

Evaluate the Effectiveness of Structured Teaching Program Regarding Menopausal Syndrome among the Peri Menopausal Women in Bandarulanka, Amalapuram, Andhra Pradesh

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Abstract:- “ evaluate the effectiveness of structured teaching programme regarding menopausal syndrome among the Perimenopausal women in Bandarulanka, Amalapuram, Andhra Pradesh”.

Objectives :

Assess the level of knowledge about menopausal syndrome of perimenopausal women.

- To check the level of knowledge of menopausal syndrome of peri menopausal women.
- findout association of pretest and posttest level of knowledge of selected demographic variables.
- To determine efficacy of Structured Teaching Programme about knowledge of menopausal syndrome of peri menopausal women.

For the study pre experimental research approach is utilized and the selected design is Pre Experimental study design with one group pre test – post test design. A sum of 45 Peri menopausal women were participated in the research. The data is entered in the master copy sheet for analysis and interpretation. The descriptive statistics and inferential statistical procedures such as frequencies, percentages, Mean, Standard Deviation, Paired t - test and Chi Square tests were used.

KEY WORDS

- | | | |
|------------|---|-------------------------------|
| 1) Df | : | Degree of freedom |
| 2) Et.al | : | All other |
| 3) F | : | Frequency |
| 4) N | : | Total number of samples |
| 5) M | : | Mean |
| 6) SD | : | Standard Deviation |
| 7) SE | : | Standard Error |
| 8) P-value | : | Level of significance |
| 9) STP | : | Structured Teaching Programme |
| 10) < | : | Less than |
| 11) > | : | More than |
| 12) % | : | Percentage |

I. INTRODUCTION

1.1BACKGROUND OF THE STUDY: “Changing women’s health-naturally”

The fact of life is aging process and this was considered as a physiological process with fragile bones, slouching skin and retrogressive systemic functions of the body. In the process of aging the women, might be encountering a well known state is known as menopause. It is distinguished by the changes those occurs in the life of women prior and women menstruation ends signing her infertile years.

In general, a female has finite number of eggs, which are found in her ovaries. The ovaries secrete hormones, like estrogen and progesterone. Those hormones are responsible for menstruation regulation and ovulatory functions. While the woman declining years, menopause occurs since the ovaries will not be able to produce eggs at every month and there will not be a regular and periodic cycle.

Once the female crossed her 40 years menstruation gets stopped physiologically and it is deliberated as a normally occurring because of ageing. Hence in some of the women, menopause might comes earlier than the expected due to the surgical interventions such as hysterectomy or ovarian damage due to chemotherapy¹

Menopause is the persistent stoppage of physiologic menses related with the decreased function of the ovaries; at this time the basic functions diminishes and ends. This is also natural phenomena that normally occurs between the age group of 45 and 55years. At once menopause is complete, women can not be pregnant for life time . Later on various bodily changes will occur. Due to the fluctuations in the hormones such oestrogen and progesterone women will experience clinical features of menopause because the ovarian functions get affected will secrete those hormones less and the women body will react in consonance with that²

The condition Menopause begins slowly and naturally indicated by variations in menstruation. The female experiences the important features might varies from one to another . In few women, menstrual flow may stop abruptly. The monthly flow may become irregular that may increase, decrease, and finally cessation will takes place.

Usually, there will be longer intervals between menses ; temporary absence of menses for several months between period is very common.³

Degradation of hormonal secretion will be leading to inadequate amounts of hormones in the blood stream which will produce the menopausal manifestations.⁴

Climacteric (Peri menopause) is the period which extends from the first sign of menopause. The period around the menopause is also called as peri menopause, it is lasting for one year after the last menstrual period (LMP). Women may have diverse beliefs about getting older so the nurse should understand the caring aspects for or imparting education to peri menopausal patients.⁵

The period beginning from about 1 year after menses at the same time is Post menopause, due to loss of estrogen levels in women the health related risk also may be apparent.⁶

The clinical manifestations of menopause usually last for the whole menopause transition (till the middle age 50s), eventhough some women may experience them for the rest of their lives. The most important manifestations are: night sweats, vaginal dryness, panic disorder, irregular periods, hot flashes, anxiety, loss of libido, and depression, irritability, joint pain, digestive problems, muscle tension, burning tongue, tingling extremities and osteoporosis⁷

