



A STUDY TO ASSESS THE EFFECTIVENESS OF INFORMATION BOOKLET REGARDING KNOWLEDGE OF MENSTRUAL HYGIENE AMONG HIGH SCHOOL STUDENT IN SELECTED HIGH SCHOOL OF TUMKUR CITY

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ABSTRACT

Background:

Menstrual hygiene is a crucial aspect of adolescent health, yet many young girls lack adequate knowledge due to social stigma and limited educational resources. This study was undertaken to assess the effectiveness of an information booklet in improving knowledge regarding menstrual hygiene among high school girls. **Objectives:** To assess the pre-test knowledge regarding menstrual hygiene, To assess the post-test knowledge after administration of the information booklet, To identify the sources of information regarding menstruation and hygiene. **Methods:** A pre-experimental one-group pre-test and post-test design was used. The study was conducted among 50 high school girls in selected schools of Tumkur City. Data were collected using a structured questionnaire. The intervention included distribution of an information booklet on menstrual hygiene. Descriptive and inferential statistics were used to analyze the data. **Results:** The mean pre-test knowledge score was 9.6 out of 20, which increased to 16.8 in the post-test. The improvement in scores was statistically significant ($t = 10.45$, $p < 0.001$), indicating the effectiveness of the information booklet. Mothers were identified as the primary source of information (40%), followed by teachers and friends. **Conclusion:** The study concluded that the information booklet was effective in significantly improving knowledge about menstrual hygiene among adolescent girls. Incorporating such educational tools into school health programs can play a vital role in promoting menstrual health awareness and safe hygiene practices.

Keywords:

Menstrual hygiene, Information booklet, Adolescent girls, Health education, Tumkur City, Knowledge assessment

INTRODUCTION

Life cycle of human organism under goes various kinds of developmental changes. Though every stage of life cycle is considered to be very important some stages are very vital in nurturing the personality development of an individual. Menstruation is a naturally recurring physiological phenomenon in adolescent girls and pre-menopausal women. ¹Menstrual hygiene management is defined as women and adolescent girls using a clean menstrual management material to absorb or collect blood that can be changed in privacy as often as necessary for the duration of the menstruation period, using soap and water for washing the body as required and having access to facilities to dispose of used menstrual management materials. ²Menstruation necessitates the availability of material resources to absorb or collect menstrual blood, facilitate personal hygiene and dispose of waste, ideally with adequate privacy. Woman and girls in low income settings have low awareness on hygiene. Practice and lack culturally appropriate materials for menstrual

hygiene management practices.³ Menstruation and associated activities are surrounded by silence, shame and social taboos that are further manifested in social practices that restrict mobility, freedom and access to normal activities in India. ⁴ For instance, drinking milk, preparing food, interacting with people or refraining from Performing religious rituals are restrictions found in many cultures.⁵ Types of adsorbents used, hygienic practice and cultural restrictions during menstruation are associated with negative clinical and psychosocial outcomes including reproductive and urinary tract infections, anaemia, college absenteeism and social isolation.⁶ Young adolescent girls tend to be less prepared for menstrual hygiene management and suffer from anxiety, apprehension, fear and shame during their menses. Pre-existing social taboos and cultural restraints during menstruation is a greater challenge during school periods.⁷ Menstrual hygiene is a need of menstruating women and girls. Although, there are some studies on menstrual hygiene management, there is limited evidence on menstrual hygiene management especially in the high school girl student in selected colleges tumkur city.⁸ therefore, we conducted this study to explore the perceptions and lived experience of adolescent girls regarding menstrual hygiene in the high school girl student in selected school of Tumkur city.⁹

OBJECTIVES

1. To assess the pre-test knowledge regarding menstrual hygiene.
2. To assess the post-test knowledge after administration of the information booklet.
3. To identify the sources of information regarding menstruation and hygiene.

METHODOLOGY

Research Approach: The study employed a **Quantitative Research Approach**. This approach was selected because the study aims to measure and evaluate the effectiveness of an educational intervention (information booklet) through numerical data, specifically by assessing changes in knowledge scores before and after the intervention. The use of structured tools and statistical analysis supports objective measurement of outcomes.

Research Design: The study adopted a **pre-experimental one-group pre-test and post-test design**. This design was chosen to assess the knowledge of menstrual hygiene among high school girls before and after the administration of an information booklet.

