INNOVATIONS

Effectiveness of Planned Nursing Interventions on the Management of Menstrual Hygiene among adolescent girls

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Abstract

A quantitative research approach of pre experimental with one group pre and post-test design was chosen for this study. By using purposive sampling technique a total of 100 samples were included for the study. The structured teaching programme was given by researcher. Pre and post test was conducted by structure questionnaire. Data were recorded and coded. The data analysis was done by using descriptive and inferential statistics. The result revealed that there was a statistically significant difference between pre and post-test knowledge and expressed practice scores regarding sanitary napkin among adolescent girls at level P<0.001.

Key Words: 1.Effectiveness,Planned Nursing Interventions,Menstrual Hygiene 2. Adolescent girls

Introduction

Back ground of the study

Women and men have specific sanitation needs, preferences, access requirements, and utilization patterns and experiences. Women also use toilet facilities to manage their menstruation. Good menstrual hygiene practices means that women and adolescent girls are using a clean menstrual management material to absorb or collect menstrual blood, that can be changed in privacy as often as necessary for the duration of a menstrual period, using soap and water for washing the body as required, and having access to safe and convenient facilities to dispose of used menstrual management materials . Poor menstrual hygiene management (MHM) can negatively impact the health and psycho-social well-being of women and girls . Menstrual hygiene management in the water and sanitation sector is not formally defined in the Sustainable Development Goals (SDGs). However, clear linkages are framed here to include: SDG3 (physical health and psycho-social well-being for women and girls), SDG4 (quality education for girls),

SDG5 (gender empowerment and equality), SDG6 (water and sanitation), and SDG12 (responsible consumption and production for the environment).

A woman menstruates between puberty (age 11–24) and menopause (age 45–55) for an estimated 459 cycles during her lifetime . With rapid urbanization, rising incomes, expanded product availability and distribution, and increased mobility, the use of disposable sanitary napkins is increasing rapidly . A PATH study estimated that the annual solid waste load of disposable sanitary napkins was higher than any other menstrual hygiene product—i.e., 44,254 cm3/female/year . Shared and public facility maintenance is frequently a source of environmental health risks due to poor hygiene. In countries where there are many stigmas and taboos around menstruation, poor waste management on-site creates anxiety and stress. This facility maintenance concern combined with the fact that urban waste collection systems are problematic in many low- and middle-income countries (LMICs) creates exposure risks and environmental pollution in dense urban areas.

An underlying reason could be the lack of clarity and consensus over how menstrual waste is classified (for instance, as solid waste, hazardous waste, or bio-medical waste), which makes it difficult to offer clear guidance on how best to discard used products, leading to inappropriate and unsafe disposal practices House notes that menstrual hygiene friendly infrastructure includes "clear mechanisms for collecting and disposing of menstrual waste," but does not elucidate what these mechanisms could be. Incorporating MHM considerations to include waste management into WASH sector planning will advance goals to ensure safety, dignity, and deliver demand-generated designs for women and girls by responding comprehensively to their biological needs. Better MHM is important for sanitation access, sustained facility use, and for gender equity. Improved access to culturally acceptable MHM in sanitation facilities enables women and girls to fully engage in education and at the workforce.

Toilet facilities designed to accommodate menstrual hygiene practices, provide access to absorbents, and encourage safe handling and disposal of used absorbents are important measures supporting women's health and dignity. In the design of communal toilets, disposal of menstrual waste has often been overlooked, leading to improper waste disposal To improve this situation in the future, knowledge of the variety of current menstrual materials is required. For example, if thermal treatment technologies are considered, these will need to be optimized for different materials. Disposing of menstrual blood can have particular cultural considerations, and the breadth of these needs to be fully understood before designing a technology.

Proper hygiene practices such as the use of sanitary pads, disposal of absorbents in a proper manner and proper cleaning of the genital area during menstruation are essential. A major aspect for women and girls is to have the understanding, facilities and cultural environment sufficient to hygienically maintain menstruation (Prajapati, Shah and Kedia, 2015). Poor water facilities, sanitation and hygiene facilities in schools, inadequate puberty education and lack of hygiene items may affect the menstrual hygiene practices of some girls (vanEijk e t al., 2016). The physical load among the girls seems to put them at risk for the occurrence of disorders(Abigail e t al., 2019) like Obstructive Sleep Apnea(OSA), a potentially life threatening condition (Shruthi and Preetha, 2018) which makes them lethargic towards menstrual hygiene. Several research studies have revealed that the majority of girls have low levels of awareness about menstrual hygiene when they first experience it (Dasgupta and Sarkar, 2008). The practice of menstrual hygiene also depends on socioeconomic, cultural and religious differences.

