



A SURVEY ON EMOTIONAL STATUS AMONG POST MENOPAUSAL WOMEN IN CHENNAI CITY

Dr. Renu Agarwal¹, Kezia J², Darshani G S³

¹Assistant Professor, PG Department of Home Science- Food Science, Nutrition and Dietetics
 ²Assistant Professor, Department of Home Science- Clinical Nutrition and Dietetics,
 ³Student, PG Department of Home Science- Food Science, Nutrition and Dietetics,
 Shrimathi Devkunvar Nanalal Bhatt Vaishnav College For Women
 Email: <u>goldie_agarwal2002@yahoo.com</u>¹, <u>kezinithi@gmail.com</u>²

ABSTRACT

Main aim of the study was to assess the Perception and the Emotional Status among post-menopausal women (positive and negative emotions) towards menopause in various aspects i.e., Frequency, Intensity, Longevity and Regulation. About 50 Post- Menopausal women from Chennai city were purposively selected for the study. House to house survey, cross- sectional descriptive study with an interview method via self- structured questionnaire, entitled "The Multidimensional Emotion Questionnaire for Post-Menopausal Women" was administered. Firstly, five positive emotions such as Happiness, Inspiration, Proudness, Excitement and Enthusiasm were evaluated. Among that frequency of happiness showed higher results, intensity was moderate that lasted up to only 10 minutes for maximum. Respondents were inspired moderately and were easily regulated. Enthusiasm and excitement were higher in intensity, lasting up to 10 minutes once in a day. Secondly, negative emotions viz. Sadness, Anger, Anxiety, Depression, and Fear, sadness was recorded most frequenting about 2 to 3 times a day having moderate intensity and effecting up to an hour. Anxiety is shown to have high frequency about 44% and 30% have high intensity lasting up to 10 minutes but regulating in a moderate degree. Fear showed higher percentages in their duration despite their minimal occurrence i.e., only once in a week. The most frequent emotions that were during the pre-menopausal time were anger amongst all. 52% they showed no bad feeling for having the menopausal symptoms.

KEY WORDS: Post- Menopausal women, Emotions, Menopause, women





INTRODUCTION

Post- Menopausal women are those who have had no menses or periods for 12 consecutive months which is characterized in the middle ages of a woman. Women revolve around one- third of their life in the menopausal time. This menopausal period has a greater challenge psychologically as well as physically. Especially the psychological aspects of women, emotional imbalances are more common, depression, stress, anxiety affects women. It is important to study emotions particularly in transitional age i.e., Post-Menopausal time. Emotions build up better relationships and help to talk about feelings more clearly, avoid or resolve conflicts better and move past difficulties more easily.

According to **WHO**, natural menopause means permanent cessation of mensuration resulting from the loss of activity of ovarian follicle without any intervening cause and is confirmed only after 12 consecutive months of absence of mensural flow. World Health Organization (WHO) also states that menopause is a natural physiological problem.

Pallikadavath.s, Ogollah.r investigated a population-based study concluded that natural menopause occurs between 45 and 55 years of age and also stated that the mean menopausal age in India is 47.5 years. With regards to the menopause, the age of menopause of the Indian population was discussed to be younger, between 41.9 and 49.4 (**Saseendran, Pallikavath**, *et al.*, **2016**). **Medical news today** has stated that perimenopause is the period when the women undergo a normal period in their reproductive age. The perimenopause is, that surrounds the final years of a women's reproductive life (**Santoro, 2016**). Mood, depression and general symptoms of anxiety and depression are common during perimenopause and this time has been known to increase the risk of both depression and psychosis in women. According to the Australasian menopausal society, depression affects 1 in 5 women and 1in 8 men at some stage of their life. The state of menopause in women is associated with the risk of symptoms of depression and anxiety (Andel. R, *et al.*, **2018**).

