

## A Study to Determine the Effectiveness of Pelvic Floor Exercise in Reducing Dysmenorrhea among Adolescent Girls

Bhavika Rathod

### How to cite this article:

Bhavika Rathod. A Study to Determine the Effectiveness of Pelvic Floor Exercise in Reducing Dysmenorrhea among Adolescent Girls. J Nurse Midwifery Matern Health. 2024;10(3):101-104.

### Abstract

A study was conducted to determine the effectiveness of pelvic floor exercise in reducing dysmenorrhea among adolescent Girls. 50 students were selected by non-probability convenient sampling technique. Data were collected by pain assessment scale and structured knowledge questionnaire. The mean scores of Pre-test knowledge score & Post-test knowledge score are 14.57 & 22.06. The co-relation value are 0.98 respectively ( $r>1$ ). So there is a positive co-relation between Pre-test knowledge score & Post-test knowledge score. The overall knowledge score shows that there was positive improvement score 6.69 which is greater than the table value 2.021 and found to be highly significant at the level of  $p<0.05$  hence it is evident that the pelvic floor exercise is effective in reducing dysmenorrhea.

**Keywords:** Effectiveness; Pelvic Floor Exercise; Dysmenorrhea; Adolescent girls.

### INTRODUCTION

India has one of the fastest growing youth populations in the world, with an estimated 190 million adolescents. Girls below 19 years of age comprise one quarter of India's rapidly growing population. The word 'adolescent' is derived from Latin word adolescent meaning "to grow up". Adolescence is a time of moving from the immaturity of childhood into the maturity of adulthood. Adolescence is the phase, usually between 10-19 years, in which children undergo rapid changes in body size, physiology and psychological and social functioning. During this

period, all body dimensions, development and maturation are completed. According to WHO adolescent is the period of life that extends from 10-19 years.<sup>1</sup>

One of the major physiological changes that take place in adolescent girls is onset of menarche which is usually associated with a number of problems among which dysmenorrhea is the most common. Menarche expresses normal, regular menstruation that lasts for a few days, but anywhere from 2 to 8 days is considered normal. The average blood loss during menstruation is 35 milliliters with 10-80 ml considered normal. Menstruation can be defined as a periodic physiologic discharge of blood mucous and other cellular debris from the uterine mucosa.<sup>2</sup>

Author's Affiliation: Associate Professor, Department of Obstetrics and Gynecology, KD Institute of Nursing Sciences, KD Hospital, Ahmedabad, Gujarat, India.

Corresponding Author: Bhavika Rathod, Associate Professor, Department of Obstetrics and Gynecology, KD Institute of Nursing Sciences, KD Hospital, Ahmedabad, Gujarat, India.

E-mail: [bhavikarathod30@yahoo.com](mailto:bhavikarathod30@yahoo.com)

Received on: 05-12-2024 Accepted on: 11-01-2025



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Many women experience menstrual problem especially adolescent girls. After the menarche the period may be irregular. Systemic symptoms of nausea, vomiting, diarrhea, fatigue, fever, uterine cramps and headache are fairly common. The uterine cramps also referred to as dysmenorrhea.<sup>3</sup>

A recent review of menstrual disorders in developing countries in journal revealed high rates of menstrual morbidity in population-based studies. By late adolescence, 75% of girls experience some problem associated with menstruation. Delayed, irregular, painful, and heavy menstrual bleeding are leading reasons for physician office visits by adolescents, and dysmenorrhea is the leading reason for school absenteeism among girls.<sup>4</sup>

### NEED FOR THE STUDY

The researcher observed that dysmenorrhea occurs mostly among adolescents. Therefore, the researcher felt the need of the study to determine the effectiveness of pelvic floor exercise in reducing dysmenorrhea.

In reference to the various literature, the investigator realized the importance of Pelvic Floor Exercise in Reducing Dysmenorrhea among Adolescent Girls, Deficiency of knowledge in this particular area is the need for interventional program to improve the knowledge of adolescents regarding the management of dysmenorrhea. Based on this, the investigator felt the need to determine effectiveness of pelvic floor exercise.