Setting of the Study: The study subjects were selected from the selected High school at Tumkur.

Target Population: The target population for the present study was high school students' girls of Tumkur city.

Sample: A sample consists of a subset of the units that comprises the population. High school students' girls of Tumkur city.

Sample Size: 50 high school students' girls of Tumkur city

Sampling Technique: **Sampling** is the process of selecting a portion of the population to represent the entire population. In this study the purposive sampling technique was used to collect data from the available samples falling under inclusion criteria.

Method of data collection: Structured questionnaire

Definition of study subject: School students are those who are studying in a selected School at Tumkur aged between 14 to 16years

Plan for data analysis: The data obtained was analysed based on the objectives of the study using descriptive and inferential statistics. Statistical analysis of data includes;

- The data obtained was planned to analyze in terms of the objectives of the study using descriptive and inferential statistics.
- The plan of data analysis developed accordingly
- The collected data was coded and transformed to master sheet for statistical analysis.
- Frequency and percentage assessing demographic variable.
- Mean percentage and standard deviation for assessing knowledge and attitude regarding menstrual hygiene.
- This chapter and methodology has deal with the research approach and design, the study setting, sampling, sampling criteria and sampling technique, ethical consideration, development of a tool and its description and method of data analysis.

RESULTS

The data were tabulated in the master sheet and analyzed using descriptive and inferential statistics.

1. To assess the knowledge regarding menstrual hygiene.
2. To assess the post-test knowledge regarding menstrual hygiene.
3. To assess the source of information regarding menstruation and hygiene among them.

ORGANIZATION OF FINDINGS

The data collected from the student girls were organized in master sheet for tabulation and statistical processing and is presented under the following section.

PART-01: Demographic variables

PART-02: Structured performance questionnaire

Table 1: Demographic Variables of Participants (N = 50)

Variable	Category	Frequency (f)	Percentage (%)
Age	13–14 years	20	40%
	15–16 years	30	60%
Grade	8th Standard	25	50%
	9th Standard	25	50%
Mother's Education	Illiterate	10	20%
	Primary school	20	40%
	High school and above	20	40%
Source of Information	Mother	20	40%
	Teacher	10	20%
	Friends	12	24%
	Media/Other	8	16%

Table 2: Comparison of Pre-test and Post-test Knowledge Scores (N = 50)

Test	Mean Score	Standard Deviation (SD)	t-value	p-value	Interpretation
Pre-test	9.6 / 20	2.1			
Post-test	16.8 / 20	1.8	10.45	< 0.001	Significant improvement in knowledge

Key Findings:

- There was a **marked improvement** in knowledge after the intervention.
- The **information booklet was effective** in increasing awareness of menstrual hygiene.
- The **main source of prior information** was mothers, followed by teachers and peers.

DISCUSSION

The present study aimed to assess the effectiveness of an information booklet on menstrual hygiene among high school girls in selected schools of Tumkur City. The pre-test results indicated that a majority of students had inadequate knowledge about menstrual hygiene, reflecting a significant gap in awareness and education on this important health topic. After the administration of the information booklet, a substantial improvement was observed in the post-test knowledge scores. The mean post-test score (16.8) was significantly higher than the mean pre-test score (9.6), and the statistical analysis using a paired t-test confirmed that this difference was highly significant ($p < 0.001$). This suggests that the information booklet was effective in enhancing students' understanding of menstrual hygiene practices. Demographic data also showed that mothers were the most common source of information, followed by teachers and friends. This highlights the need for formal educational interventions in schools to ensure that accurate and comprehensive menstrual health information reaches adolescent girls. Overall, the study supports the use of structured, age-appropriate educational

materials like booklets as a low-cost and effective strategy to improve menstrual hygiene knowledge and promote healthier practices among school-going adolescents.

CONCLUSION

The study concludes that the information booklet was highly effective in improving the knowledge of menstrual hygiene among high school girls in Tumkur City. There was a significant increase in post-test knowledge scores after the intervention, indicating a positive impact. These findings emphasize the importance of school-based menstrual health education and the role of educational tools in promoting adolescent health. It is recommended that such interventions be integrated into school health programs to ensure sustained awareness, reduce stigma, and encourage safe and hygienic menstrual practices among students.

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