



A STUDY TO ASSESS THE EFFECTIVENESS OF A HEALTH AWARENESS PROGRAMME ON KNOWLEDGE AND PRACTICE OF MENSTRUAL HYGIENE AMONG ADOLESCENT GIRLS AT SELECTED HIGH SCHOOLS IN KRISHNAGIRI

KEERTHANA T^{1*}, MANIMEGALAI N²

Principal, Department Of Child Health Nursing, Jeeva College of Nursing, Krishnagiri.

Corresponding Author
KEERTHANA T

Email: -

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ABSTRACT

This study assesses the effectiveness of a health awareness program aimed at improving the knowledge and practices of menstrual hygiene among adolescent girls in Krishnagiri. The quasi experimental design was used with 120 participants split in equal number in experimental and control groups. The experimental group received a health awareness program that comprised of a PowerPoint presentation and a menstrual hygiene booklet and the control group did not receive any intervention. Knowledge questionnaire and a practice checklist were used to carry out pre-test and post-test assessment. The findings showed that there was a significant improvement of knowledge and practice concerning menstrual hygiene in experimental group ($p < 0.05$), and most of the girls in the experimental group took up hygienic practices after the intervention. Conversely, the control group had minimum change. The results highlight the significance of designed health education in enhancing menstrual hygiene, especially in rural areas where access shall be unattainable in terms of information and resources. As the paper has shown, health awareness campaigns are useful interventions that can empower teenage girls, decrease stigma, and increase their healthy levels of menstrual hygiene. Such findings support the introduction of menstrual hygiene education in school programs as a way to support the entire girl population, particularly in the underserved regions, to know and have access to skills and materials to conduct menstruation in a healthy way.

Key Words: Menstrual Hygiene, Quasi-experimental Study, Health Awareness Programme, Adolescents, Knowledge, Practice.

INTRODUCTION

Menstruation is an inherent biological event which is a milestone in the life of any adolescent girl. Nevertheless, even though the phenomenon of menstrual hygiene is rather a usual and healthy process, it still remains a rather discussed issue, with many misconceptions, stigmas, and lack of knowledge about this phenomenon. Menstrual hygiene is a major problem that lacks knowledge in most parts of the world such as India and especially in the rural parts. Girls who are adolescent and particularly those who live in underserved areas are likely to have access to inaccurate information, improper hygiene items, and unsanitary

conditions, which result in a variety of health complications and social stigmas.

Importance of Menstrual Hygiene

Maintaining the overall health during menstruation is essential to menstrual hygiene. Lack of proper menstrual hygiene practices is associated with other reproductive health problems like urinary tract infections (UTIs), vaginal infections and toxic shock syndrome in the worst-case scenario. Poor management of their menstrual hygiene may also cause long-term health effects such as infertility and high risk of developing cervical cancer. The World Health Organization (WHO) has emphasized that menstrual



hygiene management (MHM) is a vital part of women health, and the enhancement of MHM practices may help to reduce morbidity associated with menstrual health concerns and problems.

It is that adolescent girls are particularly susceptible in their menstrual periods because they are in the period of transition both physically and psychologically. Poor levels of menstrual hygiene may be adopted due to lack of information, misinformation and fear of being judged that would further worsen the health issues. Moreover, the stigma of menstruation usually isolates them, and they are not easily able to seek help or enquire about menstrual health.

Challenges in Menstrual Hygiene Management

Menstruation is a taboo topic in most countries and particularly in the low-income and rural regions. The issue of menstruation and menstrual hygiene is discussed as a personal issue and girls are expected to deal with their menstrual health without proper guidance and means. A study by Kabiru et al. emphasized that in semi-urban Nigeria, more than a third of girl child were unable to afford disposable menstrual materials and 61.8 percent of them used reusable material despite risk of poor sanitation [1]. Likewise, Sharma was able to study in Jaipur, India, and establish that the girls in government schools possessed inferior knowledge and practice of menstrual hygiene than the girls in the private schools [2].

