Awareness and Perceptions Towards Menopause Among Saudi Women

Mufareh Asiri (1), Majed Al shahrani (2), Hajer Alamer(3), Shoug Alkhursan(3), Huda Alhashem(3), Enas Alshashaa(3), Manal Alamri (4), Fatima Alshehri(5)

Armed forces hospital southern region (AFHSR), OB/GYN department (KSA) Najran university , OB/GYN department (KSA). Medical interns , King Khalid University (KSA) North west armed forces hospital , Tabuk (KSA). Armed forces hospital southern region (AFHSR), OB/GYN department (KSA)

main author

Mufareh Asiri , ob/gyn department . armed forces hospital southern region , KSA

Email: dr.mufareh@yahoo.com

00966553725252

Co-author

Majed Alshahrani , ob/gyn department , najran university , KSA

Email:alkozeem@hotmail.com

00966555741514

<u>Abstract</u>

Background : Menopause is an important period of women life .it is a normal physiological process, defined as the permanent cessation of menses for 12 months or more. Our study assess the awareness and perception of Saudi women aged from 30 to 65 years towards menopause and to Address the health needs of women to improve the quality of life of menopausal Saudi women.

Methods: Cross sectional study by using survey distributed electronically through kingdom of Saudi Arabia for Saudi women between ages of 30-65 years old.

Results: The number of participant were total of 738 women, 130 women were menopause already. Most of participant were from southern region (67%). Study shows that 51-55 years old is the average age of menopause. Our participant (41.9%) they choose the answer of "inability of ovary to produce egg "as definition of menopause while (17.6%) choose "cessation of mensuration for more than 1 year), most of women (31.9%) they though that psychological symptoms will be more prominent with significant p value (0.003), while among menopause group they choose hot flush as the most prominent symptoms (38.5%). About 70% of our sample they mention that they don't have enough background about menopause.

CONCLUSION: Heath education with proper medical advices should be a part of primary health clinics projects. Media and menopause groups play important role to help health providers

KEY WORDS: menopause, perception, Saudi women

Introduction:

Menopause is an important period of women life .it is a normal physiological process, defined as the permanent cessation of menses for 12 months or more (1, 2).

According to the World Health Organization (WHO) classification, premenopausal women are those who have experienced regular menstrual bleeding within the last 12 months, perimenopausal women are defined as those women who have experienced irregular menses within the last 12 months or the absence of menstrual bleeding for more than 3 months but less than 12 months, and postmenopausal women are those who have not experienced menstrual bleeding for 12 months or more. Women with iatrogenic menopause are those for whom periods have stopped as a result of medical or surgical intervention, for example, due to chemotherapy or radiation of ovaries, hysterectomy or oophorectomy, or both. The age at natural menopause is between 45 years and 50 years. Early menopause is defined as menopause occurring before the age of 45 years, while premature menopause occurs before the age of 40 years. (1)

In Saudi Arabia female represents (49.06%). Saudi female in age of 65 years old and more represent (51.1%). (3)

One of the main issue is lack of specialized menopause clinics or menopause groups in most of the area. Also most of women are afraid of hormonal replacement therapy due to traditional believe.

According to vision of 2030, the expectant age will prolong to more than 75 years old. So according to that , the heath provider must work to establish more specialized clinic to enhance the health of women in this age and to reduce the comorbidities and the cost related to it . In our study we tried to assess the awareness and perception of Saudi women aged from 30 to 65 years towards menopause and to Address the health needs of women to improve the quality of life of menopausal Saudi women.

METHOD:

It is across sectional study approved by ethical committee of (Najran University), kingdom of Saudi Arabia .The survey was carried out among pre-menopausal and post-menopausal Saudi women. By using modified Menopause Rating Scale (MRS) related questionnaire as a basis for assessing menopausal symptoms in this study, this is a self-administered instrument which has been widely used and validated and have been used in many clinical and epidemiological studies, and in research on the etiology of menopausal symptoms to assess the severity of menopausal symptoms. (9) An electronic Arabic questionnaire from age of 30 years old to age of 65 years old .it was disturbed all over the kingdom of Saudi Arabia through "face book , twitter , whats app and telegram " through the period of October 2017 till December 2107 .Inclusion criteria: Saudi women aged 30-65 years. Exclusion criteria: Non Saudi women, women aged less than 30 years and more than 65 years

All the participant fill it up and send it back to us. Answer of all question was mandatory, so no questions was escaped.

