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EFFECTIVENESS OF PLANNED TEACHING PROGRAM ON KNOWLEDGE REGARDING MENSTRUAL HYGIENE, USE OF SANITARY PADS AND IT'S DISPOSAL MANAGEMENT AMONG THE ADOLESCENT GIRLS IN A SELECTED SCHOOL, BHUBANESWAR, ODISHA

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ABSTRACT

A pre experimental research design was conducted on adolescent girls to assess the effectiveness of planned teaching program on knowledge regarding menstrual hygiene, use of sanitary pad and its disposal management. An evaluative approach with one group pre-test and post-test design was used for the study. 60 samples were selected through purposive sampling technique by use of close ended multiple-choice questionnaires. The present study was conducted in school, KISS, Bhubaneswar Odisha. The data were analysed by using descriptive and inferential statistics. A significance difference between pre-test and post-test knowledge was found (t=13.79). The study finding shows that the PTP was effective in improving the knowledge of adolescent girls.

KEYWORDS: Effectiveness, Menstruation, Sanitary Pads, Disposal, Planned Teaching Program, Knowledge.

INTRODUCTION

The word Adolescence is derived from Latin verb "Adolescere", which means to grow into maturity. Adolescence is a period of transition from childhood to adulthood. There are the formative years when maximum amounts of physical, psychological and behavioural changes takes place.

An adolescent belongs to a vital age group not only because they are "entire population" to parenthood but also because they are on the threshold between childhood and adult hood. As they attempt to cross this threshold, they face various psychological and developmental changes.

India has close to 12.3 billion disposable sanitary napkins to take care of every year, majority of which are not biodegradable/compostable. Over the past few years, working with a wide range of stakeholders, the Menstrual Hygiene Alliance of India (MHAI) has approximated that there are 336 million menstruating women in India, of which 36 per cent use disposable sanitary napkins — that totals to 121 million women. With only two cities in India — Bengaluru and Pune — implementing solid waste interventions to effectively segregate and identify menstrual waste during routine garbage collection, the Solid Waste Management (SWM) Rules 2016 underscores the challenge. Sanitary waste disposal has become an increasing problem in India as the plastic used in disposable sanitary napkins are not bio-degradable and lead to health and environmental hazards. The impact is more pronounced because of the unorganised ways of municipal solid waste management and poor community collection, disposal and transportation networks in the cities and villages.

Given this, there are two decentralised methods for management of menstrual waste — small scale incineration and composting. Both can be done for disposable pads .Small scale incineration has gained popularity in the last few years and various government programmes also condone them. However, models are available in the market today that do not have appropriate emission control measures and burn waste at low temperature leading to inefficient combustion and release of carcinogenic toxic fumes. Issues of inappropriate placement, ventilation and operation of units have been seen to be rampant. If used, small scale

incinerators can be used as a practical solution if certain measures to ensure safety of users and staff operating these units are ensured.

The environmental risk of incineration against the environmental risk of disposal in landfills needs to be weighed and understood better. Composting is ideal for compostable pads. However, some efforts have shown that absorbent core of even non-compostable pads can decompose leaving behind the plastic materials. Effective composting requires community mobilisation and mechanisms for segregation and aggregation of the waste at community or household level.

While all this is easy to articulate on paper, a look at any of the garbage dumps in any major city in India makes it clear that until segregation guidelines are fully implemented menstrual waste will potentially keep polluting soil and water.

Since menstrual waste is handled and treated as solid waste, a series of steps are supposed to be followed. First, segregation and immediate disposal should be done by the user.

As already established, only two cities in the country are doing so — this is simply not enough. This should be followed by collection and transportation, and secondary segregation by the waste collector and storage treatment, and finally disposal or recycling.

Solid waste solution should be selected in accordance with the products disposed. For example, commercially available sanitary napkins cannot be easily composted; however, napkins/pads made from natural materials (e.g., banana fibre, bioplastics) can be composted.

For compostable products there should be clear labelling on product packages providing instructions on disposal. Solid waste interventions for menstrual and other sanitary waste are currently limited in India with existing solutions typically implemented in urban settings and only now beginning to show results.

As mentioned earlier, the paucity of disposal and treatment options may lead to the unsafe management of a mounting volume of menstrual waste. A look at the menstrual hygiene products and waste management solutions currently show that a majority of the current practices are either not recommended or are not the most suitable technology but an immediate practical solution often used in communities. Where technology is available it is both too expensive, people are not aware of it, and limited in availability.

