A Randomized control trial to assess the effectiveness of Billigs exercise on reducing Primary dysmenorrhoea among the adolescent girls at selected hostels of Vijayapura

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ABSTRACT

Dysmenorhoea affected millions of women around the world. It is considered as one of the most common gynecological problem among women regardless of any age. Exercise has been shown to lessen the severity of menstrual ache like abdominal pain. Billig's exercise is an exercise for dysmenorrhoea, counteracting tendency to lordosis and stretching tight fasciae around the pelvis.

Aim of the Study:

To assess the effectiveness of Billigs exercise on reducing Primary dysmenorrhoea among the adolescent girls at selected hostels of Vijayapura.

Methods:

A randomized control trial Pre-test and post-test research design was undertaken among 60 adolescent girls in selected hostels of Vijayapura. Data was collected using numerical pain scale and demographic data. A purposive sampling technique was used to select the samples. The data was analyzed by descriptive and inferential statistics.

Results:

In this study mean pretest pain score was 3.86 where as mean post test pain score was 2.16. The difference in mean pre-test posttest score was 1.70 which was highly significant with t-value =10.61 with p-value < 0.0001

Conclusion:

The present study concludes that pretest and post test pain score of primary dysmenorrheal differ significantly among the girls in the experimental group so Billigs exercise was effective among the adolescent girls in the experimental group.

Key Words:

Dysmenorrhoea, Billigs exercise, Adolescent girls

1. INTRODUCTION

Dysmenorhoea affected millions of women around the world. It is considered as one of the most common gynecological problem among women regardless of any age.

Around a half of the India's population consist of girls below 20 years. At the onset of menarche one of the major physiological changes which will takes place in the adolescent girls. Menstrual ache is also called as dysmenorrhoea or period pains, ranges from mild to severe and extreme Menstrual pain that occurs in the lower abdomen and lower back. It starts usually with in 1 or 2 days just before the menstruation and last for 2 to 4 days**.** Billig's exercise is an exercise for dysmenorrhoea, counteracting tendency to lordosis and stretching tight fasciae around the pelvis.

2. OBJECTIVES

1. To assess the Pre-test level of primary dysmenorrhoea among adolescent girls in the experimental and control group.

2. To assess the effectiveness of Billigs exercise on primary dysmenorrhoea among adolescent girls in the experimental group.

3. To assess the post-test level of primary dysmenorrhoea among adolescent girls in the experimental group and control group.

4. To find out the association between pre-test level of primary dysmenorrhoea among adolescent girls with their selected demographic variables.

ASSUMPTIONS

1. Dysmenorrhoea patient's experiences pain and it will affect the student's day today activities.

2. Billig's exercise can relief the pain which helps at the time of menstrual period.

3. There is a relationship between the dysmenorrhoea and their socio demographic variables.

HYPOTHESIS

H1; There is a significant difference between pre test and post test dysmenorrhoea of experimental and control group.

H2; there will be statistical significant between dysmenorrhoea with their selected socio demographic variables.

DELIMITATIONS

Study is delimited to

Adolescent girls age between to 14¬ to 19 years at selected hostels Vijayapur.

Data will be collected as in natural¬ setting only from adolescent girls at selected hostels Vijayapur.

3. MATERIALS AND METHODS

SOURCE OF DATA: Adolescent girls at selected hostels Vijayapur

RESEARCH APPROACH: Quantitative research methodology

RESEARCH DESIGN: Experimental and control Pre-test Post-test Research Design

SETTING: The study will take place at chosen girls hostels at Vijayapura

POPULATION:

Adolescent girls age group between 14-19 years.

VARIABLES

- ➢ **Dependent Variable** – Primary Dysmenorrhea

- ➢ **Independent Variable: Billigs exercise**

- ➢ **Demographic variable:** Age, education, religion, etc

SAMPLING PROCEDURE: Purposive sampling technique

SAMPLE SIZE: Sample size will be 60

INCLUION CRITERIA

- • Adolescent girls who have attained menarche and age group between 14-19 years.
- • Regular menstrual cycle
- • Participants who are having primary dysmenorrhoea and are willing to participate in the study

EXCLUSION CRITERIA

- • Adolescents girls who are undergoing medical treatment for dysmenorrhoea

INSTRUMENTS TO BE USED

Section A-Demographic data

Section B-Self administered Numerical pain scale

DATA COLLECTION PROCESS

1- Prior permission will be taken from concerned authority

2- The purpose of doing the study will be explained to all the study participants.