Methodology

Statement of the problem

A study to assess Effectiveness of Planned Nursing Interventions on the Management of Menstrual Hygiene among adolescent girls

Aim/ Objective of the research study :

Aim:

To improve the health status of adolescent girls

Objective of the research study

1. To assess
   - 1.1 self care practices during menstruation before and after the planned nursing interventions among adolescent girls
   - 1.2 level of pain during menstruation before and after the planned nursing interventions among adolescent girls
   - 1.3 knowledge on practice regarding diet during menstruation before and after the planned nursing interventions among adolescent girls
   - 1.4 level of stress during menstruation before and after the planned nursing interventions among adolescent girls
   - 1.5 practice regarding rest & sleep during menstruation before and after the planned nursing interventions among adolescent girls

Methodology of research work

Research Design and approach: Pre experimental –time series design with quantitative approach was used for the study

Setting of the study: The study was conducted in selected schools in rural areas.

Population: Population of the study were all the adolescent girls

Sample technique: Purposive sampling technique was used for the present study.

Sample size: Approximately 100 samples for the study.

Inclusion criteria

The adolescent girls who were,

- In reproductive age
- living in selected rural area
- willing to participate in the study.
- available during the period of data collection

Period of data collection: Approximately 6 months

Data collection procedure

Pre test

Demographic data and Clinical variables was collected with structured questionnaire, Reproductive health problems and self care practices will be assessed for all adolescent girls with check list before planned nursing intervention through interview method.

Intervention

Immediately after pre test planned nursing interventions wasgiven through audio-visual aids and demonstration,

Post test

Post test was conducted to the same group in one month interval for three times after the planned nursing intervention.

Consultation with guide

The tool Item was give to the guide. Their opinion and suggestion were considered to modify the tool.

Preparation of the final draft

The final draft of the tool was prepared after consulting with the guide.

Method of Data Collection

Ethical Consideration

- Written permission was obtained from the VAO (village administrator officer, Salem. After the only consent will obtain from each sample prior to data collecting process.
- After explaining the purpose of the data collection procedure, prior to interview self-introduction and purpose of interview was clearly explained to each adolescent girlsto obtain maximum co - operation , and consent from them.

Data Collection Procedure

- Participants were made to feel comfortable and relaxed.
- Introductions was given related to the topic.
- Goods reports were maintained.
- Purpose of the study was explained to participants.
- Items regarding the demographic data was asked as per the interview.

Planned data analysis

The collected data was analyzed by using both descriptive statistics. Such as percentage, mean and standard deviation and presented in the form of tables and figures.

Result

Section: I: Description of demographic characteristics of participation.

- Highest 77% of them were in the age group of 13 – 15 years and lowest 3% of them were in the age group of 16 - 19 years.
- Higher 57% of them were belongs to non formal education and lower 3% were belongs to secondary education.
- Highest 90% joint family were hindu and lower 10% of them were christian.
- Highest 100% were lived in urban areas.

Section: II

Table 1: Frequency and Percentage distribution of knowledge level scores during pre Test and Post test.

Grading	Score (%)	Pre test		Post test	
		Frequency	%	Frequency	%
Adequate	75-100	1	1.6%	46	41.9
Moderately adequate	51-74	38	37%	52	54.9%
Inadequate	0-50	62	61.6%	2	3.3%

This fig no-1: shows that the level of knowledge scores before and after giving the intervention.1.6% have scored under adequate category, 37% have scored under moderately adequate and 61.6% are under inadequate category. Maximum adolescent girls have scored under 0-50% level score i.e. 61.6% of the adolescents in the pre-test where as in post-test. 41.6% have scored under adequate category, 54.9% have scored under moderately adequate and 3.3% are under inadequate category. Maximum adolescent girls have scored under 51-74% level score i.e.54.9% of theadolescent girls

