A Study to Assess the Effectiveness of Jacobson's Progressive Muscle Relaxation Technique in Reduction of Stress among Post Menopausal Women in Selected Hospital at Bhopal. (M.P.)

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Abstract: <u>Background</u>: Menopause is a universal occurrence in every woman's life as they enter their fifth decade of life. Some may experience abrupt cessation of menstruation other may pass through the pattern of menstrual irregularity and the unpleasant symptoms associated with it. <u>Objectives</u>: To assess pre test level of stress among post menopausal women before imparting Jacobson's Progressive Muscle Relaxation Technique. To impart the Jacobson's Progressive Muscle Relaxation Technique among menopausal women. To assess the effectiveness of Jacobson's Progressive Muscle Relaxation Technique in relation of reduction of stress among post menopausal women after imparting Jacobson's Progressive Muscle Relaxation Technique. To find out association between the pre-test score of stress and selected Socio Demographic variables of post menopausal women. Methodology: This study was conducted using Evaluative research approach for this study at selected hospital at Bhopal (M.P.). Quasi experimental one group pre-test post test research design has been adopted. The total sample size was 60. Non-Probability Convenient sampling was used. Data collection was done using a self evaluation rating scale developed. This standardized tool consists of 40 statements which show the signs of stress. Each statement has four choices, numbering which is indicated as 0= Never, 1=Sometimes, 2=Most of the times respectively which the respondent has to mark to indicate how he is self right at the moment of testing. <u>Result</u>- This study showed that overall mean, there was significant difference between pre & post test. Stress level is decreased from 29.02 to 19.62 after administering Jacobson's Progressive Muscle Relaxation Technique. <u>Conclusion</u>: The study revealed that on Jacobson's Progressive Muscle Relaxation Technique is effective in reducing the level of stress among post menopausal women is effective. Jacobson's Progressive Muscle Relaxation Technique takes a few minutes out of our time and the rewards of enhanced recovery, better muscle control and the ability to more effectively manage stress as well worth the investment.

Keywords: Effectiveness, Jacobson's progressive, muscle relaxation technique, reduction of stress, post menopausal women

1. Introduction

An anxious mind cannot exist in a relaxed body Dr. Jacobson

Menopause is a universal occurrence in every woman's life as they enter their fifth decade of life. Some may experience abrupt cessation of menstruation other may pass through the pattern of menstrual irregularity and the unpleasant symptoms associated with it. The menstrual irregularity may persist for 4 years in 90% of women who are attaining their menopause. Woman is a precious creature of God .She has many roles in the society to perform being a daughter, sister, wife and a mother. She works easily with the opposite sex at work place but also has responsibilities to perform as a home maker and to rear a child. In order to perform these functions effectively her health needs has to be taken care and requires more attention. Natural menopause is a normal event in a woman's life. It occurs when the ovaries naturally decrease their production of sex hormones, estrogen and progesterone and there is no menstrual period. In this process it combines physical, psychological and emotional transitions. The occurrence of menopause is different for each woman. In normal women, menopause occurs somewhere between 45 to 50 years of age. The ideal age of menopause is 50, affirms Susruta, the great medical scientist of ancient India. During menopausal period women

experience both physiological as well as psychological changes. Physiological changes include hot flushes, joint pain, irritable bowel movements, and weight gain and hair loss. Psychological changes include anxiety, depression and stress. Women experiences stress in many ways and can be external and internal. It can cause changes in body images, attitude towards ageing and also leads to mood changes. Yoga, meditation, progressive muscle relaxation, physical exercises are the methods used to reduce menopausal stress. Physical exercise can also help to maintain health. Stress associated with menopause can also be reduced by practicing Benson relaxation technique. According to Women health organization all the women should practice yoga, relaxation techniques in order to maintain women's health and to reduce stress.

