Research Paper

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Breathing exercise versus applied relaxation on menopausal problems among women in selected urban areas of Coimbatore

Physical Education

KEYWORDS : • Menopausal problems • Breathing exercises • Applied relaxation

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ABSTRACT

The aim of the study to assess and compare the breathing exercise and applied relaxation on menopausal problems among 30 women was done in selected urban area. 15 women in experimental group I and 15 women in experimental group II were selected using stratified sampling technique. Menopausal problems were assessed for experimental group I at 4th and 8th week and 8th and 12th week for experimental group II by using modified menopausal rating scale. In experimental group I (breathing exercise) mean 34.87 (SD =13.6), Mean 26.13 (SD= 13.7) at 4th and 8th week. In the experimental group II (applied relaxation) Mean 31.27 (SD = 11.7), Mean 22.33 (SD=10.6) at 8th and 12th week .The study concluded that that the breathing exercises and applied relaxation was effective on menopausal problems independently. On comparison of these two techniques researcher found that the applied relaxation had more effective than the breathing exercises.

INTRODUCTION

"Menopause is probably the least glamorous topic imaginable, and this is interesting, because it is one of the few topics to which cling some shreds and remnants of taboo." (1)

The term "menopause come from two Greek words that means "month" and "to end". It translates as "the end of monthlies". The medical definition of

Menopause is the absence of menstruation for twelve months. Menopause also occurs when a women's uterus and ovaries are surgically removed. (2)

The women experience of menopause is the result of biological, psychosexual and socio-relational factors, which influence the woman's ability to cope with a life period characterized by significant changes. Changes and symptoms can the start several years earlier. They include: change in periods – shorter or longer, lighter or heavier, with more or less time in between; hot flashes and or night sweats; trouble sleeping; vaginal dryness, mood swings, trouble focusing and less hair on the head, more on the face. Women, as to men, experience an age-related decline of physical and mental capacity. They observe symptoms such as periodic sweating or hot flushes, depression, insomnia, impaired memory, lack of concentration, nervousness, and bone, and joint complaints. Menopause has an impact on women quality of life. Various tools or instruments have been designed to measure and assess symptoms during the menopausal transition, among them is Menopause Rating Scale (MRS) which is designed to assess menopause specific health related quantity of life to measure the severity of menopause complaints by rating a profile of symptoms.

Breathing exercises and applied relaxation keep body and mind in sound health. Women practicing these intervention therapies notice the onset as well as the passing away of the menopausal period. Breathing exercises balancing the autonomic nervous system through enhanced activation of parasympathetic nervous system. Increased melatonin production after breathing exercises to create sense of relaxation and wellbeing. Sympathetic arousal resulting in increased catecholamine and cortisol levels is the cause for stress, anxiety, vasomotor and peri menopausal symptoms. Applied relaxation reduces sympathetic activity. These interventions can help to alleviate or eliminate uncomfortable physical and emotional feelings associated with menopause.

Objectives

To assess the menopausal problems before and after the breathing exercises in Experimental group I.

- To assess the menopausal problems before and after the applied relaxation in experimental group II.
- To compare the effectiveness of breathing exercises and applied relaxation on menopausal problems among menopausal women in both experimental group I and experimental group II.
- To associate the mean difference in menopausal problems with selected factors in experimental group I.
- To associate the mean difference in menopausal problems with selected factors in experimental group II.

Materials and Methods

Setting of the Study: The study was conducted in selected urban areas of Coimbatore district

Research Design: The research design proposed for this study is factorial design.

R E_1 O_1 X_1 O_2, O_3
R E_2 O_4 X_2 O_5, O_6
X_1 = Breathing Exercises
X_2 = Applied Relaxation

Sample:

The target population was peri - menopausal Women within the age group of 41-55 years.

Sample was drawn based on the power analysis.

Sampling Technique: Stratification sampling technique.

Inclusive Criteria

- Women within age group of 41-55 years, achieved menopause naturally
- Women who living with husband
- Women who are willing to participate and available at the time of data collection

Exclusive Criteria:

- Women having practiced any other interventional therapy for one month or more.
- Women who are taking Hormone Replacement Therapy
- Women undergone any surgeries with in past 3 months.
- Women on psychiatric medicine
- Women who have muscle spasm and muscle pain.

Data collection Procedure:

The formal permission was obtained from the concerned officials. Obtained latest census of women of age group 41-55 years selected urban areas. Sample screening was done based on the selection criteria. Oral and written consent obtained from the samples. The samples were allocated to the both experimen-

tal Group I and experimental Group II. Information regarding background factors were collected by interview method. Orientation about the intervention schedule has been given to both the groups. Further the group was given video teaching regarding their respective intervention and both the groups were reinforced to continue the respective intervention. The Post test I was conducted for both experimental groups at 4th and 8th weeks. Post test was conducted for both experimental group II at 8th and 12th week

Statistical Analysis

The data were analyzed by using descriptive and inferential statistics. Demographic variables were analyzed by using descriptive statistics. Paired 't' test used to assess the effectiveness of Applied Relaxation on menopausal problems among women in experimental group I and to assess the effectiveness of Breathing Exercise on menopausal problem among women in experimental group II. Independent't' test to compare the effectiveness of Applied Relaxation versus Breathing Exercise problem among women.

