

RANDOMISED SINGLE BLIND PLACEBO CONTROL TRIAL TO ASSESS THE EFFICACY OF HOMOEOPATHIC MEDICINES IN THE TREATMENT OF POST MENOPAUSAL SYMPTOMS

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ABSTRACT

Background: Menopause is the time of cessation of ovarian function resulting in permanent amenorrhoea. It takes 12 months of amenorrhoea to confirm the menopause. Average age of menopause of an Indian woman is 46.2 years. Symptoms presented are: Hot flushes, irritability, mood swings, insomnia, dry vagina, difficulty concentrating, mental confusion, stress incontinence, urge incontinence, osteoporotic symptoms, depression, headache, vasomotor symptoms, insomnia etc. This was an Interventional Single Blind Randomized Placebo Control Trial. **Methods:** A total of 70 cases of Post Menopausal Symptoms were randomly allocated to the two treatment groups meeting the inclusion and exclusion criteria. Of these, 6 dropped out, and the data of 64 participants, 32 in Group A were treated with Individualized Homoeopathic medicine and 32 in

Group B were treated with Placebo and they were analysed after 6 follow ups. Assessment and reassessment was done by analyzing the score of Menopause Rating Scale (MRS).

Results: An Independent t-test was conducted to compare the effects of two approach in Group A and Group B. There is a statistically significant difference in the scores of Group A (M =6.00, S.D = 4.204), Group B (M=10.63, S.D=6.866) conditions; difference of mean = -4.625, where $t_{(62)} = -3.250$, $p = .018$. Therefore Null Hypothesis gets rejected and we were accepted Alternate Hypothesis (H_1) i.e. Individualized Homoeopathic Medicines had significant effect in the treatment of Post Menopausal Symptoms as compared to placebo.

These results suggest that the Individualized Homoeopathic Medicines are more effective than placebo in the treatment of Post Menopausal Symptoms. **Conclusion:** This study provides evidence to support the effectiveness of Individualized Homoeopathic Medicines as compared to placebo in the treatment of Post Menopausal Symptoms.

INTRODUCTION

Menopause is defined as the time of cessation of ovarian function resulting in permanent amenorrhoea. It takes 12 months of amenorrhoea to confirm that menopause has set in, and therefore it is a retrospective diagnosis.^[1]

Average age of menopause of an Indian woman is 46.2 years much less than their Western counter parts (51 years).

Homeopathy is the safest treatment before, during, and after menopause because it stimulates the natural hormonal balance without the use of harmful drugs. Constitutional Homeopathic treatment is best during the transitional period of menopause in order to balance hormonal levels and cure the many accompanying symptoms.^[2]

MATERIALS AND METHODS

Study setting: The present study was undertaken at O.P.D/ I.P.D. of Dr. Madan Pratap Khunteta Homoeopathic Medical College, Hospital & Research Centre/ Dr. Girendra Pal Homoeopathic Medical College, Hospital and Research Centre, Homoeopathy University, Saipura, Sanganer, Jaipur, Rajasthan.

Study duration: The study was undertaken for a period of 12 months w.e.f June 2018 to June 2019, out of which cases were registered in first nine month so that minimum six visits/ observations could be obtained from the last case. The follow up of the patients was done for a period of 3 months was included in the study.

Selection of samples: 70 cases of Post Menopausal Symptoms were selected from college OPD /IPD and distributed randomly in both intervention groups, Group A includes 35 cases- Individualized Homoeopathic Medicines, Group B Includes 35 cases –Placebo. Sample size had been determined to measure the change between pre-test and post-test by taking $\alpha=.05$ and power $(1-\beta) = .80$ and treatment effect (70-80%).^[3]

Inclusion criteria

- Women who had approached to menopause (menses have not appeared for minimum last 12 months), irrespective of their occupation and socio- economic background.
- The females having any two symptoms (symptom from any domain) from MRS.
- Women with surgical menopause (Removal of uterus with ovaries), irrespective of age.
- Women who had serum FSH value >40 mIU/mL

Exclusion criteria

- Women suffering from any systemic disease.
- The cases which require emergency care / rescue treatment.

