RESULTS

The aim of the current study was to assess knowledge and attitude of menopausal women regarding hormone replacement therapy. The results of data analysis were presented into five parts as a following:

- 1-<u>Part (I):</u> Includes Socio-demographic characteristics of studied sample. Tables (1-5) and figures (1-2).
- 2- <u>Part (II)</u>: Deals with findings related to assess knowledge of studied sample about menopause Tables (6-7) and figures (3).
- 3-<u>Part (III)</u>: Deals with findings related to assess knowledge of studied sample about hormone replacement therapy tables (8-10) and figure (4).
- 4-<u>Part (IV):</u> Deals with findings related to assess Attitude of studied sample regarding menopause and hormone replacement therapy tables (11) and figure (5).
- 5-<u>Part (V):</u> Presents relation and correlation between total knowledge scores and total attitude scores about menopause and hormone replacement therapy and their sociodemographic characteristics which includes age, education, residence, marital status. Tables (12-14).

Part (I): Socio-demographic characteristics of the studied group

Table :(1): Distribution of studied women according to their sociodemographic characteristics.

Sociodemographic	No=200	%		
characteristics				
* Age (in years)				
45-50	43	21.5		
51-55	114	57.0		
>55	43	21.5		
- Mean ± SD	53.08	±2.95		
* Marital status:				
Married	155	77.5		
single	3	1.5		
Widowed	42	21.0		
*Family type				
Nuclear Family	59.5	29.75		
Extended Family	4	2.0		
Only With children	15	7.5		
Only With Husband	14.5	7.25		
Alone	7	3.5		
* Income:				
Insufficient(not cover their needs)	143	71.5		
Sufficient (cover their needs)	57	28.5		
- Mean ± SD(in pounds)	579.63±210.15			
*Nature of husband presence With family				
Always present	117	58.5		
Intermittent presence	39	19.5		
Dead	44	22.0		

Table (1) shows the sociodemographic data of the population study. As regards age, more than half (57%) of the studied group were within age group of (51-55) years with a mean age of 53.08±2.95, three quarters (77.5%) of the studied group were married. And (29.75%) live in nuclear family and almost more than two thirds (71.5%) of women had in insufficient income. More than half of samples (58.5%) the husband always present with family.

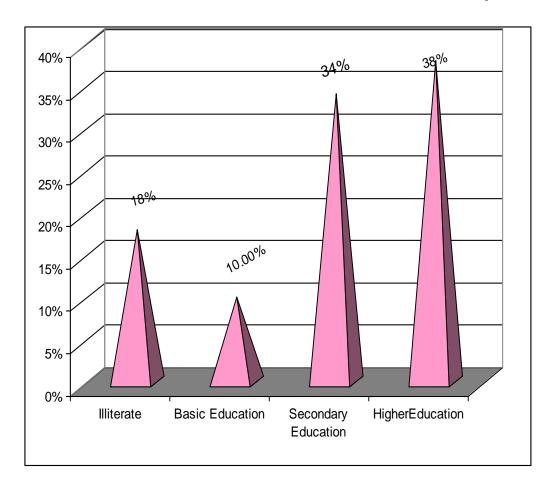


Figure (1): Percentage distribution of the studied group according to their levels of education.

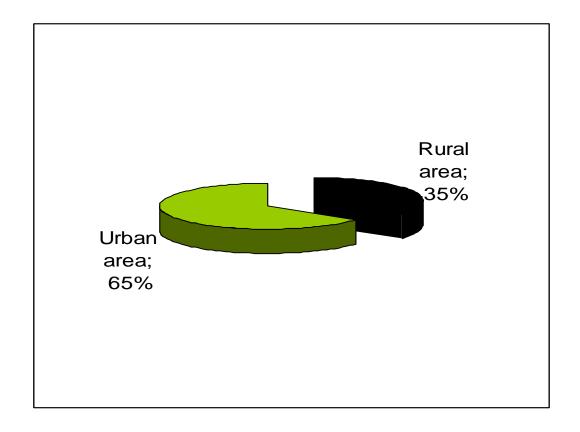


Figure (2): Percentage distribution of the studied group according to their Residence.

Table (2): Distribution of studied women according to their family and medical history.

Family and medical history	No=200	%
*Family history:		
Age of menopause for mother(In years)		
<40	2	1.0
40-<50	19	9.5
50 and more	118	59
Unknown	61	30.5
Mean ± SD	53.±2.22	
*History of medical disease(N=83)		
Cardiac disease	17	20.5
Diabetes	30	36.1
Hypertension	33	39.8
Others	3	3.6

This table shows that more than half (59%) of sample their mothers age at menopause was \geq 50 years. Regarding medical disease as cardiac disease, D.M, hypertension represents (20.5%), (36.1%), (39.8%) respectively,(3.6%) had other disease like (kidney, liver, respiratory disease).

