

A STUDY TO EVALUATE THE EFFECTIVENESS OF ADOLESCENT HEALTH CARE AND MENSTRUAL HYGIENE TRAINING ON THE KNOWLEDGE OF NURSING STUDENTS AT C.M. PATEL COLLEGE OF NURSING



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Introduction

Adolescent health care and menstrual hygiene are critical aspects of public health, especially for nursing students who play a pivotal role in educating communities about these issues. Effective training in these areas can empower future nurses with the knowledge and confidence to address related health concerns, thereby improving overall community health outcomes. This study aims to assess the effectiveness of targeted training programs in enhancing the knowledge of adolescent health care and menstrual hygiene among nursing students at C.M. Patel College of Nursing.

Objectives

1. To assess the baseline knowledge of adolescent health care and menstrual hygiene among nursing students.
2. To design and implement a structured training program on adolescent health care and menstrual hygiene.
3. To evaluate the effectiveness of the training program by comparing pre- and post-training knowledge levels.

Null Hypothesis (H₀):

There is no significant difference in the mean knowledge scores of nursing students regarding adolescent health care and menstrual hygiene before and after the structured training program at a 0.05 level of significance.

Alternative Hypothesis (H₁):

There is a significant difference in the mean knowledge scores of nursing students regarding adolescent health care and menstrual hygiene before and after the structured training program at a 0.05 level of significance.

Operational Definitions for the Study

Adolescent Health Care: Refers to the health services and education provided to individuals aged 10-19 years, focusing on physical, mental,

and social well-being, including issues like nutrition, reproductive health, and emotional development.

Menstrual Hygiene: The practices and behaviors related to maintaining cleanliness during menstruation, including the use of sanitary products, personal hygiene, and proper disposal of menstrual waste.

Knowledge: The level of understanding and awareness nursing students possess regarding adolescent health care and menstrual hygiene, measured through a structured questionnaire before and after the training program.

Structured Training Program: A planned and systematically implemented educational intervention designed to improve nursing students' knowledge of adolescent health care and menstrual hygiene, including lectures, discussions, and practical demonstrations.

Effectiveness: The degree to which the structured training program enhances the knowledge levels of nursing students, is evaluated by the difference in mean scores of pre-test and post-test assessments.

Nursing Students: Individuals enrolled in nursing programs at C.M. Patel College of Nursing, participated in the study to assess the impact of training on their knowledge of adolescent health care and menstrual hygiene.

Methodology:

Study Design: A quasi-experimental one-group pre-test and post-test design.

Population: Nursing students enrolled at C.M. Patel College of Nursing.

Sample Size: Approximately 40 nursing students were selected using random sampling.

Inclusion Criteria:

- Nursing students currently enrolled in the institution.

- Students who provide informed consent to participate.

Exclusion Criteria:

- Students who have previously undergone similar training.
- Students unwilling to participate in the study.

Data Collection Tools:

- Structured Knowledge Questionnaire: To assess knowledge levels before and after the training program.
- Training Module: A structured training program designed based on existing guidelines for adolescent health care and menstrual hygiene.

Procedure:

- knowledge scores.

- Pre-Training Assessment:** Conduct a pre-test using the structured questionnaire to evaluate baseline knowledge levels.
- Intervention:** Implement a structured training program, including lectures, group discussions, and demonstrations, over two days.
- Post-Training Assessment:** Administer the same questionnaire immediately after the training to assess changes in knowledge.

Data Analysis:

- Descriptive statistics (mean, standard deviation) to summarize the data.
- Paired t-test to compare pre- and post-test



Mean, mean difference, standard deviation(SD) AND 't' value of pre test and post test knowledge scores of samples.

[N=40]

Knowledge scores	Mean	Mean difference	S.D	't' test calculated	't' test tabulated(two tailed)	Level of significance
Pre test	4.03	4.32	1.05	29.84	2.023	0.05
Post test	8.35		0.86			

Interpretation of Results

The table presents the pre-test and post-test knowledge scores of 40 nursing students regarding adolescent health care and menstrual hygiene training. The key findings are as follows:

Knowledge Improvement:

- The mean knowledge score increased from 4.03 in the pre-test to 8.35 in the post-test, indicating a significant improvement in the knowledge of nursing students after the training program.

