ijlpr 2023; doi 10.22376/ijlpr.2023.13.2.SP2.L33-L40

International Journal of Life science and Pharma Research

ISSN 2250-0480

Research Article

Audio Drama For Personal Hygiene

Does Audio Drama Improve Knowledge and Practice Regarding Personal Hygiene Among Visually Impaired Children

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Abstract: Personal hygiene includes brushing, bathing, hand hygiene, and adequate sleep. Personal hygiene health promotion practices are frequently like general health promotion practices. Brushing, bathing, hand hygiene, and getting enough sleep are all examples of specific health promotion related to good personal hygiene. However, children who are blind or visually impaired children are more likely to contract an infection due to poor personal hygiene. The objectives were to assess the Knowledge and Practice regarding Personal hygiene among visually impaired children. To evaluate the effectiveness of Audio drama on knowledge regarding Personal hygiene. To associate the Knowledge and Practice regarding Personal hygiene with a selected demographic variable of visually impaired children. The study employed a pre-experimental research design. The research was carried out at Cuddalore's Government Blind School. Visually impaired children 30 numbers were included in the study. The sample was chosen using a simple random sampling technique. A structured interview questionnaire and checklist were used to assess the knowledge and practice of visually impaired children for data collection. The audio drama covers the introduction to personal hygiene, problems caused by poor personal hygiene practices, and proper personal hygiene practices. After seven days, a posttest was conducted. According to the findings, 21 (70%) of visually impaired children had insufficient knowledge in the pretest, but all 30 (100%) of visually impaired children had adequate knowledge in the posttest. In terms of percentage of practice, 14 (46%) of visually impaired children had fair practice in the pretest, and all 30 (100%) had good practice in the posttest. 2. The p-value was highly significant at p >0.001 level for the effectiveness of audio drama on knowledge and practice of personal hygiene between the pretest and posttest. It implied that audio drama was effective for visually impaired children. To conclude, the findings suggest that audio drama can help visually impaired children improve their knowledge and practice of personal hygiene.

Keywords: Visually Impaired, Children, Personal Hygiene, Audio Drama, Knowledge, Practice

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Received On 18 November 2022

Revised On 15 January 2023

Accepted On 14 February 2023

Published On 01 March 2023

This research did not receive any specific grant from any funding agencies in the public, commercial or not for profit sectors.

Citation Geetha Chocka Lingam , Does Audio Drama Improve Knowledge and Practice Regarding Personal Hygiene Among Visually Impaired Children.(2023).Int. J. Life Sci. Pharma Res.13(2), L33-L40 http://dx.doi.org/10.22376/ijlpr.2023.13.2.SP2.L33-L40

1. INTRODUCTION

Children's health is concerned with a child's well-being from conception to adolescence. It is deeply concerned with all phases of children's growth and development and with each child's unique opportunity to reach their full potential as a healthy adult. Maintaining children's health, according to UNICEF, is one of several responsibilities in the battle against poverty. When individuals work to improve their lives, their communities, and their countries, healthy children can grow up to be healthy adults. A major goal is to improve the health of the world's children. Mental retardation is an impairment that begins before adulthood and has a long-term impact on development. Based on the American Association on Mental Deficiency (AAMD)1959, Mental Retardation is defined as below-average general intellectual ability that begins during development and is closely linked with impairments in adaptive behavior. The Persons with Disabilities Act (1995) defines Mental Retardation as a condition of arrested or incomplete development of a person's mind, distinguished by subnormal intelligence. Mental retardation is derived from the Latin word retardate, which means "to slow, delay, hold back, or hinder. "Personal hygiene and grooming autonomy are essential skills for all students to develop. These are vital for blind or visually impaired students. It may take more time for children to learn these skills, but it is critical to motivate independence and avoid the temptation to do the activity for them to achieve completeness. According to studies[1], visually impaired youngsters are at higher risk for developing health problems due to inadequate personal cleanliness. It can be avoided by providing good health education that improves personal hygiene knowledge and practice. Visually impaired children face numerous challenges in their daily lives. Compared to their normally sighted peers, maintaining good oral hygiene is easier in visually impaired children. Traditional methods of teaching oral hygiene incorporate the usage of visual perception as well as disclosing agents to show plaque that can be removed by tooth brushing and frequently re-disclosing to monitor their oral hygiene status improvement[2].