Depression is a psychiatric problem that mostly flourished in the women population. Most of the depression disorders are caused in the premenopausal and perimenopausal time. According to the national institute of mental health, depression is a serious mood disorder and affects the way people feel, think and handle difficult daily tasks. The prevalence of depression in geriatric population reports that depression increased with age and insomnia in them (**Rathod S. Mamta**, *et al.*, **2019**).





A woman is said to be postmenopausal when she has not had period for an entire year. The major health issues that are faced by the post-menopausal women are cardiovascular disease, loss of bone mineral density, decrease in the endothelial functions, cognitive changes, mood fluctuations, changes in the coagulation factors, lipoprotein changes. It is evident that women in menopause have enormous changes concerning physiologically and psychologically (**Cassandra Recca**, *et al.*, **2018**).

An estimated 80 percent of females experience physical and psychosocial symptoms while reaching menopause as a result of the change in the quality of life. These changes are due to the estrogen deficiency in the body (**Radha Shukla, Jayshree Ganjeewale 2018**).

Management of menopause is a possible strategy to prevent the post- menopausal physical changes and psychological changes. The order to control the postmenopausal emotions early intervention may be beneficial.

This study enables a deeper understanding in the emotions persisting in post- menopausal women and their chaos due to various factors. Thus, this study aims to focus on various aspects of emotions that a woman may undergo in her post-menopausal period. This study may provide information about the intensity and magnitude of each emotion separately entitled. The perception about the menopause among the population have been studied. A recall of the pre- menopausal emotions is documented and their coping strategies to manage emotions are enlisted. This study benefits for the women, young adults and the society to understand the problems of women. This study may benefit the younger generation to understand the forthcoming changes and to prepare themselves to manage those changes.

OBJECTIVES

1. To study women's perception towards menopause.

2. To study the emotional status (positive and negative emotions) among post- menopausal women in various aspects i.e., frequency, intensity, longevity, regulation.





METHODOLOGY

RESEARCH DESIGN

A research design is a blueprint or a plan specifically created to answer the research question and to control variance. The study design opted for this study was cross sectional and descriptive.

LOCALE OF STUDY

The study was conducted at Chennai city since it is a metropolitan city so a wide population can be assessed.

SELECTION OF SAMPLE

The study population consisted of natural postmenopausal women aging 45 to 55 years old. Menopause is diagnosed when a woman has no menstrual periods for about 12 consecutive months without any intervening cause. The careful selection of sample was made to ensure that they have undergone a natural menopause despite women being done hysterectomies and also seen for further reproductive complications excluded. The mean age of menopause in India is estimated to be 47.5 by Pallikadavath.S (2016). A total number of 50 natural postmenopausal women in Chennai city were selected. The sampling technique used in selection of samples was a purposive sampling technique. The participants were informed about purpose of the study. The informed consent for the legal ethics of the collected data was informed to the samples at the time of house to house visit.

RESEARCH TOOL

The questionnaire was developed by the investigator. Data were collected among 50 postmenopausal women with a well-equipped questionnaire by house to house survey, using the questionnaire named "The Multidimensional Emotion Questionarrie for Post Menopausal Women". The MEQ (Multidimensional Emotion Questionnaire) is a self report measure of emotions. The multidimensional questionnaire asks about the experience of different emotions. Namely 5 Positive Emotions (Happiness, Inspiration, Self Valuing, Excitement, Enthusiasm) and 5 Negative Emotions (Sadness, Anger, Anxiety, Depression, Fear). The 4 scale rating was used to score the emotions.

The First part of the questionnaire consists of general information or subject profile (Name, Age, Date of Birth, Address, Type of Family, Marital Status). The *Second part* of questionnaire consists Menstrual history of the study sample like age of menopause by the recall method and some participants could not recall the exact age of menopause. In those situations, the researchers had to provide some of the clues





(like referring to some memorable events that had happened in their life). The tool includes the questions pertaining to thoughts about menopause and and perception towards menopause, managemental crisis, their general health status. *Part Three* consists of multidimensional emotional questionnaire (MEQ) for menopausal woman was used to assess the emotional status among 50 post- menopausal woman. The questionnaire was developed by the researcher to achieve the objectives of the study. The *Final part* of the questionnaire consists of the emotional experiences during their pre-menopausal time. They consisted questions like emotions overwhelming them, aspects of like that bothered the most other than the menopause, their reaction as a result of any emotion, and their attitude towards the menopausal symptoms, the managerial activities that they practiced to overcome those emotions. This part of the questionnaire is an open ended.