According to the United Nation the world population has already exceeded 7 billion. India with a population of 989 million is the world's second most populous country. Of that number 120 million are women who live in poverty. 92% of women in India suffer from gynaecological problems. Menopause disorders are recognized as one of major problem seen among post menopausal women. Jacobson's progressive muscle relaxation is especially helpful for people whose anxiety is strongly associated with muscle tension. They may experience chronic tightness on shoulders and neck, which can be effectively relieved by practicing progressive muscle relaxation. Progressive relaxation

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involves alternately tensing and relaxing the muscles. The basic therapeutic claim of muscle relaxation therapy is that tensed ,stressed and anxious people can find relief from their distress and its physiological accompaniments by learning to reduce muscle tension. The rationale assumes that patients who can be treated successfully with progressive muscle relaxation will initially have either more tonic muscle tension or exhibit increased muscle tension in response to stress than a non distressed control group, assumptions with some support in generalized anxiety disorder. Moreover a reduction in muscle tension should cause the multiple aspects of the activation response, as well as expression of emotion in non physiological systems to decrease.

According to National health interview survey conducted in India, 75 percent of women experiences anxiety during menopausal period. In the survey it reports that natural menopause may occur at 45-55 years in 83 percent of women. Late menopause occurs after the age of 55 in 5 percent of women. Early menopause between 40 and 45 years occurs in 5 percent of women. In a survey conducted in India 77 percent of post menopausal women under stress says anxiety or disorders such as insomnia or depression hamper their marital relationships. It also reports that the incidence of early and natural menopause is increasing than surgical menopause.6 Edmond Jacobson (1929), first caught on to this idea of tension and relaxation in muscles. He found that the patients were able to diminish the severity of muscle tension by relaxation. Thus was born the relaxation technique called Progressive Muscle Relaxation. Stress is a tension. Relaxation is a state opposite to stress. The body's natural relaxation response is a powerful antidote to stress. Jacobson's Progressive Muscle Relaxation Technique, when practiced regularly, leads to a reduction in every day stress level and a boost in feelings of joy and serenity. In progressive muscle relaxation Technique first deliberately apply tension to certain muscle groups, and then let it go. Thus there are two steps in Progressive Muscle relaxation procedure.

- Deliberately tensing muscle groups.
- Releasing the induced tension from the muscle groups.

Jacobson's Progressive Muscle Relaxation Technique takes a few minutes out of our time and the rewards of enhanced recovery, better muscle control and the ability to more effectively manage stress as well worth the investment

2. Material and Method

An Evaluative research approach for this study at selected hospital at Bhopal (M.P). Quasi experimental one group pretest post test research design was followed. The study was conducted between 28/08/2017 to 28/09/2017 in in selected hospital at Bhopal (M.P.). The Institutional Ethical Committee approval was obtained before the study. Population of the study was Post menopausal women admitted at selected hospitals at Bhopal, (M.P.) and who are willing to participate in the study. Non-Probability convenient sampling was carried out on 60 samples. Informed consent of the participants was obtained. Structured Interview Schedule was selected to get complete information from menopausal women. It was felt that faceto-face contact would encourage the subjects to give prompt information. Thus a structured interview schedule was prepared and used for data collection.

Demographic variable such as Age, Religion, Educational status, marital status, Monthly income, Source of income, Area of residence.

A self evaluation rating scale developed by Dr. M. Singh in 2002. This standardized tool consists of 40 statements which show the signs of stress. Each statement has four choices, numbering which is indicated as 0= Never, 1=Sometimes, 2=Most of the times respectively which the respondent has to mark to indicate how he is self right at the moment of testing to assess the Effectiveness of Jacobson Progressive Muscle Relaxation Technique in reduction of stress among menopausal women.

3. Data Analysis and Interpretation

Description of subjects

During the study period, 60post-menopausal women were enrolled in the study based inclusion criteria. **Table: 1**Among 60 respondents regarding age Majority of the participants 23 (38%) were in the age group 66 Years, Majority of the participants 48 (80%) belong to Hindu religion, Majority of the participants 34 (56.6%) had only Primary education, Majority of the participants 40 (66.71 %) were Married, Majority of the participants 30(50%) had Monthly Income between Rs. 9001-10,000/-, Majority of the participants 44(73.3%) sourced of income by family members, Majority of the participants 51 (85%) were from Rural Area.

