



Effectiveness of Structure Teaching Program on Knowledge and Practice Regarding Menstrual Hygiene among Adolescent Girls

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ABSTRACT

Maintaining proper menstrual hygiene is essential for females as it is a natural process that starts during adolescence. Poor menstrual hygiene practices can lead to physiological problems such as infections. Therefore, it is important to spread awareness about menstrual hygiene and educate females about menstrual hygiene. Objectives of the study to assess the level of knowledge and practice, evaluate the effectiveness of STP and find out the association of level of knowledge and practice of menstrual hygiene with selected social demographic variable among adolescent girls. A quasi-experimental research design was chosen for this study. By using non probability convenient sampling technique a total of 180 samples were included for the study. Pre and post test was conducted by self-structure questionnaire. The data analysis was done by using descriptive and inferential statistics. The study findings revealed that the participants had 9.4% adequate, 77.8% moderate, and 12.8% inadequate knowledge before the intervention. After the intervention, 38.9% adequate 59.4% moderate and only 1.7% had inadequate knowledge. Prior to the intervention, the practice score was 6.7% poor, 75.5% adequate, and 17.8% good. After the intervention, the score was 9.4% poor, 53.9% average and 36.7% good. The results indicate that the intervention had a positive impact on the participants' level of knowledge and practice as well. There was a statistically significant difference between pre and post-test knowledge and practice scores regarding menstrual hygiene among adolescent girls after giving structured teaching program.

Keywords: Effectiveness, Knowledge, Practice, Menstrual hygiene, Adolescent Girls

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INTRODUCTION

Menstruation is generally considered as unclean in India. Social prohibition and strong bondage with the taboos and traditional beliefs during Menstruation and hesitation of parents not discussing the related issues openly to their adolescence girl that led to poor hygiene practices. These practices results in harbouring of micro-organisms that increases susceptibility to genito-urinary infections. [1] By recognizing the importance of promotion of menstruation hygiene, government of India started a scheme of making available subsidized sanitary napkins to adolescent girls in rural part of India since August 2011. Hence this study was conducted, among adolescent girls regarding there menstruation hygiene and related personal hygiene practices and helps them to prevent the gynaecological infections and serious consequences in their future. [2]

MATERIAL AND METHODS

Quasi Experimental study design was adopted in the study. The present study was undertaken among the 180 adolescent school girls from 2 Primary Schools, Waghodia, Gujarat. Non probability convenient sampling technique was used to select adolescence girls.

Instruments

For the data collection, the researcher used self-structured knowledge questionnaire and practice checklist. Socio demographic section includes socio demographic variables such as age, class, religion, type of family, education of mother, number of siblings, availability of toilet facilities at home, age at 1st menarche, reaction at 1st menarche, using material during menstruation and how many times suffer from irregular periods. This pre-designed, pre-tested and structured questionnaire consisted of 20 self-administered multiple choice questions included topics relating to Anatomy and physiology of female reproductive system, menstrual cycle, types of devices used during menstruation, disposal method of materials used during menstruation, hygiene maintained and complications. Practice Checklist consisted of 20 items about their

Practice regarding Menstrual Hygiene. At the end of the structure teaching program, after collection of the questionnaire from the students, all their queries were answered satisfactorily by the research workers.

RESULT

Table 1: Frequency and percentage distribution of demographic variables of Adolescents Girls n=180