PROCEDURE FOR DATA COLLECTION

The methods used for the data collection was house to house survey. Interview method was adopted. The researcher stood aside with the subject and explained each aspect of the questionnaire and retrieved the answers and they were noted in the questionnaire. At the beginning of the interview, researchers informed the purpose of the data collection and the confidentiality towards the data collected. As soon as the interview was over a nutritional awareness was created among the targeted group.

STATISTICAL ANALYSIS

The data was analyzed, coded, tabulated, statistically analyzed for percentage and graphically represented through charts and tables.

DURATION OF THE STUDY

The duration of the study for the completion of the project was July to February 2019-2020. The data collection was collected from December to January. The description of the study and interpretation of the data was carried out in the rest of the study duration.





RESULT AND DISCUSSION

PART I - PERCEPTION TOWARDS MENOPAUSE

About 42% (21) of respondents reported menopause as a period of women's life and as well as having physical and mental changes. About 30% (15) of women have said that menopause is just a period of women's life and 28% (14) of women have responded menopause as only having physical and mental changes. Most of the women reported midlife as "change of life" (Shelley *et al.*, 2000).

What do you think about term	TOTAL	PERCENTAGE
menopause?	(n=50)	%
Period of women's life	15	30
Having both physical and mental changes	14	28
Both (a) and (b)	21	42
TOTAL	50	100

Respondents Response on Perception about Menopause

Samples were asked about their view on menopause. Of the respondents **52%** (**26**) of women responded **Menopause as A Positive Attribute in Life** that is having no periods and a start for new life. About 20% (10) of women have reported that menopause as a negatively as they thought to have loss in their youth and fertility. Minor percentage of 28% (14) have reported menopause as a positive as well as negative one. Women have a less depression who thought menopause as positive event (**Lee** *et al.*, **2010**).





Respondents Response on View about Menopause

How do you view menopause?	TOTAL (n=50)	PERCENTAGE%
Positively (no worries about periods and marking a new life)	26	52
Negatively (meaning loss of fertility and youth)	10	20
Both (a) and (b)	14	28
TOTAL	50	100

The data collected reports that about management of menopause revealed that a higher percentage of women **56%** (**28**) had **Difficulty** in management of menopause and 36% (16) of women reported that there was no difficulty in management of menopause; a minor amount of sample respondents 8% (4) showed null effect i.e., they didn't know whether they had difficulty or not.

Respondents' Response on Degree of Management of Menopause

Was management of menopause TOTAL Percentage%

difficult?	(n=50)	Percentage%
Yes	28	56
No	16	36
Don't know	4	8
TOTAL	50	100

About **66%** (**33**) of women have reported their health status to be **Moderately Good** and about 20% (10) of women have said that their health status was very good and minor amount of 14% (7) reported as having poor health status. The post- menopausal women reported that sometimes they had irresistible emotions. About **72%** (**36**) of women had reported that they **Sometimes had Overwhelming Emotions** and only a few i.e. 8% (4) have reported that they were never emotionally irresistible. 20% (10) of women had always overpowering emotions.





PART – II EMOTIONAL STATUS AMONG POST MENOPAUSAL WOMEN POSITIVE EMOTIONS

This study investigated about 5 positive emotions viz the happiness, inspiration, proudness, excitement, enthusiasm among 50 natural post-menopausal women that comprised four evaluating components like frequency, intensity, longevity. The values are expressed in the percentage of women having the emotions.

