

ORIGINAL ARTICLE

A Study to assess the Effectiveness of Video Assisted Teaching Program on Knowledge Regarding Detection of Visual Impairment in Children among Teachers of Selected Schools of District Durg

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ABSTRACT

Introduction: Children and their families may be adversely affected by vision impairment, which is a major global public health issue.

Aim of the study: A study to assess the effectiveness of video assisted teaching program regarding detection of visual impairment in children's among teachers.

Research design: Quasi experimental-non equivalent control group pretest and posttest design was adopted.

Methodology: Non probability Purposive sampling technique was used to select 40 samples. The teachers knowledge were assessed by structured questionnaire regarding detection of visual impairment in children's. Pretest was followed by administration of Video assisted teaching Program (VATP) regarding detection of visual impairment in children's. The post-test was conducted by using same questionnaire. The data was analyzed and interpreted using descriptive and inferential statistics.

Results: In experimental group the pre-test mean score was 17.9 ± 3.9 . After the intervention of video assisted teaching program the mean post test knowledge score was 31.7 ± 1.9 The mean difference was 13.8. The obtained 't' value 15.9 which was highly significant at $p < 0.0001$ level. There was statistically significant difference was found between the pre-test and post-test knowledge score among teachers. Also there is a significant association was found between pre test level of knowledge scores among teachers with demographic variables like gender and number of students using spectacles.

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Conclusion: The study concluded that VATP was effective in improving the knowledge regarding detection of visual impairment in children's among teachers.

KEYWORDS:

- Visual impairment • Teachers • Video assisted teaching program

INTRODUCTION

Eyesight is the window to the world for individuals to see, to perceive, to comprehend, to express and to communicate about everything. Any kind of substitutive methods for the blind cannot match a person with the normal vision.

The classroom teacher is the key to assess, plan and implement an effective educational program. The classroom teacher shares information collected during the information gathering stage is aware of the parents' or guardians' expectations for their child's program; and maintains ongoing communication with the student, parents and other. Childhood blindness is a major public health concern worldwide. In India, the prevalence of such blindness is estimated to be approximately 0.5/1,000 and at least 210,000 children have severe visual impairment (SVI) or blindness (BL). Approximately 15,000 are in schools for the blind and nearly half the causes are avoidable. With a mean age of 122 years (range, 5-16), the children in the cross-sectional population study by Shadrack Muma and Stephen Obonyo (2020) were randomly selected.¹

School health programs have widely adopted vision screening initiative in many countries; according to the World Health Organization (WHO-2019), almost 18.9 million children under 15 years of age are visually impaired globally.²

Almost 18.9 million children under 15 years of age are visually impaired globally. In developing countries, 7%-31% of childhood blindness and visual impairment is avoidable. (Centers for Disease Control and Prevention-2019).³

According to WHO 2015, approximately 314 million people worldwide live with low vision and blindness. Of these, 45 million people are blind and 269 million have moderate or severe detection of visual impairment. Around 145 million people's detection of visual impairments due to uncorrected refractive errors (near-sightedness, far-sightedness or astigmatism).⁴

Early diagnosis and treatment of these eye problems can have a major impact on academic success. Teachers spend a lot of time with students and get to know them well through observation and interaction. Educators are often the first to notice when a student is acting abnormally or experiencing difficulties. Therefore, it is crucial for educators to be able to recognize and understand the signs and symptoms of vision disorders, as well as how to effectively treat them.

OBJECTIVES

1. To design and construct video assisted teaching program regarding detection of visual impairment in children'.
2. To assess the pretest and post test knowledge regarding detection of visual impairment in children's among teachers.
3. To assess the effectiveness of video assisted teaching program regarding detection of visual impairment in children's among teachers.
4. To find out the association between pre test level of knowledge regarding detection of visual impairment in children among teachers with their selected socio demographic variables.

RESEARCH METHODOLOGY

Research approach and design: Quantitative approach with Quasi-experimental non-equivalent control group design was used in the present study.

Research setting: The study was conducted in Chatrapathi shivaji public school and Sri Narayana public School at Durg.

Population: All the teaching staffs who are teaching in selected primary schools in Durg.

Sample Size: Sample size of the present study was 40.

Sampling Technique: Non-probability purposive sampling technique was used to select the samples.