Table 2:Association of health related variables with level of expressed practice regarding sanitary napkin among adolescent girls

N=100

S. No	Health related variables		Post-test expressed practice score						Chi Square	P-value
			Inadequate		Moderately Adequate		Adequate			
			No	%	No	%	No	%		
1	Age at menarche	12.1-13 years	2	4	4	8	21	42	7.216 NS	0.301
		13.1-14 years	3	6	8	16	12	24		
2	Nature of practice during menstruation	Cloth	3	6	5	10	17	34	1.373 NS	0.849
		Sanitary napkin	2	4	6	12	12	24		
		others	-	-	1	2	4	8		
3	Frequency of changing napkin per day	Once a day	3	6	8	16	14	28	2.591 NS	0.628
		Twice a day	1	2	3	6	13	26		
		Thrice a day and above	1	2	1	2	6	12		
4	Perception of pain during menstruation	never	2	4	5	10	18	36	1.43 NS	0.839
		sometimes	2	4	4	8	11	22		
		always	1	2	3	6	4	8		
5	Source of watersupply	Well water	3	6	5	10	17	34	1.018 NS	0.907
		Municipal water	1	2	5	10	12	24		
		Bore water	1	2	2	4	4	8		
6	Methods of disposal	Directly burn	5	10	7	14	13	26	6.818 NS	0.146
		Throw outside	-	-	3	6	12	24		
		Dumped	-	-	2	4	8	16		
7	Toilet practice	Open field	2	4	9	18	19	38	2.039 NS	0.361
		Sanitary latrine	3	6	3	6	14	28		

NS = not significant

The above table shows that there was no association between health related variables and level of expressed practice regarding sanitary napkin among study participants.

Tab 3: Association of health related variables with level of knowledge regarding sanitary napkin among school girls

N=100

S.No	Health related variables		Post-test knowledge score						Chi Square	P-value
			Inadequate		Moderately Adequate		Adequate			
			No	%	No	%	No	%		
1	Age at menarche	12.1-13 years	-	-	2	4	31	62	2.62 NS	0.457
		13.1-14 years	-	-	1	2	16	32		
2	Nature of practice during menstruation	Cloth	-	-	1	2	24	48	1.95 NS	0.377
		Sanitary napkin	-	-	1	2	19	38		
		Others	-	-	1	2	4	8		
3	Frequency of changing napkin per day	Once a day	-	-	1	2	24	48	6.383* SS	0.041
		Twice a day	-	-	-	-	17	34		
		Thrice a day and above	-	-	2	4	6	12		
4	Perception of pain during menstruation	Never	-	-	1	2	24	48	0.777 NS	0.678
		sometimes	-	-	1	2	16	32		
		always	-	-	1	2	7	14		
5	Source of water supply	Well water	-	-	3	6	22	44	3.191 NS	0.203
		Municipal water	-	-	-	-	18	36		
		Bore water	-	-	-	-	7	14		
6	Methods of disposal	Directly burn	-	-	-	-	25	50	5.083 NS	0.079
		Throw outside	-	-	1	2	14	28		
		Dumped	-	-	2	4	8	16		
7	Toilet practice	Open field	-	-	1	2	29	58	0.946 NS	0.331
		Sanitary latrine	-	-	2	4	18	36		

NS =notsignificant SS =statisticallysignificant *P<0.05

The above table shows that there was a statistically association of frequency of changing napkin with level of knowledge regarding sanitary napkin among study participants at level P<0.05.

Conclusion

The following conclusions were drawn on the basis of the findings of the study. The findings showed that very few of the subjects had adequate knowledge on menstrual hygiene. The mean

post test percentage scores and the modified gain scores in all areas were found to be high, the maximum gain in facts related to the menstruation and minimum in the area of importance of sanitary pad. Knowledge about menstrual hygiene, use of sanitary pad and its disposal was poor among the adolescent girls studying in the selected schools. Although they had gained knowledge in all fourareas.The "t" test which was computed between pre test and post test knowledge scores indicate a true gain in the knowledge. Hence it was concluded that planned teaching program was effective as method to improve knowledge among the adolescent girlslgirls.

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