S.No	Demographic Data	Category	Frequency	%
		45-50	14	23
1	Age (in year)	51-55	9	16
1		56-60	14	23
		61 & above	23	38
		Hindu	48	80
2	Paligion	Muslim	3	5
2	Religion	Christian	9	15
		Any other	0	0
		Illiterate	17	28.3
3	Educational	Primary education	34	56.6
3	Status	Secondary education	5	8.3
		Graduation & above	4	6.8
		Married	40	66.7
4	Marital Status	Unmarried	5	8.3
4		Widow	2	3.34
		Divorced	13	21.7
		<5000/-	0	0
5	Monthly	5001-9000/-	20	33.4
5	Income.	9001-10,000/-	30	50
		>10000/-	10	16.6
		By family member	44	73.3
6	Source of	By Govt. Scheme	8	13.4
0	income	By Pension	6	10
		Nothing	2	3.3
7	Area of	Rural	51	85
/	Residence	Urban	9	15
	Total		60	100%

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 Table 2: Frequency and Percentage Distribution of Stress

 Level among Post menopausal women, (n=60)

S.	Level of Stress	Pre Test		Post Tes	st	
No		Frequency	%	Frequency	%	
1.	Low level of Stress	10	16.7	28	46.7	
2.	Moderate level of Stress	45	75	32	53.3	
	High level of Stress	5	8.3	-	-	
	Total	60	100	60	100	

Table reveals Majority of the participants 45(75%) had Moderate Level of Stress, 10(16.7%) of them had Low level of Stress, 5(8.3%) of them had High level of Stress before administering PMRT and 28(46.7%) had Low level of stress

and 32(53.3%) had Moderate level of Stress after administering PMRT.

 Table 3: Effectiveness of Jacobson's Progressive Muscle

 Relaxation Technique in Reduction of Stress Level among

 Menopausal women (n=60)

Menopausai women, (n=00)											
Stress Level	Mean	SD	n	't' Value	df	p Value					
Pre Test	29.02	8.28	60	14.6350	0	<0.0001					
Post test	19.62	5.62	60	14.0550	9	<0.0001					

According to mean, there was significant difference between pre &post test. Stress level is decreased from 29.02 to 19.62 after administering Jacobson's Progressive Muscle Relaxation Technique.

Ago Croup		Stress Level			Chi Square Value	df	p Value
Age Group	Low level of stress	Moderate level of stress	High level of stress	Total	Chi Square value	u	p value
45-50 Years	6	8	0	14			
51-55 Years	3	6	0	9			0.000
56-60 Years	1	12	1	14	17.133	6	0.009
61 Years & Above	0	19	4	23			3
Total	10	45	5	60			

Religion		Stress Level		Total Chi Square Va		df	P Value
	Low level of stress	Moderate level of stress	High level of stress	Total	Chi Square value	ai	P value
Hindu	8	37	3	48			
Muslim	1	2	0	3	3.389	4	0.495
Christian	1	6	2	9	5.569	4	NS
others	0	0	0	0			
Total	10	45	5	60			

Education		Stress Level		Total	Chi Squara Valua	df	PValue
	Low level of stress	Moderate level of stress	High level of stress	Total	Total Chi Square Value		r value
Illiterate	2	15	0	17			
Primary education	6	24	4	34			
Secondary education	1	3	1	5	15.736	6	0.046* S
Graduation & above	3	1	0	4			
Total	12	43	5	60			

Marital status		Stress Level		Total	Chi Square Value	df	pValue	
Maritar status	Low level of stress	Moderate level of Stress High level of stress		Total	Cill Squale Value	ui	p v alue	
Married	3	35	2	40				
Divorced	2	8	3	13				
Widow	1	1	0	2			0.001* S	
Unmarried	4	1	0	5	23.235	6	0.001* 3	
Total	10	45	5	60				