RESULTS

Table 1: assessment of the level of knowledge regarding detection of visual impairment in children’s among teacher’s in experimental group

Level of Knowledge	Experimental group			
	pre-test		post-test	
	N	%	N	%
Adequate	0	0	18	90
Moderately Adequate	7	35	2	10
Inadequate	13	65	0	0

N₁=20

Table 1 shows in experimental group during pretest 7 (35%) of teacher’s had moderate level of knowledge, 13 (65%) had inadequate knowledge and none of them had adequate 0(0%) regarding detection of visual impairment, whereas in post-test after the intervention of video assisted teaching program, 18 (90%) were had adequate knowledge and 2 (10%) had moderate level of knowledge and none of them had inadequate knowledge.

Table 2: assessment of the level of knowledge regarding detection of visual impairment in children’s among teacher’s in control group

Level of Knowledge	Control group			
	pre-test		post-test	
	N	%	N	%
Adequate	0	0	0	0
Moderately Adequate	3	15	5	25
Inadequate	17	85	15	75

N₂=20

Table 2 shows in control group during pretest 3(15%) of teacher’s had moderate knowledge and 17 (85%) had inadequate knowledge and none of them had adequate 0(0%) regarding detection of visual impairment, whereas in post-test 5(15%) were had moderately adequate knowledge and 15(75%) had inadequate knowledge.

Table 3: Comparison between mean, SD value of pretest and post test level of skin condition among teacher’s in Experimental group

Experimental group	Mean	SD	Mean Difference	t value	p value
Pre-test	17.9	3.9			
Post-test	31.7	1.9	13.8	15.9	0.0001***

N=40

***p<0.0001

Table 3 shows comparison of level of knowledge within the study group, it reveals the mean score in the pretest was 17.9 ± 3.9. After the intervention of video assisted program the mean post test knowledge score was 31.7± 1.9 The mean difference was 13.8. The obtained ‘t’ value 15.9 which was highly significant at p < 0.0001 level.

Hence the VATP was effective in improving the knowledge regarding detection of visual impairment in children’s among teachers.

Table 4: Comparison between mean, SD value of pretest and post test level of knowledge score among teacher’s in Control group

Control group	Mean	SD	Mean Difference	t value	p value
Pre-test	16.7	3.63			
Post-test	17	3.73	0.10	1.68	0.78

N=40

***p<0.0001

Table 4 shows comparison of level of knowledge within the control group, it reveals the mean score in the pretest was 16.7 ± 3.63 and the mean post test knowledge score was 17.±3.73. The mean difference was 0.10. The obtained ‘t’ value 1.68 was considered to be not statistically significant. at p < 0.0001 level. There is no significant difference between the mean pre and post test level of knowledge score among teacher’s in control group, the obtained ‘t’ value 1.68 is less when compared to experimental group. Hence there is no improvement in the level of knowledge among teacher’s in control group.

Chi square test was used to find out the association between the variables. It shows that there is a significant association was found between pre test level of knowledge on expression and storage of breast milk among employed women with their demographic variables like Occupation etc.

DISCUSSIONS

The study findings are also supported by Supriya Biswas (2019) who carried out their Study to assess the effectiveness of video assisted teaching program on knowledge regarding refractive errors among school going children at Bangalore. During the pre-test out of 60 participants, 40 (66.7%) have inadequate knowledge (≤50 %) and 20 (33.3%) have moderate (51-75 %) knowledge, whereas in

post-test out of 60 participants 44 (73.3%) had adequate knowledge (> 75%) and 16 (26.7%) had moderately adequate (51-75%) knowledge scores.⁵

The study findings were supported by Suja Karkada (2014) on effectiveness of video assisted teaching on detection of visual impairments in Children among primary school teachers at Udupi, Karnataka. In her study the mean difference between the pre-test and post-test knowledge score was 4.56 which was significant at 0.05 level. The study finding revealed that there was significant difference between mean pre-test and post-test knowledge scores ($t=8.93$, $p=0.001$) of the primary school teachers on detection of visual impairments.⁶

CONCLUSION

Statistical significance was identified between pre-test and post-test scores for knowledge regarding detection of visual impairment in children's among teachers. A significant association was identified between pretest knowledge and the demographic variables of teachers. Findings of this study clearly indicate that video assisted Teaching program was effective in improving the knowledge regarding detection of visual impairment in children among teachers. This study can create awareness among teachers and also school authorities and parents regarding necessity of detection of visual impairment among children.

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