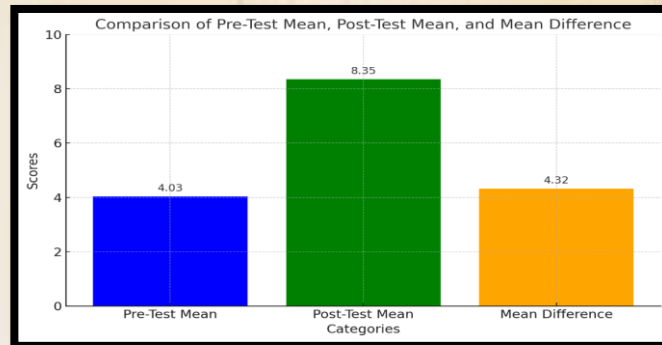
- The mean difference in scores is 4.32, reflecting a substantial gain in knowledge.

Statistical Significance

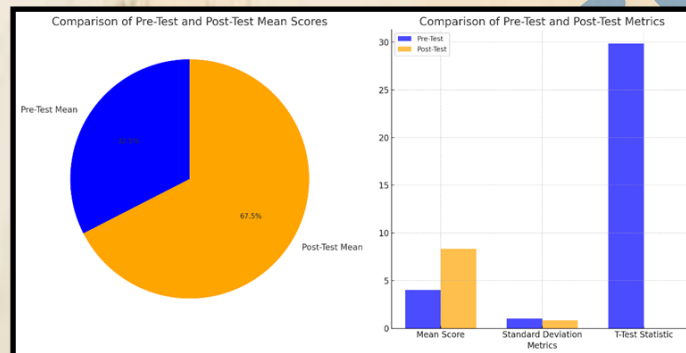
- The calculated 't' value is 29.84, which is much higher than the tabulated 't' value of 2.023 at the 0.05 level of significance.
- This indicates that the observed improvement in knowledge scores is statistically significant.

The paired t-test shows a significant difference between pre-test and post-test knowledge scores, with a p-value much smaller than 0.05. This indicates that the training program significantly

improved the knowledge of adolescent health care and menstrual hygiene among the nursing students.



column chart showing the comparison of the pre-test mean, post-test mean, and mean difference in knowledge scores.



Pie Chart: This shows the proportional comparison between the mean scores of the pre-test and post-test knowledge scores.

Column Chart: This compares the mean scores, standard deviations, and t-test statistic for the pre-test and post-test knowledge assessments. Note that the t-test value is relevant only for comparing the two groups.

Significance of the Study

This study holds significant value in the following ways:

Enhancing Knowledge: It emphasizes the importance of equipping nursing students with adequate knowledge of adolescent health care and menstrual hygiene, which are critical aspects of public health.

Improved Patient Care: Well-informed nursing students can provide better education and care to adolescents, addressing misconceptions and promoting healthier practices.

Empowering Adolescents: By training nursing students, the study indirectly contributes to

empowering adolescents to manage their health and hygiene more effectively, reducing health risks associated with poor menstrual hygiene.

Foundation for Policy: The study can inform educational and health policies to include comprehensive adolescent health care and menstrual hygiene training in nursing curricula.

Recommendations of the Study

Curriculum Integration: Adolescent health care and menstrual hygiene topics should be integrated into nursing education as a mandatory component.

Regular Training Programs: Institutions should conduct regular training and workshops to keep nursing students updated on advancements in adolescent health care.

Community Outreach: Nursing students should be encouraged to conduct awareness campaigns and educational sessions in schools and communities to spread knowledge on menstrual hygiene.

Further Research: Similar studies should be conducted in different regions and with larger sample sizes to generalize findings and assess long-term impacts.

Collaboration with Stakeholders: Collaborations between educational institutions, healthcare organizations, and government bodies should be fostered to enhance the scope and impact of such training programs.

Conclusion

The study aimed to evaluate the impact of a structured training program on adolescent health care and menstrual hygiene among nursing students. Initially, the baseline knowledge of nursing students was assessed, revealing limited awareness in these critical areas, as reflected by a low mean pre-test score of 4.03. This finding emphasized the need for an educational intervention.

A well-structured training program was designed and implemented to address the knowledge gaps. The program focused on providing comprehensive information about adolescent health issues, the importance of menstrual hygiene, and effective strategies to promote these among adolescents.

The effectiveness of the training program was evaluated by comparing the pre- and post-test knowledge levels. A significant improvement in knowledge was observed, with the mean post-test score rising to 8.35. The calculated 't' value of 29.84, far exceeding the tabulated value at the 0.05 significance level, confirmed the statistical significance of this improvement.

This study demonstrates that targeted training programs can effectively enhance the knowledge of nursing students, preparing them to address adolescent health and hygiene challenges. Incorporating such programs into nursing education can empower students to promote better health practices, ultimately benefiting adolescents and contributing to broader public health objectives. The findings advocate for integrating adolescent health care training into the nursing curriculum and highlight its potential for positive, long-term societal impacts.

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