Regarding menopause and perimenopause a million of women visited our website and many of them were find out the information about these conditions.⁸

Nearly women around 10% have absence of menopausal symptoms rather cessation of menstruation, women around 70% to 80% are aware of other changes but have not experienced problems and mostly 10% of women experienced severe form of manifestations which affected their daily activities.¹⁰

For centuries has not changed the Mean age of menopause, but in the last century tremendously the life expectancy hasbeen improved . At Romans time the life expectancy was 29 years and only 30% of women survived to experience the menopause even by the late 19th century.¹¹

It is not a disease, since many women go across the menopause with less or no problems. The menopausal woman at this modern generation is looks younger, moreover active and has enough positive attitude about menopause than in the past.

During the years of menopause, numerous women are experienced the life situations which affects mood, such as growing older, adjusting to the children's leaving home and accepting increase responsibility for aging parents.¹²

II. METHODOLOGY

Research methodology involves the following elements such as Research Approach, Research Design, Study Setting, variables, Population, sample: size, technique, inclusion, preparing blue print, data validity, pretesting and establishing tool Reliability , description of the tool, Intervention (STP), Pilot study, Data collection procedure, Data analysis procedure and Ethical considerations, problems faced during data collection. The chapter also dealing the Study Description and several steps adopted to gather data and assemble data for the study.

3.1 RESEARCH APPROACH

'Evaluative approach' adopted on the basis of problem and objectives to be accomplished.

RESEARCH DESIGN

It is the overall framework for conducting the study. The adopted research design for the present study is Pre experimental study with one group pretest –posttest research design.

3.2 STUDY SETTING

Depends on availability of samples, present study was conducted at Bandarulanka, Amalapuram.

POPULATION

The entire set of individuals (subjects) having some common characteristics. The population is again divided into two types. Those are target and accessible population.

- ❖ **Target population:** It was peri menopausalwomen.
- ❖ **Accessible Population:** was the peri menopausal women in Bandarulanka, Amalapuram.

3.3 SAMPLE AND SAMPLE SIZE Samplesize

The sample size of the present study consists of 45 peri menopausal women at Bandarulanka, Amalapuram.

3.4 CRITERIA FOR SELECTING THESAMPLE

1. Inclusioncriteria

- ❖ Who are willing to participate in thestudy.
- ❖ Study includes who knows English andTelugu.
- ❖ Woman aged 45-55 years with attended menopause and non-attended menopause visit in Bandarulanka, Amalapuram.

2.Exclusioncriteria

- ❖ Subject who are not willing to participate in thestudy.
- ❖ Subject who was not available during thestudy.

3.5 SAMPLING TECHNIQUE

Non probability convenient sampling technique was adopted for present study.

3.6 VARIABLES OF THE STUDY:

Variable is a measurable or potentially measurable component of an object or event that may fluctuate in quality or quantity or that may be different in quantity or quality from one individual object or event to another individual object or event of the same general class.

- **Independent Variables:** The most independent variable in this study is the structured teaching programme regarding menopausal syndrome among menopausal woman.
- **Dependent Variables:** In this study, dependent variable is knowledge of menopausal woman regarding menopausal syndrome.

3.7 DEVELOPMENT AND DESCRIPTION OF THE TOOL

Tool development is the complex and time consuming process. It consists of defining the construct to be measured, formulating the items, assessing the items for content validity, estimating the reliability and conducting pilot study.

The tool used for research study was self-administered structured knowledge questionnaire which was prepared to assess the knowledge of peri menopausal women regarding menopausal syndrome.

The tool was prepared after review of relevant topics, discussion with experts and guide and also based on experience of the investigator. The other steps involved in the final preparation of the tool were development of criteria check list, content validation of the tool, pre-testing of the tool, reliability testing of the tool and preparation of the final draft.

Description of the tool

Tolbert (1995) states data collection tool is the instrument that measures the variables of the study accurately and sensitively. The self-administered questionnaire consisted of part A and part B.

Part A: Demographic characteristics

The first part of the tool consisted of 11 items for obtaining information about the selected background factors such as age, religion, qualification, nature of employment, occupation, family income, marital status, type of family, number of children, source of health information, place of living.

Part B:

It consists of questions assessing knowledge regarding menopausal syndrome. It has 30 questions.

