

# A Study to Assess the Effectiveness of Teaching Session using Audio Drama on Knowledge Regarding Healthy Lifestyle Practice among Visually Impaired Children in Selected Blind School at Puducherry

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## ABSTRACT:

**Background:** The number of visual impairments in the world is 285 million blind and 246 million having low vision. In India at least 2, 00,000 children have severe visual impairment or blindness and approximately 15,000 are in schools for the blind. **Aim:** Analyze the success of an audio drama-based teaching session for visually impaired kids about adopting a healthy lifestyle. **Materials and methods:** A quantitative research approach with Quasi-experimental one group pretest-post test design used in this study. Consecutive sampling technique was used to select the 50 samples. Structured questionnaire and audio drama was administered. After 1<sup>st</sup> week post-test was done and the findings of the study showed that out of 50 children's. **Result:** The calculated paired 't' test value for the domain personal hygiene (t=5.641, p=0.0001), oral hygiene (t=4.463, p=0.0001), sleep hygiene (t=4.399, p=0.0001), bathing (t=5.152, p=0.0001), hand hygiene (t=4.593, p=0.0001) and for overall (t=8.998, p=0.0001) was found to be statistically significant at p<0.001 level. The demographic variable religion ( $\chi^2=11.078$ , p=0.026) and among children who are visually impaired, a statistically significant relationship between pre-intervention knowledge of healthy lifestyle practices at the p<0.05 level and the other demographic factors had not demonstrated a statistically significant relationship with the pre-intervention level of knowledge regarding healthy lifestyle practice among visually impaired children. **Conclusion:** Teaching session adopting Audio Drama on knowledge about healthy lifestyle practice administered among children with visual impairment was found to be effective in increasing the knowledge in the post test.

**Keywords:** Visually impaired children, audio drama and Healthy life style practice.

## INTRODUCTION:

Children's health focuses on the well-being of children from the conception through adolescence. It is vitally concerned with all aspects of children's growth and development and with the unique opportunity that each child has to achieve their full potential as a healthy adult.<sup>(1,3)</sup> The practice of a healthy lifestyle involves giving your body a thorough cleaning and

carrying for. Bathing, hand-washing, brushing teeth, and donning clean clothes are all part of maintaining good personal hygiene. <sup>(2)</sup> Making wise and healthy choices in social situations is also a part of it. Good personal hygiene habits can benefit your health as well as community. <sup>(4,5)</sup> WHO estimates the number of visual impairment in the world is 285 million blind and 246 million having low vision; 65% of people visually impaired and 82% of all blind are 50 years and older. <sup>(6,7,8)</sup>

Therefore, childhood blindness is the priority of “Vision 2020 - the Right to Sight,” a global initiative for the elimination of avoidable blindness. The prevalence is 3/10000 in children of affluent societies to 15/10000 in the poorest communities. <sup>(9,10)</sup> Reduce auditory distraction by turning down the volume on the television or radio; otherwise, the child won't be able to concentrate on other sounds or the language being used by others in the room. <sup>(11,14)</sup> Talk to the child about what is happening. Finding a good balance between verbal descriptions and constant talking is helpful. It gives succinct, precise descriptions of daily occurrences and activities. It helps to find a balance between verbal descriptions and incessant talking. It provides short, clear descriptions about daily events and activities. For example, tell the child that you are going to wipe his nose prior to wiping it. <sup>(12,13)</sup>

## **MATERIALS AND METHODS:**

Quasi-experimental research design was conducted among partial and complete visually impaired children, age group 12 to 18 years. . Consecutive technique was used to select 50 visually impaired children at selected special school, Puducherry. The ethical permission to conduct the study was obtained from the institutional ethical committee and written informed consent was taken from concerned authorities of the selected special school at Puducherry and also from the parents or guardian and teachers of the sample with assurance of confidentiality.

