Influence of Socio-Demographic Factors of Women On Menopausal-Related Health Symptoms in Osun State, Nigeria

AUTHOR(S): ADEFILA, KEHINDE BUKOLA (RN, RM, RPHN, BNsc)

And

AJAO, FUNKE FELICITAS (RN, RM, RPHN, BNsc)

Abstract

This study assessed the influence of socio-demographic factors of women on menopausal-related health symptoms in Osun State, Nigeria. The study specially examined the relationship between socio-demographic factors of women and domains of menopausal-related health symptoms. This study utilized a descriptive research design of the survey type. The populations for this study were 1,540 women within the age range 45-65 years in Irepodun Local Government of Osun state. Therefore, 308 respondents were purposively selected. However, adding 10% attrition rate, the eventual sample size was 339. However, 311 questionnaires were retrieved for data analysis. The research instrument used was a self-design questionnaire tagged Menopausal – Related Health Symptoms Questionnaire (MRHSQ). Copies of the instrument were given to two experts in the field of Nursing and Test & Measurements. The data collected from the pilot study was used to estimate the reliability of the instrument using Cronbach's Alpha to measure the internal consistency of the instrument which yielded 0.821. Inferential Statistics of multiple regressions was used to test the hypotheses at 0.05 level of significance. The findings of this study revealed that socio-demographic factors such as marital status, parity, occupation and educational qualification were related to domains of menopausal-related health symptoms. It was recommended among others that healthcare professionals should be able to accurately describe and understand how socio-demographic

1 **Commonwealth Journal of Academic Research (CJAR.EU)**
Email: editor.cjar@gmail.com   editor@cjar.eu   Website: cjar.eu

Published By

factors of women are related to menopausal-related health symptoms. This will help in providing necessary health care for such women experiencing menopausal-related health symptoms.

Keywords: Socio-demographic Factors, Women, Menopausal-Related, Health Symptoms,

About Author

Author(s): ADEFILA, KEHINDE BUKOLA (RN, RM, RPHN, BNsc)
NURSING DEPARTMENT,
LADOKE AKINTOLA UNIVERSITY OF TECHNOLOGY TEACHING HOSPITAL,
OSHOGBO, NIGERIA.

And

AJAO, FUNKE FELICITAS (RN, RM, RPHN, BNsc)
NURSING DEPARTMENT,
LADOKE AKINTOLA UNIVERSITY OF TECHNOLOGY TEACHING HOSPITAL,
OSHOGBO, NIGERIA.

2   **Commonwealth Journal of Academic Research (CJAR.EU)**
Email: editor.cjar@gmail.com   editor@cjar.eu   Website: cjar.eu

Published By

Introduction

The word "menopause" was derived from the Greek words 'meno' which means 'month' and 'pause' which means 'to end'. Hence, the literal meaning is the end of the regular monthly menstrual bleeding circle. McCarthy, Field and Marcus (2017) define natural menopause as the cessation of menstruation for one year. The age at which menopause develops in women is different ranging from late thirties to late fifties but the range for most women is between ages 45 and 55 years (Pirincci, Oguzoncul, & Tasdemir, 2016).

Menopause may be viewed as a transition from middle age to old age by many women. This can continue for many years making women to experience complex bio-physiological and psychosocial changes which in turns affect their quality of life (QoL). Women in this transition are likely to pass through different complex health challenges. Although some pass through it with pleasant anticipation, many women are dreadful of this period because of the anticipated losses and the effect on their general health. World Health Organization (WHO) has reported that globally, natural cessation of menstrual flow occurs between age 45 and 55 years. It is an extremely important yet complex period of time during which changes occur in women (Fujimoto, 2017).

Menopause is diagnosed usually when cessation of mensuration has occurred for a period of twelve months or more because occasionally, irregular menstruation or bleeding from the vagina may occur within twelve months if ovaries have not completely stopped functioning which could mean secondary ammenorrhea (Juyi, 2014). Menopause is associated with physical and emotional disturbances and some women may have symptoms for many years. Menopause is also linked to other disease conditions. Fluctuating estrogen levels during menopause are associated with a woman's increased risk of developing cardiovascular diseases, depleting musculoskeletal health, and overall cognitive decline and dementia. Persistent hot flashes increase the risk of women developing cardiovascular disorders. In addition, the average bone density decreases faster in women when they reach their 50s compared to men, increasing their risk of osteoporosis. Hence, menopause is not just a biological transition but a warning sign of chronic illnesses that have been identified as those increasing the burden on healthcare systems worldwide (Juyi, 2014).

