

Research Article

A Study to Assess the Effectiveness of Personal Hygiene Module in Order to Maintain Menstrual Hygiene among Female Students of Selected Institute of University of Vadodara

Amanda Da Graca Machava¹, Prof. Takhellambam Kiranmala Chanu²

Mrs. Sandhya Kumari³

^{1,2,3}M. Sc. 2nd year, Professor, Associate Professor Department of Obstetrics & Gynecological Nursing, Parul Institute of Nursing, Vadodara, Gujarat.

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ABSTRACT

Background: A Pre-Experimental Research Design (One Group Pre- Test and Post- Test Study). **Methodology:** a Quantitative research approach was used. **Sample:** 100 female students of Parul Institute of Nursing (PU), as research target population. **Sampling Technique:** A Convenience sampling technique was used to select the sample. **Research tool:** A Socio- demographic questionnaire and Structured knowledge Questionnaire on Menstrual Hygiene were used for collecting the data from the participants. The questionnaire was provided electronically, using Google form questionnaire. **Results:** The study result reveals that 90% of the participants improved their knowledge and holds good Knowledge after the administration of Personal Hygiene Module during Menstruation. **Conclusion:** The conclusion of the study offers insight that administration of Personal Hygiene Module during menstruation is very essential to prevent from certain reproductive tract infections and complications.

Keywords: Personal Hygiene Module, Menstruation Period, Female Students.

INTRODUCTION

Good menstrual hygiene is essential for the health and dignity of girls and women. Discussions on menstrual hygiene are essential for adolescent girls to clarify existing myths and misconceptions around menstruation. Improving menstrual hygiene is crucial from the point of view of personal comfort and increased mobility. It also reduces the likelihood of infections resulting from poor hygiene practices during menstruation. Providing girls with knowledge and skills on maintaining menstrual hygiene improves school attendance among girls, who otherwise may not attend school during those days or even drop out of school altogether. [1]

Hypothesis of the Research study:

- **H1:** There is statistically significant difference on level of knowledge after implementation of Personal Hygiene Module in order to maintain menstrual hygiene at 0.05 level of significant.
- **H2:** There is statistically significant association between pre- intervention knowledge levels of students related to Personal Hygiene Module in order to maintain

menstrual hygiene with the selected social-demographic at 0.05 level significant.

MATERIALS AND METHODS:

The current study was conducted using Quantitative research approach and Pre-Experimental Research Design (One Group Pre-Test and Post- Test Study). A Convenience Sampling Technique, a Non- Probability Sampling Technique, was addressed to select the subjects for the current investigation from the population, in which included 100 female fresher's students, between the age of 17- 25 years. Inclusion Criteria: 1st Year B. Sc and GNM female students of Parul Institute of Nursing, Female students between the age group (17-25 years), Who gave permission consent for data collection, who are present at the time of data collection. Exclusion Criteria: 1st Year Female students from others Institute of Parul University, who already have participated in training Menstrual Hygiene. Sample size was 172 female students between the age of 17- 25 years. The research study was conducted in Parul Institute of Nursing, at Parul University, Vadodara, Gujarat, India. A Socio-Demographic Questionnaire and Structured

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Knowledge Questionnaire on Menstrual Hygiene were used for collecting the data from the participants. The questionnaire was provided electronically, using Google form questionnaire, in which there were closed questions, where eight socio-demographic questionnaire, and twenty from structured knowledge questionnaire. The reliability of Personal Hygiene evaluation value is 0.70. The data was analysed using SPSS version 25 for inferential and descriptive statistics.

Results:

According to the study's objectives, the data were collated in a Microsoft Excel spreadsheet and then analysed using descriptive and inferential statistics in SPSS. The following parts include the data that has been arranged and demonstrated:

- **Section – I:** Analysis and interpretation of the Socio-Demographic data of the respondents.

- **Section – II:** Analysis and interpretation of Pre- and Post- Test knowledge score on Personal Hygiene during menstruation.

- **Section III:** Analysis and interpretation of Association between Pre-Test level of knowledge of female students with their socio-demographic variables.

Section- I: Analysis and interpretation of the Socio-Demographic data of the respondents.

Section – II: Analysis and interpretation of Pre- and Post- Test knowledge score on Personal Hygiene during menstruation.