SCORING KEY

The knowledge on menopausal syndrome was measured in terms of knowledge scores. Each correct answer was given a score of one and a wrong answer given a score of zero. The total score was 30. The title of the program is:

“Structured Teaching program regarding menopausal syndrome among peri menopausal women”.

The Structured teaching program consists of objectives, introduction to the topic, definition, age, etiological factors, pathophysiology, signs and symptoms, diagnostic evaluations, treatment, contraindications of HRT, nursing management, diet plan, summary, conclusion, bibliography and review questions and answers.

3.8 CONTENT VALIDITY

To obtain content validity of the tool, prepared tool, with objectives, operational definition and criteria check list was submitted to five experts. The experts were requested to check for relevance, adequacy and appropriateness of the tool, a few items were modified based on the suggestions of the experts and there by content validity were ascertained.

3.9 RELIABILITY

The reliability of the tool was tested by using split half technique employing Spearman Brown's Prophecy formula. The Karl Pearson co-efficient correlation was established by deviation method. The r value is 0.89 and the tool was found to be reliable.

3.10 PILOT STUDY

Permission for the pilot study was obtained from Bandarulanka, Amalapuram and it was conducted on 11-5-2019 five subjects were selected by using non probability convenient sampling technique. All the selected subjects are requested to assemble in the class room; then the investigator given self-introduction, explained the purpose of data collection to the subject's willingness to participate in the study was ascertained. Structured knowledge questionnaire was administered to five subjects with the required information on 21-5-2019 (pretest). The structured teaching programme given on menopausal syndrome on 05-06-2019 and posttest was conducted by using the same structured knowledge questionnaire. The collected data was analyzed by using descriptive and inferential statistics.

3.11 DATA COLLECTION PROCEDURE

A formal permission was obtained from the medical officer at PHC setting. Data was collected from 11-05-2019 and 11-06-2019 at Bandarulanka, Amalapuram. Four subjects were selected by using non probability convenient sampling technique. All the selected subjects are requested to assemble in the school ground; then the investigator given self-introduction explained the purpose of data collection to the subjects and subjects' willingness to participate in the study was ascertained. The subjects were assured the anonymity and confidentiality of the information provided by them. Structured knowledge questionnaire was administered to the selected subjects with the required information and the structured teaching programme was given on the same day and conducted by using the same structured knowledge questionnaire.

3.12 PLAN FOR DATAANALYSIS

The data was edited, coded and entered in excels sheet. The data were analyzed, using SPSS version 10 and the probability of less than 0.05 was considered statistically significant. The data were analyzed as follows:

Section -1: Back ground factors of peri menopausal women were analyzed by using frequency and percentagedistribution.

Section -2: Pre and Posttest knowledge of perimenopausal women regarding menopausal syndrome were analyzed by using mean, standard deviation andpercentage.

Section -3: Comparison of mean knowledge regarding menopausal syndrome among peri menopausal women in pre and posttest was analyzed by using paired ‘t’ test.

EPILOGUE

This chapter dealt with the description of research approach, research design, setting, variables, population, sample and sampling technique, development and description of the tool, content validity and reliability of tool, pilot study, ethical issues, procedure for data collection and the plan for data analysis.

III. STATISTICAL METHODS

The data was entered in the master sheet for analysis and interpretation. Descriptive and inferential statistical procedures such as frequencies, percentages, mean, standard deviation, paired t-test and chi square tests wereused. Data was presented in following headings:

Section A: Frequency and percentage distribution of Perimenopausal women according to their selected demographicvariables.

Section B: Frequency and percentage of knowledge scores of Peri menopausal women on Menopausal syndrome according to the level of knowledge scores in pretest and posttest.

Section C: Paired t test of significance for knowledge scores of Peri menopausal women on Menopausal syndrome in pretest and posttest and comparing pretest and posttest knowledge scores.

Section D: Association between knowledge scores of Peri menopausal women on Menopausal syndrome in accordance with selected demographic variables.

SECTION – A

This section of analysis dealt with frequency and percentage distribution of Peri menopausal women according to their selected demographic variables.