Income		Stress Level		Total	Chi Sayara Valua	đ	p Value
	Low level of stress	Moderate level of stress	High level of stress	Total	Chi Square Value	ai	p value
<5000/-	0	0	0	0			
5001-9000/-	3	10	7	20	0.754	4	0.686
9001-10,000/-	6	22	2	30	0.754		NS
>10000/-	0	10	0	10	0		
Total	9	42	9	60			

Source of Income		Stress Level		Total	Chi Square Value	đf	p Value
	Low level of stress	Moderate level of stress	High level of stress	Total	CIII Square value	ui	p value
By family member	6	35	3	44			
By Govt. Scheme	1	5	2	8	6.300	6	0.390
By Pension	2	4	0	6	0.300	0	NS
Nothing	1	1	0	2			
Total	10	45	5	60			

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Area of	S	Stress Level T			Chi Square Value	df	p Value
residence	Low level of stress	Moderate level of stress	High level of stress				
Rural	7	39	5	51	2.745	4	0.253
Urban	3	6	0	9	2.745	4	NS
Total	10	45	5	60			

*NS-no significant *s-significant *0.05

Table revealed

The above table depicts that there was significant association exists between the Stress level and Age group, education and marital status at 0.05 level of significance.

4. Discussion

The present study focuses assess the effectiveness of Jacobson's progressive muscle relaxation technique in reduction of stress among postmenopausal women. The discussion about the study findings are presented in this chapter. This chapter deals with the discussion of the data analysed based on the objectives of the study.

The overall majority of the participants 45(75%) had Moderate Stress, 10(16.7%) of them were in Low level of Stress, 5(8.3%) of them were in High Stress before administering PMRT and 28(46.7%) had Low stress and 32(53.3%) had Moderate level of Stress after administering PMRT.

Among the demographic variables analysed in this study, age group, education, marital status is found to have high significant association with the stress **among postmenopausal women**. There was no significant association between religion, income, source of income and area of residence onstress among postmenopausal women.

5. Conclusion

The study findings revealed that there was the Jacobson's Progressive Muscle Relaxation Technique is effective in reducing the level of stress among post menopausal women. The provision of Muscle Relaxation Technique will reduce the stress level of other post menopausal women.

6. Implications

In the Mental Health team Nurse plays a vital role in the provision of Psycho social therapy. Mental Health Nurse knows that stress is the baseline factor for the development of Depression and other mental disorders in Post menopausal women s. Jacobson's Progressive Muscle Relaxation Technique is a simple Exercise and easy way of handling the stress.

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Conflicts of interest

There are no conflicts of interest.

References

- Varghese Mary. Essentials of obstetric& gynaecology nursing. 3rded, New Delhi, India: Elsevier Publishers; 2010;451-453.
- [2] Tiwari S. C, Pandey Nisha M. Status and Requirements of Mental Health Services in India: An Evidence Based Commentary. Indian Journal of obstetric& gynaecology nursing.2012; 54(1):8-10.
- [3] Indrapal Singh. Mental Health Problems among Inhabitants of. Indian Journal of obstetric& gynaecology nursing. 2012; 54(2):144-145.
- [4] Purna Singh. obstetric& gynaecology Morbidity in Post menopausal women Population in Hospitals and Community. Indian Journal of obstetric& gynaecology Medicine. 2011; 34,39-43.
- [5] Shaji K S, Arun Kishore N R. Mental Health Care for Older People in India. Indian Journal of obstetric& gynaecology nursing. 2004; 46,367-372.
- [6] Wernick J. Listening with Different Ears: Counseling People over Sixty. Bragg CA. QED Press.1995.
- [7] Boyd Marry Ann. obstetric& gynaecology Nursing Contemporary Practice.4th ed, New Delhi, India: Wolters Kluwer; 2008; 688.
- [8] Debi Chakrabarti. Well being of menopausal women. Nursing Journal of India. 2009; 10:224-226.
- [9] Monica V Agnes. What is Stress Management? Nurses of India. 2009; 9-10.
- [10] Diana S. C. Relax a While. Prism's Nursing Practice. 2011; 6(2):51-53.

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