FREQUENCY OF POSITIVE EMOTION

The frequency of happiness among 50 post- menopausal women on the basis of frequency occurrence. Women about 40% (20) are reported to be at least Happy once in a day; 30% (15) of women are Inspired once in a day; 34% (17) get proud on the basis of their work or their potentiality towards their work or being appraised for their act once in a day; 34% (17) of women were found to be Excited and Enthusiastic. A study on emotions in everyday life, the frequency of occurrence of positive emotions are higher than that of negative emotions by 2.5 times (Trampe *et al.*, 2015).

	Happiness	Inspiration	Proudness	Excited	Enthusiasm
About once in a week	12	17	14	30	22
Once in a day	40	30	36	34	34
2 to 3 times a day	30	26	18	24	18
More than 3 times a day	18	14	26	12	26

Frequency of Positive Emotions – (N=50)

*The values represented in the table are percentage of women having the emotion

INTENSITY OF POSITIVE EMOTION

Happiness being measured implied about 56% (28) of women had moderate happiness; 40% (20) of women were Inspired Moderately upon various things; 44% (22) of women experience High Intensity of Excitement and higher percentage of about 30% (15) of women reported High Intensity of Enthusiasm. A study on anxiety among pre-natal HIV adolescents and young people conducted by Duteste (2019) those having higher self-esteem had low anxiety levels (Durteste *et al.*, 2019).





Intensity of Positive Emotions- (N=50)

	Happiness	Inspiration	Proudness	Excitement	Enthusiasm
Low	10	20	16	18	16
Moderate	56	40	44	26	28
High	26	26	28	28	30
Very high	8	4	12	18	16

*The values represented in the table are percentage of women having the emotion

LONGEVITY OF POSITIVE EMOTION

About 34% (17) of women have been reported to be **Happier** and the emotion prolonged **Up to 10 minutes**; **Inspiration** about 36% (18) of them got **up to 10 minutes** as a large among others; 34% (17) of them were having **Proudness** about 10 to 30 minutes as a higher percentage; 32% (16) experienced **up to 10 minutes** of **excitement**; at last **Enthusiasm** prolonged about 10 minutes in 30% (15) of the population.

Longevity of Positive Emotions- (N=50)

	Happines s	Inspiratio n	Proudness	Excitement	Enthusiasm
Up to 10 minutes	34	36	24	32	30
10-30 minutes	30	32	34	30	20
About an hour	18	10	24	20	22
More than an hour	18	24	18	18	28

*The values represented in the table are percentage of women having the emotion

REGULATION OF POSITIVE EMOTION

The regulation of emotions is the ability to increase or decrease the emotion. Higher percentage of about 52% (26); 36% (18); 34% (17) have shown that they easily Regulate their Happiness; Inspiration and Proudness respectively. Among the sample the same 34% (17); 46% (23); 40% (20) turned up to have a moderate ability to regulate Proudness, Excitement, Enthusiasm respectively. A study on rats done by Finlayson (2016) revealed that positive emotions were regulated in them when rats were observed after a positive treatment consisting of playful manual tickling (Finlayson *et al.*, 2016).



International Journal of Multidisciplinary Research in Arts, Science & Commerce (IJMRASC) ISSN Online: 2583-018X



Vol. 3(2), June 2023, pp. 31-45

Regulation of Positive Emotion-(N=50)

	Happiness	Inspiration	Proudness	Excitement	Enthusiasm
Easy	52	36	34	26	38
Moderate	34	30	34	46	40
Difficult	14	22	28	26	18
Very Difficult	0	12	4	2	4

*The values represented in the table are percentage of women having the emotion

NEGATIVE EMOTIONS

This study elucidates the negative emotions such as sadness, anger, anxiety, depression and fear. These emotions are studied for the components like frequency, intensity, longevity, and regulation.