Educate or improve the knowledge and practices of personal hygiene, such as hand hygiene, mouth hygiene, skin hygiene, sleep hygiene, and so on, among blind school pupils by employing audio drama. A dramatic, entirely acoustic performance transmitted on the radio is known as radio drama (or audio drama, audio play, radio play, radio theatre, or audio theatre). Radio drama relies on language, music, and sound effects to assist the listener in envisioning the characters and tale because it lacks a visual component: "In the physical dimension, it is auditory, but in the psychological level, it is as powerful as a visual force."The elements of radio drama are the same as those of stage drama. Hence in this setting, we wished to study the effectiveness of audio drama on knowledge and practice regarding personal hygiene among visually impaired children in selected blind schools, Cuddalore – a small town near Puducherry, India. The main objectives were to assess the Knowledge and Practice regarding Personal hygiene among visually impaired children: To evaluate the effectiveness of Audio drama on knowledge regarding Personal hygiene among visually impaired children: To associate the Knowledge and Practice regarding Personal hygiene with selected demographic variables of visually impaired children[3-5]We planned and went ahead with the hypotheses that There is a significant effect of knowledge and practice regarding personal hygiene through audio drama for visually impaired children during pre and post-test: There is a significant association between knowledge and practice of personal hygiene with their demographic variables. It will enable them to improve their practice of hygienic measures.

2. MATERIALS AND METHODS

2.1 Ethical Statement

The study was done in a school with visually impaired children in Cuddalore. The ethical committee of the institute approved the study. (KGNC/IHEC/2017/005) The principles of the Declaration of Helsinki did the study.

2.2 Inclusion criteria

Only children with visual impairment at a selected blind school, Cuddalore. Children aged 5 to 12 years old, Only children with vision impairment in a selected blind school, Cuddalore. Subjects available during the data collection period- Children who can communicate in Tamil and English.

2.3 Exclusion criteria

Children under five years, above 14 years, and Children with other disabilities. Not willing to participate.

2.4 The variables

The knowledge is the dependent variable, practice regarding personal hygiene among visually impaired children was the dependent variable, and the Independent variable was the Audio drama on personal hygiene.

2.5 Sampling

The sample size used in this study was 30, where the Sampling Technique was the Non-probability convenient technique.

2.6 Data Collection

The data collection method is a structured interview schedule using a structured questionnaire based on review books, journals, and internal tools developed. The instruments used for data collection were a structured questionnaire and a checklist prepared to assess knowledge of personal hygiene and a checklist for the practice of personal hygiene. The tool consists of 3 parts: Part-I: Demographic variables, which include the age of children, sex, the standard of studying, family history of visual impairment, source of information, educational qualification of parents, and their occupation. Part II: Structured Interview Questionnaire to assess the knowledge regarding personal hygiene. Part III**:** Checklist to assess the practice of personal hygiene.

