaginal dryness, the decline of B-Estradiol during menopause is one of the culprits in the accelerated aging of the skin (Abdi et al., 2016). This results in lowered estrogen and progesterone production, which in turn leads to changes in the skin. Estrogens stimulate fat deposits over the female body; as estrogen levels drop during menopause, fat deposits tend to become redistributed and often concentrated over the abdomen and/or on the thighs and buttocks. The result is a loss of supportive fat below the skin of the face, neck, hands and arms; this allows sagging wrinkles to appear, and the skin over these areas is less easily compressed, as it loses its mobility (Norozzi et al., 2013 & Abdi et al., 2016).

Conclusion

In conclusion, The age of subjects ranged between 45 and 55 years with a mean age 50.0 ± 2.7 years. The high prevalence rates of menopausal symptoms . Bones pain, headache and hot flushes came on top of menopausal symptoms. Coping strategies were relatively successful for relieving headache 82.6%, fatigue 70.9% and night sweating 69% while difficulty coping with skin dryness, hot flushes, insomnia and bones pain. the relative incapability of coping with them .

Recommendation

- Awareness raising program should be conducted at gynecological clinics to improve women awareness regarding menopausal symptoms and coping strategies to be used to relieve them.
- More studies should be done to further understand the coping strategies used for menopausal symptoms.

References

1. **Abdi F., Kazemi F., Ramezani Tehrani F., Roozbeh (2016):** Protocol for systematic review and meta-analysis: hop (Humulus lupulus L.) for menopausal vasomotorsymptoms. *NBMJ Open*.22;6(4):e010734.
2. **Abdul Rahman S., Zainudin S., & Kar Mun V., (2010):** Assessment of menopausal symptoms using modified menopause rating scale(MRS) among middle age women in Kuching, Sarawak ,malaysia *Asia Pacific Family Medicine*, 9:5
3. **Al-Safi Z., Santoro N., (2014):** Menopausal hormone therapy and menopausal symptoms. *Fertil Steril* 101:905–15.
4. **Asbury E., Chandruangphen P., Collins P., (2006):** The importance of continued exercise participation in quality of life and psychological well-being in previously inactive post-menopausal women. *Menopause*: 13(4): 561-567.
5. **Brandi C., (2013):** The effects of yoga participation on symptoms associated with menopause: a mixed methods study [All Dissertations]. Clemson University, Paper 1241.
6. **Dimkpa, D., (2011):** Psychosocial Adjustment Needs of Menopausal Women, *International Multidisciplinary Journal*, Ethiopia 5 (22):288-302
7. **Discigil G., Gemalmaz A., Tekin N, Basak O., (2006):** Profile of menopausal women in west Anatolian rural region sample. *Maturitas*. 20; 55 (3):247-54.
8. **Ebrahim. S., (2006):** Self care measures torelieve menopausal symptoms
9. **El Shafie K., Al Farsi Y., Al Zadjali N., Al Adawi S., Al Busaidi Z., Al Shafae M., (2011):** Menopausal symptoms among healthy, middle-aged Omani women as assessed with the Menopause Rating Scale. *Menopause.*;18(10):1113-9 .
10. **Harris M., (2013):** Menopause: the need for a paradigm shift from disease to women's health. PhD thesis, Southern Cross University, Lismore, NSW.
11. **Gazang Najmaddin Mustafa & Jwan Muhamad Sabir (2012):** Perception and Experience Regarding Menopause among Menopausal Women Attending Teaching Hospitals in Erbil City
12. **Loutfy I., et al., (2006).** Women's perception and experience of menopause: a community-based study in Alexandria, Egypt. *Eastern Mediterranean Health Journal*, 12:93–106.

13. **Moustafa, M., Ali, R., Elsaied, S., & Mohamed S., (2015):** Impact of menopausal symptoms on quality of life among women's in Qena City, IOSR Journal of Nursing and Health Science Volume 4, Issue 2 Ver. II, PP 49-59
14. **Norozi E., Mostafavi F., Hasanzadeh A., Moodi M., Sharifirad G., (2013):** Factors affecting quality of life in postmenopausal women, Isfahan, 2011. J Educ Health Promot. 2:58-66.
15. **Nosek M., Kennedy H., Gudmundsdottir M., (2012):** Distress during the menopause transition. A rich contextual analysis of midlife women's narratives. Sage Open 2:21.
16. **Rubinstein H., (2013):** The meanings of menopause: identifying the bio-psycho-social predictors of the propensity for treatment at menopause. PhD thesis , Lucy Cavendish College, The University of Cambridge
17. **Starczewski A., Brodowska A., Brodowski J., (2008):** Epidemiologia i leczenie nietrzymania moczu oraz obniżenia narządów miednicy u kobiet. Polski Merkurusz Lekarski. 25 (145):74–76.
18. **Williams, R., Levine K., Kalilani. L., Lewis J., & Clark, R., (2009):** Menopause-specific questionnaire assessment in US population – based study shows negative impact on health related quality of life. Maturitas .62(2): 153-9
19. **Yazdkhasti M., Simbar M., Abdi F., (2015):** Empowerment and coping strategies in menopause women: a review. Iran Red Crescent Med J 17:e18944.
20. **Yehia. M., Abo-Shabana. K., & Samir. N., (2011):** adjusting activities among pre-menopausal women. New Egyptian Journal of Medicine Vol.:45 ; No.: 3 1st
21. **Yakout S., kamal S., & Moawed S., (2011):** Menopausal Symptoms and Quality of Life among Saudi Women in Riyadh and Taif, Journal of American Science,7(5): 778-782.