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A STUDY TO ASSESS THE EFFECTIVENESS OF DEEP BREATHING EXERCISE TO REDUCE THE LEVEL OF STRESS AMONG HOUSEWIVES

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ABSTRACT

Background: Stress is an inevitable and unavoidable component of life due to increasing complexities and competitiveness in living standards. Stress has become the core concern in the life of everyone, but everybody wants stress free life. Deep breathing is one of the best ways to lower stress in the body. Deep breathing will bring the heart rate and respiration back to normal. Deep breathing releases tension from the body and clear the mind, improving both physical and mental wellness. The focus of the study and research was to determine the effects of deep breathing exercise in reducing the stress levels among housewives. The present study was intended to assess the level of stress before and after practice of deep breathing exercise among the housewives, evaluate the effectiveness of deep breathing exercise to reduce the level of stress among housewives and to find out the association between the level of stress after demonstration of deep breathing exercise and selected demographic variables. The research design used for the study was quasi experimental (one group pre test and post - test design.) A sample of 60 housewives was selected for the study using lottery method. Holmes and Rahe Stress rating scale was used to collect the data from the housewives. The data was analysed using simple descriptive statistics and association of various factors was analysed by inferential statistics. The results showed that during pre- test, housewives have moderate to severe stress. In the pre- test 11(18.33%) sample had mild level of stress, 22(36.66%) had moderate level of stress and 27(45%) had severe level of stress. . In post- test most of the housewives 35(58.33%) have no stress, and 21(35) housewives had mild level of stress, 4(6.67%) housewives had moderate level of stress and no one had severe stress. This means that deep breathing exercise was effective in reduce the stress among housewives.

Key Words: Stress, Deep breathing exercise.

INTRODUCTION

Woman plays a vital role in the Indian society. The women are the mother of race and liaison between generations. Woman hold an important position in the Indian family as rightly pointed out by the proverb 'home is the first school and mother is the first teacher'. Stress is a part of day -to day living [1]. Housewives also face stress in their life but it is more due to familial, social and psychological factors such as lack of support from family members, low status, lack of decision making power and conflict with relatives. The stress of women affect their

health status. Recent research suggests that 60-90% of illness is stress related. Chronic stress wears the individual day after day and year after year with no visible escape [2]. As sound health is very important for the performance and efficacy of the work it is important that woman learn about stress management. There are many ways to relieve the stress and deep breathing exercises are one of the most simple way. Breathing exercise are most effective when we are feeling stressed or overwhelmed and want to calm down quickly, we are stressed and we want to think more clearly [3-5]. Breathing has benefits on body, emotions, cognitions and spirit. When the person begins to breathe slowly and deeply, it deactivates the stress response and activates the relaxation response and brings more peace to our bodies. Breathing exercise is excellent for reversing our stress response and reducing stress [6].

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Objectives

- To assess the level of stress among the housewives
- To assess the level of stress after demonstration of deep breathing exercise among the housewives in selected area
- To evaluate the effectiveness of deep breathing exercise to reduce the level of stress among housewives
- To find out the association between the level of stress after practice of deep breathing exercise and selected demographic variables [7-9].

Hypothesis

H1: There is a significant difference between the level of stress before and after demonstration of deep breathing exercise among the housewives.

H2: There is a significant difference between the level of stress among the housewives and selected demographic variables [10].

METHODOLOGY

Evaluative approach was used to conduct the study. Quasi experimental design of one group pre and post test group design was used to better understand the effects of deep breathing exercise on stress level of participants [11]. The study population was 60 housewives and women aged 20-60 yrs who met the inclusive criteria were selected by using lottery method of random sampling. The tool consists of demographic data and Holmes and Rahe stress rating scale [12]. The data was collected over a period of 4 weeks at Hegganahalli village in Bangalore. The study was explained to the participants by the researcher. Participants were informed prior to administration of pretest/posttest questionnaire that participation implied informed consent to this study. A pretest/post test questionnaire was

administered to allow the participants to report the stress levels before and after the deep breathing exercise intervention. The pretest questionnaire asked demographic variables and how participants rated their stress on 4 point likertscale (Holmes and Rahe stress rating scale) [13]. The post test was the same as pretest, excluding the demographic variables. The researcher demonstrated proper breathing technique then allowed participants to continue on their own for five minutes. Descriptive statistics were used to analyse the sample characteristics [14]. A paired test was used to look for any significant differences in outcomes between the pretest and posttest intervention stress levels. Statistically significant results were calculated at $p < 0.05$ level [15].

RESULTS AND DISCUSSION

The major findings as follows:

- Most of the housewives (40.0%) were in the age group of 31-40 years.
- In relation to the religion, majority of the (75.0%) of housewives are Hindus.
- About (63.34%) of housewives had primary education
- Most (45%) of the housewives belonged to joint family
- About (33.38%) of housewives got married below 10 years ago,
- Majority (41.7%) of the housewives were having monthly income above Rs. 7,001.
- Majority of the housewives (81.67%) were having 2 children.
- Majority (81.67%) of the housewives don't have previous knowledge about deep breathing exercise.