In Nigeria, (Ameh, Madugu, Onwusulu, Eleje, & Oyefabi, 2016) found mean age at menopause to be 49.8. This was similar to studies conducted by Ogunlaja, Fehintola, Akinola, Awotunde, Durodola and Oladeji, (2016), Oloyede and Obajimi (2018) and Agunbiade and Gilbert (2019). This could be favourably compared with a study that reported that worldwide, women attain menopause at the age 50 years (Dutta, Rajendran, Ramya, Sabapathy, Kesava & Senthilraja, 2018).

Most women see this transition period as being wearisome and most times it is associated with reduction in wellbeing and numerous health challenges (Prakash, Stojanovska, Nurgali, & Apostolopoulos 2017). Many women of middle age are afraid of lossing their qualities of being a woman and beauty after menopause. Most problems that are commonly reported include vasomotor problems (hot flushes, and night/excessive sweat), physical problems (fatigue, headache, pains in the joint and weight gain), psychological problems (depression, anxiety, mood disorder, loss of memory, and sleeping problems), and sexual problems (vaginal problems, frequency in urination and sexual dysfunction) (Grady, 2016).

Menopause and its associated biological changes bring about symptoms which pose a negative influence on the general health and quality of life (QoL) and same to the wellness of women in this phase of their life. The severity of menopausal symptoms differs from person to person as a result of confounding factors like lifestyle, social status, body make up, and

psychological status. Although Hormonal Replacement Therapy (HRT) has been reported to be the effective remedy to menopausal problems, but the way women accept and long –term continuation of HRT is on the low side cancers (Fonseca, da Silva, & Ferreira, 2017). Particularly since many research findings have reported that HRT could cause an increase risk of several diseases, including breast and ovarian cancers (Fonseca, et. al., 2017).

Menopausal-related health symptoms are categorized into four main domains namely, vasomotor, psychosocial, physical and sexual domains. These symptoms affect the physical and mental wellbeing, life satisfaction, and finally the quality of life. With the increasing population of the elderly worldwide, there is increase in the number of women who live seventy percent of their life in hypo estrogenic status which could affect the quality of life (Nazarpour et al, 2019).

Some studies also found that most menopausal women were married (Ameh et al., 2016 & Ogunlaja et al, 2016). Possibly the reason could be that menopausal stage is usually post reproductive stage that most women would have got married and done with reproduction. But some studies reported that higher proportion of African-American women were previously married or never married (Sarnowski et al, 2018). Meanwhile, studies have also concluded that low socio-economic status, not being employed, null parity or having fewer children, not being married and having no or less education can lead to an early menopause (Andreoli, & Brown, 2017). Numerous studies have also showed that employment status is a factor that has always have positive influence on postmenopausal women. Its association with quality of life of women of menopausal age was reported by Baatjes (2018). Some studies from Iran also reported that level of employment and number of children is significantly associated with social and psychology domain of quality of life of women of menopausal women (Kalantari & Hassanzadeh, 2018). An American survey of women also reported that severity of menopausal related problems were dependent on the employment status of the women while severity of menopausal related problems were more severe among skilled worker women than unskilled worker women (Shepstone, et. al., 2018).

This study assessed the influence of socio-demographic factors of women on menopausal-related health symptoms in Osun State, Nigeria. The study specially examined:

i. the relationship between socio-demographic factors of women and vasomotor domains of menopausal-related health symptoms;

ii. the relationship between socio-demographic factors of women and psychosocial domains of menopausal-related health symptoms;

iii. the relationship between socio-demographic factors of women and physical domains of menopausal-related health symptoms; and

iv. the relationship between socio-demographic factors of women and sexual domains of menopausal-related health symptoms

Research Hypotheses

The following hypotheses were generated:

1. There is no significant relationship between socio-demographic factors (marital status, parity, occupation and educational qualification) and vasomotor domains of menopausal-related health symptoms.