### METHODOLOGY

**Research Approach:** An evaluative approach.

**Research Design:** One group pre test post test design with pre- experimental approach

**Population:** The adolescent girls who are studying in selected schools of Bengaluru.

**Sample:** 50 adolescent girls of 15 to 18 years, studying in selected schools of Bengaluru.

**Sampling techniques:** Non-probability convenient sampling

**Setting of the study:** The study was conducted in selected schools at Bengaluru.

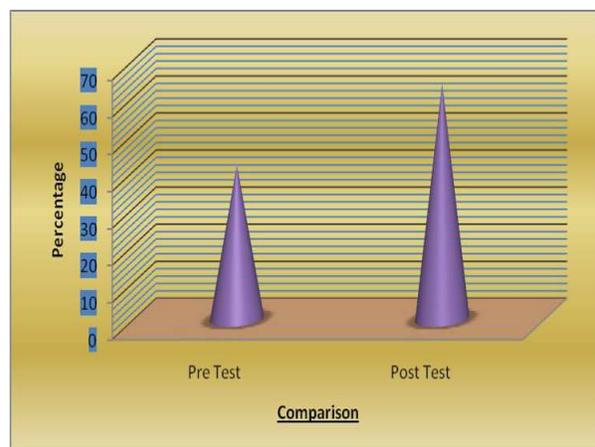
**Tools & Techniques:** Pain assessment scale and

structured knowledge questionnaire.

**Data collection:** The time taken to conduct the pre test was nearly 30-35 minutes. The pelvic floor exercise was administered on the same day respectively. The duration of each session was one hour. One month after, post test was conducted for adolescent girls using the same structured knowledge questionnaire to evaluate the effectiveness of pelvic floor exercise in improving pain and knowledge.

## RESULT

### Distribution of Mean Percentage Pre and Post Scores Adolescent:



The above graph indicates that there was improvement in mean knowledge score in all knowledge aspects. The overall knowledge score shows that there was positive improvement in post test knowledge score.

### Association between pre-test knowledge scores with their selected personal variables:

To find out the association between the pre-test levels of knowledge and selected personal variables, Chi square was computed and the following research hypothesis was stated-

**H<sub>2</sub>:** There is a significant association of knowledge of the adolescent girls regarding the effectiveness of exercise in reducing dysmenorrhea with selected demographic variables.

### Chi-square values between Pretest levels of knowledge of respondents with their selected personal variables:

**Table 1:** Chi-square values between Pretest levels of knowledge of respondents with their selected personal variables

$$\chi^2_{(1)} = 3.814,_{(2)} = 7.815 (p>0.05)$$

Personal variables	Table value	d(f)	Chi square value	Level of significance
<i>Age in years</i>				
15-16				
16-17	5.99	02	3.34	Not Significant
17 & above				
<i>Religion</i>				
Hindu				
Muslim	7.82	03	0.21	Not Significant
Christian				
Others				
<i>Education</i>				
10 <sup>th</sup> std				
11 <sup>th</sup> std	3.84	02	4.41	Significant
12 <sup>th</sup> std				
<i>Area of living</i>				
Rural				
Sub-urban	3.84	02	1.22	Not Significant
Urban				
<i>Source of Information</i>				
Mass media				
Health Personnel	7.82	03	7.7	Significant
Family members/Friends/Neighbors				
Others				
<i>Did you ever experience dysmenorrhea</i>				
Yes				
No	3.84	01	1	Not significant

The data presented in the table shows that the computed Chi-square value for association between pre-test level of knowledge of adolescents is found to be statistically not significant at 0.05 levels for age, religion, area of living and experience of dysmenorrhea and significant for education and sources of information. Therefore, the findings did not support the research hypothesis H<sub>2</sub> for demographic variables age, religion, area of living and experience of dysmenorrhea and significant for education and sources of information and support the research hypothesis H<sub>2</sub> for education and sources of information. Hence the research hypothesis is accepted inferring that adolescents pretest level of knowledge is significantly associated with their demographic variables education and sources of information.

## DISCUSSION

The findings of the present study are compared and contrasted with those of other similar studies. Findings of present study were compared with a following findings.

A study was conducted on Attitude and knowledge of medical students of Isra University about dysmenorrhea and its treatment. This study was conducted at Isra University Hyderabad. Non-probability, convenient random selection from MBBS student was done. Participants included were 18-25 years of ages, irrespective of marital status. Girls with irregular menstrual cycles, primary or secondary amenorrhea were excluded

from the study. Pre-designed questionnaire was filled by the students. After implementation of treatment, there was a positive improvement in the knowledge scores.<sup>12</sup>

## COCLUSION

The study findings showed that there was a significant increase in the knowledge of adolescent girls after administration of the pelvic floor exercise and also pelvic floor exercise is effective in reducing the pain level of adolescent girls during dysmenorrhea. Hence, it was concluded that the pelvic floor exercise was effective in improving the pain & knowledge of adolescent girls.

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