FREQUENCY OF NEGATIVE EMOTIONS

Among the 50 post- menopausal women 38% (19) of women turned up to be Frequently Sad, 44 % (22); 36% (18); 42% (21) of women got Anger, Anxiety and Depression at least once in a day respectively. A Frequent occurrence of Fear was noted i.e., 42% (21). Least percentage of women, about 14% reported to get happier more than three times a day, 6% (3) of women showed anger more frequently, 10% (5) of women showed anxiety, fear and depression occurring more than 3 times a day. Women are said to have 2 to 3 times higher risk for depression when they were in their perimenopause (**Joyce** *et al.*, **2011**).

Frequency of Negative Emotion-(N=50)

	Sadness	Anger	Anxiety	Depression	Fear
About once in a week	16	22	28	32	42
Once in a day	32	44	36	42	18
2 to 3 times a day	38	28	26	16	24
More than 3 times a day	14	6	10	10	10

*The values represented in the table are percentage of women having the emotion





INTENSITY OF NEGATIVE EMOTIONS

Among the 50 post- menopausal samples 40% (20), 48% (24) of women showed Moderate Intensity of Sadness and Anxiety. 34% (17) of women reported high levels of Depression and Fear. 30 % (15) of women showed High Intensity of Anger among all. The gender specific study among men and women on their negative emotions was recorded. Men showed larger decreases in heart rate whereas women showed higher levels of arousal towards anger, amusement and pleasure (Deng *et al.*, 2016).

Intensity of Negative	Emotion-(N=50)
------------------------------	----------------

	Sadness	Anger	Anxiety	Depression	Fear
Low	16	22	26	34	34
Moderate	40	28	48	28	24
High	34	30	22	16	26
Very high	10	20	4	22	16

*The values represented in the table are percentage of women having the emotion

LONGEVITY OF NEGATIVE EMOTIONS

Sadness among women has shown more longevity about 32% (16). Among all 44% (22) of women have shown Low Intensity of Depression, Anxiety and Anger.

Longevity of Negative Emotions- (N=50)

	Sadness	Anger	Anxiety	Depression	Fear
Up to 10 minutes	22	44	44	40	52
10- 30 minutes	22	24	38	14	22
About an hour	24	18	14	28	18
More than an hour	32	14	4	18	2

*The values represented in the table are percentage of women having the emotion





REGULATION OF NEGATIVE EMOTIONS

The higher percentages of about 34% (17); 40% (20); 44% (22); 28% (19) had Moderate ability to Regulate Sadness, Anger, Anxiety, Depression and Fear respectively and same 28% (14) of women Easily Regulated Fear.

	Sadness	Anger	Anxiety	Depression	Fear
Easy	30	22	22	20	28
Moderate	34	40	44	42	28
Difficult	20	28	22	20	26
Very Difficult	8	10	12	18	18

Regulation of Negative Emotions- (N=50)

*The values represented in the table are percentage of women having the emotion

CONCLUSION

This study concludes that emotions are also to be primarily despite all the psychological changes being happening in a woman during menopause. Emotions play a key role in how we think and behave. The emotions we feel each can compel us to take actions and influence the decision making about any future actions. Thus it is important to study emotions particularly in transitional age and post- menopausal time. Emotions build up better relationships and help to talk about feelings more clearly, avoid or resolve conflicts better and move past difficulties more easily.