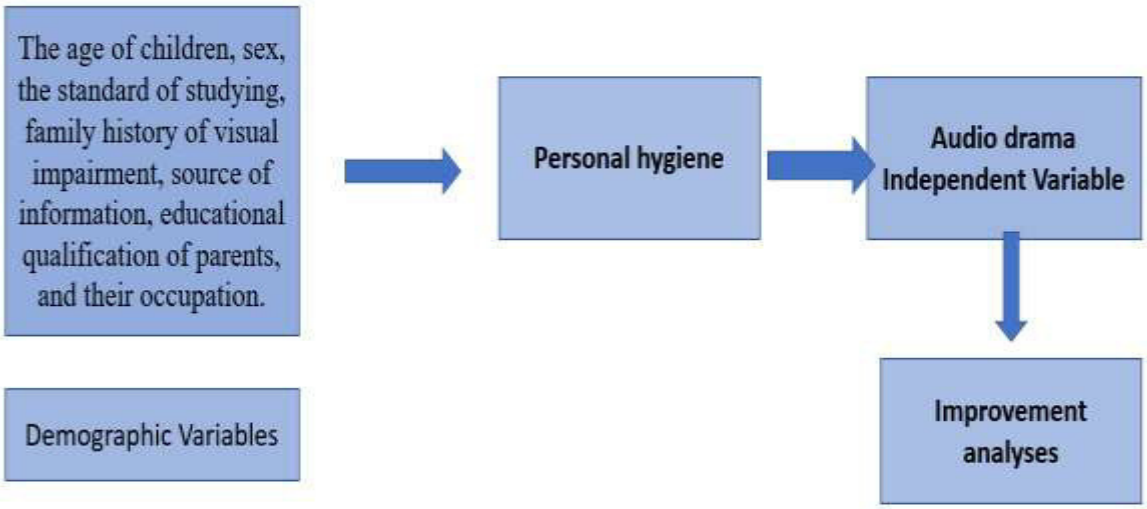

Fig 1 shows the variables and analyses.

2.7 Knowledge scoring system

The scoring interpretation for knowledge was categorized into>75% -Adequate Knowledge, 50- <75%-Moderately Adequate Knowledge, and 50% -Inadequate Knowledge. The scoring interpretation for practice was categorized in to >75% Excellent, 50- <75% - Good, 50% - Poor

2.8 Reliability of tools:

The questionnaire's reliability was determined utilizing the test-retest method and the inter-rater procedure. Karl Pearson's r was calculated to determine the reliability of instruments I and II, and the correlation in both structured questionnaires was high (r=0.94). The trustworthiness of instrument III (practice checklist) was (r=0.92) utilizing interrater methodology and rating scale, whereas the reliability of blind adolescent girls' contentment was (r=0.92) using the test re-test method. Pilot research on visually impaired ten kids in Cuddalore (a small South Indian town) was conducted with formal administrative authorization with a similar methodology, proved fruitful, and hence this study was started. The sample of the pilot study was separate from the original work. Based on the inclusion criteria, the samples were identified. For the sample selection, an easy sampling procedure was adopted. The sample consisted of 30 visually impaired children who agreed to participate in the audio drama. The subjects were given a pre-test using a scheduled interview questionnaire and a checklist, followed by an audio drama on personal hygiene, and a post-test using the scheduled interview questionnaire and checklist. A reliability test was calculated from the pre-and post-test scores to assess the data. During the pre-test, a scheduled interview questionnaire and checklist were utilized to assess the sample's knowledge and practice and implement the intervention (Audio Drama). After seven days, the knowledge and practice were assessed using the same scheduled interview form and checklist[6-10].

3. STATISTICS ANALYSIS

The researchers utilized descriptive statistics such as mean, frequency, percentage, and standard deviation and inferential statistics such as the correlation coefficient, paired t-test, and chi-square test. A p-value of less than 0.05 was considered significant. A convenient sample of thirty was used.