Table (3): Distribution of studied women according to their menstrual history.

menstrual history	No=200	%
*Age at menarche:		
<12	9	4.5
12 and more	191	95.5
- Mean ± SD	12.06	±0.53
*Rhythm of menstruation		
Regular	168	84.0
irregular	32	16.0
*Frequency of menstruation		
<28 days	23	11.5
28-30 days	157	78.5
31-35 days	20	10.0
*Amount of menstrual flow		
Light	29	14.5
Moderate	158	79.0
Heavy	13	6.5
*Pain during menstruation		
Low	56	28.0
moderate	96	48.0
Extensive	6	3.0
No pain	42	21.0

Table (3) shows menstrual history of study population. Majority of sample menarche (95.5%) was above 12 years and only (4.5%) were before 12 years. Majority of sample (84%) had regular menstruation. In three quarters of sample (78.5%) frequencies ranged from 20-30 days. More than three quarters of sample (79%) had moderate amount of menstrual flow. Approximately half of cases (48%) had moderate pain during menstruation.

Table (4): Distribution of studied women according to their history of menopausal changes.

History of menopausal changes	No=200	%
*Age of last menstruation :		
<40-45	18	9.0
46-55	153	76.5
56 and more	12	6.0
Unknown	17	8.5
- Mean ± SD	48.49±	2.04
* Type of menopause incidence		
Natural	196	98.0
Artificial	4	2.0
*Bleeding around menopause		
No	186	93.0
Yes	14	7.0
*Inter menstrual bleeding		
No	176	88.0
Yes	24	12.0
* Post menopausal bleeding		
No	177	88.5
Yes	23	11.5

Table (4) shows the history of menopausal changes .regarding age of last menstruation more than three quarters (76.5%) of women's age ranged from 46-55 years. and only (6%) were above age 56 years. Majority of sample (98%) had physiological menopause while (2%) had artificial menopause. Majority of sample (93%) had no bleeding around menopause. Majority of sample (88%) had no intermenstrual bleeding. Majority (88.5%) had no post menopausal bleeding.

Table (5): Distribution of studied women according to the reproductive history.

Reproductive history	No=200	%
*Gravida:		
2	28	14.0
3-5	130	65.0
6 and more	42	21.0
*Parity:		
2	30	15.0
3 and more	170	85.0
*Type of delivery:		
Normal	177	88.5
Cesarean section	23	11.5
*Abortion:		
None	161	80.5
1	23	11.5
2 and more	16	8.0
*Gynecological history of		
operation for genital prolapse:		
No	178	89.0
Yes	22	11.0
* History of previous use of		
family planning:		
Don't use	75	37.5
Hormonal	50	25.0
Intrauterine device (IUD)	75	37.5

Table (5) demonstrates that (65%) of women gravida it was 3-5 times. More than three quarters of sample (85.5%) were >3 times parity. Concerning the type of delivery majority of sample (88.5%) had normal vaginal delivery and more than three quarters (80.5%) of sample had no history of abortion. Majority of women in study group (89%) had no operation for genital prolapse. In relation to previous used of family planning methods, it was found that users of IUD represents (37.5%) and also (37.5%) don't used family planning methods.

Part II: Studied women's knowledge regarding menopause

Table :(6): Distribution of studied women according to their knowledge about menopausal period among cases.

knowledge regarding menopause	No=200	%
*Definition of menopause:		
Complete stop of menstruation	67	33.5
Stop of child bearing	10	5.0
Decrease of estrogen hormone	2	1.0
Natural event of women	32	16.0
Age of occurrence of disease	3	1.5
All of them	86	43.0
* Feeling toward menopause:		
Age of experience and knowledge	21	10.5
End of menstrual problems	17	8.5
End of pregnancy problems	23	11.5
All of them	139	69.5

This table shows that (43.0%) of sample don't know definition of menopause. More than two thirds (69.5%) of sample don't know their feelings about menopause.