REFERENCE

- 1. Aravind, Kamini rao., (2008). Textbook of Gynecology. Pre- Mature Menopausal and Post -Menopausal Bleeding. I edition. Elsevier. Noida. pp 69-74.
- Bromberger, J. T., Kravitz, H. M & et, al. (2013). Does Risk for Anxiety Increase During the Menopausal Transition? Study of Women's Health Across the Nation. Menopause: The Journal of The North American Menopause Society, 1. doi: 10.1097/gme.0b013e3182730599
- 3. Cassandra Recca, MD, Zain AI- Safi, MD and Nanette Santoro. (2018). The Post- Menopausal Women.
- 4. Census report of India 2020
- Chen, Y., Xiang, J., et al. (2015). Associations of Bone Mineral Density with Lean Mass, Fat Mass, And Dietary Patterns in Postmenopausal Chinese Women: A 2-Year Prospective Study. PloS one, 10(9), e0137097. <u>https://doi.org/10.1371/journal.pone.0137097</u>.
- 6. Chennai district: census2011-2020
- 7. Daley, A., Stokes-Lampard, H., Thomas, A., & MacArthur, C. (2014). Exercise for Vasomotor Menopausal Symptoms. Cochrane Database of Systematic Reviews.
- De Arruda Amaral, I. C. G., Baccaro, L. F., & et, al. (2018, July). Factors Associated with Knowledge About Menopause and Hormone Therapy In MiddleAged Brazilian Women: A Population-Based Household Survey. Retrieved from <u>https://www.ncbi.nlm.nih.gov/pubmed/29939892</u>
- Dennerstein, L., Lehert, P., Guthrie, J. R., & Burger, H. G. (2007). Modeling Women's Health During the Menopausal Transition: A Longitudinal Analysis. Menopause, 14(1), 53–62
- Dr. Preethi Kothiyal, Monika Sharma. (2013). Post- Menopausal Quality Of Life And Associated Factors A Review. Journal of Scientific and Innovative Research.
- Dutta, Ruma., et al. (2012). A Population Based on The Menopausal Symptoms in A Rural Area of The Tamil Nadu. Indian Journal of Clinical and Diagnostic Research. Supplementation- 2; 6(4):597-601
- 12. Erbil, N. (2018). Attitudes Towards Menopause and Depression, Body Image of Women During Menopause. Alexandria Journal of Medicine, 54(3), 241–246. doi: 10.1016/j.ajme.2017.05.012
- Farahnaz Hashemipoor, Forough Jafari, et al. (2019, April 18). Maladaptive Schemas and Psychological Well-Being in Pre menopause; And Post- Menopausal Women.
- Gordon, J. L., Peltier, A. et al. (2019, June 12). Estradiol Fluctuation, Sensitivity to Stress, and Depressive Symptoms in the Menopause Transition: A Pilot Study. Retrieved from <u>https://www.ncbi.nlm.nih.gov/pubmed/31244722</u>
- 15. Harvard Medical School. (2018). Mood Problems at Menopause. Retrieved from https://www.health.harvard.edu/womens-health/treating-premenstrualdysphoric-disorder