Study design

Interventional Single Blind Randomized Placebo Control Trial.

INTERVENTION/DISPENSING OF MEDICINE**Group A: Individualized homoeopathic medicines**

Individualized Homoeopathic medicines were selected after analysis, evaluation, and constructing totality of symptoms with repertorization from RADAR 10.0 and final reference to Materia Medica for Group A was done.

Potency and Dosage: Medicine was given in any potency 30c, 200, 1M as per the prescribing totality.

Manufacturer- Medicine was obtained from a GMP certified company.

Form- Globules No.30

Route of administration- Oral

Dispensing- This was done by the college dispensary from a certified pharmacist.

Dispensing unit of: -Dr. M.P.K./ Dr. Girendra Pal Homoeopathic Medical College, Hospital and research centre, Saipura, Sanganer, Jaipur, Rajasthan.

Change of medicine and / or dosage/ frequency and repetition: In Group - A, potency; doses and repetition were done as per Homoeopathic principles on observing changes triggered after administration of first remedy.

Group B: Placebo

Placebo was prescribed.

Manufacturer- Medicine was obtained from a GMP certified company.

Form- Globules No.30

Route of administration- Oral

Dispensing- This was done by the college dispensary from a certified pharmacist.

Dispensing unit of: -Dr. M.P.K./ Dr. Girendra Pal Homoeopathic Medical College, Hospital and research centre, Saipura, Sanganer, Jaipur, Rajasthan.

Change of medicine and / frequency and repetition: In Group -B, potency and repetition were done as per Homoeopathic principles on observing changes triggered after administration of first remedy.

Co-Intervention – Lifestyle Advice for both groups.

Selection of tools

A detailed Case Taking Proforma especially designed for the study.

Radar 10.0 version for repertorization.

Parameter Scale: Menopause Rating Scale (MRS)⁴ for assessment. It is the scale which is designed to measure severity of complaints in menopausal women. There are 11 items in this scale. The scoring is straightforward, the score increases point by point with increasing severity of subjectively perceived complaints in each of the 11 items (severity expressed in 0...4 points in each item). The total score of the MRS ranges between 0 (asymptomatic) and 44 (highest degree of complaints).

The minimal/maximal scores vary between the three dimensions depending on the number of complaints allocated to the respective dimension of symptoms:

- Psychological symptoms: 0 to 16 scoring points (4 symptoms: depressed, irritable, anxious, exhausted)
- Somato-vegetative symptoms: 0 to 16 points (4 symptoms: sweating/flush, cardiac complaints, sleeping disorders, joint & muscle complaints)
- Urogenital symptoms: 0 to 12 points (3 symptoms: sexual problems, urinary complaints, vaginal dryness).

The composite scores for each of the dimensions (sub-scales) is based on adding up the scores of the items of the respective dimensions. The composite score (total score) is the sum of the dimension scores.

Menopause rating scale (MRS)

Menopause Rating Scale (MRS)

Which of the following symptoms apply to you at this time? Please, mark the appropriate box for each symptom. For symptoms that do not apply, please mark 'none'.

Symptoms:

	none	mild	moderate	severe	very severe
Score =	0	1	2	3	4
1. Hot flushes, sweating (episodes of sweating).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Heart discomfort (unusual awareness of heart beat, heart skipping, heart racing, tightness).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Sleep problems (difficulty in falling asleep, difficulty in sleeping through, waking up early).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Depressive mood (feeling down, sad, on the verge of tears, lack of drive, mood swings).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Irritability (feeling nervous, inner tension, feeling aggressive).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Anxiety (inner restlessness, feeling panicky).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Physical and mental exhaustion (general decrease in performance, impaired memory, decrease in concentration, forgetfulness).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Sexual problems (change in sexual desire, in sexual activity and satisfaction).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Bladder problems (difficulty in urinating, increased need to urinate, bladder incontinence).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Dryness of vagina (sensation of dryness or burning in the vagina, difficulty with sexual intercourse).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Joint and muscular discomfort (pain in the joints, rheumatoid complaints).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Data collection

The cases were recorded according to the standard case format. This format was prepared according to homoeopathic methods of case taking.