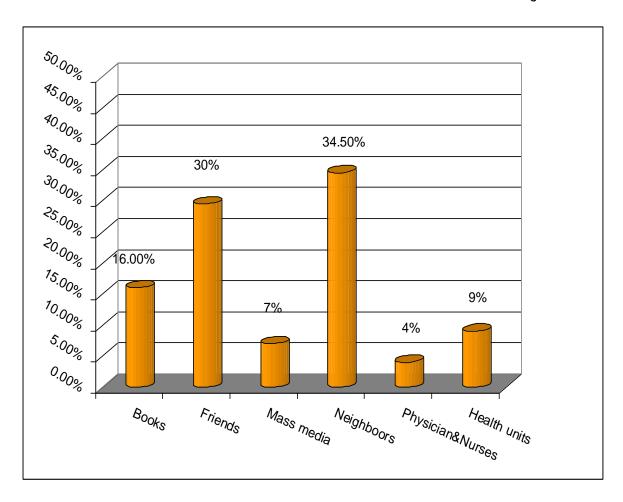


Figure (3): Distribution of the studied group according to their source of information.

Table: (7): Distribution of studied women according to their knowledge regarding changes during menopause among cases.

knowledge regarding changes during	No=200	%
menopause		
*Physical changes at menopause:		
Hot flushes	70	35.0
Night sweats	7	3.5
Headache	12	6.0
Palpitation	6	3.0
Vaginal dryness	5	2.5
Over weight	2	1.0
Muscle weakness	8	4.0
Urinary incontinence	9	4.5
All of them	81	40.5
*Psychological changes at menopause:		
Depression	37	18.5
Shortness of memory	16	8.0
Difficulty concentration	50	25.0
Sense of loneliness	70	35.0
Nervousness	17	8.5
Anxiety	9	4.5
All of them	1	0.5
* Social changes at menopause		
Changes in relation with husband	2	1.0
Increase in responsibility toward children	95	47.5
Sense of emptiness at home	36	18.0
Increase of responsibility toward parents	3	1.5
Unknown	64	32.0
* Changes in sexual desire at menopause :		
No changes	163	81.5
Sexual unsatisfaction	4	2.0
Husband decrease desire	17	8.5
Dysparenuia	14	7.5
unknown	2	1.0

Concerning mother's knowledge toward menopausal physical changes: more than one third (40.5%) suffer all physical changes of menopause, more than one third (35%) had sense of loneliness as psychological changes at menopause. Nearly half of sample (47.5%) had sense of increased responsibility toward children, while (81.5%) of sample had no changes in sexual desire.

Part (III): Studied women's knowledge regarding hormone replacement therapy

- Research question (1): Are menopausal women had knowledge and positive attitude regarding hormone replacement therapy? The analyses used to answer this question were percentage means (Table, 8, 9, 10).

Table (8): Distribution of studied women according to their Knowledge about Hormone replacement therapy.

Knowledge about Hormone replacement	No=200	%
therapy		
*Definition of hormone replacement therapy:		
Take compensatory hormones	46	23.0
Unknown	154	77.0
* Forms of hormone replacement therapy:		
Oral pills	30	15.0
Intramuscular injection	5	2.5
unknown	165	82.5
*Time to start hormone replacement therapy:		
Premature menopause without cause	34	17.0
Surgical menopause	5	2.5
Natural menopause	7	3.5
unknown	154	77.0
*Contraindication of hormone replacement		
therapy		
Pregnancy	33	16.5
Uterine fibroids	2	1.0
All of them	6	3.0
unknown	159	79.5
*Benefits of hormone replacement therapy		
Prevent hot flashes	24	12.0
Protect from osteoporosis	6	3.0
Don't know	170	85.0

Table (8) illustrates studied women's knowledge regarding hormone replacement therapy. More than three quarters (77%) didn't know HRT .More than three quarters (82.5%) didn't know forms of HRT. More than three quarters (77%) don't know when to start HRT .More than three quarters (79.5%) don't know contraindication of HRT .Majority of sample(85.0) don't know any thing about the benefits of HRT .

Table (9): Distribution of studied women according to their Knowledge of side effect of Hormone replacement therapy.

Knowledge of side effect of (HRT)	No=200	%
*Side effects of hormone		
replacement therapy		
Breast cancer	2	1.0
Uterine cancer	10	5.0
Stroke	1	0.5
Unknown	187	93.5
* Duration for use hormone		
replacement therapy		
<3 years	30	15.0
3-5 years	5	2.5
unknown	165	82.5
* Desire for use hormone		
replacement therapy		
No	39	19.5
Yes	12	6.0
unknown	149	74.5

In relation to women's knowledge about the side effect of hormone replacement therapy it was found that majority of sample (93.5%) don't know side effects HRT. And (82.5%) of sample don't know about the duration for use HRT .In relation to desire for use of hormone replacement therapy it was observed that less than three quarters (74.5%) of sample don't know if use it or no.