Table 1: Pretest and Post test of Menopausal problems among women in experimental group I .

EXPERIMENTAL GROUP I						
	Group	N	Mean	SD	t	Sig
Pre test & 4week	Pre test	15	40.8	16.9	1.05	0.29 NS
	Post test	15	34.87	13.6		
Pre test & 8week	Pre test	15	40.8	16.9	2.61	0.01*
	Post test	15	26.13	13.7		
4th week & 8th week	Pre test	15	34.87	13.6	1.75	0.091 NS
	Post test	15	26.13	13.7		

> *significant at p<0.05 levels, NS – Not significant

The mean posttest menopausal problems at 4th week was 34.87(SD=13.6) compared with pre 40.8(SD16.9), the reduced factor 15% but the results are not statistically significant [p>0.05]. Whereas in 8 week, posttest 26.13(SD =13.7).the difference between mean are statistically significant. The reduced factor 36% (p<0.05). The women in experimental group I had significant reduction in the menopausal problems after breathing exercise. The breathing exercises was effective on menopausal problems.

Table : Pre test and Post test of Menopausal problems among women in experimental group II .

experimental group ii						
	group	n	Mean	SD	t	Sig
pre test & 8th week	pre test	15	32.8	17.2	0.286	0.777 NS
	post test	15	31.27	11.7		
pre test & 12th week	pre test	15	32.8	17.2	2.011	0.045*
	post test	15	22.33	10.6		
8th week & 12th week	pre test	15	31.27	11.7	2.194	0.037*
	post test	15	22.33	10.6		

-> *significant at p<0.05 levels, NS – significant

The mean posttest menopausal problems at 8th week was 31.27(SD=11.7) compared with pre 32.8 (SD17.2), the reduced factor 5%, the results are not statistically significant [p>0.05]. Whereas in 12 week, posttest 22.33(SD =9.6).the difference between mean are statistically significant. The reduced factor 32% (p<0.05). The mean had decreased 29% from 8th week to end of the study period 12th week. The difference between mean was found statistically significant [p<0.05]. The women in experimental group I had significant reduction in the mean menopausal problems after applied relaxation has effective on menopausal problems.

Table 3: Comparison Of Effectiveness Of Breathing exercise Vs Applied relaxation On Menopausal Problems Between Experimental Group I & Experimental Group II

	Group	N	Mean	S.D	t	Sig
Post test – 4th week vs 8th week	Experimental group –I 4th week	15	34.87	13.6	0.776	0.444NS
	Experimental group -II 8th week	15	31.27	11.7		
Post test – 8th week vs 12th week	Experimental group –I 8th week	15	26.13	13.7	0.879	0.387NS
	Experimental group -II 12th week	15	22.33	9.6		

The post-test mean menopausal problems among women in experimental group I & II mean of 4th & 8th week are 34.87,(SD=13.6),31.27(SD=11.7) , the difference between mean was found 3.6. Comparison of both the groups at the end of their study periods post-test mean menopausal problems among women in experimental group I & II at 8th ,12th week 26.13 (SD=13.7),22.33(SD=9.6) , the difference mean was found 3.8. So experimental group ii is better than the experimental group I regarding menopausal problems among women. Applied relaxation is better than the breathing exercises.

DISCUSSION

It was inferred that breathing exercise and applied relaxation is independently effect on menopausal problems among women in experimental group I and experimental group II. The above findings in this study were supported by (Debra.S.burns2012), slow deep breathing may exacerbate some preexisting respiratory conditions, and it was not originally tested among women taking estrogen ablative therapies that are known to increase hot flash. Evidence to date suggests that paced respiration at 6 to 8 breaths per minute when practiced 15 minutes twice per day and applied at the onset of hot flashes can be helpful for healthy peri and postmenopausal women in decreasing both the number and severity of this bothersome menopausal symptom. Women who are unwilling or unable to practice twice daily or apply it at the onset of hot flashes are not likely to find this therapy feasible or accept-able and may benefit from discussion about other alternatives. (Elizabeth nedstrand et.al 2004) conducted study on effectiveness of applied relaxation, After 12 weeks of treatment, the number of flushes/24 h decreased significantly over time in both treatment groups. In the group receiving applied relaxation, the mean number of flushes/24 h decreased from 6.0 (95% CI 4.5–7.6) to 3.0 (95% CI 2.1–3.9) after 12 weeks of treatment. The mean number of flushes/24 h was 1.7 (95% CI 0.7–2.5) at 6 months follow-up; i.e. a 72% decrease. This study suggest that suggest that applied relaxation may be used as an alternative treatment of vasomotor symptoms for postmenopausal women. In the experimental group pre-test mean 40.8 (SD=16.0) versus 4th week mean 34.8 (SD=13.7) not significant .pre-test versus 8th week mean 26.13 (SD=13.7), significant. Reducing factor is 25%. where as in experimental group I pre-test versus 8th week mean 32.8(SD=17.2) Significant. And at pre-test versus 12th week mean 22.33 (SD =10.6) significant and reducing factor is 29%.The researcher concluded that applied relaxation is effective than the breathing exercises.

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