After filling the questionnaire, the participant will submitted it back online again.

The questionnaire was contains 3 parts. First part contains 10 questions including (age, area of residency, marital status, if she has children or no, education level, if she is working or no, age of first menstruation, if she is menopause or not yet

Her background about age of menopause and definition). The second part contain 22 questions for menopause women including

(age of last menstrual period , the most prominent symptom made her think that she is menopause , the pattern of her period before stopping , if there is medical or surgical intervention made her menopause earlier , if menopause affect her regular activity , affect relation with husband , children or sexual relationship , did she seek medical advice , if she heard about menopause group , if she did medical test or checkup , if she has medical disorder , if she heard or used hormonal replacement therapy, if she is doing exercise or following healthy diet and what kind of diet she thought it is appropriate, what kind of service they need from medical staff and how is she feeling in general in this age).

The third part contain 20 question for those who didn't reach the age of menopause yet. It is the same questions of section two. To measure their awareness about age of menopause and what they will do when they reach this age.

Data were collected, coded and fed to statistical software IBM SPSS version 21. All statistical analysis was done using two tailed tests and alpha error of 0.05. P value less than or equal to 0.05 was considered to be statistically significant. Descriptive statistics was done by showing frequencies and percentages for categorical variables. Chi-square or exact tests were used to test for association between menopausal status and sample attributes and with also menopause awareness and perception.

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Results:

Table (1): Socio-demographic characteristics of Saudi females aging 30 to 65 yearsaccording to their menopausal status, Saudi Arabia, 2017

			Are yo	u menopaus	e?	
Socio-demographic characteristi			Yes		No	P
		No	%	No	%	
	30-35	7	5.4%	235	38.7%	
	36-40	26	20.0%	146	24.0%	
Age in years	41-45	13	10.0%	122	20.1%	0.001
	46-50	32	24.6%	88	14.5%	
	51-60	52	40.0%	17	2.8%	
Marital status	Single	5	3.8%	54	8.9%	
	Married	117	90.0%	523	86.0%	0.063
	Divorced	3	2.3%	22	3.6%	0.063
	Widow	5	3.8%	9	1.5%	
Children	Yes	114	87.7%	514	92.8%	0.545
Children	No	16	12.3%	94	15.4%	0.54
	Southern region	80	61.5%	413	67.9%	
Region of	Northern region	1	.8%	10	1.6%	
residence	Eastern region	16	12.3%	63	10.4%	0.552
residence	Western region	10	7.7%	38	6.3%	
	Central region	23	17.7%	84	13.8%	
Education level	Primary	33	25.4%	29	4.8%	
	Intermediate	6	4.6%	33	5.4%	0.001
	Secondary	47	36.2%	144	23.7%	

	University / higher	44	33.8%	402	66.1%	
	Private section	2	1.5%	26	4.3%	
Work	Governmental section	49	37.7%	262	43.1%	0.124
	Not working	79	60.8%	320	52.6%	
	Less than 10 years	13	10.0%	13	2.1%	
Age at first	10-12	40	30.8%	217	35.7%	0.001*
menstruation	13-15	74	56.9%	343	56.4%	0.001*
	16-17	3	2.3%	35	5.8%	

* P < 0.05 (significant)

Table (2): Menopause awareness among Saudi females aging 30 to 65 years in relation

to their menopausal status, Saudi Arabia, 2017

		Are you menopause?				
Menopause awareness items		Yes		No		P
		No	%	No	%	-
	Hot flushes	50	38.5%	143	23.5%	
Monorono ormatorio	Psychological symptoms	30	23.1%	194	31.9%	0.003*
Menopause symptoms you have/ will have	Vaginal dryness	13	10.0%	102	16.8%	
	Vaginal bleeding	23	17.7%	120	19.7%	
	Sexual problems	14	10.8%	49	8.1%	
	Suddenly stopped	32	24.6%	31	5.1%	
Menstruation stopped	Gradually stopped	52	40.0%	268	44.1%	0.001*
mensiruation stoppen	Irregular bleeding then stopped	40	30.8%	228	37.5%	0.001*
	Couldn't remember	6	4.6%	81	13.3%	
Menopause affect your	Yes	36	27.7%	35	5.8%	0.001*