2. There is no significant relationship between socio-demographic factors (marital status, parity, occupation and educational qualification) and psychosocial domains of menopausal-related health symptoms

3. There is no significant relationship between socio-demographic factors (marital status, parity, occupation and educational qualification) and physical domains of menopausal-related health symptoms

4. There is no significant relationship between socio-demographic factors (marital status, parity, occupation and educational qualification) and sexual domains of menopausal-related health symptoms

Conceptual Framework of the Study

Characteristic of individuals - Women at menopausal age 45-65 years
- Marital status
- Parity
- Occupation
- Educational qualification

Four domains of menopausal-related health symptoms
- Vasomotor domains
- Psychosocial domains
- Physical domains
- Sexual domains
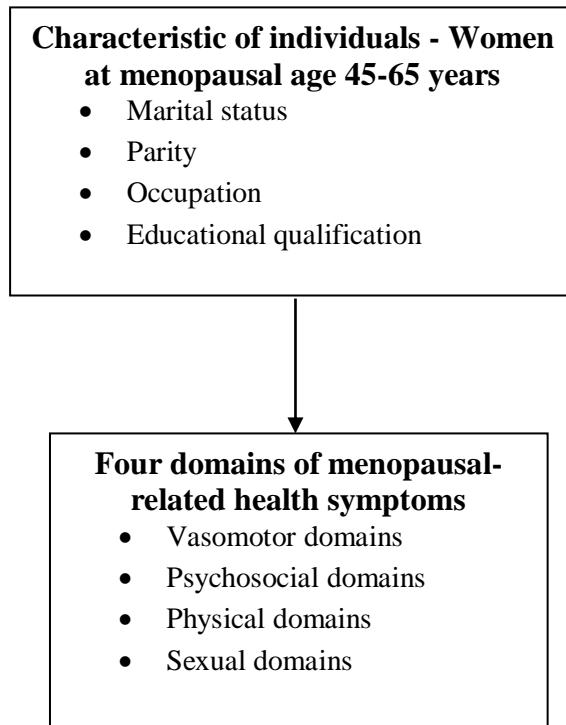
In applying the model in this study attempt were made to illustrate the relationship between socio-demographic factors of women such as marital status, parity (number of children), occupation and educational qualification and the four domains of menopausal-related health symptoms such as vasomotor, psychosocial, physical and sexual.

Methodology

This study utilized a descriptive research design of the survey type. This method was used to make accurate and systematic description of menopausal-related health symptoms experienced by the women. The populations for this study were 1,540 women as seen in (table 1) within the age range 45-65 years in six selected wards namely; Olobu B, Olobu D, Bara A, Bara B, Elerin A and Elerin C in Irepodun Local Government of Osun state.

Table 1: Distribution of menopausal age women in selected wards in Irepodun Local Government Area of Osun State

S/N	Name of the ward	No. of households selected	No. of menopausal women (45-65 years)	Proportionate sample size
1	Olobu B	160	240	53
2	Olobu D	220	190	42
3	Bara A	240	400	88
4	Bara B	200	210	46
5	Elerin A	200	160	35
6	Elerin C	300	340	75
		1320	1540	339

Inclusion Criteria: This study included
1. Women who had reached menopause in the last one year and above
2. Women between 45 and 60 years as at the time data was collected
3. Women who resided within the selected wards within the Local government.

Exclusion criteria

Women with chronic disease like diabetes, hypertension, congestive cardiac failure, liver disease, kidney disease, and any form of cancer, were excluded from the study because of the already existing debilitating condition(s).

Therefore, 308 respondents were purposively selected. However, adding 10% attrition rate, the eventual sample size was 339. This was to enhance robust and proper representative of the study population because the higher the representative, the higher the power of findings. However, 311 questionnaires were retrieved for data analysis

The research instrument used was a self-design questionnaire tagged Menopausal – Related Health Symptoms Questionnaire (MRHSQ). It consisted of two sections namely Section A and B. Section A sought for socio-demographic factors of women which include marital status, parity (number of children), occupation and educational qualification. Section B consisted of 30 items on the four main domains of menopausal-related health symptoms such as vasomotor domain, psychosocial domain, physical domain and sexual domain. Copies of the instrument were given to two experts in the field of Nursing and Test & Measurements. Their observations were used to make necessary correction of the items in the research instrument. The data collected from the pilot study was used to estimate the reliability of the instrument using Cronbach's Alpha to measure the internal consistency of the instrument which yielded 0.821.