Technology offers sanitary pads to deal with flow. Absorbent pads may be noticeable in form fitting cloths. Whatever the preference, washing is important. There need be no taboo about on these days. Some people have the problem of odor during menstruation. Cleanliness and change of pad as often as necessary reduces this problem.

Literature reviewed by the investigator shows that there are few studies done in India and abroad to assess the knowledge, practice and attitude of girls towards use of sanitary pads and its disposal. the evaluation of the effects of Planned Teaching Program (PTP) and about menstruation and hygiene A girl may still choose sanitary pads, but does so with greater understanding of how she should use it. A cloth pad user may continue to use home-made pads, ensuring that she washes, dries and stores them properly to minimise infections. She may also change the type of cloth pad used, opting for new designs and variants that offer greater leakage protection and can be washed and dried more easily.

What happens to sanitary pads once they are used and thrown? Widespread sanitary pad promotion has overlooked disposal. This issue is concerning for two inter-related reasons. First, when girls lack access to disposal facilities, they tend to use a hygienic/safe product in an unhygienic manner — they often extend its use beyond the recommended time (sometimes using a single pad for a whole day). When this happens, it places the girl at increased risk for infection, and has critical health implications.

Second, discarding sanitary pads is concerning as we do not have feasible and scalable solutions for managing this waste safely, having implications for girls and women, as well as for the environment.

Research indicates that pads are typically thrown in the open and in water bodies, and field experiences suggests that used materials are also discarded in toilets and in incinerators. The use of incinerators is particularly concerning. While they offer an immediate and convenient way of dealing with waste, most incinerators in India do not adhere to emission norms set by the Central Pollution Control Board. Because of inefficient combustion, these small-scale incinerators release toxic fumes into the immediate environment — potentially affecting the health of people.

