



A STUDY TO ASSESS THE EFFECT OF JACOBSON'S RELAXATION TECHNIQUE ON PREMENSTRUAL SYNDROME AMONG LATE ADOLESCENT GIRLS IN A SELECTED SCHOOL OF NURSING, KOLLAM.

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ABSTRACT A quantitative study was conducted in Kollam (2020) to evaluate the effect of Jacobson's relaxation technique on premenstrual syndrome (PMS) among late adolescent girls. 60 late adolescent girls, 30 each in the experimental and control group were selected using purposive sampling technique. Self administered modified Stainer and Wilkins PMS diagnostic criteria and PMS screening tool were used to assess the level of PMS. Analysis using chi-square and unpaired 't' test. The result showed that significant difference between mean post test score of PMS were found to be significant at 0.05 level of significance ($t=9.98, p<0.01$). The study concluded that Jacobson's relaxation technique is one of the best method with no side effects and provide diversion also it can be used as a complementary therapy for reducing the severity of premenstrual syndrome.

KEYWORDS :Effect, Jacobson's relaxation technique, premenstrual syndrome(PMS), late adolescent girls.

INTRODUCTION

Premenstrual syndrome (PMS) is a cyclic phenomenon of somatic and affective symptoms appearing in the days preceding menses and interfering with one's work or lifestyle followed by a symptom-free interval.¹ Menstruation is the cyclic discharge of blood, mucous and cellular debris from the uterine lining.²

The American College of Obstetricians and Gynecologists (ACOG) defined PMS as a clinical condition characterized by the cyclic presence of physical and emotional symptoms unrelated to any organic disease that appear during the 5 days before menses in each of the three prior menstrual cycles and disappear within 4 days of the onset of menses, without recurrence until at least cycle day 13.³

The highest incidence of anovulation is under age 20 and over age 40. At age 25, over 40% of cycles are between 25 and 28 days in length from 25-35 years over 60% are between 25 and 28 days. The prevalence of PMS among adolescents varies from 10% to 53%, depending on the population studied and diagnostic measures used.⁴ Women with PMS tend to have a significantly lower quality of life, increased absenteeism from work, decreased work productivity, impaired relationships with others, and more frequent visits to health providers than those who do not experience PMS.⁵

Premenstrual syndrome is very common in late adolescent girls, it affect their daily activities, for reducing this so many girls were taking analgesics but it causes many side effects. Rather than pharmacological some non-pharmacological measures are very helpful to relieve the symptoms of premenstrual syndrome. Relaxation therapy is one of the important techniques to reduce these symptoms.

This gave an insight to the researcher and she found that only a few researches have been conducted to study the effect of Jacobson's relaxation technique on premenstrual syndrome, hence the present study was an attempt to find the effect of Jacobson's relaxation technique on reduction of premenstrual syndrome among late adolescent girls.

OBJECTIVES

- To assess the pre test and post test scores of premenstrual syndrome among late adolescent girls in group I (experimental group) and group II (control group).
- To compare the effectiveness of Jacobson's relaxation technique on premenstrual syndrome in group I and group II.
- To find out the association between the post test scores of premenstrual syndrome with selected demographic variables.

CONCEPTUAL FRAMEWORK

A conceptual framework is referred to as the interrelated concepts or abstracts that are assembled together in some rational scheme by virtue of their relevance to a common theme. The overall objective of a

framework is to make scientific findings meaningful and generalisable and they also give direction for relevant questions of practical problems.⁷

Conceptual frame work of the present study is based on Orlando's Nursing Process Model.

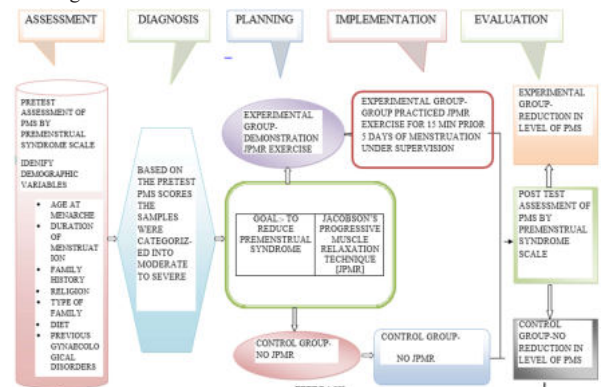


Figure-1 Conceptual Framework Based On Modified Orlando's Nursing Process Model



Figure-2 Schematic Representation On Methodology

Methods And Materials

Research Methodology is one of the vital sections of a research proposal, since the success of any research mostly depends upon the methodological issues that are followed in the execution of the research work. The role of methodology consists of procedures and technique for concluding the study.⁷