3- Pre-test was conducted by using the numerical pain rating scale for experimental and control group.

4- Soon after the pre-test Billigs exercise as a intervention was offered to the experimental group on a day before menstrual period, then day 1 and day 2 of menstruation,5-6 times a day.

5- Post test was conducted to assess the level of dysmenorhoea for both groups by using numerical pain rating scale.

DATA ANALYSIS PLAN

Study data will be analyzed by using the descriptive (Mean, Median, frequency, percentage and standard deviation) and inferential statistics (t-value, p-value) based on the objectives and hypothesis.

4. RESULTS AND DISCUSSION

1. Demographic Variables of Respondents

The Majority of the responders out of 60 according to their Age in experimental group 22(73%) and in control group 20(66%) were between the ages of 14 and 16,8(26%) and 10(33.4%) were between the ages of 17 and 19. The majority of responders according to their education 20(66.6%) in experimental group and in control group 19(63.3%) had completed SSLC,7(23.3%) in experimental and 4(13.3%) in control group had completed PUC,3(10.1%) in experimental and 7(23.4%) in control group had completed Degree. The majority responders according to their religion out of 60 participants 22(73.3%) in experimental and 23(76.7%) in control group were Hindu,6(20.0%) in experimental and 6(20%) in control group were muslim,2(6.7%) in experimental and 1(3.3%)in control group were Christian. The majority of the participants according to their BMI out of 60 participants 16(53.3%) in experimental and 8(26.6%) in control group their BMI is <20,10(33.3%) in experimental and 17(56.7%)in control group with their BMI 20-25, 4(13.4%) in experimental and 5(16.7%) in control group their BMI is >25.The majority of the participants out of 60 according to their age at menarche 5(16.6%) in experimental and 1(3.4%) in control group were <12 years,18(60%) in experimental and 18(60%) in control group were 12-13 year,7(23.4%) in experimental and 11(36.6%) in control group were 14-15 years. The majority of the participants out of 60 according to their duration of menstrual cycle 7(23.3%) in experimental and 8(26.6%) in control group duration of menstrual cycle is 2-3 days, 21(70%) in experimental and 18(60%) in control group duration is 4-5days, 2(6.7%) in experimental and 4(13.4%) in control group duration is >5 days. The majority of the participants according to their regularity of menstrual cycle 21(70%) in experimental and 19(63.3%) in control group were regular,9(30%) in experimental and 11(36.7%) in control group were irregular. The majority of the participants according to their menstrual cycle pain 11(36.6%) in experimental and 11(36.6%) in control group had their menstrual cycle pain one day previous, 17(56.6%) in experimental and 15(49.8%) in control group on first day,2(6.8%) in experimental and 4(13.6%) in control group on second day.The majority of the participants according to their flow of menstrual cycle 15(50%) in experimental and 10(33%) in control group had mild menstrual flow,12(40%) in experimental and 16(53.4%) in control group had moderate flow,3(10%) in
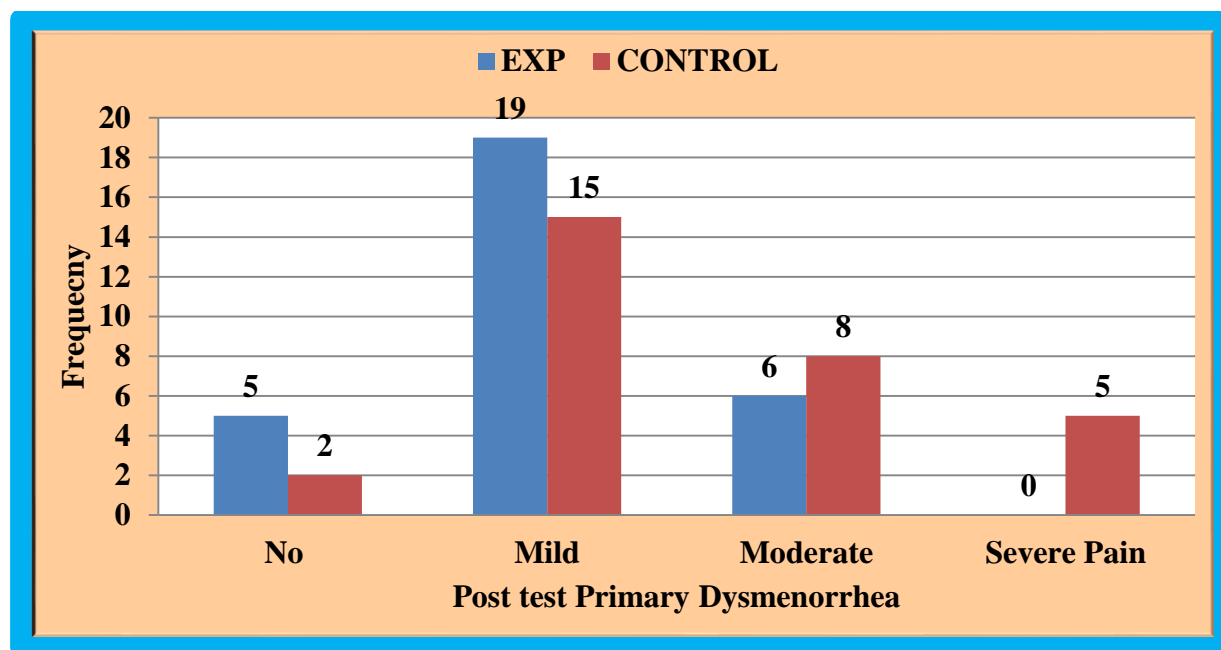
experimental and 4(13.3%) in control group had heavy flow. The majority of the participants according to their nature of menstrual pain 9(30%) in experimental and 1(3.3%) in control group nature of menstrual pain is pricking,12(40%) in experimental and 21(70%) in control group pain is throbbing ,9(30%) in experimental and 8(26.7%) in control group pain is cramping. The majority of the participants according to their associated symptoms 14(46.6%) in experimental and 8(26.6%) in control group had nausea and vomiting,11(36.6%) in experimental and 15(50%) in control group had fatigue,4(13.3%) in experimental and 5(16.7%) in control group had diarrhea,1(3.3%) in experimental and 2(6.7%) in control group had giddiness. The majority of the participants according to their medication during menstrual cycle 6(20%) in experimental and 5(16.7%)in control group were replied yes,24(80%) in experimental and 25(83.3%) in control group were replied No. The majority of the participants according to their inference 19(63.3%) in experimental and 13(43.4%) in control group were sometimes missed school/college,7(23.3%) in experimental and 9(30%) in control group were regularly missed school/college,2(6.7%) in experimental and 4(13.3%) in control group were missed one day of period, 2(6.7%) in experimental and 13.3%) in control group were missed on the second day of period.

