

## Effectiveness of Pranayama on Primary Dysmenorrhoea among Adolescent Girls

Ravita Yadav<sup>1</sup>, Manoj Jaiswal<sup>2</sup>, Rajkumar Mehta<sup>3</sup>, Deepak Rajput<sup>4</sup>,  
Virendra Kushwaha<sup>5</sup>, Neeraj Kumar Bansal<sup>6</sup>, Reeja Raju<sup>7</sup>

**Author Affiliation:** <sup>1-5</sup>B Sc. Nursing Fourth year students, <sup>6,7</sup>Associate Professor, Jai Institute of Nursing & Research, Gwalior, Madhya Pradesh 475001, India.

**Corresponding Author:** Neeraj Kumar Bansal, Associate Professor, Jai Institute of Nursing & Research, Gwalior, Madhya Pradesh 475001, India. **E-Mail:** [dr.neerajkumarbansal@gmail.com](mailto:dr.neerajkumarbansal@gmail.com)

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### Abstract

**Abstract:** Dysmenorrhoea is one of the most frequently encountered gynaecologic problem, refers to painful menstruation. It is a condition affects almost all women in their life time. A pre-experimental study was undertaken with the implementation of pranayama sessions to reduce the pain during menstruation. A total of 30 adolescent girls were selected using purposive using. The outcome of the study showed the effectiveness of the pranayama in terms of reducing the pain during menstruation.

**Keywords:** Dysmenorrhoea; Painful Menstruation; Pranayama; Physical Therapy.

Dysmenorrhoea is literally meaning painful periods or menstrual cramps. It usually occurs during the initial days of menstruation and last at least for 12-72 hours. Dysmenorrhoea can feature different kinds of pain, including sharp, throbbing, dull, nauseating, burning, or shooting pain. Pranayama are the breathing exercises and its subtle energy that is used and manipulated in acupuncture.

The common management used to treat dysmenorrhoea are hot application, analgesic, massage of lower back & abdomen, rest when needed. Women who practice regular exercise often have less menstrual pain. To help prevent cramps, make exercise a part of weekly routine.

### Need of the Study

Dysmenorrhoea, one of the most frequently encountered gynaecologic disorder, refers to painful menstruation. Dysmenorrhoea is classified as primary & secondary dysmenorrhoea. Primary dysmenorrhoea is painful menstrual cramps in the absence of any visible pelvic pathology that could count for it.

More than 50% of post pubescent menstruating women are affected by dysmenorrhoea, with 10-12% of them having severe dysmenorrhoea with incapacitation for 1-3 days each month. Because young women constitute a significant percentage of the adult workforce in the united states. about 600

million working hours or 2 billion dollars are lost annually because of incapacitating dysmenorrhoea if adequate relief is not provided.

### **Problem statement**

A study to assess the effectiveness of pranayama on primary dysmenorrhoea among adolescents residing in J.I.N.R. girls' hostel, Gwalior (M.P).

### **Objectives of the study**

The study will help all the adolescents to cope up with the pain by minimum efforts during menstruation. The following objectives were selected:

- To assess the level of dysmenorrhoea in adolescents.
- To Implement the pranayama sessions on adolescents.
- To assess the effectiveness of pranayama on dysmenorrhoea in adolescents.
- To find out the association between posttest level of dysmenorrhoea in adolescents with their demographic variables.

### **Hypothesis**

H1: There is significant difference between pretest level and post-test level of dysmenorrhoea.

H2: There is significant association between posttest level of dysmenorrhoea and demographic variables.

### **Research Methodology**

- Research Design: the suitable research design selected for the study was Pre experimental one group pretest posttest design.
- Setting of the study: J.I.N.R girls hostel Gwalior was chosen to conduct the study.
- Sample size & sampling technique: 30 girls age 17-24 years were selected by using non probability purposive sampling.
- Measurement and tool: Effectiveness of pranayama on the primary dysmenorrhoea and the level of pain was assessed by the Mc gill pain questionnaire. The maximum pain score was 78. The score interpreted as 'the higher the pain score, the greater the pain.
- Data analysis: descriptive statistics was used to find out frequency percentage, mean & standard deviation, while in inferential statistics; chi-square used to find out

association & t-test was used to find out the significant difference in two means.

### **Results**

- It is observed from the statistical analysis that (20%) from the age group below 18, (70%) from the age group 19-22, (10%) from the age group 23 and above.
- The subjects age of menarche was 2(6.66%) at the age group below 12, 21(70%) at the age group 13-15 year and 7(23.33%) at the age group 16 and above. Duration of menses was 3(10%) at 1-2 days, 27(90%) at 3-5 days.
- The dietary habits showed that 16(53.33%) were vegetarian, 12(40%) were both vegetarian and non-vegetarian and 2(6.66%) were eggetarian.
- The statistics as per the body build of the subjects showed that 5(16.66%) were thin and 25(83.33%) were normal.
- It also reveals that 50% of adolescents had moderate pain, 50% of adolescents had severe pain by Mc gill questionnaire.
- The study reveals that the mean of Mc gill questionnaire obtained in pretest was 41.53 with standard deviation 8.09. the pretest pain score shows the significant pain during menstruation while in posttest, the mean of Mc gill questionnaire was 13.40 with standard deviation of 12.27. this outcome shows the effect of pranayama on dysmenorrhoea as the pain score decreases.
- The calculated t-test value of 2.045 was significantly higher than the table value of 2.043, which showed a good impact in reducing the pain during menstruation.
- The chi-square calculation showed significant association between posttest level of dysmenorrhoea among adolescent girls with their selected demographic variables.

### **Discussion**

The study suggest that pranayama is highly effective on reduction of dysmenorrhoea. Regular sessions of pranayama help in reducing physical & mental strain as well as relieve the posture related issues which become a factor converting it to severe dysmenorrhoea.

### **Limitation**

- The study is limited to 30 participants only.

- Purposive sampling was used in the study so generalization is limited.
- The results are based on the perception of the participants.

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