TABLE 1Frequency and Percentage Distribution of Peri menopausal women according to Demographic variables.(n=45)

S. NO.	DEMOGRAPHIC CHARACTERISTIC	Frequency (f)	Percentage (%)	
1	Age in years	35-39 years	0	0%
		40-44 years	0	0%
		45-49 years	22	48.9%
		50-55 years	23	51.1%
2	Religion	Hindu	12	26.7%
		Muslim	15	33.3%
		Christian	16	35.6%
		Others	2	4.4%
3	Qualification	10 th class	25	55.5%
		Intermediate	13	28.9%
		Degree	5	11.1%
		Uneducated	2	4.4%
4	Occupation	House wife	20	44.4%
		Daily worker	19	42.2%
		Retired	4	8.9%
		Unemployed	2	4.4%
5	Nature of employment	Permanent	25	55.5%
		Temporary	20	44.4%
6	Income	Rs.2000-5000/-	19	42.2%
		Rs.5001-10000/-	12	26.7%
		Rs.10001-20000/-	12	26.7%
		Nil	2	4.4%
7	Marital status	Married	38	84.4%
		Unmarried	1	2.2%
		Separated/divorced	3	6.7%
		Widow	3	6.7%
8	Type of family	Nuclear	22	48.9%
		Joint	19	42.2%
		Extended	4	8.9%
		One	7	15.6%

9	Number of children	Two	24	53.3%
		Three	9	20%
		Four	5	11.1%
10	Source of information	Mass media	26	57.8%
		Health Personnel	9	20
		New papers	8	17.8%
		Others	2	4.4%
11	Place of living	Urban	6	13.3%
		Rural	39	86.7%

SECTION B

Frequency and percentage of knowledge scores of Peri menopausal women on Menopausal syndrome according to the level of knowledge scores in pretest and posttest.

TABLE - 2Frequency and percentage distribution of knowledge score of Peri menopausal women according to level in pretest and posttest on Menopausal syndrome(n=45)

Categorization	Pretest		Posttest	
	Frequency	Percentage	Frequency	Percentage
Below average (0-34.9%)	13	28.9%	0	0%
Average (35-64.9%)	32	71.1%	6	13.3%
Above average (65-100%)	0	0%	39	86.7%

The table no.2 shows that frequency and percentage based on knowledge scores of the Peri menopausal women regarding Menopausal syndrome. Below average (0-34.9%) indicates the scores in between 0 to 10, Average (35-64.9%) indicates the score between 11-19 and Above average (65-100%) indicates the scores between 20-30.

Table no.2, 13 (28.9%) were under below average knowledge level in pretest whereas in posttest were found nil, 32 (71.1%) were under average knowledge level in pretest whereas 6 (13.3%) were average knowledge level in posttest, above average knowledge level in pretest were found nil whereas 39 (86.7%) were under above average knowledge level in posttest. These differences indicate that Structured teaching programme was highly effected in Peri menopausal women.

