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A Study to Assess the Effectiveness of Audio Drama on Knowledge of Menstrual Hygiene Among Visually Challenged Adolescent Girls of Selected Schools of Gujarat

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Abstract:

Health is an essential factor for a happy contented life. The onset of menstruation is a life event that can help a girl transition from childhood to womanhood. Even typically developing adolescent girls may not be aware of good menstrual management during this extremely sensitive time in their lives. Visual difficulties arise as the girl's biological changes progress. Due to their limitations, adolescent girls experience various difficulties; they may require assistance even in daily activities. audio dramas help them learn more. The purpose of the current study is to evaluate the impact of audio drama on visually impaired girls' awareness of menstrual hygiene. A quantitative technique is applied in this investigation. Pre-experimental research design is used in this study and the data collection was done by administering the menstrual hygiene knowledge questionnaire. The study conducted in the Lions blind girls school, Vadodara, Gujarat. 30 sample size are selected. In this study, the effectiveness of the audio drama is evaluated using the purposive sampling method. Adolescent girls who were visually impaired and were between the ages of 13 and 18 were included in this study. In the pre-test samples, 33.3% had insufficient knowledge, 66.7% had moderate knowledge, and 0% had adequate knowledge; in the post-test samples, 0% had insufficient knowledge, 36.75% had moderate knowledge, and 63.35% had suitable knowledge. The findings indicate that samples from the post-test group had higher knowledge levels than samples from the pre-test group. When the association was assessed, there was no connection found between awareness of menstrual hygiene and the chosen socio-demographic characteristic. Teenage females with visual impairments were learning more about menstruation hygiene thanks to the audio drama. It has been found that there was a significant improvement in the knowledge level of visually challenged adolescent girls after audio drama.

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1. Introduction

Twenty percent of the 39 million blind individuals globally live in India, where there are 7.8 million blind persons. (WHO,2010)

Girls must be able to attend school and fulfil their potential there if gender equality is to be achieved [1]. Insufficient alternatives for menstruation hygiene have recently drawn attention as a deterrent to girls' access to education in low- and middle-income nations. Poor school sanitation and a lack of access to high-quality sanitary supplies have been linked in studies to decreased enrollment, absence, and dropout rates [2, 3, 4]. Poor menstrual hygiene may have negative effects on health, including an increased risk of STIs and UTIs [5,6-7]. Girls need to be aware of the different facets of the menstrual hygiene issue. [9].

Blood is lost through the vagina during the natural stage of the reproductive cycle known as menstruation [10]. Menarche, or the first period in adolescents, often occurs between the ages of 11 and 14. Yet, some females begin as early as age 8 and others wait until they are 17 or later [11,12].

Estimates from the 2011 census (the most recent census statistics available) indicate that 10% of India's population was made up of female adolescents aged 10 to 19 years, or roughly 120 million girls [13]. Although menstruation is honoured in many regions of India, cultural taboos frequently restrict girls' freedom to leave the house and participate in certain activities during this time [3,14]. Due to the negative views this causes among women towards menstruation, young girls experience significant physical and psychological hardship. [3].

The menstrual disease experiences of adolescents who are visually impaired have received scant literary attention. Common sense would suggest that vision impaired individuals do not undergo bodily alterations or undergo psychosocial change. [15]

WHO estimates that 1.5 million people younger than 15 years old, or nearly 5% of the world's population, are visually impaired. The females who are blind require assistance with their daily tasks. Teenage girls who are blind have changed their menstrual hygiene habits. They require support with identification, placement, washing of period-appropriate clothing, and disposal of spent menstrual products. [16]

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One of the indications of puberty, menstruation, the cyclical vaginal bleeding that happens with the shedding of the uterine mucosa, happens one to two years after the emergence of secondary sexual characteristics. Every mature female menstruates on average 3-5 days (minimum 2 days, maximum 7 days) per month (once established) till menopause. Periods can range in intensity from low to moderate to heavy, and they can also differ in length. [19] Menstruation can cause discomfort, a reproductive tract infection, odour, and embarrassment, among other things, if it is not well handled. For adolescent girls, health education must include instruction on menstrual hygiene. [19] The educational, economical, and cultural position of the family has an impact on menstrual hygiene. The curriculum at schools has a part in menstruation health, too. ^[20].

AIMS AND OBJECTIVES OF THE STUDY

This study aimed to assess the knowledge of visually challenged adolescent girls before audio drama and after audio drama in selected school of Gujarat.

2. Methodology

This study's methodology is pre-experimental design. Adolescent females who are visually impaired are the focus of the project, which is being undertaken in a few Gujarati schools. There are chosen 30 sample sizes. The Purposive Sampling Method is employed in this investigation. The inclusion criteria include visually impaired schoolgirls between the ages of 13 and 18. Schoolgirls who are unwilling to participate in the study and hearing impairment are the exclusion criteria.

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Here, visually impaired adolescent females were subjected to an interview to determine their understanding of menstrual hygiene. All volunteers who met the inclusion criteria provided their informed consent. Thirty teenage visually impaired girls from the Lions Blind Girls School in Vadodara, Gujarat, provided the study's data.

