

**A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED
TEACHING PROGRAMME WITH REGARD TO JACOBSON'S
PROGRESSIVE MUSCLE RELAXATION TECHNIQUE ON
DYSMENORRHEA AMONG ADOLESCENT GIRLS IN SELECTED SCHOOL
OF KALABURAGI, KARNATAKA.**

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ABSTRACT:

Dysmenorrhea is characterized by intense menstrual discomfort that interferes with day-to-day functioning. Symptoms include cramping during ovulatory cycles, nausea, vomiting, exhaustion, and fainting. It has an impact of 17% to 80% worldwide.

The most prevalent menstrual disorder is dysmenorrhea, which affects 50% of women who are fertile and 10% of whom have excruciating pain for one to three days every month. In India, 60–90% of teenagers have dysmenorrhea, which is a major source of school absences or restrictions on activities and social engagement -**UNICEF 2012.**

According to a 2009 nationwide poll of teenage girls, 40% of the participants often missed work and college due to excruciating menstruation cramps. Dysmenorrhea is the most common cause of teenage absences from school and is the cause of major absenteeism from work.

INTRODUCTION:

In recent decades, there has been a renewed governmental commitment to and increased international prominence of women's health issues. Women's health is closely linked to the health of families and communities; a woman's illness or death can have a major and lasting impact on the health of her offspring, family, and community.

Women's reproductive health is seen as very important and has a broad impact on the general public's development and well-being. There are 1.2 billion people in the globe between the ages of 10 and 19, a period of life known as "adolescence". The period of adolescence lasts from the start of puberty to the completion of sexual maturation. Children go through significant bodily changes during adolescence, in addition to changes in societal expectations and perceptions. The methodical process by which newborns and children acquire a variety of abilities and capabilities is called development. The term "maturation" describes a rise in the functionality of several body systems related to skill development. Puberty, as it is commonly called, is a stage of life that typically affects women between the ages of ten and fifteen. It's crucial to keep in mind that puberty marks the beginning of reproduction in this situation. Adolescence is a time of physical and developmental transitions. A woman's first menstrual cycle begins when she reaches menarche. Menarche is a momentous day of great significance that every girl remembers for the rest of her life.

The World Health Organization (WHO) defines "adolescence" and "young people" as the age groups of 10 to 19 and 10 to 24 years, respectively. Teenagers make up a sizable portion of the population today: Adolescents between the ages of 10 and 19 make up one in five people, and 85% of them reside in developing nations. More than 25% of individuals on the planet are young folks. A third of the world's population is between the ages of 10 and 24, and more than half of all people are under 25. There are currently 1.7 billion young people and 1.2 billion teenagers in the world.

Adolescence is the time between childhood and maturity when physical, hormonal, emotional, and cerebral development accelerates. It also marks a shift from total dependency to a certain

degree of independence. For a girl, adolescence is a time of physical and mental preparation for being a safe mother. Adolescent girls' health affects not only their personal health but also the health of the next generation because they are the direct progenitors of future generations. Girls under the age of twenty make up over 25% of India's population.

Adolescents were not previously acknowledged as a distinct group from children and adults. Teens used to be grouped with children in the past, which resulted in their ignorance of and denial of the issues they encountered as a result of the changes that came with puberty. Together with its two main partners, UNICEF (United Nations International Children's Emergency Fund) and UNFPA (United Nations Population Fund), the Adolescent Health and Development Programme (ADH) has created a work schedule. Together, they are dedicated to giving teenagers the help and chance to learn the skills necessary to refrain from taking unnecessary risks, to get counseling—especially in times of crisis—to access health services, including reproductive health services, and to live in a secure and nurturing environment. Six

Throughout the reproductive cycle, menstruation is the regular release of blood, mucus, and epithelial cells from the uterus; it typically happens once a month. These days, a lot of females may experience medical issues related to their periods, such as dysmenorrhea, weight gain, headaches, backaches, breast soreness, mood swings, depression, and so on. 50% of women who menstruate experience dysmenorrhea or pain during their period, and 10% are unable to work for one to three days every month. After menarche, or the start of menstruation, more than half of all females typically feel some degree of discomfort. According to estimates, it is the main reason why people miss work and school.