Centralized data were collected in approved master chart in proper excel format.

Data analysis

On the basis of pre and post scoring obtained by using menopause rating scale in recommended follow ups.

Outcome assessment

Following parameters were fixed according to the type of the response obtained after the treatment.

According to the scores obtained from the MRS evaluation form, following formula was applied after calculating before and after scores:

Recovery**Improvement**

Marked- 75 to < 100% improvement in Menopause Rating Scale

Moderate - 50 to < 75% improvement in Menopause Rating Scale

Mild - 25 to < 50% improvement in Menopause Rating Scale

No significant improvement - < 25% improvement in Menopause Rating Scale

Status quo – When there was no change in Menopause Rating Scale

Worse – when there was no improvement in condition of the patient and instead her complaints get worse in respect to Menopause Rating Scale. This would be assessed in view of Homoeopathic aggravation, disease & medicinal aggravation. Counseling of patient would be done accordingly; if aggravation is continuous for more than 30 days then considered as worse.

Dropped out– When patient discontinues the treatment during the course of study or show poor compliance. Patient could willfully withdraw from the study any time and would be considered as dropped out.

Statistical techniques

Paired t- test was applied to ascertain the statistical results of the study for pre and post treatment score within the group.

Independent t-test was used for outcome measure and comparisons between 2 groups.

Before treatment- [mean± SEM]

After treatment- [mean± SEM]

Data was analysed by using SPSS software and Excel.

RESULTS

As shown in above graph, 34 cases (48.57%) were from 43-50 yrs of age group, from which 14 cases (40%) were from Group A , 20 cases (57.14%) were from Group B. 16 cases (22.85%) were of 51-58 yrs of age group, from which 7 cases (20%) were from Group A and 9 cases (25.71%) were from Group B . 11 cases (15.71%) were from 35-42 yrs of age group, from which 9 cases (25.71%) were from Group A , 2 cases (5.71%) were from Group B. 9 cases (12.85%) were from 59-66 yrs of age group, from which 5 cases (14.28%) were from Group A and 4 cases (11.42%) were from Group B.