Demographic Variables	Categories	Frequency (f)	Percentage (%)
Age in Year	13 Year	67	37.2
	14 Year	100	55.6
	15 Year	13	7.2
	16 Year	--	--
Class	7 th Std	48	26.7
	8 th Std	129	71.7
	9 th Std	03	1.7
Religion	Hindu	118	65.6
	Muslim	55	30.6
	Christian	7	3.9
	Others	--	--
Types of Family	Nuclear	79	43.9
	Joint	95	52.8
	Extended	6	3.3
Education of Mother	No formal education	52	28.9
	Primary education	110	61.1
	Secondary education	18	10.0
	Graduation & above	--	--
	Post graduation	--	--
Number of Siblings	1	64	35.6
	2	56	31.1
	3	53	29.4
	4	7	3.9
Toilet facilities available at home	Private	115	63.9
	Open	45	25.0
	General/Public	20	11.1
Age at first menarche	9-12 Year	29	16.1
	12-14 Year	105	58.3
	14-16 Year	29	16.1
	Not Yet	17	9.4
How do you get the information about menstruation for first time	Family members	90	50.0
	Friends	64	35.6
	Mass media	22	12.2
	Health workers	4	2.2
How was your reaction to first menstruation	Scared	39	21.7
	Discomfort	74	41.1
	Usual	67	37.2
What do you use during menstruation	Clothes	68	37.8
	Sanitary pads	106	58.9
	Menstrual cups	5	2.8
	Others	1	0.6
Have you ever suffered from irregular periods	Rarely	74	41.1
	Never	77	42.8
	Often	27	15.0
	Always	02	1.1

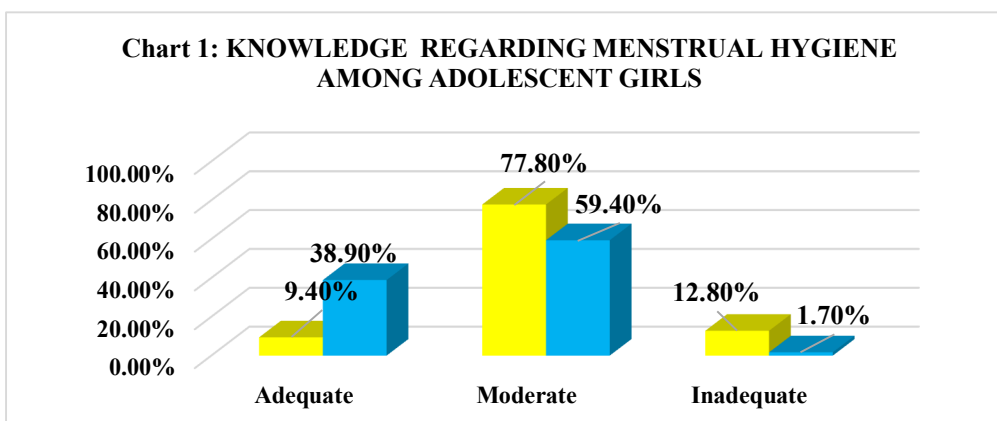


Chart 1 represents the results of a statistical analysis on the level of knowledge on menstrual hygiene in pre and post-test. Overall, the results indicate that the intervention had a positive impact on the participants' level of knowledge.

