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"A STUDY TO EVALUATE THE EFFECTIVENESS OF BILLIG EXERCISE IN REDUCING DYSMENORRHEA AMONG ADOLESCENT GIRLS IN SELECTED COLLEGE, NAMAKKAL"

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ABSTRACT

The research approach adoptedwas quantitative research approach.Quasi experimental research design was used in this study to evaluate the effectiveness of billigs exercise in reducing dysmenorrhea among adolescent girls. Subjects were selected by using Purposive sampling technique. The sample size was 30 adoleoscent girls with dysmenorrhea in experimental group and 30 adoloscent girls with dysmenorrhea in control group. A semi structured questionnaire was used to collect the socio demographic variables and the menstrual variables. RESULTS: The analysis reveals that the unpaired t test value of adolescent girls among experimental and control group the calculated t value was 3.6 and the p level valuewith the significance was 2.0, it was noted that the calculated value is greater than the p level value, there was a significant difference between the post test score in experimental and control group.

KEYWORDS: DYSMENORRHEA,BILLIG'SEXERCISE,ADOLESCENTGIRLS.

INTRODUCTION

The female reproductive system is truly amazing. Menstruation is a significantstage of puberty in girls; it is one of many physical signs that a girl is maturing into a woman. The onset of menstruation is known as **"Menarche,"** is one of the most significant milestones in a woman's life. Menstrual pain is also known as dysmenorrhea or period pains, ranges from dulland annoying to severe and extreme. Menstrual cramps tend to begin after ovulationwhen an egg is released from the ovaries and travels down the fallopian tube.

Pain occurs in the lower abdomen and lower back. It usually begins with in 1or 2 days before menstruation and lasts for 2to 4 days.The management of dysmenorrhea is determined by the type of dysmenorrheal and its underlying causes. To determine the cause, a physical examination, medical history, family history, and menstrual history may be performed. Pelvic examination,ultrasound, and laparoscopic diagnostic tests may be performed in severe cases non-steroidal anti-inflammatory drugs may be prescribed as a pain (Physical exercise, relaxation therapy, dietary changes, vitamin supplements, a heating pad a cross the abdomen, a hot bath or shower, and abdominal massage can also help to relieve pain. Physical exercise has been advocated as a non–medical intervention for the relief of dysmenorrhea. Billig's exercise that stretches the connective tissue around the pelvis, the hip flexors, and the muscles on the inside of the thighs.

NEEDFORSTUDY:

Dysmenorrhea is one of the most common gynecological disorders in adolescent girls. Global estimates of the prevalence of dysmenorrhea range from 50% to 95%. This could be due to studies conducted on different age groups, Egyptian university students had the highest prevalence, with 93% having painful menstruation, followed by 89.1%of Iranian university students. The prevalence of dysmenorrhea varies widely, with studies from around the world reporting a range of 28% to 71.7%. Similar studies from Turkey have reported a prevalence of dysmenorrhea ranging from58.2% to89.5%.

OBJECTIVES:

❖ To assess the level of dysmenorrheal among adolescent girls in both experimental and control group.

❖ To assess the level of dysmenorrheal among adolescent girls after billig's exercise in experimental group.

❖ To evaluate the effectiveness of billig's exercise among adolescent girls in experimental and control group.

❖ To find out the association between post-test level of dysmenorrhea among adolescent girls with their selected socio demographic variables in experimental group and control group.

MATERIALS AND METHODS:

In this study the investigator selected the vivekanandha college of nursing at namakkal district for the study setting Quasi experimental design, Non randomized control design was used. Purposive sampling technique was used to select the samples. The sample size of the study comprised of 60 adolescent girls who fulfilled the inclusive criteria, with experimental group 30 and control group 30.

DESCRIPTION OF THE TOOL

SECTION - A DEMOGRAPHIC VARIABLES AND MENSTRUAL VARIABLES DEMOGRAPHIC VARIABLES

Demographic variables which include age, education, religion, residence , type of family, marital status, dietary pattern, family history of dysmenorrhea.

MENSTRUAL VARIABLES:

Menstrual variables which include age at menarche, menstruation duration, menstrual cycle, menstruation flow, type of pain, location of pain, associated symptoms, duration of menstrual pain, emotional disturbances, home remedies used to relieve dysmenorrhea.

SECTION-B STANDARDIZED NUMERICAL PAIN RATING SCALE

Standardized numerical pain rating scale was used to measure the pain experienced by the adolescent girls during the menstruation. This scale is marked from 0-10 encompassing 10 equal division 1,2,3,4,5,6,7,8,9,and10. The pain intensity is a subjective experience and the difference between minimum pain and maximum pain could be measured objectively with equally divided numerical digits as the level of scores increases, the intensity of pain also increases. In this scale, pain intensity was scored arbitrarily as follows

- 0–Nopain
- 1-3–Mild
- 4-6–Moderate
- 7-10-severe

Frequency and percentage distribution of pre-test and post-test level of dysmenorrhea among adolescent girls in the experimental group