OBJECTIVES OF STUDY:

- To assess the level of pain among the adolescent girls during the dysmenorrhea with the help of Pain visual analogue scale(VAS).
- The aim of this project is to create and implement a structured teaching program on Jacobson's Progressive Muscle Relaxation Technique for adolescent females with dysmenorrhea in a few schools in Kalaburagi, Karnataka.

- To evaluate the impact of a structured teaching program on the Jacobson's Progressive Muscle Relaxation Technique on teenage girls in a few Kalaburagi, Karnataka, schools.
- Identifying the relationship between the Structured Teaching Program and specific demographic factors in the adolescent girls suffering from dysmenorrhea

HYPOTHESIS:

H1. The amount of pain experienced by the teenage females with dysmenorrhea may differ significantly before and after using Jacobson's Progressive Muscle Relaxation Technique.

H2. Adolescent girls who fit certain demographic criteria may show a strong correlation between the Structured Teaching Program and Jacobson's Progressive Muscle Relaxation Technique.

REVIEW OF LITERATURE:

A review of the literature is an assortment of materials that lays the foundation for additional research. It aids in the formulation of research problems and the selection of a particular approach to be applied to the difficulties for additional investigation. It is a crucial component of all research since it supports the hypotheses being investigated and allows for a critical analysis of the format and content of the research report.

A review of the literature is an overview of research on a particular subject that is frequently prepared to contextualize a research challenge and serve as a foundation for project implementation.

Betsy Schroeder and Joseph S. Sanfilippo are doing a study on the prevalence of pelvic discomfort and dysmenorrhea in teenage girls in North America. A total of 70,000 non-institutionalized teenagers between the ages of 12 and 17 were polled; 2699 of them had reached menarche. They discovered that 59.7% of women had dysmenorrhea. Out of those who reported experiencing discomfort, 37% classified it as "moderate," 49% as "mild," and 12% as "severe." Age-related increases in the prevalence of dysmenorrhea were seen, rising from 39% in 12-year-olds to 72% in 17-year-olds. Of the sample as a whole, 14% reported skipping

school regularly due to dysmenorrhea, and 50% reported missing school due to severe menstrual pain.

In their study, Lee K. and Ritten House C. looked at the relationship between the menstrual cycle and physical, mental, family, and job characteristics in 59 West Coast women who were employed as full-time registered nurses in seven hospitals. Based on author-generated items and the menstrual distress questionnaire, 33 symptoms were shown to be more common among women under 30. Weight gain and swelling, anxiety, tension, and irritability (66%) and irritability (62%), exhaustion (55%), cramps (55%), breast discomfort (54%), mood swings (53%) and food cravings (50%) are among the symptoms.

Researchers Banikarim C., Chacko M.R., and Kweder S.H. investigate the prevalence and consequences of dysmenorrhea in adolescent Hispanic females. From 9 to 12 grade Hispanic youths, 706 of them provided data. According to their report, 38% of them missed school because of dysmenorrhea, which affected 85% of them. Additionally, they stated that dysmenorrhea was substantially linked to lower grades (29%), engagement in sports (50%), sociability (46%), homework (35%), and test-taking abilities (36%). Just 14% of respondents had seen a doctor, while 49% sought assistance from a school nurse for their concerns. Additionally, they recommended that medical practitioners should regularly screen for this issue and provide therapy.

Martin et al. perform a study to determine the frequency and severity of dysmenorrhea in 207 Turkish teenage girls who live in suburban areas. A Menstrual Assessment Form was given to 207 participants. The subjects were 17.6 years old on average, 89% white, 59% in high school, and 28% in college. While many reported changes they judged severe (59%) or extreme (43%), nearly all individuals experienced dysmenorrhea (96%) or moderate (89%) severity. The most often reported physical condition changes were autonomic bodily alterations, weariness, signs of water retention, and overall discomfort. Impaired social function, depressive changes, and impulsive behavior were the most often reported mood and behavior alterations. Teenagers who reported experiencing dysmenorrhea saw the most severe alterations from these adjustments.