## **PROCEDURE**

The researcher assesses the demographic variables and find out the knowledge on healthy lifestyle practice among visually impaired children by using structure knowledge questionnaire. The audio drama will be played to the subjects. On day 7, the post test will be conduct using the same tool. The tool consists of:

### **SECTION 1:**

It consists eleven items of demographic variables such as age, gender, year of studying, religion, residential area, the parent's occupation, the length of their studies, their educational background, frequency of health check-up, family history of visual problem, source of information regarding healthy lifestyle practice.

**SECTION 2:**

It consists of knowledge questionnaire on healthy lifestyle practice in children with visual impairment. The questionnaire has six domains like personal hygiene, oral hygiene, sleep hygiene, bathing and Hand hygiene. Each domain has six questions. Totally thirty questions.

**STATISTICS**

The knowledge of healthy lifestyle practices among visually impaired children was evaluated using frequency and percentage distribution. Among children who are visually challenged, knowledge of healthy lifestyle practices was evaluated using the means, medians, and standard deviations. Effectiveness of audio drama was determined using a paired "t" test on visually impaired children .The connection between demographic characteristics and the knowledge test of visually impaired children was determined using the chi square test.

**RESULT:**

In our study shows that most of the visually impaired children, 37(74%) were aged between 12 to 14 years, 26(52%) were female and were studying eighth standard, 38(76%) were Hindus, 31(62%) were residing in rural area, 28(56%) of parents had primary school education, 27(54%) of parents were farmer / daily wages, 24(48%) were staying in blind school for two years, 22(44%) undergone health checkup once in six month, 42(84%) had no family history of visual problems and 23(46%) received information regarding personal hygiene through parents and relatives.(table 1)

Table 1: Demographic variables of frequency and percentage distribution of children with visual impairment.

Demographic Variables	Frequency	Percentage
<b>Age in years</b>		
7 to 10	-	-
12 to 14	37	74.0
14 to 18	13	26.0
<b>Gender</b>		
Male	24	48.0
Female	26	52.0
<b>Year of studying</b>		
Sixth	-	-
Seventh	6	12.0
Eighth	26	52.0
Ninth	18	36.0
Tenth	-	-

<b>Demographic Variables</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Religion</b>		
Hindu	38	76.0
Muslim	6	12.0
Christian	6	12.0
Others	-	-
<b>Residential area</b>		
Rural	31	62.0
Semi urban	14	28.0
Urban	5	10.0
<b>Educational status of the parents</b>		
Diploma / Degree	-	-
Higher secondary	-	-
Middle / High school	22	44.0
Primary school	28	56.0
Non literate	-	-
<b>Occupation of the parents</b>		
Business	-	-
Government employee	-	-
Private employee	23	46.0
Farmer / Daily wages	27	54.0
Unemployment	-	-
<b>Duration of staying in blind school</b>		
Less than a year	-	-
One year	11	22.0
Two year	24	48.0
Three year	15	30.0
Four year	-	-
<b>Frequency of health checkup</b>		
Every month	-	-
Once in three month	1	2.0
Once in six month	22	44.0
Once in a year	18	36.0
Never	9	18.0
<b>Family history of visual problems</b>		
Yes	8	16.0

Demographic Variables	Frequency	Percentage
No	42	84.0
<b>Source of information regarding personal hygiene through</b>		
Parents and relatives	23	46.0
School and friends	22	44.0
Media	5	10.0
Health personnel	-	-
Not aware	-	-

Pre intervention shows that with respect to personal hygiene, 28(56%) had moderately adequate knowledge, 12(24%) had adequate knowledge and 10(20%) had inadequate knowledge. With regard to oral hygiene, 22(44%) had moderately adequate knowledge, 14(28%) had inadequate and moderately adequate knowledge. Considering the domain sleep hygiene, 23(46%) had moderately adequate knowledge, 14(28%) had adequate knowledge and 13(26%) had inadequate knowledge. Regarding bathing, 30(60%) had moderately adequate knowledge, 10(20%) had inadequate and moderately adequate knowledge. With respect to hand hygiene, 26(52%) had moderately adequate knowledge, 14(28%) had adequate knowledge and 10(20%) had inadequate knowledge. The overall pre-intervention level of knowledge revealed that, 38(76%) had moderately adequate knowledge, 9(18%) had inadequate knowledge and 3(6%) had adequate knowledge. (Table 2)

Table 2: Pre-intervention level of knowledge regarding healthy lifestyle practices among visually impaired children.