Questionnaires and demographic data were used as data gathering instruments. The demographic data included details on Age, Religion, Parents' Education, Parents' Profession, and Family Type. There were 25 questions in the menstrual hygiene knowledge test, each with four possible answers. The three types of questions on the questionnaire were introduction (1, 2,

3), anatomy and physiology (4, 5, 6), and menstrual hygiene (7 to 25). Each response was given a score of "1".

Scores of 1 to 8 indicate inadequate understanding of menstrual hygiene, 9 to 16 indicate intermediate awareness, and 17 to 25 indicate adequate knowledge.

The sociodemographic information and knowledge of menstrual hygiene were described using data analysis utilising frequency and percentage distribution. To evaluate the knowledge, mean, mean percentage, and standard deviation were employed. The relationship between understanding of menstruation and knowledge of menstrual.

3. Result

Table 1: Frequency and Percentage Distribution of Visually Challenged Adolescent Girls Of Selected Scho N=30

Sr No/Variabes	Variabes	Frequency	Percentage
1. Age	13-14	7	23.3%
	15-16	13	43.3%
	17-18	10	33.3%
2. Religion	Hindu	26	86.7%
	Muslim	04	13.3%
	Christian	00	00
	Others	00	00
3. Parents education	Non formal	08	26.7%
	Primary education	20	66.7%
	Higher secondary education	02	6.7%
	Graduation	00	00%
	Post graduation	00	00%

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4. Parents occupation status	Labor	14	46.7%
	Private	02	6.7%
	Government	13	43.3%
	Own business	01	3.3%
5. Type of family	Joint	23	76.7%
	Nuclear	07	23.3%

Table -1 Show that of the participants, 7 (23.3%) were in the 13–14 age range, 13 (43.3%) were in the 15–16 age range, and 10 (33.3%) were in the 17–18 age range. 26 (86.7%) were Hindus, and 4 (13.3%) were Muslims. Of the participants' parents, there were 8 (26.7%) with no formal education, 20 (66.7%) with primary education, 2 (6.7%) with higher secondary

education, 0 (0%) with no postgraduate work completed. 14 of the participants (46.7%) of the parents were employed; 2 (6.7%) had private jobs, 13 (43.3%) had government jobs, and 1 (3.3%) had their own businesses. There were 23 participants with joint families (76.7%) and 7 participants with nuclear families (23.3%).

TABLE 2 ASSOCIATION OF PRE-TEST KNOWLEDGE WITH DEMOGRAPHIC VARIABLES

SrNo	Demographic variable	Less than 9	More than 9	Chi square value	Tablevalue	Df	Result
1	Age			2.435	5.991	2	NS
	13 to 14	3	4				
	15 to 16	5	8				
	17 to 18	7	3				
2	Religion			1.154	3.841	1	NS
	Hindu	14	12				
	Muslim	1	03				
	Christian	0	0				
	Others	0	0				

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3	Parent education			4.200	5.991	2	NS
	Non formal	6	2				
	Primary education	9	11				
	Higher secondary	0	2				
	Graduation	0	0				
	Post graduation	0	0				
4	Parent occupation			1.978	7.815	3	NS
	Labor	8	6				
	Private	1	1				
	Government	5	8				
	Own business	1	0				
5	Type of family			0.186	3.841	1	NS
	Joint	11	12				
	Nuclear	04	03				

TABLE 3 ASSOCIATION OF POSTTEST KNOWLEDGE WITH DEMOGRAPHIC VARIABLES

SrNo	Demographic variable	Less than 17	More than 17	Chi square value	Table value	Df	Result
1	Age						
	13 to 14	3	4				
	15 to 16	7	6	2.729	5.991	2	NS

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	17 to 18	8	2				
2	Religion			0.192	3.841	1	NS
	Hindu	16	10				
	Muslim	2	2				
	Christian	0	0				
	Others	0	0				
3	Parent education			9.167	5.991	2	S
	Non formal	6	2				
	Primary education	9	11				
	Higher secondary	0	2				
	Graduation	0	0				
	Post graduation	0	0				
4	Parent occupation			5.069	6.251	3	NS
	Labor	9	5				
	Private	0	2				
	Government	9	4				
	Own business	0	1				
5.	Type of family			0.031	3.841	1	NS
	Joint	14	09				
	Nuclear	04	03				

Table 2 and 3 suggested that there is no significant association between pre test knowledge and demographic variables and there is significant

association between post test knowledge and parents education and no significant association between age, religion, parents occupation and type of family.

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TABLE-4 Frequency and Percentage Distribution of Learning Needs of Menstrual Hygiene Among Visually Challenged Adolescent Girls. N=30

LEARNING NEEDS	SCORE	PRE TEST		POST TEST	
		frequency	percentages	frequency	percentages
Inadequate knowledge	1 to 8	10	33.3%	00	00%
Moderate knowledge	9 to 16	20	66.7%	11	36.7%
Adequate knowledge	17 to 25	00	00%	19	63.3%

Table 4 suggested that in pre test 33.3% participants having inadequate knowledge,66.7% participants having moderate knowledge and 00% participants having adequate knowledge. In post test 00%

participants having inadequate knowledge,36.7% having moderate knowledge and 63.3% having adequate knowledge.

