

## A STUDY TO DETERMINE THE EFFECT OF TEACHING USING AUDIO DRAMA ON KNOWLEDGE REGARDING ORAL HYGIENE AMONG VISUALLY IMPAIRED CHILDREN OF SELECTED BLIND SCHOOL IN PALANPUR

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### ABSTRACT

A study conducted to determine the effect of teaching using audio drama on knowledge regarding oral hygiene among visually impaired children of selected blind school in Palanpur. **Material & Method:** The Evaluative approach and pre- experimental one group pre testpost test design was adopted for this study. Non probability purposive sampling technique was used for sample selection. The data were collected from 30 visually impaired children. The study was conducted at smt.indumatirajnikantmehta 'anandniketan' School for the Mentally Divyang, Palanpur. Structured interview schedule questionnaire for knowledge tool was used to gather the data. Through SPSS, both descriptive and inferential statistics were used for data analysis. **Results:** Result showed that during pre-test majority 22 (73.3%) had poor knowledge & 8 (26.6%) had average knowledge. where as in post-test maximum 23 (76.3%) had good knowledge & 7 (23.7%) had average knowledge regarding oral hygiene among visually impaired children. Result on knowledge showed that post-test mean knowledge score 13.40 was higher than mean pre-test knowledge score 6.36 with mean difference of 7.04 with calculated value ( $t=20.44$  at  $df=29$ ,  $p=0.001$ ) was found significant. **Conclusion-** This indicates that the knowledge of visually impaired children regarding oral hygiene significantly improved after teaching using audio drama.

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### INTRODUCTION

As we all know about the popular and common saying that "Health is Wealth". It is as true as our life. Good health keeps us always happy and gives us feeling of complete physical, mental, social and intellectual well-being. A good health keeps us away from the diseases and health disorders.<sup>1</sup>

"Oral health is a standard of the oral and related tissues which enables an individual to eat, speak and socialise without active disease, discomfort or embarrassment and which contributes to general well-being" (WHO, 1982.) It can also be said to be a mouth without any disease in its active form. Neglecting oral hygiene habits can lead to pain and discomfort for children.

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The foundation for healthy permanent teeth in children and teenagers is laid during the first years of life. Poor diet, poor habits of food intake and inadequate tooth brushing habits during the first 2 years of life have been shown in several studies to be related to tooth decay in children. The development of caries in primary teeth further increases the risk of developing caries in permanent teeth.

According to WHO "Health is the state of complete physical, mental, social & spiritual well being and not merely the absence of disease or infirmity". Maintenance of Personal Hygiene helps to improve the quality of life & life expectancy and Poor Hygiene Practices & inadequate sanitary conditions plays a important role in the spread of diseases. Practicing a good standard of Personal Hygiene helps in keeping infection illness & bad odors away. The practice of good hygiene should start from an earlier age. Personal Hygiene can be defined as an act of maintaining cleanliness & grooming of the external body which includes bathing, washing hand, brushing & cleanclothing. Maintaining Good Personal Hygiene is one of

the most effective way to prevent the development, spread and occurrence of infections. Personal Hygiene in the environment of health care includes skin care, nail care, hair care, care of teeth and wearing clean clothes. Personal appearances are very much important & helps to improve self-confidence & self-esteem.<sup>2</sup>

**PROBLEM STATEMENT**

A study to determine the effect of teaching using audio drama on knowledge regarding oral hygiene among visually impaired children of selected blind school in Palanpur.

**OBJECTIVES**

1. To assess the knowledge of oral hygiene among visually impaired children.
2. To evaluate the effect of audio drama teaching on knowledge regarding oral hygiene.
3. To find the association of knowledge on oral hygiene with selected demographic variables.

**MATERIALS AND METHOD**

**Research Approach**

The research approach adopted for present study was evaluative research approach.

**Research Design**

In this study pre-experimental one group pre-test post-test design. was adopted to assess the knowledge.

**Population**

Population is the entire aggregation of cases that meets a designated set of criteria for research. The population of the present study comprises all visually impaired children in blind school in Palanpur.

- Target population- It was comprised of the all visually impaired children in blind school in Palanpur
- Accessible population- The Accessible population was the adolescent who are in the age group between 12 -17 years.

**Research setting**

The study was conducted Smt. Menaben Keshavlal Mehta School for the Visually Divyang, Palanpur.

**Sample Size**

A total sample for this study was 30 visually impaired children.

**Sampling Technique**

Non probability purposive sampling technique was used to select the sample for this study.

**Sampling criteria**

**Inclusion criteria**

- All visually impaired children between 12 – 17 years of age.
- Visually impaired children who are willing to participate.

**Exclusion criteria**

- Visually impaired children with any other disabilities.

**ETHICAL CONSIDERATIONS**

- The permission was obtained from ethical committee of Gokul Global University, Sidhpur.
- Permission was obtained from concerned blind school authority for conducting the research study.
- The consent was taken from the subjects attendees. To gain their confidence, they were ensured that research data will be kept confidential and will be used for only research purpose.
- The purpose of the study will be explained to the subjects attendees. They were also informed about their right to refuse from participation in the study.

Plan for data analysis: The data analyses were done according to the study objectives by using descriptive and inferential statistics. The plans of data analysis were as follows:

- Frequency, percentage, mean, and standard deviation was calculated.
- The chi-square test was used for association with demographic variables.