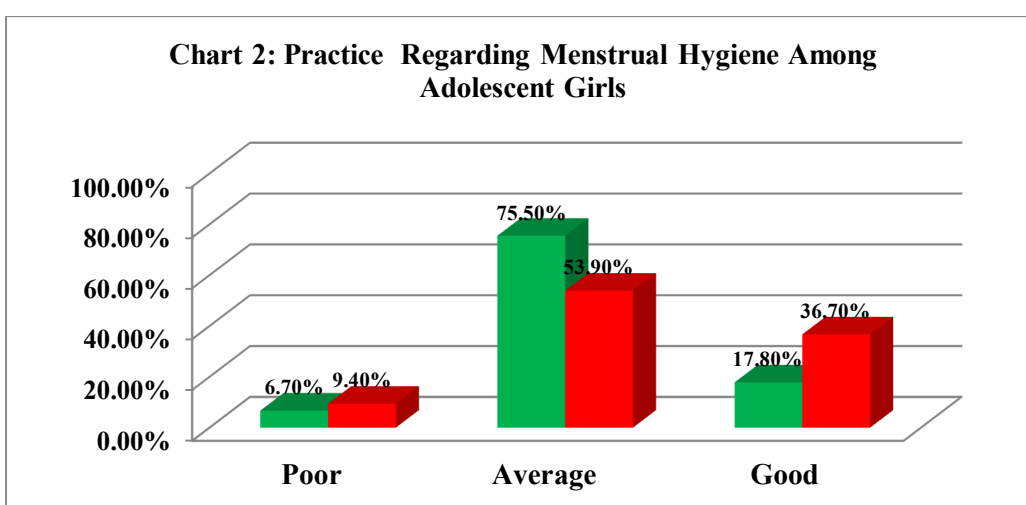


Chart 2 presents the results of a statistical analysis on the level of practice of a particular group of individuals before and after an intervention. Overall, the results indicate that the intervention had a positive impact on the participants' level of practice.

Table 2: Association between Knowledge Score Regarding Menstrual Hygiene among Adolescents Girls with Selected Demographic Data

n=180

Sr.	Demographic Variables	Categories	Knowledge score			χ ² value	df	p value
			Inadequate	Moderate	adequate			
1	Age in Year	13 Year	4	45	18	1.713	4	0.788 ^{NS}
		14 Year	3	69	28			
		15 Year	0	10	3			
		16 Year	--	--	--			
2	Class	7 th Std	2	34	12	2.505	4	0.644 ^{NS}
		8 th Std	5	89	35			
		9 th Std	0	1	2			
3	Religion	Hindu	3	84	31	3.434	4	0.488 ^{NS}
		Muslim	4	36	15			
		Christian	0	4	3			
		Others	--	--	--			
4	Types of Family	Nuclear	0	59	20	8.390	4	0.078 ^{NS}
		Joint	7	62	26			
		Extended	0	3	3			
5	Education of Mother	No formal education	2	34	16			
		Primary education	5	81	24			

		Secondary education	0	9	9	7.058	4	0.133 ^{NS}
		Graduation & above	--	--	--			
		Post graduation	--	--	--			
6	Number of Siblings	1	3	45	16	1.526	6	0.958 ^{NS}
		2	2	38	16			
		3	2	35	16			
		4	0	6	1			
7	Toilet facilities available at home	Private	5	81	29	7.281	4	0.122 ^{NS}
		Open	0	28	17			
		General/Public	2	15	3			
8	Age at first menarche	9-12 Year	1	23	5	7.219	6	0.301 ^{NS}
		12-14 Year	3	69	33			
		14-16 Year	1	19	9			
		Not Yet	2	13	2			
9	How do you get the information about menstruation for first time	Family members	1	66	23	13.632	6	0.034*
		Friends	6	36	22			
		Mass media	0	18	4			
		Health workers	0	4	0			
10	How was your reaction to first menstruation	Scared	0	33	6	12.542	6	0.014*
		Discomfort	5	41	28			
		Usual	2	50	15			
11	What do you use during menstruation	Clothes	2	45	21	4.613	6	0.594 ^{NS}
		Sanitary pads	5	76	25			
		Menstrual cups	0	2	3			
		Others	0	1	0			
12	Have you ever suffered from irregular periods	Rarely	1	49	24	4.737	6	0.578 ^{NS}
		Never	5	54	18			
		Often	1	20	6			
		Always	0	1	1			

From the above table 2 it was proved that there is no significant association between post-test knowledge scores and any of demographic variables but **source of information about menstruation** for the **first time and reaction to first menstruation** were significantly associated with the knowledge score regarding menstrual hygiene among adolescent girls.