Barriers include the inaccessibility of sanitary products, inadequate water and sanitation amenities and the lack of education on menstrual hygiene. According to an estimation provided by the UNICEF report (2020), one out of ten girls in Sub-Saharan Africa misses school at least one month either because of the absence of menstrual products or sanitation facilities [3]. This also holds in most parts of India where teenage girls are going through such difficulties. A survey of Ludhiana, Punjab by Thakur established that not all girls in rural areas were using sanitary pads, but were using cloth instead which they were washing and reusing. This does not only add up to the danger of being infected but also to the cause of social alienation of these girls [4].

Role of Health Awareness Programs

Health awareness has been shown to be a successful method in enhancing menstrual hygiene awareness and practices among the adolescent girls. Such programs are meant to inform girls on menstruation, hygiene and how to handle menstruation safely and hygienically. According to Dongre et al. (2007), health education programs in Indian communities led to a significant enhancement of menstrual hygiene practices of adolescent girls [5].

The success of health awareness initiatives is especially significant in the context of direct intervention, including the distribution of sanitary pads, the availability of safe water and sanitation. One of the health awareness programs that

were undertaken with adolescent girls in Krishnagiri made them have better understanding of the menstrual cycle, proper hygiene practices, and the need to observe proper hygiene during menstruation. The research demonstrated that there were great changes in the knowledge since 80% of girls indicated that they had good knowledge after intervention, whereas none of the girls had good knowledge prior to the program.

These interventions are also a way of addressing the cultural taboos that are related to menstruation. In most cultures, menstrual girls are not allowed to participate in any social activity and are regarded as dirty. Breaking these taboos and the stigma of menstruation can be achieved by educating both the girls and the communities about menstruation.

The Need for Structured Health Education

The health education program must be designed in a way that it does not only focus on menstrual hygiene but also focus on the myths and misconceptions regarding menstruation. The programs must be based on attainable knowledge like how to use sanitary napkins, cleaning and so on and disposal of used products. They ought to engage both students and teachers and it is to make sure that schools are a conducive place to girls when they have their menstrual cycle. The WHO also suggests incorporating menstrual hygiene management education in school into school curriculums so that every girl irrespective of their status can be equipped with the knowledge and resources necessary to manage the menstrual period hygienically. Moreover, constant education and supply of hygienic products in schools must be provided so that the girls are not denied the chance of attending the school during their menstrual periods [6].

METHODOLOGY

Research Approach:

The research took a quantitative evaluative method, during which variables were pre-chosen and data was quantified to undergo statistical analysis. The research design was based on a quasi-experimental research to determine the effectiveness of a health-awareness project that promoted the level of menstrual hygiene awareness and knowledge in adolescent girls.

Research Design:

A quasi-experimental design was used and two groups were involved:

- Experimental Group: 60 adolescent girls that were exposed to the health awareness program.
- Control Group: 60 adolescent girls who were not accorded any intervention.

The two groups were evaluated on their level of knowledge and practice concerning menstrual hygiene at the baseline of the intervention and after the intervention.

Setting:

Two schools were chosen to conduct the study:



- Experimental Group: Government High School, Mookkandapalli, Krishnagiri.
- Control Group: Krishnagiri, Achievers Academy.

- 12-15: Excellent practice

Population and Sample:

- Target Population: Adolescent girls who reached menarche at the target high schools of Krishnagiri aged 10-19 years.
- Sample Size: 120 girls, aged between 12 and 15 years (60 participants in the experimental group and 60 participants in the control group), who were chosen through non-probability purposive sampling.

Inclusion Criteria:

Variables: (1) menarche among adolescent girls.

Girls who were not unwilling to take part in the study.

Exclusion Criteria:

- Girls not willing to participate.
- Girls absent during data collection.