Table (10): Distribution of studied women according to their Knowledge about the follow up during Hormone replacement therapy.

follow up during (HRT)	No=200	%		
*Follow up during hormone Replacement therapy				
No	2	1.0		
Yes	51	25.5		
unknown	147	73.5		
*examination during hormone				
Breast examination	7	3.5		
	,			
Blood pressure	23	11.5		
unknown	170	85.0		
*Medical follow up				
Without complain	39	19.5		
With complain	161	80.5		

Table (10) shows follow-up during HRT less than three quarters (73.5%) of sample doesn't know about the follow up. More than three quarters of sample (85%) were unknown about physical examination during HRT and only (3.5%) of sample select breast examination. As regards medical follow up, more than three quarters of sample (80.5%) going to medical follow up with complain.

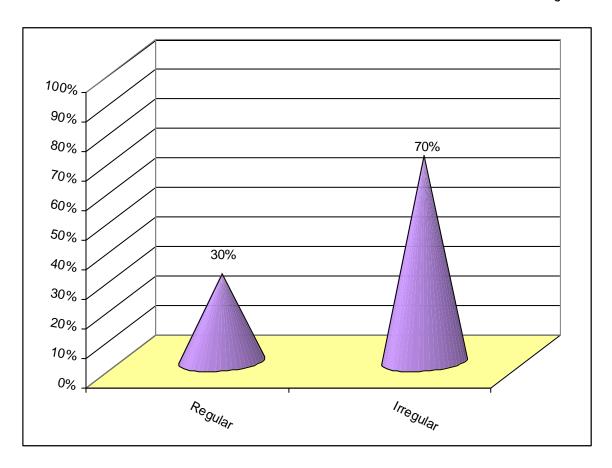


Figure (4): Distribution of the studied women according to pattern of follow up during hormone replacement therapy.

Part (IV): Assessing attitude of menopausal women regarding Hormone replacement therapy.

Table (11): Distribution of studied women according to their attitude regarding Hormone replacement therapy (n=200).

Attitude regarding (HRT)	Disa	Disagree		ertain	Ag	ree
	No	%	No	%	No	%
*Menopause is normal stage for women	2	1.0	13	6.5	185	92.5
in middle age						
*Menopausal symptoms cant be	40	20.0	61	30.5	99	49.5
controlled						
*Psychological changes is due to life	93	46.5	76	38.0	31	15.5
events						
*Increased sexual desire after	168	84.0	28	14.0	4	2.0
menopause						
* Osteoporosis detected early by	30	15.0	50	25.0	147	73.5
analysis &tests						
* Changes of menopause lead to	67	33.5	85	42.5	48	24.0
problems between couples						
* Husband has role to help women to	1	.05	15	7.5	184	92.0
overcome menopausal problems						
*HRT For Sever symptoms	89	44.5	91	45.5	20	10.0
* Use herbal treatment better than HRT	26	13.0	92	46.0	82	41.0
*side effect are more than benefits of	16	8.0	152	76.0	32	16.0
HRT						
* HRT is taken after doctor order	5	2.5	14	7.0	181	90.5
* Annual follow up during HRT	3	1.5	33	16.5	164	82.0
* HRT prevent hot flashes	17	8.5	144	72.0	39	19.5
* HRT treat side effect if taken	4	2.0	25	12.5	171	85.5
correctly						

*There alternatives for HRT	19	9.5	171	85.5	10	5.0
* HRT is taken for ever	126	63.0	67	33.5	7	3.5

Table (11) shows attitude of menopausal women regarding HRT. Majorities of sample (92.5%, 92.0%,) agree that menopause is a normal stage for women in middle age and that husband has a role to help woman to overcome menopausal problems and (42.5%) uncertain agree that changes of menopause lead to problems between couples. While (84.0%) disagree that the sexual desire increases after menopause. The majority of sample (92.0%). Agree that Husband has role to help women to overcome menopausal problems. the majority of sample (90.5%) agreed that (HRT) given after doctor order, while (85.5%,76.0%)some times agreed that there were alternative for (HRT) and the side effect of (HRT) more than its benefits respectively. while (63.0%) disagree that (HRT)given for ever.