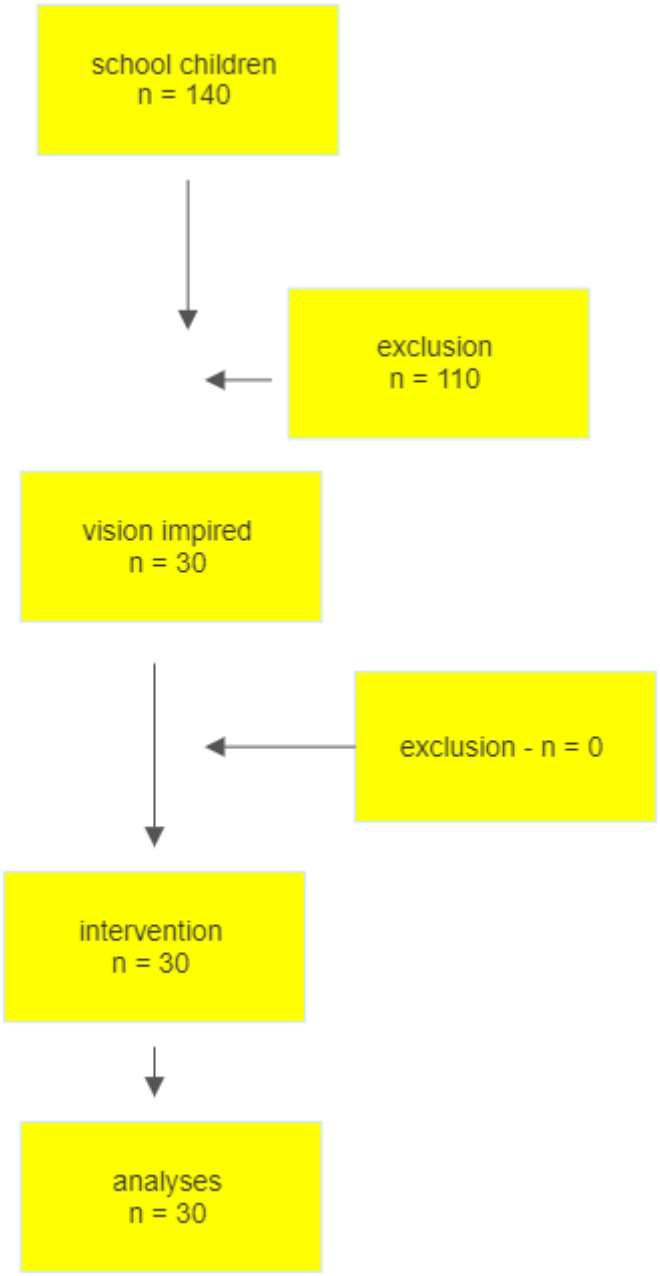

Fig 2 - Consort flow chart of the flow of the study:

4. RESULTS

4.1 Major Study Findings

All thirty students completed the study**.** Analysis of demographic data shows that children aged 4-6 years are 13%, 7-9 years are 23%, and 10-12 years are 63%. Analysis of gender showed that 53% of them were male and 47% were female. Analysis of years of studying shows that the first standard is 20%, second standard is 17%, the third standard is 3%, the fourth standard is 17%, and the fifth standard is 43%. Analysis of religion shows all children were Hindu 100%. The residential area shows rural 53%, semi-urban 23%, and urban 23%. The father's educational status shows in the higher secondary, while the mothers were in primary school. On analysis of the parents' occupation, they were a farmer or daily wagers. On analysis of duration of staying in Blind school, 43% stayed for one year, 30% stayed for three years, 16% stayed for two years, and 3% stayed for four years. On analysis of the duration of visiting an ophthalmologist, 60% visited once in six months, 16% visited once in three months, and 23% visited every month. Analysis of the family history of visual impairment shows that 70 % do not have a family history of visual impairment, and 30% have a family history of visual impairment. Analysis of the source of information, 56% were from parents/ relatives, 10% from mass media, 6% from friends, and 26% were unaware of personal hygiene.

- Regarding the percentage of knowledge on personal hygiene in the Pre-test, most of them had inadequate knowledge, and in Post-test, all had adequate knowledge. Regarding the percentage of practice on personal hygiene

in the Pre-test, most of them had poor practice, and in Post-test, most had a good practice.

- ❖ Concerning the effectiveness of audio drama on knowledge and practice regarding personal hygiene between the Pre-test and Post-test, the p-value was highly significant at p<0.001 level. It implied that audio drama regarding personal hygiene was effective.
- ❖ Regarding the association between knowledge and demographic variables, the findings revealed a significant association between age, duration of staying in a blind school, and family history of visual impairment.