TABLE-5 MEAN, STANDARD DEVIATION AND PAIRD “T” VALUE OF PRE AND POST TEST

Pre -test knowledge score		Mean (%)	Post-test knowledge score		Mean (%)	Paired “t” value	Table value	Sig.
Mean	SD	35.66%	Mean	SD	64.33%	22.05	1.699	S
9.33	1.70		16.83	1.80				

Table 5 represents that mean pre and mean post level of knowledge with maximum possible score, standard deviation and paired “t” value. Pre and post test mean are 9.33 and 16.83,SD are 1.70 and 1.80,mean percentage are 35.66% and 64.33% and the paired t value(22.05) is more than table value(1.699),so, the audio drama is effective the post test knowledge score is more than pre test knowledge score.

4. Discussion

DISCUSSION IS BASED ON THE OBJECTIVES

The first objective of the present study was to assess the level of knowledge onmenstrual hygiene among visually challenged adolescent girls.

According to the findings, in the pretest, almost half of them had adequate knowledge 10 (33.3%), while the other half had moderate knowledge 20 (66.7%). After listening to the audio drama, half of the participants scored acceptable on the posttest (19, or 63.3%), and half scored moderately on the test (11, or

36.7%).

Comparable results have also been documented in other studies conducted by Jayanthi, P. (2017), including one on the impact of audio drama on visually impaired girls' knowledge and practise of menstrual hygiene and minor menstrual ailments. The self-structured questionnaire used for data collection has a one-group pretest-posttest design. In the pretest, the study's findings showed that around half of the participants had moderate knowledge (53.33, 46.67%) and half had inadequate knowledge (46.67, 53.33%). in both the experimental and control groups of students. The majority of the students in the experimental group had moderate knowledge (70%) and adequate knowledge (30%) in the posttest I, and in the posttest II following the audio play, they had moderate knowledge (76.67%) and appropriate knowledge (23.33%). According to the study's findings, both the control and experimental groups' pre-audio drama menstrual hygiene practises were generally bad (63.33 and 57.67%, respectively). In

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contrast, all of the experimental group's students scored 100% on posttest I and 100% on posttest II for practising proper menstrual hygiene.

The second objective of the study was to assess the effect of audio drama on menstrual hygiene among visually challenged adolescent girls.

H01 was the corresponding hypotheses. The knowledge levels of visually impaired adolescent girls before and after listening to an audio drama about menstrual hygiene will not significantly alter.

In this study, the difference between the pretest and posttest's mean and standard deviation of knowledge ($M=9.33$, 16.83 $SD=1.70$, 1.80) As a result, the null hypothesis H01 was disproved.

Efficacy of Planned Health Education on Knowledge and Self-Reported Practices of Menstrual Hygiene Among Visually Impaired Adolescent Girls in Selected Blind Schools in Pune City, Ms. Prema, Ms. Dhandapani Diksha (2020). A non-probability convenient sampling approach was used, along with a one-group pre- and post-test design. The study was conducted at a few schools for the blind. The study involved 30 adolescent girls who were visually impaired. To gauge menstrual hygiene knowledge, a semi-structured questionnaire and a check list for self-reported practises were utilised. The considerable differences between the pre- and post-test knowledge scores on menstrual hygiene show that the targeted health education was successful in boosting knowledge among visually impaired adolescent females. The study's conclusions showed that adolescent girls' awareness of reproductive health had significantly increased. So, it can be said that menstrual hygiene awareness among adolescent females is improved through instructionally organised health training.

The third objective was to find out the association between knowledge regarding menstrual hygiene among visually challenged adolescent girls with selected demographic variables.

The corresponding hypothesis was H02, which said that among females who are visually impaired, "there would not be a significant correlation between demographic characteristics and the amount of knowledge on menstrual hygiene."

According to the study's findings, there was no correlation between visually impaired girls' pre-test knowledge level and the demographic characteristics that were chosen. and in the post test, there was a significant correlation between parents' knowledge and education, whereas other factors such as age, religion, parents' occupation, and type of family were not significant. conclusions from the investigation. As a result, the null hypothesis H02 was rejected.

The study's findings are in opposition to a study by Mishra et al. (2016) that used a sample of 715 teenage females from West Bengal, in Eastern India, including 325 from rural areas and 390 from urban areas. Urban girls have better menstrual hygiene practices ($\beta=0.343$, $p<0.01$) than rural girls. A similar trend is noted for gynaecological problems ($\beta=0.080$, $p<0.01$) among the study participants. The results of path analysis also indicate that girls of higher socioeconomic status have better menstrual hygiene practices which subsequently reduce the prevalence of gynecological problems among them.

5. Conclusion

The findings of the study revealed that audio drama is one of the best methods for visually challenged girls to obtain a good knowledge of menstrual hygiene.

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