**RESULTS AND DISCUSSION**

**Section - I**

**Table 1.** Frequency and percentage distribution of the Socio-demographic variables

N=30

S. No	Demographic Variables	Frequency	Percentage
1	Age in years		
	12-13	9	30
	14-15	10	33.3
	16-17	11	36.7
2	Gender		
	Male	18	60
	Female	12	40
3	Education level		
	6 <sup>TH</sup> – 8 <sup>TH</sup>	7	23.3
	9 <sup>TH</sup> – 10 <sup>TH</sup>	13	43.4
	11 <sup>TH</sup> – 12 <sup>TH</sup>	10	33.3
4	What do you use to brush your teeth?		
	a. Tooth paste with brush	25	83.4
	b. Tooth powder with brush	0	0
	c. Charcoal	1	3.3
	d. Neem stick	0	0
	e. Tooth paste with finger	4	13.3
	f. Tooth powder with fingers	0	0
5	Do you have any previous knowledge about Oral Hygiene?		
	a. Yes	3	10
	b. No	27	90

6	Have you undergone any dental treatment?		
	a. Yes	3	10
	b. No	27	90

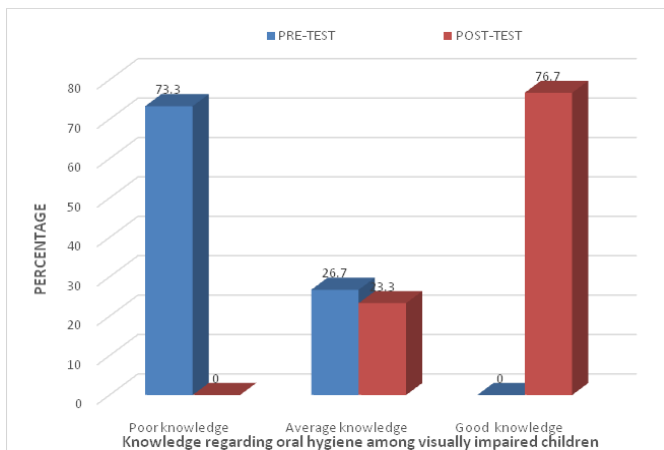
**Section – II**

**Table 2.** Distribution of pre-test and post-test level of knowledge regarding oral hygiene among visually impaired children

N=30

Level of knowledge	Pre-test		Post-test	
	f	%	f	%
Poor knowledge	22	73.3	0	0
Average knowledge	8	26.7	7	23.3
Good knowledge	0	0	23	76.7

Result showed that distribution of pre-test and post-test level of knowledge regarding oral hygiene among visually impaired children. Result showed that during pre-test majority 22(73.3%) had poor knowledge and 8(26.7%) had average knowledge where as in post-test maximum 23(76.7%) had good knowledge and 7(23.3%) had average knowledge regarding oral hygiene.



**Fig 1.** Distribution of pre-test and post-test level of knowledge regarding oral hygiene among visually impaired children

**Section III**

**Table 3.** Descriptive statistics of pre-test and post-test scores of knowledge regarding oral hygiene among visually impaired children

N=30

Descriptive statistics	Pre-test	Post-test
Minimum	4	9
Maximum	11	17
Range	7	8
Mean	6.36	13.40
Median	6	14
Mode	5	14
Std. Deviation	2.05	2.25

**Section - IV**

**Table 4.** Effectiveness of structured educational programme on knowledge regarding oral hygiene among visually impaired children

N=30

Effectiveness	Mean	SD	Mean D	t value	df	p value
Pre-test	6.36	2.05	7.03	20.44	29	0.001*
Post-test	13.40	2.25				

\*P<0.05 level of significance NS-Not significant

Result on knowledge showed that post-test mean knowledge score 13.40±2.25 was higher than mean pre-test knowledge score 6.36±2.05 with mean difference of 7.03 with calculated value (t=20.44 at df=29, p=0.001) was found significant.

**Section - V**

**Table 5.** Association between the pre-test level of knowledge regarding oral hygiene among visually impaired children with selected demographic variables

N=30

Demographic variables	Pre-test knowledge		χ2value	df	p value
	Poor	Average			
Age in years					
12-13	8	1	3.326	2	0.190 <sup>NS</sup>
14-15	8	2			
16-17	6	5			
Gender					
Male	13	5	0.028	1	0.866 <sup>NS</sup>
Female	9	3			
Education level					
6 <sup>TH</sup> – 8 <sup>TH</sup>	6	1	4.179	2	0.124 <sup>NS</sup>
9 <sup>TH</sup> – 10 <sup>TH</sup>	11	2			
11 <sup>TH</sup> – 12 <sup>TH</sup>	5	5			
What do you use to brush your teeth?					
a. Tooth paste with brus	18	7	4.337	2	0.121 <sup>NS</sup>
b. Tooth powder with brush	--	--			
c. Char-coal	0	1			
d. Neem stick	4	0			
e. Tooth paste with fingers	--	--			
f. Tooth powder with fingers	--	--			
Do you have any previous knowledge about Oral Hygiene?					
a. Yes	0	3	9.167	1	0.002*
b. No	22	5			

Have you undergone any dental treatment?					
a. Yes	0	3			
b. No	22	5	9.167	1	0.002*

\*P<0.05 level of significance

NS-Not significant

Table 5 depicts the association between the pre-test level of knowledge regarding oral hygiene among visually impaired children with selected demographic variables which was tested by using chi square test. Result showed that do you have any previous knowledge about Oral Hygiene and Have you undergone any dental treatment was found significant association at p<0.05 level but other demographic variables such as age, gender, education level and What do you use to brush your teeth were found to be non-significant at p<0.05 level with pre-test level of knowledge regarding oral hygiene among visually impaired children.

### CONCLUSION

Result on knowledge showed that post-test mean knowledge

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score 13.40±2.25 was higher than mean pre-test knowledge score 6.36±2.05 with mean difference of 7.03 with calculated value (t=20.44 at df=29, p=0.001) was found significant.

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