Table 1 Distribution of level of knowledge regarding Personal hygiene among visually impaired children during Pre-test and Post-test

S.No	Level of knowledge	Pretest		Post-test	
		N	%	N	%
1	Adequate knowledge (≥75%)	3	10	30	100
2	Moderately adequate knowledge (50 - <75%)	6	20	0	0
3	Inadequate knowledge (<50%)	21	70	0	0

During the Pre-test and Post-test, Table 1 shows the distribution of knowledge about personal hygiene among visually impaired children. Out of 30 samples, 21 (70%) had inadequate knowledge, 6(20%) had moderately adequate knowledge, 3(10 %) had adequate knowledge during the pre-test, and all 30 (100%) had adequate knowledge during the post-test. Most visually impaired children had insufficient knowledge in the Pre-test, while all of the visually impaired children had adequate knowledge in the Post-test.

Table 2: **Effectiveness of Audio Drama on Knowledge Regarding Personal Hygiene. Table 2: Mean, Standard deviation, Mean difference, and paired value of the knowledge regarding Personal hygiene**

Knowledge	Mean	Standard Deviation	Standard Error Mean	difference in means	t-test	p-value
Pretest	12.53	6.73	1.229	14.9	12.205	<0.001*
Post-test	27.43	1.654	0.302			

(Highly significant at p<0.001 level)***

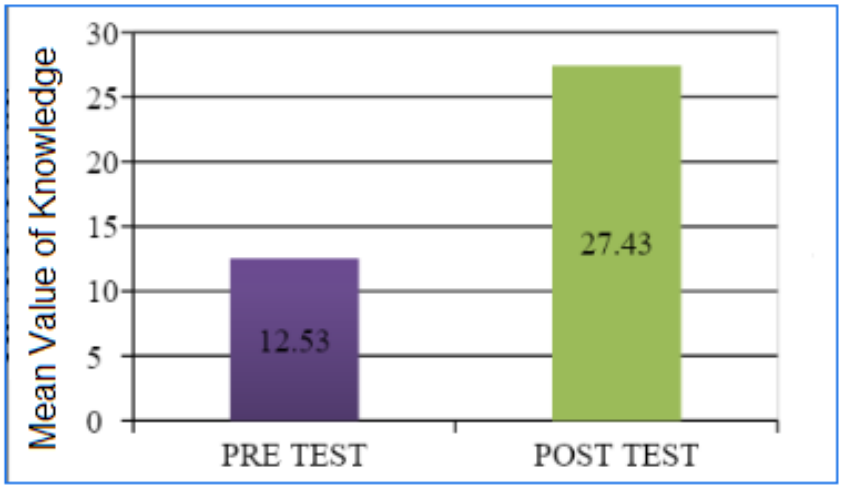

Fig 1: Mean, Standard deviation, Mean difference, and paired 't' value of the knowledge regarding Personal hygiene.

The mean, standard deviation, mean difference and paired 't' value of the knowledge of personal hygiene are shown in Table was greater than the Pre-test. The Pre-test knowledge score had a standard deviation of 6.73, whereas the Post-test knowledge score had a standard deviation of 1.654. The paired 't' value 2 and Figure 1. The mean Pre-test knowledge score was 12.53, whereas the mean Post-test knowledge score was 27.43, which obtained was 12.205, with a p-value of 0.000. At the p0.001 level, it was highly significant. As a result, the stated hypothesis was rejected.

Table 3: Mean, Standard deviation, Mean difference, and paired 't' value of the practice regarding personal hygiene

Practice	Mean	Standard Deviation	Standard Error Mean	difference in means	t-test	p-value
Pretest	23.33	7.676	1.401	14.3	9.816	<0.001*
Post-test	37.63	1.098	0.2			