Quantitative approaches are said to use deductive methods, often testing hypothesis and deducing the result using inferential statistics.⁸

A quantitative study was conducted to evaluate the effect of

Jacobson's relaxation technique on premenstrual syndrome among late adolescent girls in Lourde School of Nursing, Kottiyam, Kollam from 23rd January to 25th February 2020. Non-probability purposive sampling technique was adopted to select 120 samples. Written consent was obtained from each participants and guardians of those whose age is below 18 years. Ethical clearance has been taken after the ethics committee meeting from Holy Cross Hospital, Kottiyam.

Modified Stainer and Wilkins, PMS criteria tool was used for screening the sample and it consist of 10 items. The scores was graded as follows:

Mild	1-3
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Moderate	4-7
Severe	8-10

Premenstrual syndrome screening tool was also used and it consists of 20 items based on the common premenstrual symptoms and the collected data were compiled for analysis. The scores was graded as follows:

Never	1-15
Mild	16-30
Moderate	31-45
Severe	46-60

RESULTS

Table 1: Description of demographic Proforma based on the group

Age(years) at menarche	Experiment		Control		Total	
	Frequency	Percentage	Frequency	percentage	Frequency	percentage
10 - 13	20	66.7	13	43.3	33	55.0
13 - 15	9	30.0	16	53.3	25	41.7
15 - 18	1	3.3	1	3.3	2	3.3
Duration of menstruation						
2 - 3 days	3	10.0	1	3.3	4	6.7
4 - 5 days	19	63.3	21	70.0	40	66.7
5 - 6 days	8	26.7	8	26.7	16	26.7
Family history of Premenstrual syndrome						
Yes	19	63.3	17	56.7	36	60.0
No	11	36.7	13	43.3	24	40.0
Religion						
Hindu	5	16.7	5	16.7	10	16.7
Christian	25	83.3	25	83.3	50	83.3
Type of family						
Nuclear family	29	96.7	28	93.3	57	95.0
Joint family	1	3.3	2	6.7	3	5.0
Diet						
Non vegetarian	30	100.0	30	100.0	60	100.0
Vegetarian	0	0.0	0	0.0	0	0.0
Previous gynaecological disorders						
Yes	1	3.3	0	0.0	1	1.7
No	29	96.7	30	100.0	59	98.3
Previous knowledge						
Yes	17	56.7	24	80.0	41	68.3
No	13	43.3	6	20.0	19	31.7

Table :1 shows that in experimental group the majority of the sample belongs to the age group of 10-13 years (66.6%) who had 4-5 days (63.3%) of menstruation, whereas (63.3%) had family history of premenstrual syndrome and (83.3%) believes in Christianity .In this group (96.7%) belongs to nuclear family, and all (100%) of them were non-vegetarian, (96.7%) had no previous gynaecological disorders and (56.7%) had previous knowledge regarding PMS.

In control group majority of the sample (53.3%) are in the age group of 10-13 years and (70%) had 4-5 days of menstruation, (56.7%) had family history of premenstrual syndrome and (83.3%) believes in Christianity. In this group (93.3%) belongs to nuclear family and allof them were (100%) non vegetarian and had no previous gynaecological (80%) had previous knowledge regarding PMS.

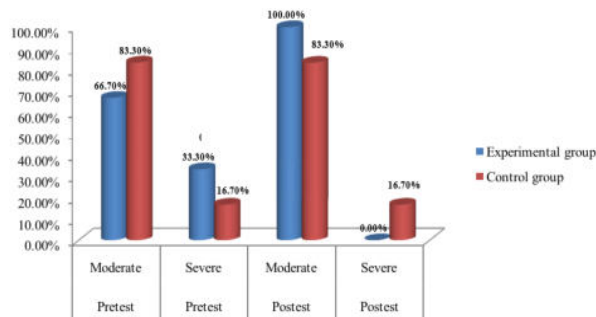


Figure 3 : To assess the pre test and post test scores of premenstrual syndrome among late adolescent girls in group I (experimental group) and group II (control group).