Inferential Statistics of multiple regressions was used to test the hypotheses at 0.05 level of significance.

Results

Table 2: Descriptive Statistics showing Socio-demographic characteristics of respondents

Variables	Responses	Frequency (N=311)	Percentages (%=100%)
Age as at last birthday (in years)++	45-49	35	11.3
	50-54	80	25.7
	55-59	84	27.0
	60-65	112	36.0
Age at menarche (in years)	10-12	10	3.2
	13-15	68	21.9
	16-18	137	44.1
	18 and above	96	30.9
Religion	Christianity	104	33.4
	Islam	207	66.6
Marital status	Married	192	61.7
	Divorced	32	10.3
	Widow	87	28.0
Level of education	No formal education	137	44.1
	Primary	67	21.5
	Secondary	49	15.8
	Tertiary	58	18.6
Number of children	One	5	1.6
	Two-three	92	29.5
	Four and above	214	68.8
Occupation	Unemployed	8	2.6

	Civil servants	60	19.3
	Trading	219	70.4
	Retiree	10	3.2
	Farming	14	4.5
Monthly income (in Naira)	<10,000	186	59.8
	10,000-50,000	82	26.4
	51,000-100,000	20	6.4
	101,000 and above	23	7.4
When did you menstruate last (in months)	6-12	60	19.3
	13-18	63	20.3
	19-24	34	10.9
	25 and above	154	49.5
At what age did you reach menopause (in years)	40-44	15	4.8
	45-49	156	50.2
	50-54	113	36.3
	55-59	27	8.7

++Mean age as at last birthday = 63.1 (SD = 8.89), **Mean age at menopause = 49.9 (SD = 9.03)

Table 1 shows that a total of 311 women participated in this study. The mean age of respondents as at last birthday was 63.1. Also mean age at menopause was 49.9. Majority (66.6%) of the respondents were Muslim while 33.4% were Christian. While 61.7% were married, 28.0% were widowed and 10.3% were divorced. Majority (44.1%) of the respondent had no formal education, 21.5% had primary education, and 15.8% had secondary education while 18.6% had tertiary education. Most (68.8%) of the respondents had four and more children, majority (70.4%) are into trading, 59.8% get less than ₦10, 000 as monthly income.

Test of Hypotheses

Research Hypothesis 1: There is no significant relationship between socio-demographic factors (marital status, parity, occupation and educational qualification) and vasomotor domains of menopausal-related health symptoms.

Table 3: Effect of socio-demographic factors on vasomotor domains of menopausal-related health symptoms

R= 0.552, R²=0.305, (F $_{(3, 307)}$ =10.112; p < 0.05).

Variables	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Remark
	B	Std. Error	Beta			
(Constant)	8.411	.549		15.320	.000	
Marital Status	.205	.043	.117	4.767	.000	Accept
Parity	.418	.118	.322	3.542	.001	Accept
Occupation	.195	.056	.089	3.482	.001	Accept
Educational Qualification	.313	.062	.221	5.048	.000	Accept

Table 3 showed the combination of the socio-demographic factors of women account for 31% of the variance on vasomotor domains of menopausal-related health symptoms (R² adjusted = 0.305). The analysis of variance of the multiple regression data yielded an F-ratio value which was found to be significant at 0.05 alpha level (F $_{(3, 307)}$ =10.112; p < 0.05). Hence, there was significant relationship between socio-demographic factors (marital status, parity, occupation and educational qualification) and vasomotor domains of menopausal-related health symptoms.

In terms of individual effect of socio-demographic factors of women on vasomotor domains of menopausal-related health symptoms, Parity (ß = 0.418, t = 3.542; p<0.05) had the highest effect followed by educational qualification (ß = 0.313, t = 5.048; p<0.05), marital status (ß = 0.205, t = 4.767; p<0.05) while occupation (ß = 0.195, t = 3.482; p<0.05) had the least effect.