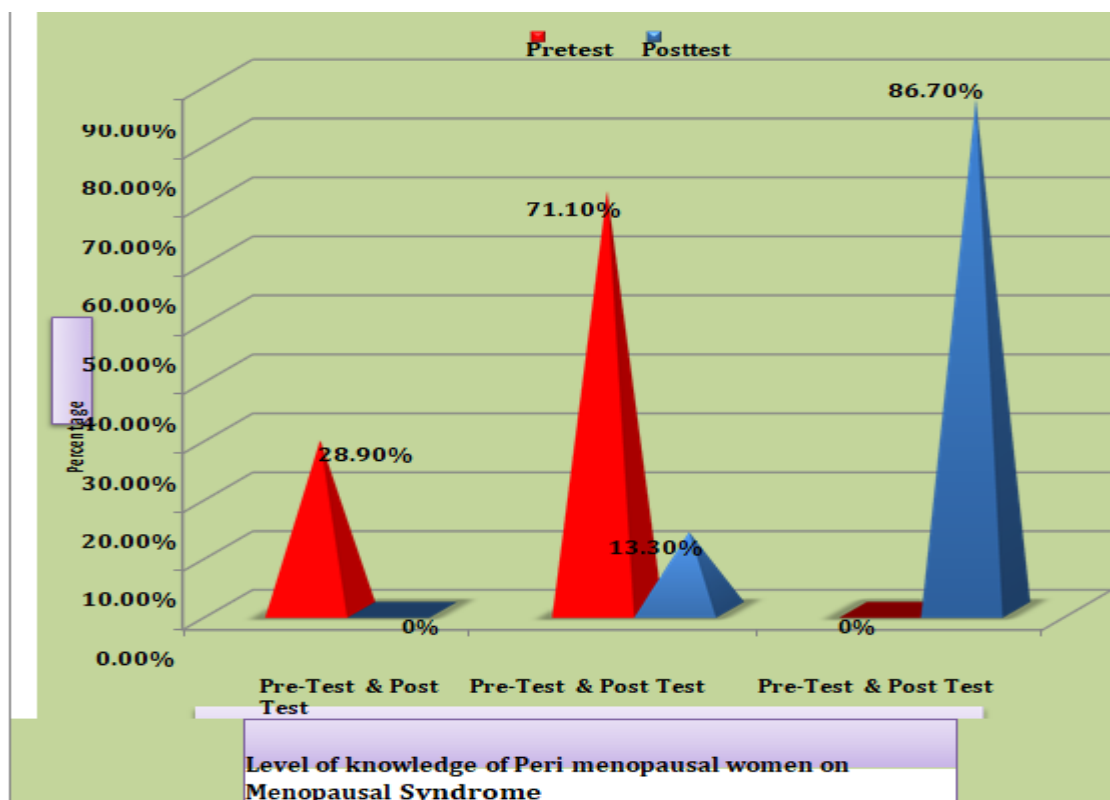


FIG.NO. 4.12 PERCENTAGE DISTRIBUTION OF PERI MENOPAUSAL WOMEN ACCORDING TO LEVEL OF KNOWLEDGE ONMENOPAUSAL SYNDROME

SECTION – C

It dealt with the mean knowledge and practices and comparison of pretest and posttest mean knowledge scores by using paired t test and testing the hypothesis of the present study.

TABLE - 3
Pre test and post test mean knowledge scores and paired t-test of significance on Menopausal syndrome among Peri menopausal women. (n=45)

Knowledge scores	Pretest	Posttest
Mean	12.00	26.71
Standard Deviation	2.46	3.53
Paired t-test	25.08	

44df standard deviation and that of posttest was 26.71 with 3.53 standard deviation. The calculated t' value was 25.08, which is higher than the table t' value 2.69 at 44df with 0.001 level of significance. It shows that there is significant difference ($p < 0.001$) in pretest and posttest knowledge scores.

Hence it concluded after Structured teaching programme on Menopausal syndrome the knowledge scores of the Peri menopausal women have been increased. The formulated hypothesis for the present study —there will be significant difference in the pretest and posttest knowledge scores of Peri menopausal women on Menopausal syndrome | has been accepted because of the significant difference in the pretest and posttest knowledge scores which is evident by the t' values. Hence H1 is accepted.

IV. RESULTS AND DISCUSSION

A study was conducted to assess the effectiveness of structured teaching programme regarding the knowledge on menopausal syndrome among peri menopausal women in community area, Bandarulanka, Amalapuram. The sample size was 45 patients. The discussion of the study is based on the findings obtained from the statistical analysis. The findings were discussed in relation to the objectives of the study.

Frequency and percentage distribution of peri menopausal women according to their selected demographic variables:

Related to out of 45 peri menopausal women 51.1% were in the age group of 50-55 years and 48.9% were in the age group of 40-49 years.

Related to Religion, majority 35.6% were Christians, 33.3% were Muslims, 26.7% were Hindus and 4.4% were belongs to other religions.

Regarding to Qualification of Peri menopausal women majority 56.6% were with 10th class, 28.9% were with intermediate, 11.1% were with Degree qualification and 4.4% were with uneducated.

Pertaining to Occupation of Peri menopausal women, majority 44.4% were house wives, 42.2% were daily workers, 8.9% were retired and 4.4% were with Unemployed.

In case of Nature of employment, majority of Peri Menopausal women 55.6% were permanent employee and 44.4% were Temporary employed>

Pertaining to family income per month, 42.2% getting Rs.2000-5000/- per month, 26.7% were getting Rs.5001-10000/- and Rs.10001-20000/- per month respectively and 4.4% were not getting any income.

In regard to Marital status of Peri menopausal women, majority 84.4% were married, 6.7% were divorced and Widow respectively and 2.2% were unmarried.

In respect of Type of family among Peri Menopausal women, majority 48.9% were from nuclear family, 42.2% were from joint family and 8.9% were from extended family.