(Highly significant at p<0.001 level)***

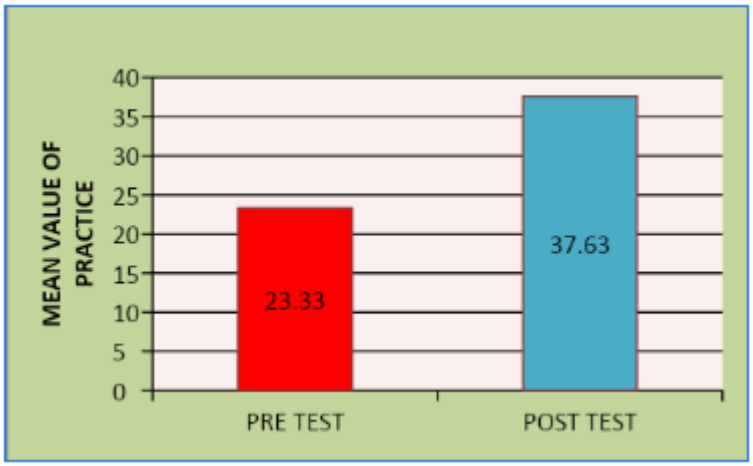

Fig 2. The pre-test and the post-test mean value of practice regarding personal hygiene.

The mean, standard deviation, mean difference and paired' t' value of the personal hygiene practice are shown in Table 3 and Figure 2. The pre-test practice score was 23.33, whereas the post-test practice score was 37.63, which was greater than the pre-test. The pre-test practice score had a standard deviation of 7.676 and the post-test practice score had a standard deviation of 1.098. The paired' t' value obtained was 9.816 with a p-value of 0.000. At the p0.001 level, it was highly significant. As a result, the stated hypothesis was rejected. The audio drama on personal hygiene practices among visually challenged children was highly effective**.**

5. DISCUSSION

The audio drama on knowledge regarding personal hygiene among visually challenged children was quite beneficial. Both descriptive statistics (Mean, Frequency, Percentage, and Standard deviation) and inferential statistics (paired't' test and chi-square test) were used to analyze the data. The findings were discussed under the study's objectives.

5.1 To assess the Knowledge and Practice regarding Personal hygiene among visually impaired children.

The first objective of the present study was to assess the level of knowledge and practice regarding personal hygiene among visually impaired children during the Pre-test. The present findings revealed that out of 30 samples, most of them 21(70%) had inadequate knowledge, 6(20%) had moderately adequate knowledge, and 3(10%) had adequate knowledge in the Pre-test. In Post-test, 30(100%) had adequate knowledge. Regarding the practice, during the Pre-test, out of 30 samples, most of them 14(46%) had fair practice, 7(23%) had good practice, 9(30%) had excellent practice and in the post-test, all of them had Excellent practice. To evaluate the effectiveness of a health education program, researchers [11] conducted a study on the understanding of oral health and hygiene among visually impaired children. The total number of subjects was 65, with 28 completely blind and 37 partially blind children aged 7 to 17. A 24-item verbal questionnaire was used to test knowledge throughout the sessions, and plaque index (PI) and gingival index (GI) scores were collected at four locations to assess the oral hygiene of all teeth. Following the completion of the program, the student's knowledge of oral health was evaluated utilizing the same questionnaire to gauge the program's success. The findings revealed that most of the children had inadequate knowledge in the pre-test but that 60% improved after the instruction program. Our results were better than the above results by the other researchers.

5.2 To evaluate the effectiveness of Audio drama on knowledge regarding Personal hygiene among visually impaired children.

The second objective of the present study was to evaluate the effectiveness of audio drama on knowledge and practice regarding personal hygiene among visually impaired children during the Post-test. Regarding the knowledge, Table 4.3.1 shows the mean Pre-test knowledge score was 12.53, and the Post-test knowledge score was 27.43, which was higher than the Pre-test. The standard deviation of the Pre-test knowledge score was 6.73, and the Post-test knowledge score was 1.654. The obtained paired't' value was 12.205, and the p-value was 0.000, which was highly significant at the p<0.001 level. Regarding the practice, Table 4.3.2 reveals that the mean Pre-test practice score was 23.33 and the Post-test practice was 37.63. It was

higher than the Pre-test. The standard deviation of the Pre-test practice score was 7.676 and the Post-test practice score was 1.098. The obtained paired t-value was, and the p-value was highly significant at p<0.001% level. The findings were supported by a study conducted on visually impaired children studying at a selected blind school in kerala[12] on their knowledge and practice about health concerns, lifestyle adjustment, and related aspects. The authors have found significant improvement after audio drama interventions.