Level of Knowledge	Inadequate (<50%)		Moderately Adequate (50 – 75%)		Adequate (>75%)	
	F	%	F	%	F	%
Personal hygiene	10	20.0	28	56.0	12	24.0
Oral hygiene	14	28.0	22	44.0	14	28.0
Sleep hygiene	13	26.0	23	46.0	14	28.0
Bathing	10	20.0	30	60.0	10	20.0
Hand hygiene	10	20.0	26	52.0	14	28.0
<b>Overall</b>	<b>9</b>	<b>18.0</b>	<b>38</b>	<b>76.0</b>	<b>3</b>	<b>6.0</b>

Post intervention shows that with respect to personal hygiene, 33(66%) had adequate knowledge and 17(34%) had moderately adequate knowledge. With regard to oral hygiene, 33(66%) had adequate knowledge, 16(32%) had moderately adequate knowledge and 1(2%)

had inadequate knowledge. Considering the domain sleep hygiene, 31(62%) had adequate knowledge, 18(36%) had moderately adequate knowledge and 1(2%) had inadequate knowledge. Regarding bathing, 31(62%) had adequate knowledge, 17(34%) had moderately adequate knowledge and 2(4%) had inadequate knowledge. With respect to hand hygiene, 32(64%) had adequate knowledge, 17(34%) had moderately adequate knowledge and 1(2%) had inadequate knowledge. The overall post intervention level of knowledge revealed that, 37(74%) had adequate knowledge and 13(26%) had moderately and adequate knowledge.

The calculated paired 't' test value for the domain personal hygiene ( $t=5.641$ ,  $p=0.0001$ ), oral hygiene ( $t=4.463$ ,  $p=0.0001$ ), sleep hygiene ( $t=4.399$ ,  $p=0.0001$ ), bathing ( $t=5.152$ ,  $p=0.0001$ ), hand hygiene ( $t=4.593$ ,  $p=0.0001$ ) and for overall ( $t=8.998$ ,  $p=0.0001$ ) was found to be statistically significant at  $p<0.001$  level. This clearly infers that teaching session on knowledge of adopting a healthy lifestyle using audio drama administered among children with visual impairment was found to be effective in increasing the knowledge in the post test.(fig1).