- Johnson, A., Roberts, L., & Elkins, G. (2019). Complementary and Alternative Medicine for Menopause.Journal of evidence-based integrative medicine,24,2515690X19829380. <u>https://doi.org/10.1177/2515690X19829380</u>
- 17. Johnson, T. C. (2019, August). Menopause Emotions, Depression, Moodiness, and More. Retrieved from https://www.webmd.com/menopause/guide/emotionalroller-coaster
- Judd, F. K., Hickey, M., & Bryant, C. (2012). Depression and Midlife: Are We Over Pathologizing the Menopause? Journal of Affective Disorders, 136(3), 199–211.
- Karmakar, N., Majumdar, S., Dasgupta, A., & Das, S. (2017). Quality of life Menopausal Women: A Community-Based Study in a Rural Area of West Bengal. Journal of mid-life health, 8(1), 21–27. <u>https://doi.org/10.4103/jmh.JMH_78_16</u>
- Karmakar, N., Majumdar, S., Dasgupta, A., & Das, S. (2017). Quality of Life Among Menopausal Women: A Community-Based Study in A Rural Area Of West Bengal. Journal of mid-life health, 8(1), 21–27. doi: 10.4103/jmh.JMH_78_16
- Kashyap, A., & Chhabra, P. (2019). Assessment of Nutritional Intake and Nutritional Knowledge of Rural Post- Menopausal Women. The Indian Journal of Nutrition and Dietetics, 56(4), 431. doi: 10.21048/ijnd.2019.56.4.23736
- Kroemeke, A., Zając-Gawlak, I., Pośpiech, D., Gába, A., Přidalová, M., & Pelclová, J. (2014). Postmenopausal Obesity: 12,500 Steps Per Day as A Remedy? Relationships Between Body Composition and Daily Steps in Postmenopausal Women. Menopause Review, 13(4), 227–232. <u>https://doi.org/10.5114/pm.2014.44998</u>
- Kroemeke, Aleksandra., Zając-Gawlak, I., & et, al. (2014). Postmenopausal Obesity: 12,500 Steps Per Day as A Remedy? Relationships Between Body Composition and Daily Steps in Postmenopausal Women. Retrieved from <u>https://www.ncbi.nlm.nih.gov/pubmed/26327859</u>
- 24. -Liao, K. L., Wood, N., & Conway, G. S. (2000). Premature Menopause and Psychological Well-Being. Retrieved from <u>https://www.ncbi.nlm.nih.gov/pubmed/11076338</u>
- 25. Malik, H. S. (2008, April). Knowledge and Attitude Towards Menopause and Hormone Replacement Therapy (HRT) Among Postmenopausal Women. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/18655421
- Memon, F. R., Jonker, L., & Qazi, R. A. (2014). Knowledge, Attitudes and Perceptions Towards Menopause Among Highly Educated Asian Women in Their Midlife. Retrieved from https://journals.sagepub.com/doi/abs/10.1177/2053369114557510
- 27. Menopause FAQs: An Introduction to Menopause. The North American Menopause Society. https://www.menopause.org/for-women/menopause-faqs-anintroduction-to-menopause
- Mulhall, S., Andel, R., & Anstey, K. J. (2018, February). Variation in Symptoms of Depression and Anxiety in Midlife Women by Menopausal Status. Retrieved from <u>https://www.ncbi.nlm.nih.gov/pubmed/29290217</u>
- 29. Myra Hunter. (1992). The women's health questionnaire: A measure of midaged women's perceptions of their emotional and physical health. Psychology & Health. 7:1, 45-54, DOI: 10.1080/08870449208404294





- 30. Nusrat, N., Nishat, Z., & et, al. (2008). Knowledge, Attitude and Experience of Menopause. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/19024187
- 31. Peiseley, Tanya. (2019, October). Does Menopause Affect Mental Health? Retrieved from https://www.sane.org/information-stories/the-saneblog/wellbeing/does-menopause-affect-mental-health
- 32. Prinz, J. (2011, November 2). Culture and Cognitive Science. Stanford encyclopedia of philosophy. Retrieved from https://plato.stanford.edu/entries/culture-cogsci/
- 33. Rhitu. S., Bharathi, V. (2015, may 06). To study the lipid profile and nutritional status of post- menopausal women in relation to their stress level. Prestige university of management and research. <u>http://hdl.handle.net/10603/88813</u>
- Rogerio. A. Lobo. Comprehensive Gynecology. 5th edition. Elsevier. Mosby. Philadelphia. pp 1039- 1043.
 Santoro N. (2016). Perimenopause: From Research to Practice. Journal of women's health (2002), 25(4), 332– 339. <u>https://doi.org/10.1089/jwh.2015.5556</u>
- 35. Soares, C. N. (2017, June). Depression and Menopause: Current Knowledge and Clinical Recommendations for a Critical Window. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/28477650
- Soares, C. N. (2019, July). Depression and Menopause: An Update on Current Knowledge and Clinical Management for this Critical Window. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/31078198 • Srilakshmi, B. (2014). Dietetics (seventh multicolor edition). New age Publications. New Delhi, India.
- Thomas E. Synder. (2006). Clinical gynecology. Peri Menopause. Elsevier. Churchill Livingstons. Philadelphia. pp 875- 880
- Zivdir, P. & Sohbet, R. (2017). Effect of Feelings of Guilt and Shame on Life Quality of Women in Menopause. Journal of menopausal medicine, 23(1), 5–14. https://doi.org/10.6118/jmm.2017.23.1.5