5.3 To associate the Knowledge and Practice regarding Personal hygiene with selected demographic variables of visually impaired children.

The third objective was to find the association between the level of knowledge and practice regarding personal hygiene and their selected demographic variables. The study revealed a significant association between the level and practice regarding personal hygiene and demographic variables like Age, Duration of staying in a blind school, and family history of visual impairment on knowledge. However, the study also revealed that there was no significant association between the level of knowledge and practice regarding personal hygiene and demographic variables like gender, religion, year of studying, residential area, educational status and occupation of parents, duration of visiting ophthalmologist, and source of information on knowledge.

Table 4 shows variables and influencing factors and their correlation.

	Pearson correlation value	Significance
Age	+ 0.45	**Yes – positive – significant**
Duration of stay	+ 0.39	**Yes – positive – significant**
Family history	+ 4.6	**Yes – positive – significant**
gender	+0.1	Negative – insignificant
religion,	+0.06	Negative – insignificant
Residence	+ 0.6	Negative – insignificant
Year of studying	+0.12	Negative – insignificant
Occupation of parents	+0.14	Negative – insignificant
Duration of doctor visits	+0.12	Negative – insignificant
Source of information	+0.04	Negative – insignificant

Many studies were done to determine the impact of an audio training program on reproductive health among visually impaired women. One such study used a total of 70 visually impaired women who were involved in the study, who were chosen using a purposive sample method. Most visually impaired women (96%) reported insufficient knowledge and a negative attitude toward reproductive health. The audio instruction program provided information on reproductive health to visually impaired women. The audio teaching program provided information on reproductive health to visually impaired women. The majority of the visually impaired ladies gained appropriate information and a positive attitude as a result of this. University graduates had significantly superior knowledge and attitudes about reproductive health compared to school-aged children.[13-15] The limitation of the study was that conducted in only one blind school with limited samples.

5.4 Implication of Study

Nursing Practice: The outcomes of the study assist nurses in understanding the relevance of audio drama, as well as personal hygiene knowledge and practice, and urge visually impaired youngsters to incorporate hygienic practices into their daily lives. Nursing Education: Nursing instructors taught student nurses to be up to date on the problems due to improper personal hygiene. Nursing education should strongly emphasize teaching future nurses to impact health information and appraise the community's self-care potential. It is best accomplished by incorporating innovative instructional technology into the curriculum. It is important to use practices such as role-playing, auditory aids such as narrative, and audio drama. Nursing Administration: The administration should refrain from participating in audio drama-based health education programs for visually impaired children as part of the nursing process. In a blind school, a regular mass health education program must be organized. Nursing Research: Most research studies should be conducted in the same way as in other developing nations to keep up to speed on personal hygiene and its value. Evidence-based approaches that address health issues due to inadequate personal hygiene should be emphasized. Recommendation and future options: The study can be reproduced with a large sample size and a multicentric option with students of different countries. The research can be done by comparing one instructional program to another. A study of visually challenged children's attitudes toward personal hygiene education could be done. A health professional can research the negative impacts of inadequate personal hygiene and preventative strategies. The research can be carried out on other disabled children.

6. CONCLUSION

In this prospective nonrandomized observational trial of thirty visually impaired children, a session of audio drama for seven days improved their knowledge of personal hygiene. Their practice improved significantly. The findings need authentication with larger multicentric comparative trials. We did not have any side effects.

7. AUTHOR CONTRIBUTION STATEMENT

Geetha chocka lingam has done the design, writing, and data collection.

8. CONFLICT OF INTEREST

Conflict of interest declared none.

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