Table. 1. Distribution of female students according to their Socio- Demographic data. N= 100

SR. NO.	DEMOGRAPHIC DATA	FREQUENCY (f)	PERCENTAGE (%)
1.	Age group	17- 19 years	58
		19- 21years	36
		21- 23 years	4
		23- 25 years	2
2.	Education	1st year GNM	46
		1 st year B.Sc. Nursing	54
3.	Residential area	Rural	40
		Urban	60
4.	Religion	Hinduism	75
		Islamic	8
		Christianity	9
		Buddhism	8
5.	Strong religious beliefs	Yes, I do.	86
		No, I don't.	14
6.	Monthly family income in Indian rupees	Less than Rs.10.000/ Month	19
		10000rs - 20000rs/ Month	24
		20000rs - 30000rs/ Month	24
		More than 30,000rs/ Month	33
7.	Previous knowledge about personal hygiene during menstruation?	Yes	90
		No	10

Figure 1. Distribution of Pre- and Post- test female students' knowledge score on Personal Hygiene during menstrual period.

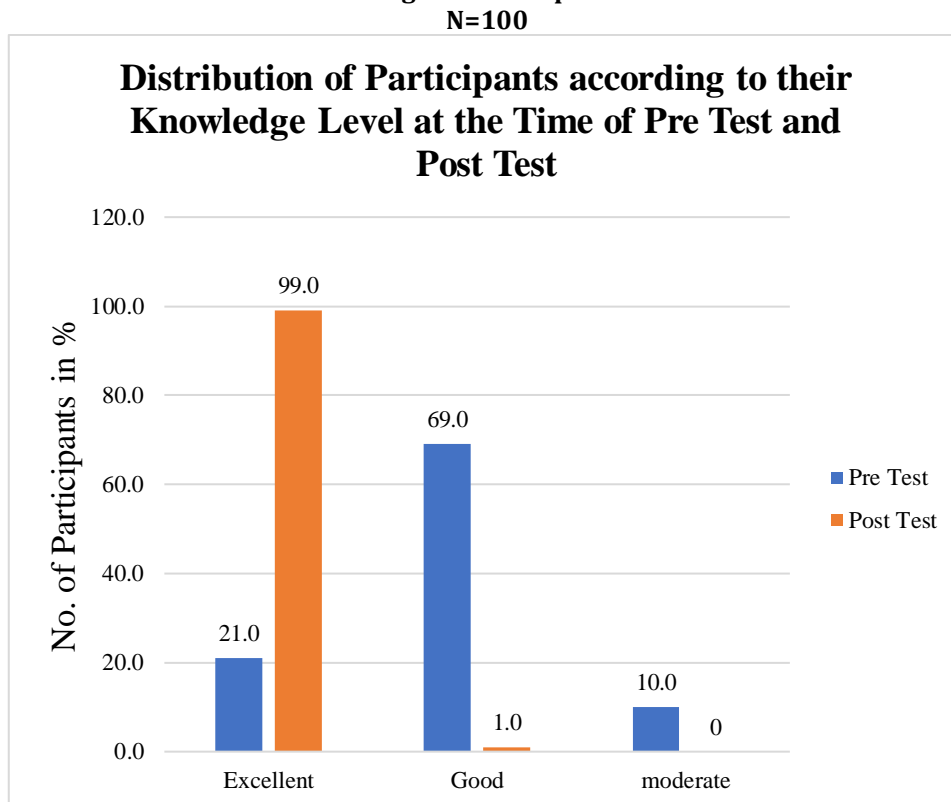


Figure 2. Differences in Mean Pre- test and Post- test Score.