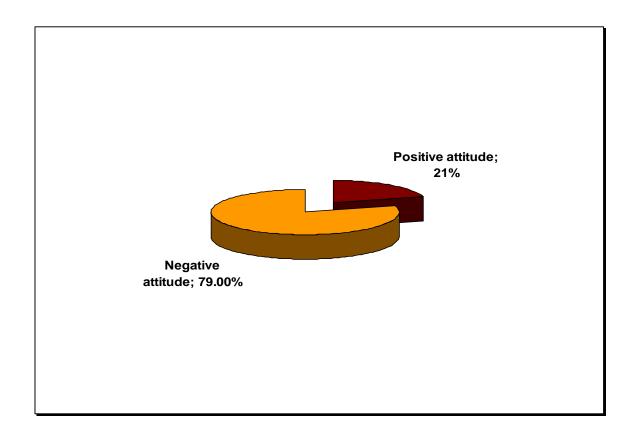


Figure (5): Distribution of sample according to their total attitude score.

Part (V): Relation and correlation between sociodemographic characteristics, total knowledge and total attitude scores.

- Research question (2): Are the educated women had more knowledge about menopausal changes and hormone replacement therapy than none educated? The analyses used to answer this question were percentage means (Table 12).

Table (12): Relation betweens socio- demographic characteristics and total knowledge of studied menopausal women (n=200).

socio- demographic	total knowledge					
characteristics	Unsatisfactory K Satisfactory I		actory K	\mathbf{X}^2	P.Value	
	No	%	No	%		
Age					2.69	>0.05
41-45	0	0.0	1	0.5		
46-50	22	11.0	20	10.05		
51-55	69	34.5	45	22.5		
>55	29	14.5	14	7.0		
Nature of husband						
presence						
Always present	80	40.0%	37	38.5%	11.62	< 0.001
Intermittent	16	8.0%	23	11.5%		
Dead	22	11.0%	22	11.0%		
Residence					1.47	>0.05
Rural	40	20.0%	30	15.0%		
Urban	80	40.0%	50	25.0%		
Education level						
Illiterate	27	13.5%	9	4.5%	5.79	< 0.05
Basic Education	16	8.0%	5	2.5%		
Secondary education	35	17.5%	32	16.0		
Higher education	42	21%	34	17.0%		

K=Knowledge

Table (12) illustrates that there is insignificant relation between age, residence and knowledge (P>0.05). While there is statistically

significant relation between educational level and knowledge (P<0.05). There were highly significant relation nature of husband presence and knowledge (P<0.001).

Table (13): Relation between socio-demographic characteristics and total attitude scores of studied menopausal women (n=200).

socio-demographic	total Attitude					
characteristics	Positive attitude		Negative attitude		\mathbf{X}^2	P- value
	No	%	No	%		
Age						
45-50	8	4.0	35	17.5	2.062	<0.001
50-55	21	10.5	93	46.5		
>55	12	6.0	31	15.5		
Nature of husband presence					2.81	>0.05
Always present	25	12.5	92	46.0		
Intermittent	5	2.5	34	17.0		
Dead	11	5.5	33	16.5		
Residence					0.745	>0.05
Rural	12	6.0	58	29.0		
Urban	29	14.5	101	50.5		
Education level					7.42	>0.05
Illiterate	12	6.0	24	12.0		
Basic Education	4	2.0	17	8.5		
Secondary education	8	4.0	59	28.5		
Higher education	17	8.5	59	28.5		

Table (13) illustrates that there is a highly significant relation between attitude and women age. While there was non significant relation between nature of husband presence, Residence, education and Menopausal attitude toward HRT.

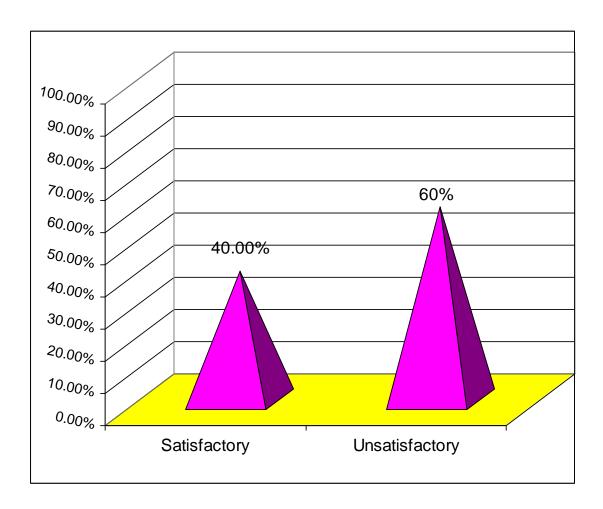


Figure (6): Distribution of sample according to their total knowledge score.

Table (14): Correlation between study sample total knowledge and total attitude scores.

Items	total knowledge		
Total attitude	R	P	
	0. 53	0.16	

Table (14) shows that there is positive statistically significant correlation between total knowledge and attitude scores of studied women.