RESEARCH METHODOLOGY:

The components of the study are arranged according to the research methodology. The overall structure for arranging the process of obtaining accurate and trustworthy data for the study is shown by the research methodology. The population, sample, and sampling technique, the research approach, the research design, the research setting, the creation of tools for collecting data, the planning of a lesson plan, and the process and analysis of data collection are all included. A methodical approach to solving the research challenge is through research technique.

The purpose of this research study is to evaluate the impact of a systematic teaching program on dysmenorrhea in teenage females attending particular schools in Kalaburagi, Karnataka, in relation to Jacobson's progressive muscle relaxation technique.

The research methodology used for this study was an evaluative one, with the goal of determining how well a structured teaching program applied Jacobson's progressive muscle relaxation technique to the problem of dysmenorrhea in teenage girls attending particular schools in Kalaburagi, Karnataka. An evaluative research is a type of applied research in which the effectiveness of a certain program, method, procedure, or product is evaluated to determine its quality, desirability, applicability, and feasibility in terms of the same meaningful criterion measure.

The "SISTER CALLISTA ROY'S ADAPTATION MODEL" serve as the foundation for the study's conceptual framework (1939). Design: This study employed an evaluator approach with a quasi-experimental one group pre- and post-test design. Configuration: The City Academy school in Kalaburagi, Karnataka, was the study's location. Six teenage girls participated in a pilot trial, and the tool's viability was determined. Sample size: There were sixty samples. Sampling strategy: A convenient non-probability sampling strategy was applied. Instrument for gathering data: To gather the data, a structured questionnaire and practice program were created. The questionnaire is divided into three components. Section 1 contained demographic data, Section 2 included a visual analogue scale for pain, and Section 3 included a practice STP. Intervention: The teenage ladies received an organized education session lasting close to

thirty minutes. Twelve experts in the nursing and medical fields evaluated the tool's content validity, and test-retest reliability was determined by comparing the mean post-test dysmenorrhea score of 4.15 to the pre-test score of 6.40. The study found a statistically significant change ($p < 0.001$) between the mean VAS score before and after STP in relation to JPMR, or the pre and post-test. Procedure for Gathering Data: The investigator personally gathered the data using a questionnaire approach, which was then utilized to assess how well education was working for teenage girls with dysmenorrhea. Descriptive and inferential statistics were used to interpret the data in terms of the goals and study hypothesis.

Lee Huang is doing a cross-sectional study at the Western Turkey School of Nursing to find out how common dysmenorrhea is among nursing students. 857 people made up the sample. Simple random sampling was the technique employed for the sample. Two-part questionnaires were used to gather data. Forty percent of the students had dysmenorrhea. The visual analog scale was used to measure the pain's severity. According to the findings, 5.2% of students reported light discomfort, 62.6% reported moderate pain, and 32.2% reported severe pain.

Polit and Hungler (1999) defined data collection as "the process of obtaining information required to address a research problem." It entails the exact and methodical collection of information pertinent to the study's objective and questions for the hypothesis.

The investigator obtained written permission from the principal of "The City Academy School" in Kalaburagi to collect data between June 12 and July 24, 23.

The study's subjects were chosen using a convenient non-probabilistic selection procedure in accordance with the established criteria. The subjects were informed of the study's goal, and their prior agreement was obtained before they could be asked to participate.

The Pain visual analogue scale and a structured questionnaire were used to administer the pre-test. The investigator gave the eighth and ninth grade girls at Kalaburagi's City Academy School a systematic teaching program that lasted up to thirty minutes and used Jacobson's progressive muscle relaxation technique. The same questionnaire utilized for the pre-test, the

Pain Visual Analogue Scale, was employed for the post-test, which was administered to the samples four to six weeks after the STP.