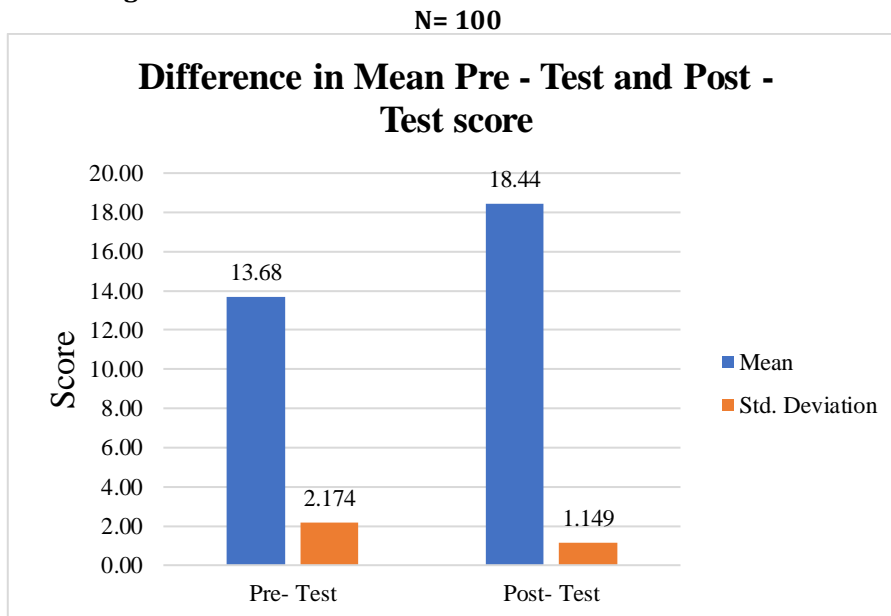


Table 2: Median test between Pretest and Post test Knowledge Scores regarding personal hygiene.

N= 100

Median= 16		Group		Chi - Square	p- value	Result
		Pre- test	Post- test			
Score	> Median	3	93			

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	<=Median	97	7	162.26	<0.0001	HS
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Section III: Analysis and interpretation of Association between Pre-Test level of knowledge of female students with their socio- demographic variables.

**Table 3: Association between the pre-test score of Knowledge with their selected demographic variables.
N= 100**

Age (Year)	Pre-Test				Total	Fisher's Exact Test	p - value	Result
	Excellent	Good	Moderate	Poor				
17-19	16	35	7	0	58	6.585	0.297	NS
19-21	5	29	2	0	36			
21-23	0	3	1	0	4			
23-25	0	2	0	0	2			
Total	21	69	10	0	100			
Residential area	Pre-Test				Total	Fisher's Exact Test	p - value	Result
	Excellent	Good	Moderate	Poor				
Rural	4	28	8	0	40	10.518	0.005	S
Urban	17	41	2	0	60			
Total	21	69	10	0	100			
Strong religious beliefs	Pre-Test				Total	Fisher's Exact Test	p - value	Result
	Excellent	Good	Moderate	Poor				
Yes, I do.	18	61	7	0	86	2.581	0.239	NS
No, I don't.	3	8	3	0	14			
Total	21	69	10	0	100			
Family income in Rupees	Pre-Test				Total	Fisher's Exact Test	p - value	Result
	Excellent	Good	Moderate	Poor				
Less than Rs.10.000/ Month	2	11	6	0	19	11.093	0.066	NS
10000rs - 20000rs/ Month	5	18	1	0	24			
20000rs - 30000rs/ Month	4	18	2	0	24			
More than 30,000rs/ Month	10	22	1	0	33			
Total	21	69	10	0	100			
Previous knowledge about	Pre-Test				Total	Fisher's Exact Test	p - value	Result
	Excellent	Good	Moderate	Poor				

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personal hygiene during menstruation								
Yes	21	60	9	0	90	3.002	0.179	NS
No	0	9	1	0	10			
Total	21	69	10	0	100			

DISCUSSION

Findings of the study regarding the knowledge before conducting the Personal Hygiene Module – Training Program, shows that out of hundred (100) female students’ participants, 90% participants had Previous knowledge about personal hygiene during menstruation and only 10% didn’t had Previous knowledge about menstrual hygiene.

At the time of Pre-test only 21% participants had excellent knowledge about Personal Hygiene during menstruation which is increased to (99%) at the time of post-test, (10%) had Moderate knowledge at the time of Pre- test and (69%) had good knowledge in Pre-test. (0%) had Poor knowledge Score about Personal Hygiene during menstruation, which means that they were aware and the Pre- test intervention was effective.

Findings of the study shows that out of 100 subjects at the time of Pre –test, mean Pre- test score was 13.68 with SD 2.174 which is increased to 18.44 with SD 1.149 at the time of Post-test. Test statistic value was -19.36 with p – value < 0.0001. i.e., there is knowledge score was significantly increased at the time of Post test.

CONCLUSION

After conducting a pre-test intervention, an increasing on knowledge regarding personal hygiene was observed on post- test intervention, meaning that the Personal Hygiene Module was found effective, and an essential way to increase the awareness among female population.

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