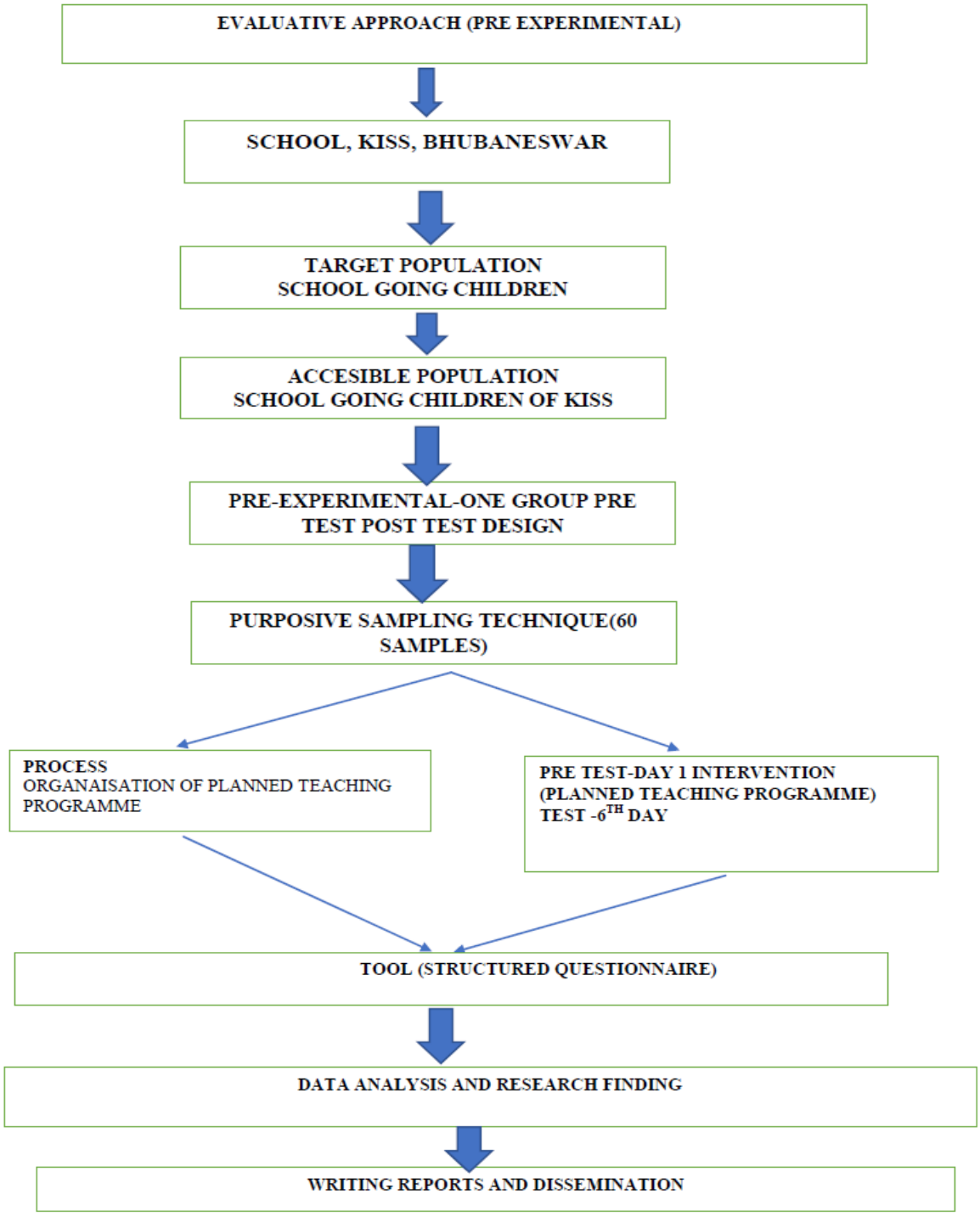
OBJECTIVES

- To assess the existing knowledge of adolescent girls regarding menstrual hygiene, use of sanitary pads and its disposal.
- To evaluate effectiveness of planned teaching program regarding menstrual hygiene, use of sanitary pads and its disposal in terms of change in knowledge among adolescent school girls.

METHODOLOGY

An Evaluative approach and pre experimental research design was conducted among adolescent girls of KISS Bhubaneswar. 60 samples were collected by purposive sampling technique and PTP intervention given on menstrual hygiene, Importance of sanitary pads and its

disposal. Based on these areas lesson plan and slides were prepared and it delivered through power point presentation in the school of Kiss. Data collected by using self structured questionnaires.



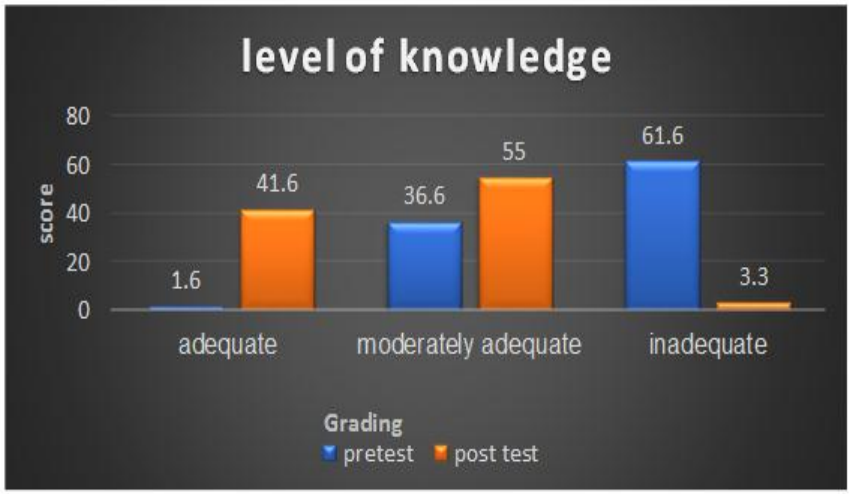
RESULT AND DISCUSSION

Findings related to demographic characteristics

- Majority of the subjects were 66.6% in the age of 11-13 yrs and only 33.3% were in age group of 13-15 years. 100% of subjects were from Hindu religion. Among respondents 63.3% were from joint family, 33.3% were from nuclear family, 3.3% were from extended family. Majority of the subjects were 53.3% attained menarche by 11-12 years of age where as only 10% attained menarche at the age of 14-15 years of age and 36.6% attained menarche at the age of 13-14 years of age..55% of samples used sanitary pads where as 5% using homemade cotton pads
- Among 63.3% had heard about menstruation from the elders in the family.