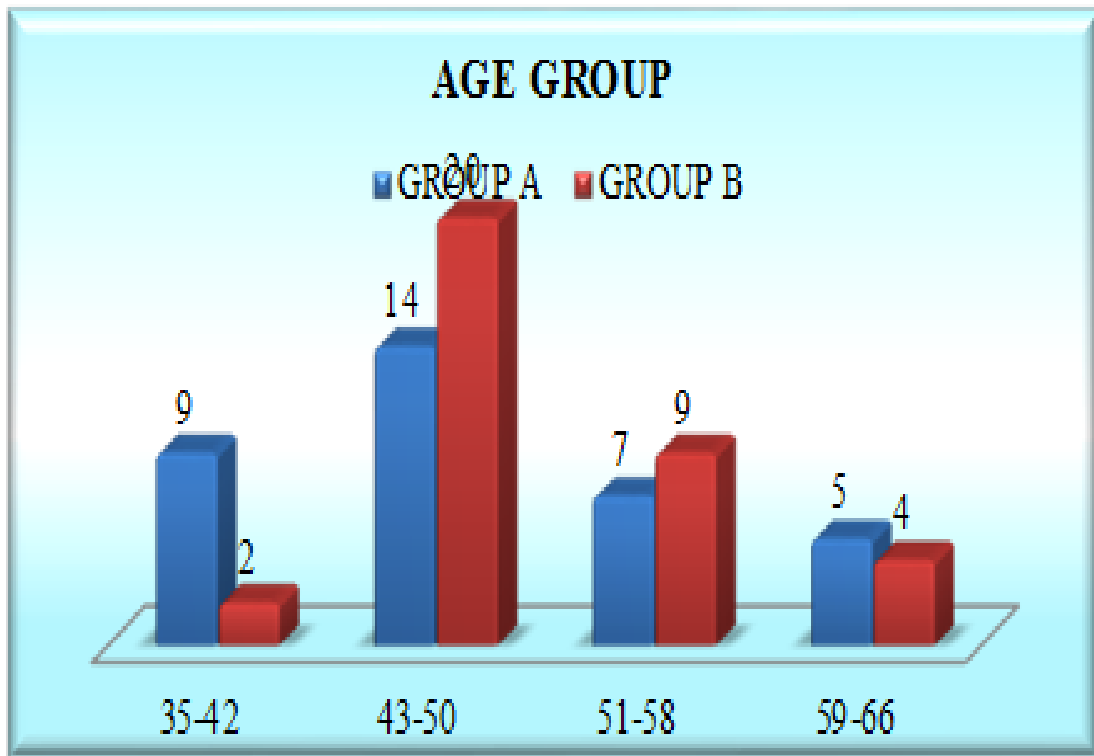


Fig. 1: Showing distribution of cases according to the “Age group”.

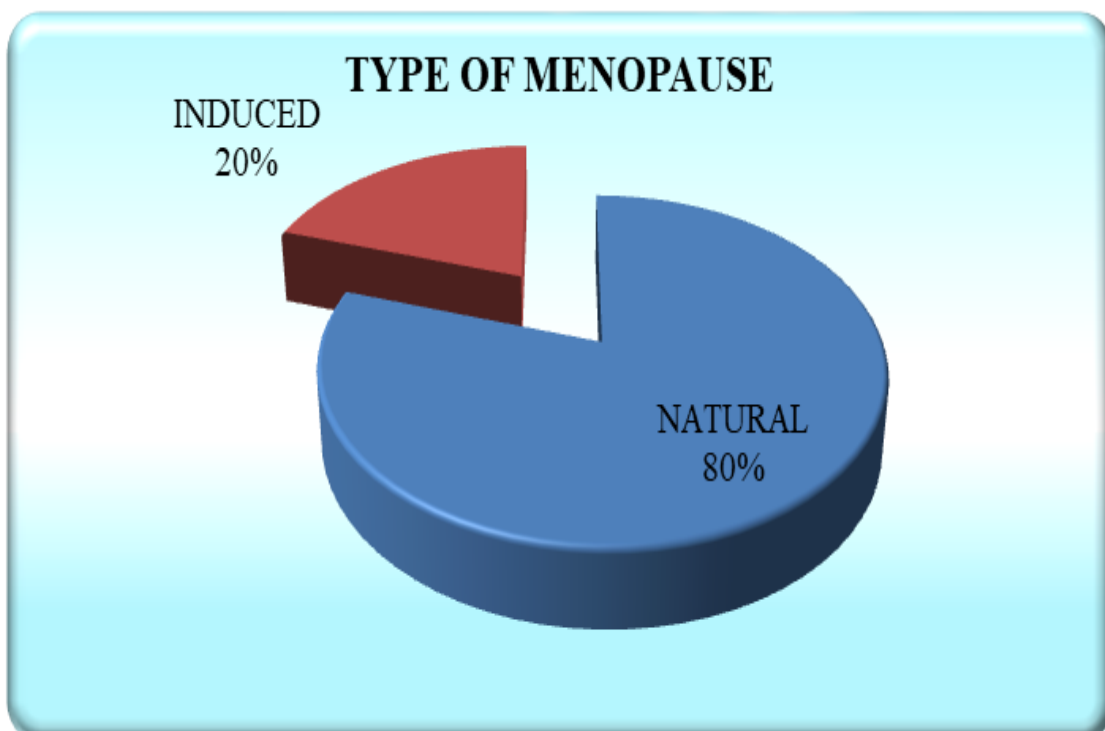


Fig. 2: Showing distribution of cases according to the “Type of Menopause”.