Figure 3 shows that, pre test scores of premenstrual syndrome in experimental group (66.7%) and (83.3%) in control group had moderate premenstrual syndrome while (33.3%) in experimental group and (16.7%) in control group had severe premenstrual syndrome. In post test scores of premenstrual syndrome, whole of the sample in experimental group (100%) and (83.3%) in control group had moderate premenstrual syndrome and only (16.7%) in control group had severe premenstrual syndrome.

Table 2: Effectiveness of Jacobson's relaxation technique on premenstrual syndrome in group I and group II.

Group	Mean post test	SD	N	t	P
Experimental	28.6	1.4	30	9.98	p<0.01
Control	36.5	4.1	30		

*significant at 0.05 level

Table 2 depicts that the mean post test score of control group (36.5%) is higher than that of mean post test score of experimental group (28.6%). The calculated 't' value (9.98) is higher than that of tabulated 't' value (2.69) at 0.05 level of significance . So research hypothesis(H1) is accepted, that is there is significant difference in mean post test score regarding Jacobson's relaxation technique. It is inferred that Jacobson's relaxation technique was effective in reducing premenstrual syndrome among late adolescent girls.

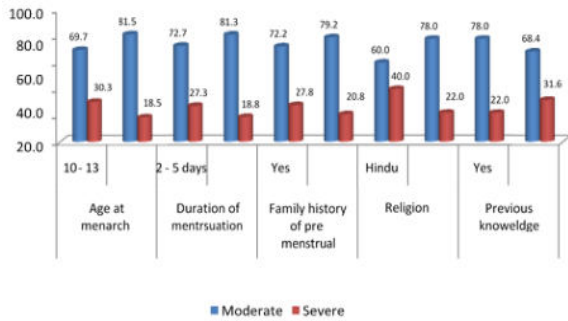


Figure 4 Association between the post test score of premenstrual syndrome among late adolescent girls with selected demographic variables

Figure 4 reveals that all the chi-square values related to age at menarche, duration of menstruation, family history of PMS, religion and previous knowledge are greater than that of p value at 0.05 level of significance. Therefore, the investigator fails to support the research hypothesis (H2) which means there is no significant association between post test scores of premenstrual syndrome with selected demographic variables such as age at menarche, duration of menstruation, family history of PMS, religion and previous knowledge in experimental group.

DISCUSSION

The aim of the present study was to evaluate the effect of Jacobson's relaxation technique on premenstrual syndrome among late adolescent girls in a selected school of nursing, Kottiyam, Kollam.

The study samples in the present study consisted of 60 adolescent girls between the age group of 17-22 years in Lourde School of Nursing, Kottiyam. Out of these samples majority of them attained menarche between the age group 10-13 years.

The present study was consistent with the result of a cross sectional study in Bangladesh to investigate the association of early at menarche and severity of premenstrual syndrome. The study result showed that more than 48% girls already attained menarche within the age of 12 years, among them 25.6%, 41.0%, and 58.3% girls experienced menarche at the age of 10, 11, and 12 years had moderate to severe level of premenstrual syndrome.⁹

The current study shows the mean post test scores of control group (36.5%) is higher than that of mean post test scores of experimental group (28.6). The calculated 't' value (9.98) is higher than that of tabulated 't' value (2.69) at 0.05 level of significance. It is inferred that Jacobson's relaxation technique was effective in reducing premenstrual syndrome among late adolescent girls.

These findings were consistent with another study conducted in Coimbatore with 60 samples to determine the effectiveness of Jacobson's muscle relaxation therapy on premenstrual syndrome among adolescent girls. The result showed that the post test mean score 11.53 was lesser than the pre test mean score 35.87. The obtained 't' value was 17.13 which was found to be significant.¹⁰

CONCLUSION

Based on the findings of the present study, the following conclusions were drawn. The mean post test score of control group is higher than that of mean post test score of experimental group, hence it can be concluded that there is significant difference in mean post test score after the intervention of Jacobson's relaxation technique. It is inferred that Jacobson's relaxation technique was effective in reducing premenstrual syndrome among late adolescent girls. There is no association between post test scores of PMS with demographic variables such as age at menarche, duration of menstruation, family history of PMS, religion and previous knowledge both in experimental and control group.

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