Table 1. Pretest level of stress among the housewives in selected area

Level of stress	Score	n=60	
		Number of Respondents	
		No	%
No Stress	< 35%	0	0
Mild	35--55%	11	18.33
Moderate	55--75%	22	36.67
Severe	> 75%	27	45
Total		60	100

Table 2. Assessment of level of stress after demonstration of deep breathing exercise among the housewives

Level of stress	Score	n=60	
		Number of Respondents	
		No	%
No Stress	< 35%	35	58.33
Mild	35--55%	21	35.00
Moderate	55--75%	4	6.67
Severe	> 75%	0	0
Total		60	100

Table 3. Mean, SD and Mean% of pre and post test level of stress on deep breathing exercise among housewives

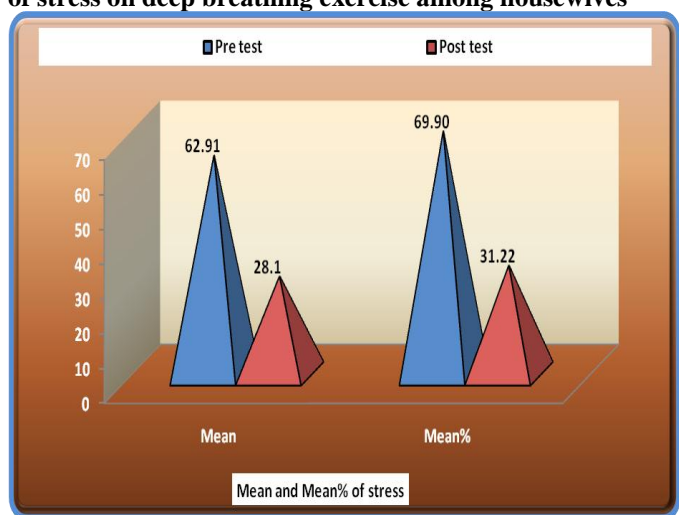
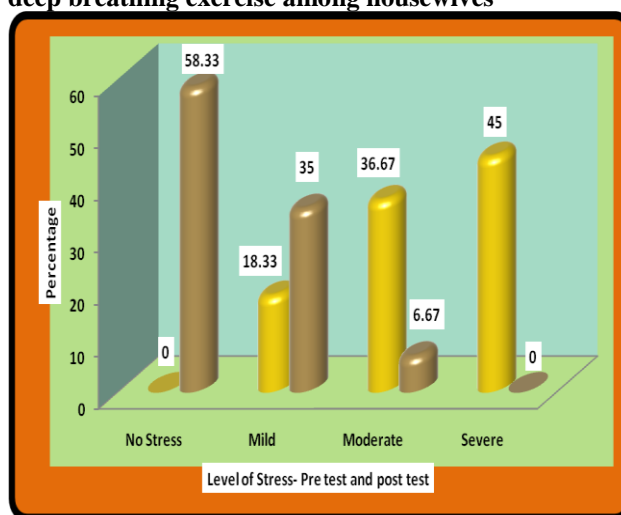
						n=60
Stress level	Max Statement	Max Score	Range	Mean	SD	Mean%
Pre test	30	90	39—76	62.91	9.84	69.90
Post test	30	90	13—38	28.1	7.24	31.22

Table 4. Comparison between pre and posttest level of stress on deep breathing exercise among housewives

						n=60
Level of stress	Score	Post test		Pre test		
		No	%	No	%	
No Stress	< 35%	35	58.33	0	0	
Mild	35--55%	21	35.00	11	18.33	
Moderate	55--75%	4	6.67	22	36.67	
Severe	> 75%	0	0	27	45	
Total		60	100	60	100	

Table 5. To evaluate the effectiveness of deep breathing exercise to reduce the level of stress among housewives

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				n=60
Stress level	Mean	SD	Mean%	Paired 't' test
Pre test	62.91	9.84	69.90	30.1**
Post test	28.1	7.24	31.22	
Improvement	34.81	8.96	38.68	
**Significant at p<0.05 level df 59, t-value 2.65				

Fig 1. Mean and Mean percentage of pre and post test level of stress on deep breathing exercise among housewives**Fig 2. Comparison pre and post-test level of stress on deep breathing exercise among housewives**

In pre-test 27(45%) of the housewives had severe level of stress, 22(36.67%) had moderate level of stress, 11(18.33%) stress. In post-test most of the housewives 35(58.33%) have no stress, and 21(35) housewives had mild level of stress, 4(6.67%) housewives had moderate level of stress and no one had severe stress.

To evaluate the effectiveness of deep breathing exercise on reduction of stress level among housewives, 't' values were calculated. Compared paired 't' value (t=30.1) which was statistically significant at 0.05.

Chi square values were calculated to find out the association of mean post -test stress score with demographic variables. There was no significant association between stress score on mean post- test when compared to religion, duration of marriage, number of children, knowledge about deep breathing exercise, However significant association was found between age, educational status, type of family, duration of marriage, monthly income of family.

CONCLUSION

The study findings revealed that there was a highly significant reduction in the level of stress among the subjects after the practice of deep breathing exercise. The paired 't' test computed between mean pretest stress score and mean post test stress score (t value= 30.1) indicated a highly significant difference in the stress scores among housewives. Thus it is concluded that the deep breathing exercise is effective to reduce the level of stress among housewives in selected community area at Bangalore.

Recommendation: This similar study can be conducted for many housewives who is struggling with stress in village set up and in the urban set up, Exploratory study can be done to find out the factors make them to develop stress, a similar study can be replicated with a control group, a comparative study can be conducted with rural and urban areas, a comparative study can be conducted between working and nonworking women .

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