As shown in above figure, among the 70 cases of Post menopause symptoms, 56 cases (80%) had occurred natural menopause and 14 cases (20%) occurred induced menopause.

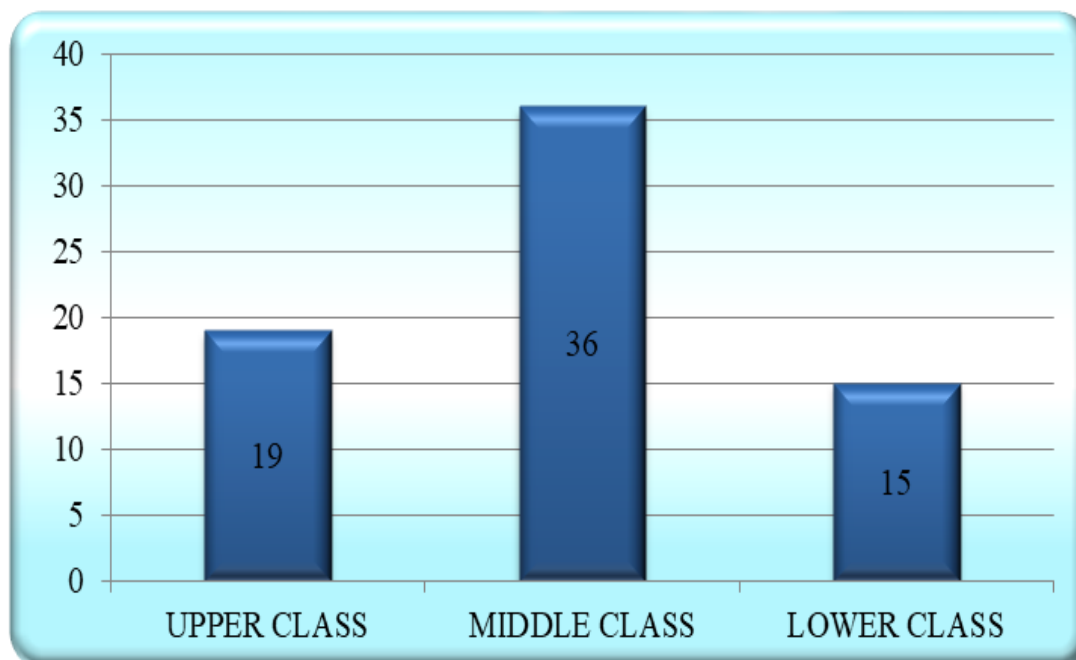


Fig. 3: Showing distribution of cases according to the “Socio Economic Status”.

As shown in above figure, among the 70 cases of Post Menopausal symptoms 19 cases (27.14 %) were of upper class, 36 cases (51.42 %) were of middle class and 15 cases (21.42 %) were of lower class.

Table 1: Distribution of cases of post menopausal symptoms according to presenting complaints (Hot flushes/ Joint Pains/ Anxiety/ Loss of libido).

S. No.	Presenting complaints	No. of patient	Percentage
1.	Hot flushes	55	78.57%
2.	Joint Pains	59	84.28 %
3.	Anxiety	68	97.14 %
4.	Loss of libido	60	85.71 %
5.	Hot Flushes+ Joint Pains+ Anxiety+ Loss of libido	37	52.85 %

As shown in above table, among 70 cases of Post Menopausal Symptoms, 68 cases (97.14%) were presented with Anxiety as presenting complaint, 60 cases (85.71%) were presented with Loss of libido, 59 cases (84.28%) with Joint Pains, 55 cases (78.57%) with Hot Flushes and 37 cases (52.85%) were presented with all the four symptoms i.e; Hot Flushes+ Joint Pains + Anxiety + Loss of libido.

Table 2: Distribution of cases of Post Menopausal Symptoms according to “Associated Complaints”.