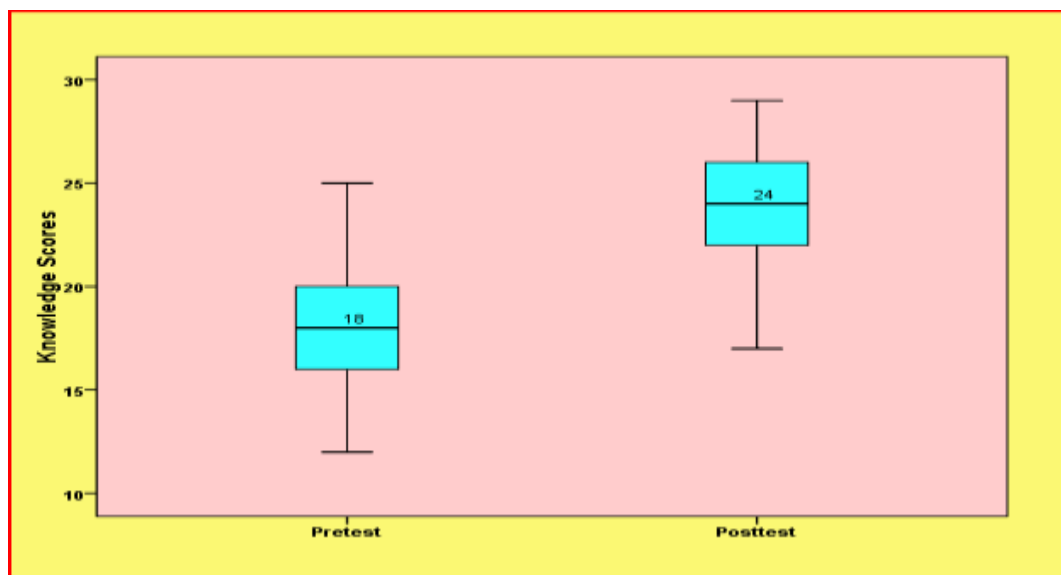


Figure 1. Boxplot showing the effectiveness of teaching session using Audio Drama on knowledge about healthy lifestyle practice among children with visual impairment.

**(Median: Pretest – 18.0, Post test – 24.0)**

## DISCUSSION:

The effect of audio drama regarding the knowledge on healthy life style practices among the visually impaired children. Regarding in pretest mean score of personal hygiene was  $3.58\pm 1.11$  and the post test was  $4.80\pm 0.93$  with MD = 1.22,  $t = 5.641$ . Regarding oral hygiene, the pretest mean score was  $3.56\pm 1.37$  and posttest mean score was  $4.80\pm 1.11$  with MD = 1.22,  $t = 4.463$  respectively. With respect sleep hygiene, the pretest mean score was  $3.60\pm 1.49$  and posttest mean score was  $4.68\pm 1.02$  with MD = 1.08,  $t = 4.399$ . In pretest mean

score of bathing was  $3.60 \pm 1.07$  and posttest mean score was  $4.68 \pm 1.08$  with MD = 1.08,  $t = 5.152$  respectively. Regarding hand hygiene the pretest mean score was  $3.56 \pm 1.37$  and posttest mean score was  $4.66 \pm 0.98$  with MD = 1.10,  $t = 4.593$ . In our research the pretest overall mean score was  $17.90 \pm 3.11$  and posttest overall mean score was  $23.62 \pm 2.81$  with MD = 5.72,  $t = 8.998$  respectively. **Niganagouda G patel (2020)** A quasi-experimental study is being carried out in a government pre-primary blind school in Vijayapur, with 25 visually challenged teenage students chosen using purposive sample approaches. The information was gathered via self-structured questionnaires. To test the knowledge of impaired teenage children, frequency and percentage were utilized. After intervention, the mean score for personal hygiene knowledge and practice increased to 38.1 and 42.0, respectively. Thus, audio-assisted instruction program encourage personal hygiene among visually impaired youngsters.<sup>(15)</sup>

The association of pre interventional level of knowledge on healthy lifestyle practices with selected demographic variables. The demographic variable religion ( $\chi^2=11.078$ ,  $p=0.026$ ) had shown statistically significant association with pre-intervention level of knowledge regarding healthy lifestyle practice among children with visual impairments, at the  $p < 0.05$  level, and the other demographic factors had not demonstrated a statistically significant association with pre-intervention knowledge of healthy lifestyle practices among visually impaired children. **Rania El-Kurdy (2020)** conducted a study on effect of structured audio educational sessions on visually challenges adolescent girls knowledge and practice regarding menstruation. after provision of the Audio educational sessions with highly statistically significant differences ( $P < 0.001$ ). It shows the adolescent girls knowledge was improved after the audio educational sessions.<sup>(16)</sup>

## CONCLUSION:

From the results of the study, it is concluded that the audio drama was greatly increased the knowledge on healthy lifestyle practice among visually impaired children. The audio drama is very effective to improve the knowledge of visually impaired children.

## RECOMMENDATIONS:

- The study can be replicated with large sample size
- The study can be conducted by comparing it to other educational initiatives.
- A study can be done to determine how visually impaired kids feel about personal hygiene education.
- Studies can be conducted by health professional on ill effects of poor personal hygiene practice and its preventive measures.
- The study can be replicated with other disabled children.



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