RESULTS:

In order to find meaningful answers to the research questions, the acquired data must be processed and analyzed in an orderly, logical manner that allows for the discussion of patterns and relationships. This chapter deals with data analysis and interpretation.

The process of classifying, organizing, manipulating, and summarizing the data gathered to find the answers to the study questions is called analysis. The true significance and usefulness of the conclusions may not be fully understood from the tabulated data interpretation. The study's objectives guided the analysis of the data.

The analysis and interpretation of the data gathered to evaluate the impact of a systematic instruction program on the progressive muscle relaxation technique developed by Jacobson on teenage girls' dysmenorrhea are covered in this section. The process of analyzing data allows for the meaningful summarization, organization, evaluation, interpretation, and communication of qualitative information.

The Structured Questionnaire and STP data on teenage females with dysmenorrhea (n=60) form the basis for the analysis and interpretation of the study's data. Based on the study's aims, the findings were calculated using both descriptive and inferential statistics.

DISCUSSION:

This study is a pre-experimental, one-group design with pre- and post-tests. For the study, an evaluation methodology was adopted. To choose the teenage girls, a non-probability convenient sampling procedure was applied. Sixty teenage females with dysmenorrhea who received a systematic teaching program comprise the study's sample.

The study's conclusions are examined in terms of how they compare and contrast with those of other comparable research carried out in other contexts.

The purpose of the quasi-experimental study design, which included a single group pre- and post-tests, was to evaluate the impact of a structured training program on teenage girls' dysmenorrhea in relation to Jacobson's progressive muscle relaxation technique. Using a suitable non-probability sampling technique, sixty teenage girls who met the study's inclusion requirements were chosen. The samples' demographics were evaluated using a structured questionnaire that asked about their age in years, education, religion, dietary habits, type of family, monthly income, age at menarche, frequency of menstrual cycles once a month, length of menstrual cycles, history of dysmenorrhea in the family, awareness of or knowledge of menstrual abnormalities, problems with their menstrual cycles, sources of information, and use of remedies to lessen dysmenorrhea. Anguish The samples are given the Visual Analogue Scale (VAS) during the pre-test to gauge how painful they are. The samples received the intervention (STP) for a maximum of thirty minutes through a power point presentation and conversation techniques. Pain VAS, which was utilized for the pre-test, was used to administer a post-test to the identical samples four to six weeks following the structured teaching program (STP).

CONCLUSION:

The purpose of this study was to assess the impact of a structured teaching program on the pain visual analogue scale scores of a sample of teenage girls attending The City Academy School in Kalaburagi, Karnataka.

The primary finding of this study is that the majority of the teenage girls did not have dysmenorrhea. The girls' health is improved and the intensity of their menstrual pain is lessened thanks to the structured teaching program. The study's findings indicate that teenage girls' behavior to seek health care increased as a result of the STP.

When the teenage girls with dysmenorrhea were asked to rate their level of pain, the majority of them—93.3%—said that they experienced pain throughout their periods.

The results of the study showed that the mean VAS score before and after the structured teaching program with regard to Jacobson's Progressive Muscle Relaxation, or pre and post-test, differed statistically significantly ($P < 0.001$).

When compared to before the structured instruction program with respect to Jacobson's Progressive Muscle Relaxation, the mean VAS pain score was reported to have greatly decreased, or by 20%. This demonstrates the great effectiveness of Structured Teaching Programmed with Regards to Jacobson's Progressive Muscle Relaxation training.

The results of the study showed that the following sociodemographic factors did not statistically significantly correlate with pain VAS score following structured teaching program with regard to Jacobson's Progressive Muscle Relaxation: age of adolescent girls, educational class, religion, type of family, age at menarche, diet pattern, monthly income of family, and source of information ($P>0.05$).