S. No.	Associated Complaints	No. of patient	Percentage
1.	Irritability	8	11.42%
2.	Irritability with palpitation	24	34.28%
3.	Palpitations	15	21.42 %
4.	Sleeplessness	8	11.42 %
5.	Palpitation with sleeplessness	12	17.14 %
6.	Incontinence of urine	13	18.57 %

As shown in above table, among 70 patients of Post menopausal symptoms, 24 cases (34.28%) presented with Irritability with palpitation as an associate complaints with their presenting complaints, followed by Palpitations having 15 cases (21.42%), 13 cases (18.57%) of Incontinence of urine, 12 cases (17.14%) of Palpitation with sleeplessness, 8 cases (11.42%) of Irritability and 8 cases (11.42%) were of Sleeplessness.

Table 3: Distribution of cases of Post Menopausal Symptoms according to Indicated Medicine in Group A.

Indicated Medicine	No. of Patients	Percentage (%)
<i>Sulphur</i>	5	14.28
<i>Lachesis</i>	7	20
<i>Natrum muriaticum</i>	4	11.42
<i>Pulsatilla</i>	5	14.28
<i>Bryonia</i>	2	5.71
<i>Phosphorus</i>	4	11.42
<i>Sepia</i>	5	14.28
<i>Lycopodium</i>	3	8.57

As shown in above table out of 35 patients in Group A, *Lachesis* was indicated medicine prescribed in maximum no. of patients i.e. in 7 (20%), followed by in *Sulphur* 5 (14.28%) patients, *Pulsatilla* in 5 (14.28%) patients, *Sepia* in 5 (14.28%) patients, *Natrum muriaticum* 4 (11.42%) patients, *Phosphorus* 4 (11.42%) patients, *Lycopodium* 3 (8.57%) patients and *Bryonia* in 2 cases (5.71%).

Table 4: Distribution of cases of Post Menopausal Symptoms according to severity on the basis of Menopause Rating Scale (MRS) score before treatment and after treatment.

S. No.	Severity of Case	Group A (Individualized Homoeopathic Medicine)		Group B (Placebo)	
		Before treatment	After treatment	Before treatment	After treatment
1.	0-9	0	27	0	16
2.	10-19	14	5	15	11
3.	20-29	15	0	12	0
4.	30-39	5	0	8	0
5.	SQ	-	0	-	5
6.	Drop out	0	3	0	3
	TOTAL	35		35	

As shown in above table, **In Group- A:** (Individualized Homoeopathic medicines) Before treatment, maximum cases i.e. 15 cases out of 35 were found between the range of 20-29 range of severity level, 14 cases were found in 10-19 range and 5 cases were found between 30-39 range of severity level and no patients were found in the range of 0-9 of severity level. After treatment no patients were found in the range of 20-29 of severity level, 5 cases were found in the range of 10-19 range and no patients were found in the range of 30-39, whereas 27 cases were found in the range of 0-9 after treatment, no patients were found in status quo and 3 cases were drop outs from the study.

In Group – B: (Placebo) Before treatment, maximum cases i.e. 15 cases out of 35 were found within the range of 10-19 of severity level, 12 cases were found in 20-29 range of severity, 8 cases were found in the range of 30-39 of severity level and no patients were found in 0-9 range of severity. After treatment 11 cases were found in 10-19 range of severity level, no patients were found in the range of 20-29 and 30-39 of severity, 16 cases were found in the range of 0-9 of severity level, 5 patients were found in status quo and 3 were drop outs from the study.