regular activity	No	94	72.3%	511	84.0%		
	Don't know	0	0.0%	62	10.2%		
Menopause affect your	Yes	38	29.2%	107	17.6%		
relationship with your	No	87	66.9%	351	57.7%	0.001*	
husband	Don't know	5	3.8%	150	24.7%		
Menopause affect your	Yes	8	5.15%	52	8.6%		
relationship with your	No	109	83.8%	459	75.5%	0.001*	
children	Don't know	13	10.0%	97	16.0%		
Mananauca officiat volur	Yes	23	17.7%	146	24.0%		
Menopause affect your sexual relationship	No	101	77.7%	283	46.5%	0.001*	
sexual relationship	Don't know	6	4.6%	179	29.4%		
Have any idea about the	Yes	20	15.4%	152	25.0%		
menopause women	No	110	84.6%	456	75.0%	0.019*	
groups	NO	no	04.0%	450	75.0%		
	Cardiac check up	2	1.5%	45	7.4%		
	Cholesterol check up	10	7.7%	11	1.8%		
	Blood pressure check up	8	6.2%	33	5.4%		
Medical checkup should	Blood sugar check up	43	33.1%	19	3.1%	0.001*	
done	Bone mineral density	16	12.3%	198	32.6%	0.001*	
	Pap smear	5	3.8%	222	36.5%		
	Mammogram	14	10.8%	0	0.0%		
	None of the above	32	24.6%	80	13.2%		
Heard about Hormone	Yes	35	26.9%	139	22.9%	0 2 2 2	
Replacement Therapy	No	95	73.1%	469	77.1%	0.322	
	Meat and chicken	2	1.5%	14	2.3%		
Food suitable for	Fruits and vegetables	95	73.1%	448	73.7%	0 14 2	
menopause women	Dairy products	8	6.2%	66	10.9%	0.143	
	Don't know	25	19.2%	80	13.2%		
	ignificant)						

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* P < 0.05 (significant)

Continued...

			Are you r	nenopause?		
Menopause awareness iter	ms, continued	Y	es		No	P
	-	No	%	No	%	
	45-50	54	41.5%	148	24.3%	
Age of menopause	51-55	63	48.5%	348	57.2%	0.001*
(years)	56-60	13	10.0%	98	16.1%	
	Above 60 years	0	0.0%	14	2.3%	
	The end of menstruation for 1 year	21	16.2%	108	17.8%	
Menopause is:	Unable to get pregnant	10	7.7%	101	16.6%	0.026
·	Unable of ovary to produce eggs	67	51.5%	243	40.0%	
	Don't know	32	24.6%	156	25.7%	
	Yes	21	16.2%	480	78.9%	
You should seek medical advice	No	107	82.3%	22	3.6%	0.001
	Not important	2	1.5%	106	17.4%	

* P < 0.05 (significant)

Table (3): Menopause perception among Saudi females aging 30 to 65 years in relation

to their menopausal status, Saudi Arabia, 2017

		Are you me	enopause?			
tems	Ye	s	No		P	
	No	%	No	%		
Getting better	36	27.7%	103	16.9%		
Getting worse	18	13.8%	98	16.1%		
No change	76	58.5%	185	30.4%	0.001	
I don't know	0	0.0%	222	36.5%		
Yes	48	36.9%	590	97.0%		
No	82	63.1%	18	3.0%	0.001	
Yes	38	29.2%	580	95.4%		
No	92	70.8%	28	4.6%	0.001	
Happiness	28	21.5%	63	10.4%		
Hopelessness	1	.8%	34	5.6%		
Less beauty	8	6.2%	66	10.9%		
More fatigue	32	24.6%	104	17.1%	0.001	
Fear of future	9	6.9%	152	25.0%		
No changes	52	40.0%	189	31.1%		
	Getting better Getting worse No change I don't know Yes No Yes No Yes No Happiness Hopelessness Less beauty More fatigue Fear of future	NoGetting better36Getting worse18No change76I don't know0Yes48No82Yes38No92Happiness28Hopelessness1Less beauty8More fatigue32Fear of future9	NoYesGetting better3627.7%Getting worse1813.8%No change7658.5%I don't know00.0%Yes4836.9%No8263.1%Yes3829.2%No9270.8%Happiness2821.5%Hopelessness1.8%Less beauty86.2%More fatigue3224.6%Fear of future96.9%	No % No Getting better 36 27.7% 103 Getting worse 18 13.8% 98 No change 76 58.5% 185 I don't know 0 0.0% 222 Yes 48 36.9% 590 No 82 63.1% 18 Yes 38 29.2% 580 No 92 70.8% 28 Happiness 28 21.5% 63 Hopelessness 1 .8% 34 Less beauty 8 6.2% 66 More fatigue 32 24.6% 104 Fear of future 9 6.9% 152	Yes No Rems Yes No Getting better 36 27.7% 103 16.9% Getting worse 18 13.8% 98 16.1% No change 76 58.5% 185 30.4% I don't know 0 0.0% 222 36.5% Yes 48 36.9% 590 97.0% No 82 63.1% 18 3.0% Yes 38 29.2% 580 95.4% No 92 70.8% 28 4.6% Happiness 28 21.5% 63 10.4% Hopelessness 1 .8% 34 5.6% Less beauty 8 6.2% 66 10.9% More fatigue 32 24.6% 104 17.1% Fear of future 9 6.9% 152 25.0%	