Regarding Number of children among Peri Menopausal women, majority 53.3% had two children, 20% had three children, 15.6% had one child and 11.1% had four children.

In view of Source of information of sample, majority 57.8% had information from mass media, 20% had information from health personnel,

Frequency and percentage of distribution of knowledge score of Peri menopausal women according to level in pretest and posttest on Menopausal syndrome :

Out of 45 peri menopausal women ,13 (28.9%) were under below average knowledge level in pretest whereas in posttest were found nil, 32 (71.1%) were under average knowledge level in pretest whereas 6 (13.3%) were average knowledge level in posttest, above average knowledge level in pretest were found nil whereas 39 (86.7%) were under above average knowledge level in posttest. These differences indicate that structured teaching programme was highly effected in Peri menopausal women.

Association between knowledge of peri menopausal women menopausal Syndrome according to the selected demographic variables by using the chi-square test:

It reveals that there was significant association between pretest and post test knowledge scores on Menopausal syndrome with qualification, occupation, nature of employment, type of family, marital status and income where the obtained chi square values were significant at 0.05 level of significance and there was no significant association between age, religion, and source of information and place of living where the obtained chi square values were not significant.

V. CONCLUSION

The findings of the study shows:

Out of 45 peri menopausal women, 13 (28.9%) were under below average knowledge level in pretest whereas in posttest were found nil, 32 (71.1%) were under average knowledge level in pretest whereas 6 (13.3%) were average knowledge level in posttest, above average knowledge level in pretest were found nil whereas 39 (86.7%) were under above average knowledge level in posttest. These differences indicate that Structured teaching programme was highly effected in Peri menopausal women.

It reveals that there was significant association between pretest knowledge scores on Menopausal syndrome with qualification, occupation, nature of employment, type of family, marital status and income where the obtained chi square values were significant at 0.05 level of significance and there was no significant association between age, religion, and source of information and place of living where the obtained chi square values were not significant. It reveals that there was significant association between posttest knowledge scores on Menopausal syndrome with qualification, occupation, nature of employment and income where the obtained chi square values were significant at 0.05 level of significance and there was no significant association between age, religion, marital status, type of family, source of information and place of living where the obtained chi square values were not significant.