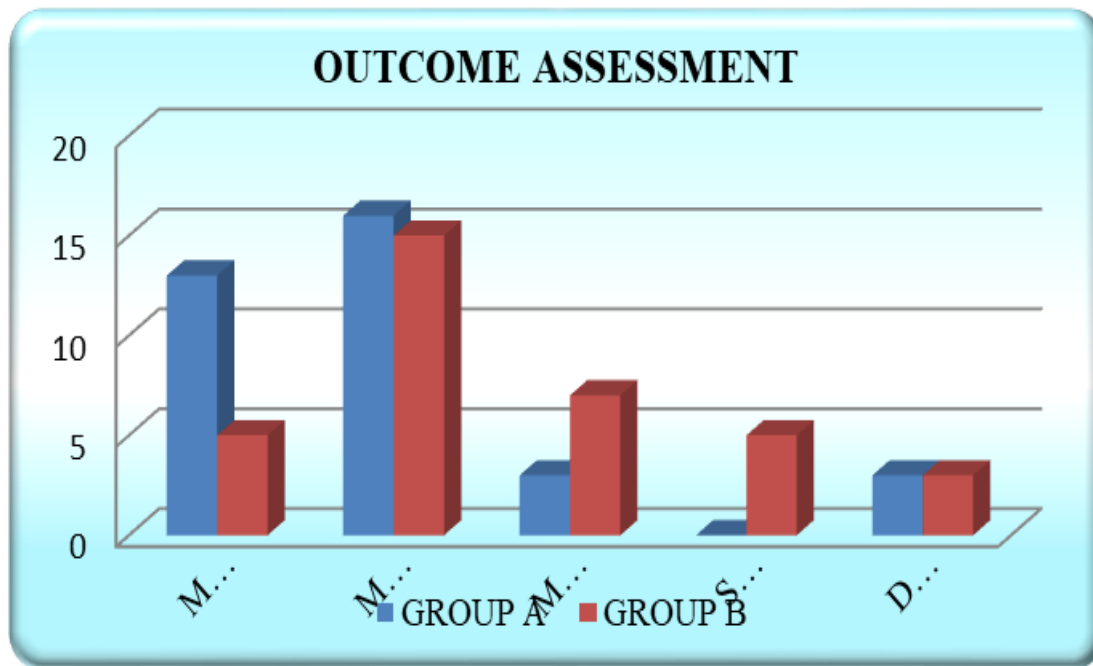


Fig. 8: Showing distribution of cases in different groups according to outcome assessment on the basis of MRS Score.

As shown in above figure, 18 cases (25.71%) had shown Marked Improvement, out of which maximum cases were from Group A –Individualized Homoeopathic Medicine i.e. 13 cases; 31 cases (44.28%) had shown Moderate Improvement, out of which maximum cases were from Group A- Individualized i.e. 16 cases, 10 cases (14.28%) has shown Mild Improvement, out of which maximum cases were from Group B- Placebo Group ie. 7 cases and 5 cases (7.14%) remained status quo, of which the cases were from Group B- Placebo Group. 6 (8.57%) cases were dropped out of which 3 cases from Group A and 3 cases from Group B.

DISCUSSION

In this study, Maximum incidence (48.57%) of Post Menopausal Symptoms were observed in 43-50 yrs of age group in both Group A & Group B. In the previous study which was done by Satpathy M in Odisha found that the mean menopausal age is 44.8 years. It was also mentioned in this study that the range of menopausal age in Indian women varies from 40.3 to 48.8 years, which is very similar to the present study.^[5]

Maximum (80%) patients had attained their menopause naturally i.e; 56 cases and only 14 cases (20%) had induced menopause. Most of the patients were from Middle class (51.42%) in both the Groups. In the previous study which was done by Kannur D and Itagi S in

Karnataka state found that maximum (65%) post menopausal women belong to middle class.^[6]

In this study, maximum (97.14%) patients presented with Anxiety; (85.71%) with Loss of libido as their present complaint in both Group A and B. In the previous study conducted by Karmakar, *et al* in West Bengal found anxiety and nervousness (94%) as most prevalent symptoms.^[7]

Irritability with Palpitation were the most commonly found associated complaint i.e; 24 cases (34.28%) whereas 15 cases (21.42%) were of Palpitations.