Research Hypothesis 2: There is no significant relationship between socio-demographic factors (marital status, parity, occupation and educational qualification) and psychosocial domains of menopausal-related health symptoms

Table 4: Effect of socio-demographic factors on psychosocial domains of menopausal-related health symptoms

Variables	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Remark
	B	Std. Error	Beta			
(Constant)	13.084	.491		26.65	.000	
Marital Status	.367	.063	.270	5.749	.000	Accept
Parity	.435	.050	.388	8.547	.000	Accept
Occupation	.227	.068	.129	3.338	.001	Accept
Educational Qualification	.514	.054	.409	9.519	.000	Accept

R= 0.692, R^2=0.479, (F$_{(3, 307)}$ =16.797; p < 0.05).

Table 4 showed that the combination of the socio-demographic factors of women account for 48% of the variance on psychosocial domains of menopausal-related health symptoms (R^2 adjusted = 0.479). The analysis of variance of the multiple regression data yielded an F-ratio value which was found to be significant at 0.05 alpha level (F$_{(3, 307)}$ =16.797; p < 0.05). Hence, there was significant relationship between socio-demographic factors (marital status, parity, occupation and educational qualification) and psychosocial domains of menopausal-related health symptoms

In terms of individual effect of socio-demographic factors of women on psychosocial domains of menopausal-related health symptoms, educational qualification (ß = 0.514, t = 9.519; p<0.05) had the highest effect followed by parity (ß = 0.435, t = 8.547; p<0.05), marital status (ß = 0.367, t = 5.479; p<0.05) while occupation (ß = 0.227, t = 3.338; p<0.05) had the least effect.

Research Hypothesis 3: There is no significant relationship between socio-demographic factors (marital status, parity, occupation and educational qualification) and physical domains of menopausal-related health symptoms

Table 5: Effect of socio-demographic factors on physical domains of menopausal-related health symptoms

Variables	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Remark
	B	Std. Error	Beta			

R= 0.883, R^2=0.780, (F$_{(3, 307)}$ =25.160; p < 0.05).

(Constant)	15.127	.472			32.049	.000	
Marital Status	.229	.057	.113	4.018	.000		Accept
Parity	.414	.054	.358	7.611	.000		Accept
Occupation	.008	.064	.004	.128	.801		Reject
Educational Qualification	.394	.108	.223	3.647	.001		Accept

Table 5 showed that the combination of the socio-demographic factors of women account for 78% of the variance on physical domains of menopausal-related health symptoms (R^2 adjusted = 0.780). The analysis of variance of the multiple regression data yielded an F-ratio value which was found to be significant at 0.05 alpha level ($F_{(3, 307)}$ =25.160; $p < 0.05$). Hence, there was significant relationship between socio-demographic factors (marital status, parity, occupation and educational qualification) and physical domains of menopausal-related health symptoms.

In terms of individual effect of socio-demographic factors of women on physical domains of menopausal-related health symptoms, Parity (ß = 0.414, t = 7.611; p<0.05) had the highest effect followed by educational qualification (ß = 0.394, t = 3.647; p<0.05), marital status (ß = 0.229, t = 4.018; p<0.05) while occupation (ß = 0.008, t = 0.128; p>0.05) had the least effect.

Research Hypothesis 4: There is no significant relationship between socio-demographic factors (marital status, parity, occupation and educational qualification) and sexual domains of menopausal-related health symptoms

Table 6: Effect of socio-demographic factors on sexual domains of menopausal-related health symptoms

R= 0.699, R^2=0.489, ($F_{(3, 307)}$ =17.564; $p < 0.05$).						
Variables	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Remark
	B	Std. Error	Beta			
(Constant)	16.573	.609		27.213	.000	
Marital Status	.344	.075	.241	4.587	.000	Accept
Parity	.149	.057	.053	2.614	.011	Accept
Occupation	.350	.071	.222	4.930	.000	Accept
Educational Qualification	.451	.061	.319	7.393	.000	Accept

Table 6 showed that the combination of the socio-demographic factors of women account for 49% of the variance on sexual domains of menopausal-related health symptoms (R^2 adjusted = 0.489). The analysis of variance of the multiple regression data yielded an F-ratio value which was found to be significant at 0.05 alpha level ($F_{(3, 307)}$ =17.564; $p < 0.05$). Hence, there was significant relationship between socio-demographic factors (marital status, parity, occupation and educational qualification) and sexual domains of menopausal-related health symptoms.