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REFERENCES

- [1]. Bradshaw K D. Menopausal transition. In: Schorge JO, et al. Williams Gynecology. New York, N.Y.: McGraw-Hill Medical;2008.
- [2]. Manson JE, et al. The menopausal transition and postmenopausal hormone therapy. In: Fauci AS, et al. Harrison's Principles of Internal Medicine. 17th ed. New York, N.Y.: McGraw-Hill Medical;2008..
- [3]. Menopause. National Institute on Aging. Accessed June 15,2011.
- [4]. Cedars MI, et al. Menopause. In: Gibbs RS, et al. Danforth's Obstetrics and Gynecology. 10th ed. Philadelphia, Pa.: Lippincott Williams & Wilkins; 2008:725.
- [5]. Col NF, et al. In the clinic: Menopause. Annals of Internal Medicine. 2009;150:ITC4.
- [6]. Gass MLS. Menopause. In: Hillard PJA. The 5-Minute Obstetrics and Gynecology Consult. Philadelphia, Pa.: Lippincott Williams & Wilkins; 2008:292.
- [7]. National Institutes of Health state-of-the-science conference statement: Management of menopause-related symptoms. Annals of Internal Medicine.2005;142:1003.
- [8]. Dixie Mills, An introduction to perimenopause ,menopause and menopausal syndrome, menopause and perimenopause,2011.
- [9]. [Http:// www.womens- health. co.uk](http://www.womens-health.co.uk).
- [10]. Potter Parry A et al. Fundamental of nursing, Mosby Company, sixth edition 2006.
- [11]. Dr Jharana Swain, Health action, Managing menopause in elderly women, 2011 pp 14-16.
- [12]. Joyce M et al, Medical Surgical nursing, Menopause Seventh edition 2007 PP 980-981.
- [13]. Newton M, Odom PI. The menopause and its symptoms, south med j.; 57.
- [14]. [Http ://www.lifeextensionvitamins.com](http://www.lifeextensionvitamins.com)
- [15]. Basvanthappa B.T (2006), Nursing Research, 2nd Edition, New Delhi; Jaypee Publication pp 92-93.
- [16]. Nancy burns Susan K. Grove,(2007) Understanding nursing research, 4th Edition, New Delhi; Elsevier publication (p) Ltd.
- [17]. Neugarten BL , Kraines RJ, – Menopausal symptoms in women of various Ages, Psychosom Med. 1965 May- June 27.
- [18]. Rogers j. The menopause .N Engl J. Med. 1956 Apr 12.
- [19]. Sonja M. Mc. Kinlay and Margot Jefferys , Menopausal Syndrome, 1974 London.
- [20]. Stewart et al. The menopausal syndrome ; 1951 Dec, 755-756
- [21]. Bush et al. Perspective in the women's health initiative trial of hormone replacement therapy. Obstet Gynaecol 2002.
- [22]. Syed AS.A. Rahman et al. Assessment of menopausal symptoms using modified menopause rating scale among middle age women in Malaysia, Sarawak, 2010.
- [23]. Thompson B, Hart SA, Durno D, International journal of nursing studies, between menopausal symptoms depression, and exercise in middle aged women. 2009
- [24]. Dennerstein L, Dudley EC, Hopper JL, Guthrie JR, Burger HG. A prospective population-based study of menopausal symptoms. Obstet Gynecol 2000;96:351-8.
- [25]. Guthrie JR, Dennerstein L, Taffe JR, Donnelly V. Health care-seeking for menopausal problems. Climacteric 2003;6:112-7.
- [26]. Joffe H, Cohen LS. Estrogen, serotonin and mood disturbance: Where is the therapeutic bridge? Biological Psychiatry 1998; 44:798-811.
- [27]. Proceedings from the NIH State-of-the-Science Conference on Management of Menopause-Related Symptoms, March 21-23, 2005, Bethesda, Maryland, USA. Am J Med 2005;118 Suppl 12B:1-171.
- [28]. Santoro N, Sherman SS, Joffe H, Newton K, Grady D, Freeman E, Schmidt P, Stearns V; Endicott J, Ganz P, Low Dog T, Monroe S, Shames D, Weber A, Zeitlian G. New intervention strategies for menopausal symptoms. Executive Summary of NIH meeting November 2006.
- [29]. Grady D, Women's health study, 2008
- [30]. Rossouw JE, women's attitude toward the menopause, 1963
- [31]. Dew J et al., A cohort study of hormone replacement therapy given to women previously treated for breast cancer, 1998.
- [32]. WHO: World Report on Ageing and Health. Geneva: World Health Organization; 2015.
- [33]. Central Statistical Agency. The 2007 Population and Housing Census of Ethiopia. Addis Ababa: Federal Democratic Republic of Ethiopia, Population Census Commission, Central Statistical Agency; 2010.
- [34]. Barnabei VM. Making the Diagnosis. In R. Wang-Cheng, J.M. Neuner, &
- [35]. M. Barnabei (Eds.), Menopause (p. 212). Philadelphia: The American College of Physicians; 2007.
- [36]. Brinton RD, Yao J, Yin F, Mack WJ, Cadenas E. Perimenopause as a neurological transition state. Nat Rev Endocrinol. 2015;11(7):393-405.
- [37]. Harlow SD, Gass M, Hall JE, Lobo R, Maki P, Rebar RW, Sherman S, Sluss PM, de Villiers TJ. Executive summary of the stages of reproductive aging workshop + 10: addressing the unfinished agenda of staging reproductive aging. Menopause. 2012;19(4):387-95.
- [38]. Dr Bang, A Study on menopausal problems, 1999.
- [39]. Silvine levis et al., A study on soy isoflavines in the prevention of menopausal bone loss and menopausal symptoms, 2011
- [40]. Hoffman BL, Schorge JO, Bradshaw KD, Halvorson LM, Schaffer JI, Corton MM. Williams Gynecology (3rd ed., pp. 471-491). New York: McGraw-Hill