In 35 cases of Group A, *Lachesis* was most indicated medicine i.e. in 7 cases (20%), whereas *Sulphur*, *Pulsatilla* and *Sepia* in 5 cases (14.28%) each respectively. In the previous study which was done by Kalal R in Karnataka, it was found that *Lachesis* was one of the indicated medicine which proves to be effective in Post Menopausal Symptoms.^[8]

It has been observed that as per the MRS score, In Group- A (Individualised Homoeopathic Medicine) before treatment maximum 15 cases (42.85%) were found to lie in 20-29 range of severity and after treatment there was improvement, the severity decreases and 27 cases (77.14%) were found in 0-9 range.

In Group B (Placebo) before treatment, 15 cases (42.85%) were found in 10-19 range of severity and after treatment 16 cases (45.71%) were found in 0-9 range.

In this study among 70 cases, 18 cases (25.71%) had shown Marked Improvement, out of which maximum cases were from Group A –*Individualised Homoeopathic Medicine*, i.e. 13 cases and 5 cases were from Group B-*Placebo*; 31 cases (44.28%) has shown Moderate Improvement, out of which maximum cases were from Group A i.e. 16 cases and 15 cases were from Group B ; 10 cases (14.28%) has shown Mild Improvement, out of which maximum cases were from Group B i.e; 7 cases and 3 cases were from Group A; 5 cases (7.14%) remained status quo, which were from Group B. 6 cases (8.57%) were drop outs (3 cases each from Group A and B).

CONCLUSION

This was a randomized single blind placebo control trial with an aim to assess the efficacy of Homoeopathic medicines in the treatment of post menopausal symptoms, which was fulfilled.

The objective which was to study the efficacy of Homoeopathic medicines in the treatment of post menopausal symptoms by comparing the pre and post- treatment MRS scores showed the effectiveness of Individualized Homoeopathic medicines. This study showed that Individualized Homoeopathic medicines like *Lachesis*, *Sulphur*, *Pulsatilla*, *Sepia*, *Natrum muraticum*, *Phosphorus*, *Lycopodium* are significantly effective in the treatment of Post Menopausal symptoms as compared to placebo when comparing the pre and post treatment MRS score.

Though the smaller sample size and study duration proved a drawback but still the study helped in demonstrating the firm foothold of Homeopathy in the cases of Post Menopausal symptoms. Larger sample size and variation in the study design is recommended for more reliable results.

Continuing experience and research in this field will help in a big way to make Homoeopathy more useful and effective in treatment of Post Menopausal symptoms. There lies great potential & promise ahead for it in the future. On the basis of the above study it can be concluded that Homoeopathy definitely opens a ray of hope to the women suffering by Post Menopausal symptoms.

REFERENCES

1. Howkins, Bourne. Shaw's Text Book of Gynaecology. India: Reed Elsevier India Private Limited, 2015.
2. Price E. The Homeopathic Treatment of Menopause.[cited 2018 June 5]. Available from : <http://www.homeoint.org/site/price/menopause.htm>.
3. Leslie gross and Watkins; fundamentals of clinical research application to practice table C3, 2019; 12: 662.
4. Hauser GA, Huber IC, Keller PJ, Lauritzen C, Schneider HPG: Evaluation der klinischen Beschwerden (Menopause Rating Scale). Zentralbl Gynakol, 1994; 116: 16-23.
5. Satpathy M. A study on Age at Menopause, Menopausal Symtoms and Problems among Urban Women from Western Odisha, India. International Journal of Scientific and Research Publication [online], 2016; 6(3): 422- 427. Available from www.ijsrp.org.
6. Kannur D, Itagi S. Influence of Demographic Characteristics on Menopausal Problems among Rural and Urban Middle Aged Women. Journal of Nutrition & Food Sciences [online], 2018; 8(3): 1-6. Available from:<http://www.longdom.org>.

7. Karmakar N, Majumdar S, Dasgupta A, Das S. Quality of life among menopausal women: A community-based study in a rural area of West Bengal. *J Mid-life Health*, 2017; 8: 21-7.
8. Kalal R R. Constitutional Approach to Post Menopausal Complaints. Rajiv Gandhi University Of Health Sciences, Karnataka, Bangalore, 2009.