International Journa ISSN 2229-5518	onal Journal of Scientific & Engineering Research Volume 9, Issue 2, February-2018 9-5518					
	More education and awareness	45	34.6%	210	34.5%	
Needs from medical staff	Specialized clinics	27	20.8%	134	22.0%	0.939
	Facility to home care	9	6.9%	34	5.6%	
	Psychological support	49	37.7%	230	37.8%	

* P < 0.05 (significant)

Table (4): Menopause related data among sample of Saudi females aging 30 to 65 years

in menopausal status, Saudi Arabia, 2017

Menopause related da	ta	No	%
	30-352	29	22.3%
	36-40	11	8.5%
Age when you get your	41-45	12	9.2%
last menstrual period	46-50	47	36.2%
	51-55	25	19.2%
	56-60	6	4.6%
Received any medical or	Yes	43	33.1%
surgical treatment that			
made your menopause	No	87	66.9%
earlier			

	Hormonal treatment	17	39.5%
If yes, mention	Chemotherapy or radiotherapy	4	9.3%
	Surgical (hysterectomy, ovaryectomy)	22	51.2%

The number of participant were total of 738 women, 130 women were menopause already. Most of participant were from southern region (67%).

The married women represent about (82.7%). More than 50% of participant were from high education (university level), and 54% are not working. about 56% go their menarche at age between 10 and 13 years old . Regarding their back ground about age of menopause ,(55.8%) choose the answer of age between 51-55 years old , and (41.9%) they choose the answer of " inability of ovary to produce egg " as definition of menopause while (17.6%) choose " cessation of mensuration for more than 1 year) . (Table 1).

Regarding the perception of the most prominent menopausal symptoms, most of women (31.9 %) they though that psychological symptoms will be more prominent with significant p value (0.003), while among menopause group they choose hot flush as the most prominent symptoms (38.5%). regarding the pattern of stop of mensuration both group choose that gradual stop of menstruation is the most common pattern with significant p value (0.001).

Regarding the perception if the menopause affect the regular activity, relation with husband or children or effect on sexual relationship, most of participant choose the answer (NO) with significant p value (0.001). Most of participant didn't heard about menopause support group (p value (0.019)).

Among the group of menopause, (33.1%) choose that blood sugar check up is the most important test to be done in this age while (24.6%) of them didn't do any medical checkup. Among the young women they though that the pap smear and

bone mineral density are the most important test to be done at age of menopause. Regarding the hormonal replacement hormone more than 70% of both group didn't heard about it before. Regarding the food suitable in menopause age (73%) of both group choose that fruit and vegetable are most important food in this age, most of menopause group are not following healthy diet and not doing exercise . The young women are believing in healthy diet and doing exercise in menopause age p value (0.001). (Table 2, 3)

One of the interesting that (82.3%) of menopause group didn't seek medical advice in this age while in other group (78.9%) are believing in the importance of seeking medical advice in this age, P value (0.001). (Table 2)

In general both group they think that no emotional changes will be significant in menopause age with significant p value (0.001). Both groups agreed that the psychological support from medical staff is the most important need in this age but the p value was not significant p value (0.939). Unfortunately 70% of our sample they mention that they don't have enough background about menopause.