In terms of individual effect of socio-demographic factors of women on sexual domains of menopausal-related health symptoms management, educational qualification (ß = 0.451, t = 7.393; p<0.05) had the highest effect followed by occupation (ß = 0.350, t = 4.930; p<0.05), marital status (ß = 0.344, t = 4.587; p<0.05) while parity (ß = 0.149, t = 2.614; p<0.05) had the least effect.

9 **Commonwealth Journal of Academic Research (CJAR.EU)**
Email: editor.cjar@gmail.com   editor@cjar.eu   Website: cjar.eu

Published By

Discussion

The findings of the study revealed that there was significant relationship between socio-demographic factors (marital status, parity, occupation and educational qualification) and vasomotor domains of menopausal-related health symptoms. Parity had the highest effect followed by educational qualification and marital status while occupation had the least effect. The outcome of this study is related to the report of Hu, Shen, Hung, Wen, Chiang & Lu, (2016) who found out that vasomotor domains of menopausal-related health symptoms are affected by number of children and marital status.

The findings of the study also revealed that there was significant relationship between socio-demographic factors (marital status, parity, occupation and educational qualification) and psychosocial domains of menopausal-related health symptoms. Educational qualification had the highest effect followed by parity and marital status while occupation had the least effect. In consonance with this finding, Kalantari, et. al. (2018) reported that level of education and number of children is significantly associated with social and psychology domain of menopausal-related health symptoms.

The findings of the study further revealed that there was significant relationship between socio-demographic factors (marital status, parity, occupation and educational qualification) and physical domains of menopausal-related health symptoms. Parity had the highest effect followed by educational qualification and marital status while occupation had the least effect. In line with this finding, Baatjes (2018) found relationship between socio-demographic factors and physical domains of menopausal-related health symptoms.

The findings of the study revealed that there was significant relationship between socio-demographic factors (marital status, parity, occupation and educational qualification) and sexual domains of menopausal-related health symptoms. Educational qualification had the highest effect followed by occupation and marital status while parity had the least effect.

Summary of Findings

1. There was significant relationship between socio-demographic factors (marital status, parity, occupation and educational qualification) and vasomotor domains of menopausal-related health symptoms.

2. There was significant relationship between socio-demographic factors (marital status, parity, occupation and educational qualification) and psychosocial domains of menopausal-related health symptoms.

3. There was significant relationship between socio-demographic factors (marital status, parity, occupation and educational qualification) and physical domains of menopausal-related health symptoms.

4. There was significant relationship between socio-demographic factors (marital status, parity, occupation and educational qualification) and sexual domains of menopausal-related health symptoms.

Conclusion

It is concluded that socio-demographic factors such as marital status, parity, occupation and educational qualification were related to domains of menopausal-related health symptoms.

Recommendations

The following recommendations were made.

1) Healthcare professionals should be able to accurately describe and understand how socio-demographic factors of women are related to menopausal-related health

symptoms. This will help in providing necessary health care for such women experiencing menopausal-related health symptoms.

2) There should be frequent training of nurses on how to handle women with menopausal-related health symptoms because of the likely influence of socio-demographic factors.

References

Agunbiade, O. M., & Gilbert, L. (2019). The night comes early for a woman: Menopause and sexual activities among urban older Yoruba men and women in Ibadan, Nigeria. *Journal of women & aging*, 1-26.

Ameh, N., Madugu, N. H., Onwusulu, D., Eleje, G., & Oyefabi, A. (2016). Prevalence and predictors of menopausal symptoms among postmenopausal Ibo and Hausa women in Nigeria. *Tropical Journal of Obstetrics and Gynaecology*, *33*(3), 263.