REFERENCES:

1. Basava Thapa BT. Textbook of midwifery and reproductive health. New Delhi: Jaypee Brothers Company. 2006:331-2.
2. Cooper KL, Chang E, Sheehan A, Johnson A. The impact of spiritual care education upon preparing undergraduate nursing students to provide spiritual care. *Nurse education today*. 2013 Sep 1;33(9):1057-61.
3. International Institute for Population Sciences, ORC Macro. MEASURE/DHS+ (Programme). National Family Health Survey (NFHS-2), India, 1998-99: Uttar Pradesh. International Institute for Population Sciences, Mumbai, India; 2001.
4. World Health Organization. Ministry of Health Cambodia, Health Strategic Plan 2008-2015. <http://www.wpro.who.int/countries/khm/CAMHSP2Approved.pdf>.
5. Agarwal AK, Agarwal A. A study of dysmenorrhea during menstruation in adolescent girls. *Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine*. 2010 Jan;35(1):159.
6. WHO U, UNICEF. Action for adolescent health: towards a common agenda. Retrieved July 11, 2006 from <http://www.who.int>
7. Black JM, Jane HH. *Medical Surgical Nursing*. New Delhi: Elsevier India private Ltd; 2005:.625-629
8. Tindall VR. *Principles of Gynaecology* (5th edn.) Noida: Gopson publication. 1998;785-90.

9. Howkins. Shaw's Textbook of Gynaecology. New Delhi: Elsevier Publishers; 20081.
10. Dutta DC. Text Book of Obstetrics Including Gerontology and Conception. In: New age central publications. New Delhi; 2004. p. 658–60.
11. Howkins B. Shaw's Textbook of gynaecology. Haryana: Elsevier; 2008.
12. Chakravarthy S. Manual of Obstetrics. 2005;208–12.
13. Calcutta: Dawn book publication. 2003;582–9.
14. Fraser DM, Cooper MA. Myles' textbook for midwives. 14th ed. London, England: Churchill Livingstone; 2003.
15. Heffers. C. Text Book of Obstetrics. New York: Mosby Company. 2000; 689-692.
16. Lind RCJ. Text Book of Midwives. USA: SLACK in Corporate. 2001;545–9.
17. Lowdermilk P. Maternity and Women's Health Care. London: Mosby. 1997;254–7.
18. Matrox J. Care Textbook of Obstetrics and Gynaecology. California: Mosby. 1999;281–5.
19. Menon M. Mudaliar and Menon's Clinical Obstetrics. Madras: Orient Longman Company. 2001;645–50.
20. Maternity Nursing Family New Born and Women Health Care. London: Lippincott Company. 1999;200–8.
21. Scott Ricci S, Kyle T. Maternity & Paediatric Nursing. Lippincott Williams & Wilkins - Health & Fitness; 2009.
22. Terri K. Essentials of Paediatric Nursing. Wolter Kluwer Publishers: India Private Ltd; 2008.
23. Abbaspour Z. The effect of exercise on Primary Dysmenorrhea. Nursing Times. 2008;6(1):26–31.
24. Aparecida A. The use of progressive muscle relaxation technique for pain relief in Gynaecology and Obstetrics. Southern medical journal. 2000;3(6):24–30.
25. Griffiths V. Traditional Chinese medicine. a case of dysmenorrhea. Aust J holist Nurse. 2000;7(1):42–3.
26. Www.whobulletien1999;(5):13-15. [cited 2023 Aug 15]. Available from: [http://www.whobulletien1999;\(5\):13-15](http://www.whobulletien1999;(5):13-15)

27. Parvathy N, Grover Vijay L, Kannan AT. Awareness and practices of menstruation and pubertal changes amongst unmarried female adolescents in a rural area of East Delhi. Indian Journal of Community Medicine. 2007;32(2):2007–8.
28. Slap GB. Menstrual disorders in adolescence. Best Pract Res Clin Obstet Gynaecology. Best Pract Res Clin Obstet Gynaecology. 2003;17(1):75–92.
29. Hillen TI, Grbavac SL, Johnston PJ, Straton JA, Keogh JM. Primary dysmenorrhea in young Western Australian women: prevalence. impact. and knowledge of treatment. J Adolescent Health. 1999;25(1):40–5.

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