Dissuasion:

According to the statistics of Saudi Arabia 2017, Saudi population (20,408,362), female represents (49.06%). The same statistics shows that Saudi female more than 65 years old represent (51.1%). (3)

The Perception and concepts of illness and health are based on background, thoughts and level of education. The health services in Saudi Arabia are free and supported by government.

Most of female in Saudi Arabia had their menarche between the ages of (13-15) years old which is comparable to other countries. The average age of menarche is about 12.5 years in the United States,(4) 12.72 in Canada,(5) and 12.9 in the UK.(6) A study of girls in Istanbul, Turkey, found the median age at menarche to be 12.74 years.(7)

Most of women in our study thoughts that age of menopause is between 51 -55 years, which is consistent with the picture emerging from previous studies from Saudi Arabia and the gulf region. William and colleagues 2003 shows that the median age of menopause in Saudi Arabia is 50 years. (8)

The perception of most women shows that psychological symptoms is more than somatic symptoms. In other local study done in (Abha, Saudi Arabia) shows that somatic symptoms are more followed by psychological symptoms. (9)

Nisar N (2009), reported that the scores of psychological domain were significantly high in menopause transition women P < 0.003) (10)

In United States it is estimated that 20% have depression at some point during menopause period. (11)

Less women in Saudi Arabia they though that sexual symptoms will be prominent during menopause age. Indeed most of women they are not reporting such problem to their health providers due to some social barriers.

Actually the exact incidence and etiology are unknown. Many factors are playing role, it includes decreased interest or desire to initiate activity, as well as decreased arousal or ability to achieve an orgasm during sexual intercourse. It could be also due to psychological problems such as depression or anxiety disorders.

Our women they thought that pattern of mensuration will stop gradually before the last mensuration period. In one study the authors found that serial irregularity of bleeding pattern was a strong predictor of onset of menopause.(12)

One of the interesting in our study shows that menopause will not affect regular activity among Saudi women. One study shows that not all women who report menopausal symptoms are affected by them. (13)

The Study of Women's Health across the Nation (SWAN) measured health-related quality of life of approximately 3,000 women and found that many of the symptoms associated with menopause, were also associated with lower quality of life. (14, 15)

In other local study noticed moderately poor quality of life due to menopausal

Symptoms observed among menopause group. (9)

The perception of Saudi women in our study that menopause will not affect relation with husband or children.

Worldwide, the prevalence of sexual dysfunction in postmenopausal women ranging from 68% to 86.5 %.)(16)

The Global Study of Sexual Attitudes and Behaviors (GSSAB), which included 13,882 women aged 40 to 80 years, reported 26% to 48% of women had a lack of interest in sex, and 18% to 41% of women had difficulty reaching orgasm; these were the most common female sexual dysfunctions (FSD) across world regions. Furthermore, in this study, sexual dysfunction was demonstrated to significantly impact women's self-esteem and quality of life, and cause emotional distress, leading to relationship problems. (16).

Our study shows that most of women in Saudi Arabia don't have any idea about menopause supportive groups either because it is not exist or because no social awareness among women about such groups.

Heath service in Saudi Arabia is free and developing quickly but the presence of specialized menopause clinics is not widely spread, While our study shows that most of young women believing in seeking medical advice when they will reach the age of menopause.

Due to that most of women are not aware about the importance of medical checkup that they must do in a routine basis. Based on that most of them didn't heard about hormonal replacement therapy.

In our community the trend toward improvement of heath in general is increasing. The women are believing to follow healthy diet and do regular exercise at age of menopause which can maintain their health and improve the symptoms of menopause. In one study measure the physical activity among Saudi women shows that high level of inactivity among Saudi females in reference to the international recommendation. (17)

Local study done on 2007 shows the prevalence of physical inactivity among Saudis adults is relatively high. (18)

In this study most of women they though that age of menopause is physiological changes and no fear of future or sadness feeling will be associated. This could be explained by the strong family relationship and support among Arab population in general. Same finding been noticed among Bahraini women (2008). (19)

Psychological changes play important role during menopause. Psychological symptoms increase during menopause due to many factors like loss of fertility or unable to do regular activity as before. Our study shows that most of women need more psychological support from medical staff.

Our study shows that 70% of women don't have enough background about menopause.

CONCLUSION:

Menopause is important physiological period of women life. More specialized clinics should be available. Heath education with proper medical advices should be a part of primary health clinics projects. Media and menopause groups play important role to help health providers.