2. **Effectiveness of Billigs exercise on primary dysmenorrhea among adolescent girls in the experimental group**

	Mean	N	Std. Deviation	Difference	t-value	df	p-value
Pre-test	3.86	30	2.43	1.70	10.61	29	< 0.0001(S)
Post-Test	2.16	30	1.76				

mean pretest pain score was 3.86 where as mean post test pain score was 2.16. The difference in mean pre-test posttest score was 1.70 which was highly significant with t-value =10.61 with p-value < 0.0001

2. Assessment post-test level of primary dysmenorrhea among adolescent girls in the experimental group and control group.

From table no 16 and graph no 15 , it was clear that , Psot test primary symenorrha was ddecreased significantly among the adolecent girls of experimental group in comparison with control group

4. Association between pre- test levels of primary dysmenorrhoea among adolescent girls with their selected demographic variables.

There was no association between pre- test level of primary dysmenorrhoea among adolescent girls with their selected demographic variables such as age (0.142), education (0.475) , religion (0.875) , BMI (0.915) , age at menarche (0.619), duration of MC (0.450), regularity of MC (0.855) , MC pain (0.360) , flow of MC (0.110) , Nature of MC (0.212) , associated symptoms (0.786) , duration of medication (0.448) , and inference (0.675).

RECOMMENDATIONS

Nursing research is a widely expanding area with need for validating conservative, interventions and development of new knowledge.

This study recommends the following for achieving this end.

Conduct a comparative research to examine the effectiveness of Billigs exercise and Aerobic exercises among experimental group 1 and experimental group II.

5. CONCLUSION

The present study concludes that pretest and post test pain score of primary dysmenorrheal differ significantly among the girls in the experimental group so Billigs exercise was effective among the adolescent girls in the experimental group.

6. ACKNOWLEDGEMENT

CONFLICT OF INTEREST-None declared

ETHICALCLEARENCE- Ethical clearance certificate was obtained by institutional ethical committee.

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