Baatjes, K. J. (2018). *Bone health in post-menopausal patients with breast cancer treated with aromatase inhibitors: factors predicting the risk for osteoporosis* (Doctoral dissertation, Stellenbosch: Stellenbosch University).

Dutta, R., Rajendran, P., Ramya, S., Sabapathy, N., Kesava, S., & Senthilraja, S. (2018). Prevalence of depression among the Post-Menopausal women in the field practice area of saveetha medical college and hospital, Thirumazhisai, Tamil Nadu. *Indian Journal of Public Health Research & Development*, *9*(11), 175-179.

Fonseca, M. I. H., da Silva, I. T., & Ferreira, S. R. G. (2017). Impact of menopause and diabete on atherogenic lipid profile: is it worth to analyse lipoprotein subfractions to assess cardiovascular risk in women? *Diabetology & metabolic syndrome*, *9*(1), 22.

Fujimoto, K. (2017). Effectiveness of coaching for enhancing the health of menopausal Japanese women. *Journal of women & aging*, *29*(3), 216-229.

Grady, D. (2016). Clinical Practice: *Management of Menopausal Symptoms. N. Engl.J.Med. 355*(22), 2338-2347.

Hu, L. Y., Shen, C. C., Hung, J. H., Chen, P. M., Wen, C. H., Chiang, Y. Y., & Lu, T. (2016). Risk of psychiatric disorders following symptomatic menopausal transition: a nationwide population-based retrospective cohort study. *Medicine*, *95*(6)

Juyi, F. (2014). A study on the menopause management and practice and the quality of life in climacteric women. *J. Korean Soc Maternal Child Health*; 3,75-78

Kalantari, S., Heidari Lahsher, F., & Hassanzadeh, R. (2018). Effect of Menopause on Quality of Life and Psychological Profile of Women in Gorgan, Iran. *Journal of Clinical and Basic Research*, *2*(2), 17-23.

McCarthy, C. E., Field, J. K., & Marcus, M. W. (2017). Age at menopause and hormone replacement therapy as risk factors for head and neck and oesophageal cancer. *Oncology reports*, *38*(4), 1915-1922.

Nazarpour, S., Simbar, M., Ramezani Tehrani, F., & Alavi Majd, H. (2018). Quality of life and sexual function in postmenopausal women. *Journal of women & aging*, *30*(4), 299-309.

Ogunlaja, O. A., Fehintola, A. O., Akinola, S. E., Awotunde, O. T., Durodola, A. O. & Oladeji, O. A. (2016). A clinical audit of hysterectomy in Bowen university teaching hospital, Ogbomoso, south west Nigeria. *Tropical Journal of Obstetrics and Gynaecology*, *33*(1), 64-69.

Oloyede, O. A., & Obajimi, G. O. (2018). Symptomatology of menopause among suburban Nigerian women. *Tropical Journal of Obstetrics and Gynaecology*, *35*(2), 188-191.

Pirincci, E., Oguzoncul, A. F., & Tasdemir, R. (2016). Age at the onset of menopause and its influencing factors in Turkish women in a rural area. *Journal of women & aging*, *28*(3), 238-246.

Prakash, M. D., Stojanovska, L., Nurgali, K., & Apostolopoulos, V. (2017). Exercise in menopausal women. In *Sex Hormones, Exercise and Women* (pp. 285-307). Springer, Cham.

Sarnowski, C., Kavousi, M., Isaacs, S., Demerath, E. W., Broer, L., Muka, T. & Lunetta, K.L. (2018). Genetic variants associated with earlier age at menopause increase the risk of cardiovascular events in women. *Menopause (New York, NY)*, *25*(4), 451.

Shepstone, L., Lenaghan, E., Cooper, C., Clarke, S., Fong-Soe-Khioe, R., Fordham, R. & Holland, R. (2018). Screening in the community to reduce fractures in older women (SCOOP): a randomised controlled trial. *The Lancet*, *391*(10122), 741-747.

Cite this article:

Published by

12 **Commonwealth Journal of Academic Research (CJAR.EU)**
Email: editor.cjar@gmail.com editor@cjar.eu Website: cjar.eu

Published By