- Education / Medical;2016.
- [41]. Kaufert PA. The social and cultural context of menopause. *Maturitas J Climacteric Postmenopause*.1996;23:169–80.
- [42]. Santoro N, Epperson CN, Mathews SB. Menopausal symptoms and their management. *Endocrinol Metab Clin N Am*.2015;44(3):497–515.
- [43]. Ford K, Sowers M, Crutchfield M, Wilson A, Jannausch M. A longitudinal study of the predictors of prevalence and severity of symptoms commonly associated with menopause. *Menopause*.2005;12(3):308
- [44]. Li C, Borgfeldt C, Samsioe G, Lidfeldt J, Nerbrand C. Background factors influencing somatic and psychological symptoms in middle-age women with different hormonal status. A population-based study of Swedish women. *Maturitas*. 2005;52(3-4):306–18.
- [45]. Havican C, A study on correlation between ayurvedic dosha and menopausal symptoms, June 2010.
- [46]. T.Cehiz et al., A Research study on evaluate the
- [47]. Tumbull S. Yoga as a treatment for menopausal symptoms. *J Yoga Ontogenet and Therap Investig*.2010;2:14–5.
- [48]. Sharma S, Tandon VR, Mahajan A. Menopausal symptoms in urban women. *JK Science*.2007;9(1):13–7.
- [49]. Shah R, Kalgutkar S, Savardekar L, Chilang S, Iddya U. Menopausal symptoms in urban Indian women. *Obstet and Gynecol Today*. 2004;11:667–70.
- [50]. Kowal K et al., Management of menopause related symptoms, 2005. 50)Cuttler GB et al., treatment of menopause associated vasomotor
- [51]. symptoms, 2004.28. Daniel Becker
- [52]. Daniel Becker et al., Psychologic distress around menopause, June 2001.
- [53]. Cain Vet al., A study on menopausal status and symptoms across ethnic groups, 2009.
- [54]. Ross JL et al., A Study on hormone replacement therapy, March 2011, Philadelphia.
- [55]. Kulshreshtha B, Ammini A. Hormone replacement therapy. In: Sharma OP, editor. *Geriatric care: A textbook of geriatrics and gerontology*. 3rd ed. New Delhi: Viva Books Publishers; 2008. pp.647–50.
- [56]. Vaze N, Joshi S. Yoga and menopausal transition. *J Midlife Health*. 2010;1:56-8.
- [57]. Mahmoud Hajiahmadi et al, *World applied sciences journal* 4, The effect of yoga technique on the treatment on menopausal syndrome.
- [58]. Simpson ER, Davis SR (2001). "Mini review: aromatase and the regulation of estrogen biosynthesis--someneew
- [59]. Freeman EW, Sammel MD, Lin H, et al. (2007). "Symptoms associated with menopausal transition and reproductive hormones in midlife women" *gynecology*
- [60]. Pien GW, Sammel MD, Freeman EW, Lin H, DeBlasis TL (July 2008). "Predictors of sleep quality in women in the menopausal transition".
- [61]. Peter Kenemans, MD, PhD. Menopause, Perimenopause & Postmenopause: Definitions, Terms & Concepts
- [62]. Grimes DA et al: Perspectives on the Women's Health Initiative trial of hormone replacement therapy. *Obstetric Gynecol* 2002;100:1344.
- [63]. Rapp SR et al: Effect of estrogen plus progestin on global cognitive function in postmenopausal women: the Women's Health Initiative Memory Study: a randomized controlled trial. *JAMA* 2003;289:2663.
- [64]. Rossouw JE et al: Risks and benefits of estrogen plus progestin in healthy postmenopausal women: principal results from the Women's Health Initiative randomized controlled trial. *JAMA* 2002;288:321.
- [65]. Grady D et al: Cardiovascular disease outcomes during 6.8 years of hormone therapy: Heart and Estrogen/progestin Replacement Study follow-up (HERS II). *JAMA* 2002;288:49.
- [66]. Mishra N, Mishra VN, Devanshi Exercise beyond menopause: Dos and don'ts. *J Midlife Health*.2011;2:51–6.
- [67]. Saka M, Saidu R, Jimoh A, Akande T, Olatinwo A. Behavioral pattern of menopausal Nigeria women. *Ann Trop Med and Public Health*. 2012;5:749.
- [68]. <http://www.medscape.com>
<http://www.medicinenet.com>
- [69]. Anamma Jacob text book of midwifery and gynecological nursing ,third edition page no-55,791,795,800
- [70]. Dc.dutta textbook of obstetrics 7 th edition page no-100-108
- [71]. www.pubmed.com
- [72]. www.slideshare.com