Table 3: Association between Practice score regarding menstrual hygiene among adolescents' girls with selected demographic data (n=180)

Sr	Demographic Variables	Categories	Practice score			χ^2 value	df	p value
			Poor	Average	Good			
1	Age in Year	13 Year	7	38	22	2.974	4	0.562 ^{NS}
		14 Year	10	50	40			
		15 Year	0	9	4			
		16 Year	--	--	--			
2	Class	7 th Std	5	25	18	1.411	4	0.842 ^{NS}
		8 th Std	12	71	46			
		9 th Std	0	1	3			
3	Religion	Hindu	13	61	44	1.856	4	0.762 ^{NS}
		Muslim	3	32	20			
		Christian	1	4	2			
		Others	--	--	--			
4		Nuclear	4	39	36	8.648	4	0.071 ^{NS}
		Joint	13	53	29			

	Types of Family	Extended	0	5	1			
5	Education of Mother	No formal education	8	27	17	6.308	4	0.177 ^{NS}
		Primary education	9	62	39			
		Secondary education	0	8	10			
		Graduation & above	--	--	--			
		Post graduation	--	--	--			
6	Number of Siblings	1	4	29	31	16.917	6	0.010*
		2	5	26	25			
		3	7	36	10			
		4	1	6	0			
7	Toilet facilities available at home	Private	13	58	44	3.379	4	0.496 ^{NS}
		Open	2	29	14			
		General/Public	2	10	8			
8	Age at first menarche	9-12 Year	3	12	14	5.538	6	0.477 ^{NS}
		12-14 Year	9	58	38			
		14-16 Year	2	16	11			
		Not Yet	3	11	3			
9	How do you get the information about menstruation for first time	Family members	9	42	39	8.589	6	0.198 ^{NS}
		Friends	5	43	16			
		Mass media	2	10	10			
		Health workers	1	2	1			
10	How was your reaction to first menstruation	Scared	3	20	16	3.302	4	0.509 ^{NS}
		Discomfort	7	36	31			
		Usual	7	41	19			
11	What do you use during menstruation	Clothes	5	39	24	2.746	6	0.840 ^{NS}
		Sanitary pads	11	54	41			
		Menstrual cups	1	3	1			
		Others	0	1	0			
12	Have you ever suffered from irregular periods	Rarely	6	39	29	5.133	6	0.529 ^{NS}
		Never	8	45	24			
		Often	3	13	11			
		Always	0	0	2			

From the above table 3 it was proved that there is no significant association between post-test practice scores and any of demographic variable but having fewer siblings and private toilet facilities at home may contribute to better practice regarding menstrual hygiene among adolescent girls. The findings of this study could be useful for policymakers and healthcare professionals in developing interventions to improve menstrual hygiene practices among adolescent girls.

DISCUSSION

Menstruation is considered as normal physiologic process. Poor hygiene or unhealthy menstrual practices have been associated with serious ill health ranging from reproductive tract infection, urinary tract infections etc. The finding of the present study shows that most of the adolescent girls 77%, 12.8% and 9.45% had average, inadequate and adequate knowledge in pre-test. Whereas in post-test majority 59.4%, 38.9% and 1.7% adolescent girls gained moderate, adequate and inadequate knowledge after structured teaching programme. Practice score was prior to the intervention, 6.7%, 75.5% and 17.8% of the

participants had poor, average, and good practice. After the intervention, the percentage of participants with poor practice increased slightly to 9.4%, 53.9% and 36.7% while the percentage with poor, average and good practice.

Another study was supporting the findings revealed that 29% had adequate knowledge about menstrual hygiene, 71% had inadequate knowledge about menstrual hygiene. The data revealed on practice scores revealed that 19%, 69%, 12% samples had poor, fair and good score of practices regarding menstrual hygiene respectively. [4]

In the Present study, demographic variables, such as information source about menstruation for the first time and reaction to first menstruation, were significantly associated with the knowledge score and having fewer siblings and private toilet facilities at home may contribute to better practice regarding menstrual hygiene among adolescent girls. Another study was supporting the findings revealed that a statistically significant association between menstrual hygiene practices and demographic variables such as type of family and education of parents. [5]

CONCLUSION

The result of the present study shows that the structure teaching program was effective in improving the knowledge and practice of adolescent girls regarding menstrual hygiene. This study implied that creating awareness regarding menstrual hygiene will prevent the occurrence of reproductive tract infection among school girls and promote their health.

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