FIGURE:4.1.1

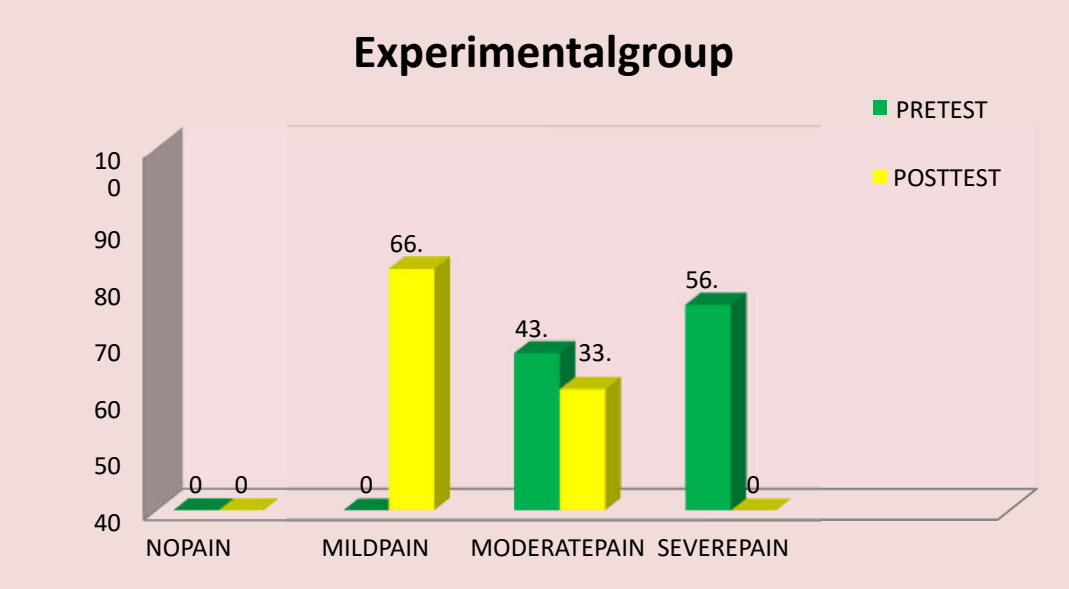

FIGURE 4.1.1: shows the frequency and percentage distribution of pre-test and post-test level of dysmenorrheal among adolescent girls, in the experimental group in pre-test13(43.3%) had moderate pain and 17 (56.7%) had severe pain. In post-test 10(33.4%) of them had moderate pain and 20(66.6%) had mild pain.

Comparison of Pre-test and Post-test level of dysmenorrhea among study participants in experimental group

TABLE 4.2.1:

EXPERIMENTALGROUP				
Levelofdysmenorrhea	**Mean**	**Standard deviation**	**Mean Difference**	**PairedTvalue**
Pre–test	2.5	1.3	1.2	C.V-16T.V2.05 **S**
Post– test	1.3	1.2		

TABLE 4.2.1: shows that mean, standard deviation and the paired t test value of level of dysmenorrhea among adolescent girls is experimental group. In pre-test the mean value was 2.5 and standard deviation value was 1.3. In post- test them an value is 1.3 and standard deviation value was 1.22.the calculated t value was 16 which is greater than table value, it was noted that there was a significant between pre-test and post test score, so the research hypothesis was accepted.

Comparison of Pre-test and Post-test level of dysmenorrhea among adolescent girl's study participants in control group

TABLE 4.2.2:

CONTROL GROUP				
Level of dysmenorrhea	**Mean**	**Standard deviation**	**Mean Difference**	**Paired T value**
Pre–test	2.6	0.38	0.2	C.V-4.8 T.V-2.05 **S**
Post– test	2.4	1.34		

TABLE 4.2.2: shows that mean, standard deviation and the paired t test value of level of dysmenorrhea among adolescent girls in control group. In pre-test the mean value was 2.6 and standard deviation value was 0.38. In post- test the mean value is 2.4 and standard deviation value was 1.34.The calculated t value was 4.8 which greater than table value, it was noted that there wasa significant between pre-test and post test score.

Comparison of post-test level of dysmenorrhea among adolescent girls in both experimental and control group.

TABLE 4.2.3:

Group	Level of dysmenorrhea	Mean	Mean Difference	Unpaired t test value
Experimentalgroup	Pre-test	2.5	1.2	C.V-3.6 T.V-2.0 **S**
	Post-test	1.3		
Controlgroup	Pre–test	2.6	0.2	
	Post-test	2.4		

TABLE 4.2.3: shows that mean, and the unpaired t test value of adolescent girls among experimental and control group. The calculated t value was 3.6 and the p level value with the significance was 2.0, it was noted that the calculated value is greater than the p level value, there was a significant difference between the post test score in experimental and control group.

Association of post-test level of dysmenorrheal among adolescent girls and demographic variables and menstrual variables in experimental group.

There is association between the level of dysmenorrheal among adolescent girls variables residence. There is no association between the level of dysmenorrheal among adolescent girls variables age, education, religion, residence ,type of family, marital status, dietary pattern, family history of dysmenorrhea, age at menarche, menstrual duration, menstrual cycle, menstrual flow, location of menstrual pain, type ofmenstrual pain, associated symptoms during menstruation, duration of menstrual pain, emotional disturbances during menstruation, home remedies during menstrual pain, impact of student academic performance due to dysmenorrheal

CONCLUSION:

The study shows significant effectiveness of Billig's exercise in reducing pain during menstruation among adolescent girls in experimental group. The study showsthat the Billig's exercise is more effective in reducing pain during menstruation among adolescent girls than pharmacological management

RECOMMENDATIONS:

Similar study can be conducted for a large group on along- term basis. Comparative study can be conducted by using various other complementary and alternative therapies to find out the effectiveness in reducing menstrual pain. Comparative study can be conducted between Billig's exercise and hot fomentation.

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