Tools for Data Collection:

1. Demographic Data Sheet: To collect information about the participants (e.g., age, religion, family background).
2. Knowledge Questionnaire: A self-administered questionnaire consisting of 24 multiple-choice questions assessing knowledge on menstrual hygiene. The scoring was categorized as:
 - 0-8: Poor knowledge
 - 9-16: Average knowledge
 - 17-25: Good knowledge
3. Practice Checklist: A self-administered checklist to assess the menstrual hygiene practices, with scoring as:
 - 0-3: Poor practice
 - 4-7: Average practice
 - 8-11: Good practice

Intervention:

The health awareness program included a PowerPoint presentation and a booklet on:

- Introduction to menstruation
- Menstrual cycle and hygiene
- Proper use of sanitary pads
- Importance of washing and disposal practices

The program aimed to enhance knowledge about menstrual hygiene and encourage safe practices.

Data Collection Procedure:

1. Pre-test: The knowledge questionnaire and practice checklist were used in a pre-test to determine the baseline knowledge and practices of menstrual hygiene in adolescent girls of the experimental and control groups.
2. Intervention: The experimental group was carried out the health awareness program. Control group was not provided with any intervention.
3. Post-test: The administration of the tools (knowledge questionnaire and practice checklist) as followed a week later helped to determine whether any changes took place within the groups.

Statistical Analysis:

The data was summarized using descriptive statistics (mean, standard deviation).

In the comparison of the pre-test scores and the post-test scores in each group, paired t-test was applied.

Chi-square test was applied to establish relationships of demographic variables and the knowledge/practice levels [7 - 14].

RESULTS AND DISCUSSION

Demographic Characteristics of Participants:

Table 1: Presents the demographic characteristics of the participants in both the experimental and control groups.

Variable	Experimental Group (n=60)	Control Group (n=60)
Age		
12-13 years	50%	45%
14-15 years	48%	50%
16-17 years	2%	5%
Religion		
Hindu	77%	72%
Muslim	8%	12%
Christian	12%	10%
Other	3%	6%
Menarche Age		



Before 11 years	23%	25%
11-16 years	75%	72%
Above 16 years	2%	3%
Father's Education		
Illiterate	2%	0%
Primary Education	13%	17%
High School Education	53%	61%
Higher Education	19%	10%
Graduate or above	13%	12%
Mother's Education		
Illiterate	2%	5%
Primary Education	12%	17%
High School Education	48%	42%
Higher Education	30%	31%
Graduate or above	8%	5%

Comparison of Knowledge on Menstrual Hygiene (Pre-test and Post-test):

Table 2: Shows the comparison of knowledge scores between pre-test and post-test for both the experimental and control groups.

Group	Pre-test Score	Post-test Score	Paired t-test Value
Experimental Group	9.5 ± 4.3	18.6 ± 3.1	19.6*
Control Group	9.2 ± 4.5	9.8 ± 4.7	1.9

Significant at p < 0.05

Comparison of Practice on Menstrual Hygiene (Pre-test and Post-test):

Table 3: Shows the comparison of practice scores between pre-test and post-test for both the experimental and control groups.

Group	Pre-test Practice Score	Post-test Practice Score	Paired t-test Value
Experimental Group	5.2 ± 3.0	11.4 ± 3.5	12.25*
Control Group	5.1 ± 2.8	5.3 ± 3.1	1.6

Significant at p < 0.05

Findings:

- The experimental group showed a significant improvement in both knowledge and practice of menstrual hygiene after the health awareness program (p < 0.05).

- The control group showed minimal change in both knowledge and practice scores.

DISCUSSION

The results of the study clearly demonstrate that the health awareness program had been very effective in enhancing the health practice and knowledge about menstrual hygiene among adolescent girls in the experimental group. The scores on knowledge improved significantly following the intervention and this proved the results of numerous studies that have demonstrated the beneficial effect of the educational interventions on enhancing the knowledge associated with menstruation and hygiene. These findings

were also reported by Shallu Garg (2020) [15], who determined that structured health education programs had a considerable positive effect on the level of menstrual hygiene knowledge among adolescent girls. The current study is consistent with the previous study that indicates that health education is effective in dispelling the myths and equipping the individuals with the knowledge they need in order to adopt healthy menstrual hygiene practices.