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%	25	41.6
Moderately adequate	51-74	22	36.6%	33	55%
Inadequate	0-50	37	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, 36.6% have scored under moderately adequate and 61.6% are under inadequate category. Maximum students have scored under 0-50% level score i.e. 61.6% of the students in the pre-test where as in post-test. 41.6% have scored under adequate category, 55% have scored under moderately adequate and 3.3% are under inadequate category. Maximum students have scored under 51-74% level score i.e.55% of the students.

Table no. 2: Area wise mean percentage of pre test and post test.

Sl. No.	Areas	Max possible score	Mean percentage of			
			Pre test		Post test	
			Obtained mean score	%	Obtained mean score	%
1	Knowledge questionnaire On menstruation	6	2.45	11.13%	4.15	20.4%
2	Facts related to menstrual hygiene	3	1.1	5%	1.5	6.8%
3	Importance of sanitary pads	1	0.46	2.0%	0.05	0.22%
4	Disposal of sanitary pad	12	5.53	25.1%	8.51	38.68%

The data in table no 2 shows that mean and mean percentage of knowledge score of the pre test was maximum the area of menstrual hygiene (25%) and minimum in the area of pre menstrual manifestations (2%). the mean percentage knowledge scores of the post test were maximum in the area of menstrual hygiene (38.68%) and minimum in the area of premenstrual manifestations (0.22%).

Table no. 3: Range, mean and standard deviation of pre-test & post-test knowledge scores of adolescent girls on menstrual hygiene, use of sanitary pads and its disposal.

Test	N (sample number)	Maximum score	Range	Mean	Standard deviation
Pre test	60	22	4-16	9.5	2.94
Post test	60	22	9-18	14.6	1.97

In table no 3 represents that the post test knowledge scores range from 9-18 where as the pre test knowledge score range from 4-16. the mean post test knowledge score was apparently higher (14.6) than the pre test knowledge score (9.5). The standard deviation of post test is 1.97 and pre test is 2.94.

Table no. 4: Mean, differences of mean, standard deviation and paired 't' value of pre test and post test.

Groups	Mean	S	Mean difference	't' value	Table value (p< 0.05)
Pre test	9.45	2.94	5.15	13.79	2.00
Post test	14.6	1.97			

Table no 4 shows that computed 't' value 13.79 which represent the significant gain in knowledge through planned teaching program.

Table 5: Comparision of pretest and post test knowledge score and testing of hypothesis.

Test	Mean knowledge score	T value (calculated)	T value (tabulated)	Level of significance	Degree of freedom
Pre test	9.45	13.79	2.00	0.05(5%)	59
Post test	14.6				

Inferences

As the calculated t value (13.79) greater than the tabulated t value (2.00) so there is significant difference between pre test and post test knowledge score.

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 four areas.

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 school girls.

REFERENCES

1. https://www.downtoearth.org.in/blog/health/the-mammoth-task-of-managing-menstrual-waste-in-india-63376.
2. https://www.downtoearth.org.in/blog/health/menstrual-hygiene-management-in-india-still-a-long-way-to-go-63606.
3. Pritty Joseph-effectiveness of PTP on the care of adolescent girls with regard to menstruation for mothers in selected communities in Kerala, unpublished M.sc (N), thesis RGUHS, bangalore, 2001.
4. Mandal. K., "teaching adolescent school about menstrual hygiene", Indian journal of nursing and midwifery,1 (a), 1998; 19-26.
5. Hedge K. Desai p. and Hazra M. "Adolescent's menstrual patterns" the journal of obstetrics and gynecology of india, 1990; 40(2): 259-261.
6. Myles F. Elledge,[1,*] Arundati Muralidharan,[2] Alison Parker,[3] Kristin T. Ravndal,[3] Mariam Siddiqui,[4] Anju P. Toolaram,[3] and Katherine P. Woodward[5] Menstrual Hygiene Management and Waste Disposal in Low and Middle Income Countries—A Review of the Literature
7. Int J Environ Res Public Health, Published online, 2018; 15(11): 2562. doi: 10.3390/ijerph15112562.
8. Guidelines for management of sanitary waste As per solid waste management rules, 2016 CENTRAL POLLUTION CONTROL BOARD Ministry of Environment, Forest & Climate Change, Govt. Of India Parivesh Bhawan' C.B.D. Cum-Office Complex, East Arjun Nagar, Shahdara, Delhi-110032, 2018.
9. Arundati Muralidharan Management of Menstrual Waste, WaterAid India, Menstrual Health Alliance India, 21; 06: 18.