References :

[1]World Health Organization . Research on Menopause in the 1990s: Report of

WHO Scientific Group. Geneva: World Health Organization; 1996. (WHO Technical Report Series 866).

[2]Solues MR, Sherman S, Parrott E, Rebar R, Santoro N. Executive summary,

stages of reproductive aging workshop (STRAW) Fertil Steril. 2001;8:874–878.

[3] <u>www.stats.gov.sa</u>

[4] Anderson SE, Dallal GE, Must A (April 2003). "Relative weight and race influence average age at menarche: results from two nationally representative surveys of US girls studied 25 years apart". Pediatrics. 111 (4 Pt 1): 844–50. doi:10.1542/peds.111.4.844. PMID 12671122.

[5] Al-Sahab B, Ardern Cl, Hamadeh MJ, Tamim H (November 2010). "Age at

menarche in Canada: results from the National Longitudinal Survey of Children & Youth". BMC Public Health. 10: 736. doi:10.1186/1471-2458-10-736. PMC 3001737 Freely accessible. PMID 21110899.

[6]Hamilton-Fairley, Diana (2004). Obstetrics and Gynaecology (PDF) (2nd ed.).

Blackwell. p. 29. ISBN 1-4051-2066-5. Retrieved 2013-11-09.

[7] Atay, Z.; Turan, S.; Guran, T.; Furman, A.; Bereket, A (2011-06-13). "Puberty

and Influencing Factors in Schoolgirls Living in Istanbul: End of the Secular Trend?". Pediatrics. 128 (1): e40–5. doi:10.1542/peds.2010-2267. PMID 21669888.

[8] The frequency distribution of age at natural menopause among Saudi Arabian

women William Greer *, Amy L. Sandridge, Rona S. Chehabeddine Maturitas 46 (2003) 263 /272)

[9]The prevalence of symptoms experienced during menopause, influence of

Socio-demographic variables on symptoms and quality of life among women

at Abha, Saudi Arabia. Hassan M. Al-Musa, Biomedical Research 2017

[10] Nisar N, Sohoo NA. Frequency of menopausal symptoms and their impact on

the quality of life of women: a hospital based survey. J Pak Med Assoc 2009; 59: 752-756

[11] Soares CN. New York, Arlington, VA: American Psychiatric Publishing; 2004.

Perimenopause-related Mood Disturbance: An Update on Risk Factors and Novel Treatment Strategies Available. In: Meeting Program and Abstracts. Psychopharmacology and Reproductive Transitions Symposium. American Psychiatric Association 157th Annual Meeting; May 1.6, 2004; pp. 51–61.)

[12] Timing of Menopause and Patterns of Menstrual Bleeding M. Weinstein T.

Gorrindo A. Riley J. Mormino J. Niedfeldt B. Singer G. Rodríguez J. Simon S.

Pincus American Journal of Epidemiology, Volume 158, Issue 8, 15 October 2003, Pages 782–791.

[13]Feldman BM. Voda A. Gronseth E. The prevalence of hot flash and associated

variables among perimenopausal women. Res Nurs Health. 1985;8:261–268

[14] Avis NE. Ory M. Matthews KA, et al. Health-related quality of life in a

multiethnic sample of middle- aged women: Study of Women's Health Across the Nation (SWAN) Med Care. 2003;41:1262–1276

[15] Avis NE. Colvin A. Bromberger JT, et al. Change in health-related quality of

life over the menopausal transition in a multiethnic cohort of middle-aged women: Study of Women's Health Across the Nation (SWAN) menopause. 2009;16:860–869.)

[16]Addis IB, Van Den Eeden SK, Wassel-Fyr CL, et al. Sexual activity and function

in middle-aged and older women. Obstet Gynecol. 2006;107:755-764

[17] Einas S. Al-Eisa and Hana . Al-Sobayel Physical Activity and Health Beliefs

among Saudi Women, Journal of Nutrition and Metabolism Volume 2012 (2012)

[18]Hazzaa M Al-Hazzaa Health-enhancing physical activity among Saudi

adults using the International Physical Activity Questionnaire (IPAQ), ,Public Health Nutrition,2006

[19] Ghufran Ahmed Jassim *, Qasim Al-Shboul, Attitudes of Bahraini

women towards the menopause: Implications for health care policy, European menopause journal (2008) 358–372