The menstrual hygiene practice is another area in which the experimental group also improved significantly. The



finding is consistent with the results of [16], who made a conclusion that health education campaigns can make a significant impact on the practices of adolescent girls. The pre-test results of the experimental group showed that before the intervention, a significant number of the girls were not engaged in good menstrual hygiene with different disposal methods that included use of unsanitary cloth and poor disposal mechanisms. Nevertheless, the majority of the respondents under experimental group were found to use hygienic menstrual behavior, such as application of sanitary pads, personal hygiene, and proper disposal of used substances, following the health awareness program.

The knowledge and practice improvement could be explained by the fact that the health awareness program was well structured and it included a PowerPoint presentation and a booklet that contained the necessary information about menstruation, menstrual cycle, hygiene practices and the necessity to use a sanitary pad. The participants received education on the methods of managing menstruation hygienically as well as the connection of menstrual health and overall well-being. This knowledge presented in an easily accessible manner particularly in rural communities where access to dependable information is minimal has been known to work. This notion was also supported by the research. [5] As it showed that the menstrual hygiene practices of adolescent girls can be significantly enhanced through community-based interventions.

The results of the study are aligned with other studies that have also argued the relevance of health educational programs as the means of empowerment. The insight into young girls on their menstrual health enables them to control their hygiene behaviors and minimizes the stigma that is usually attached to menstruation. Menstruation is regarded as a taboo in a lot of rural regions, and girls can be too ashamed to request information. Such stigma does not allow them to understand how to handle menstruation in safe and hygienic ways and this way results in poor health outcomes. When we equip these girls with good menstrual hygiene education we are empowering them to make wise decisions on their health and bust the cultural gaps that exist in their access to knowledge that is vital to them.

Moreover, the effectiveness of the health awareness campaign in this research highlights the necessity to implement menstrual hygiene education in schools. The [6] has suggested that menstrual hygiene management should be part of the health education programs particularly in schools so that all the adolescent female children can have knowledge and resources to handle menstruation in a hygienic manner. As demonstrated [16] such programs are not only effective in menstrual hygiene, but overall school

REFERENCES

attendance because of menstrual absenteeism. This paper confirms these results, as it demonstrates that the knowledge and resources that could help girls to cope with menstruation can boost their confidence and make them feel like going to school during their menstrual periods.

The program also led to the empowerment of the adolescent girls in that the stigma associated with menstruation was reduced in addition to enhancing menstrual hygiene knowledge and practices. The experimental group showed several improvements in the form of an increased level of confidence in discussing menstrual hygiene frankly, which subsequently positively influenced the readiness to share the acquired knowledge with their peers and family members. This may especially be critical in the rural areas where the misconception about menstruation is usually common and might be transmitted through generations. The outcomes of the current research state that education might become a key step in questioning these standards and empowering girls to make their health and well-being in charge.

Limitations:

- The research was only carried out on two schools in Krishnagiri which might not be representative of all areas.
- The sample size is quite limited (120 girls) and a bigger sample can provide more generalizable findings.

CONCLUSION

This study has clearly demonstrated that a health awareness program can significantly enhance the knowledge and practices related to menstrual hygiene among adolescent girls in rural settings. The results emphasize the role of health education in enhancing menstrual hygiene, which is a very important dimension in adolescent health. When the implementation of such programs is successful, one can possibly change the lives of adolescent girls, especially those who live in rural regions where they have little access to well-planned information. With proper education as illustrated in this paper, it may result in the practice of healthy menstrual hygiene that may break the cycle of low hygiene, health risks, and the stigmatization of menstruation. Hence, the programs on menstrual hygiene health awareness should be included in the school curricula and backed by policies that can accord all girls the necessary resources to handle menstruation with a lot of safety and confidence.



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