



EFFECT OF STRUCTURED TEACHING PROGRAMME ON EYE HEALTH AMONG PRIMARY SCHOOL TEACHERS

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ABSTRACT

Eye examinations are an important part of health maintenance for everyone. Good vision and eye health are important to a child's development. So children's eye examinations are important to ensure normal vision development. The study was on "Effect of Structured Teaching Programme on Eye Health among Primary School Teachers." The objectives of the study include Assessment of the knowledge on eye health among primary school teachers using structured questionnaire, determine the effect of structured teaching programme on eye health among primary school teachers. In addition, the purpose was to find out the association between knowledge regarding eye health among primary school teachers with selected demographic variables. Quasi experimental, one group pre test and post test design was used in the study. The sample size was 82 primary school teachers in Eight Government Primary Schools under Alappuzha District, which was selected using multistage cluster sampling technique. The result revealed that the computed t-value of knowledge is ($t=51.15$ $p<0.01$) which showed a significant effect of the Structured Teaching Programme. There was no association between knowledge regarding eye health and selected variables like age, sex, religion, education, family income, area of residence and teaching experience. The result showed a positive effect on structured teaching programme with increasing level of knowledge among primary school teachers regarding eye health.

KEYWORDS :

INTRODUCTION

Children are one third of our population and all of our future. In order to develop a healthy society, it is very important that we have healthy children. Good vision and eye health are important to a child's development.

The human eye is the organ of vision. A vital organ of vision plays a very important role not only in life but also in the human body. The human eye is the organ which gives us the sense of sight, allowing us to learn more about the surrounding world than we do with any of the other four sense. Eye examinations are an important part of health maintenance for everyone.

Vision is closely linked to the learning process. Children with undetected vision problems often will have trouble with their school work. Eye exams for children play an important role in ensuring normal vision development and academic achievement of all children.

The child eye health programme is being developed as a demonstration approach in school health which is scalable and will help advocacy with the Departments of Health, Education and other stakeholders. Strengthened Education Sector structure and enhance Government capacity to effectively plan and deliver high quality comprehensive and equitable child eye health services in school and at all levels of health care.

NEED AND SIGNIFICANCE

School children who form an important and large target group, must be screened for early detection of eye diseases to prevent blindness.

Approximately 285 million people worldwide live with serious vision impairment, of these, 39 million people are blind and 246 million have moderate to severe visual impairment. It is predicted that without extra interventions, these numbers will rise to 75 million blind and 200 million visually impaired by the year 2020 (World Health Organization, 2010).

The estimated overall global prevalence of childhood blindness ranges from 0.4 to 1.2 per 1000; in India prevalence of childhood blindness averages around 1.0 per 1000. The global incidence of childhood blindness is 1,500,000 children, in India it is estimated 100,000 new cases of childhood

blindness occur in every year.

The main causes of blindness are cataract (47.8%), glaucoma (12.3%) and age related muscular degeneration (8.7%) other causes include corneal opacity (5.1%), diabetic retinopathy (4.8 %), Childhood blindness (3.9 %), and trachoma (3.6 %).

Teachers have an important role to play in child protection. Their role can only be carried out, if teachers are equipped with the relevant knowledge. By this study the investigator aims to make awareness among primary school teachers on importance of maintaining a good eye health in primary school children.

STATEMENT OF THE PROBLEM

Effect of Structured Teaching Programme on Eye Health among Primary School Teachers in Government Primary Schools of Alappuzha Dist.

OBJECTIVES OF THE STUDY

- Assess the knowledge on eye health among primary school teachers using structured questionnaire
- Determine the effect of structured teaching programme on eye health among primary school teachers.
- Find out the association between knowledge regarding eye health among primary school teachers with selected demographic variables.

OPERATIONAL DEFINITIONS

Effect : Effect in this study refers to the extent to which the structured teaching programme makes a change in the knowledge of primary school teachers regarding eye health as measured by a structured questionnaire.

Structured Teaching Programme : Structured teaching programme refers to the systematically planned teaching methods using instructional aides to provide information on eye health among primary school teachers.

Primary School Teacher : Primary school teacher refers to the qualified person's who provide basic education to the children in Government lower primary schools appointed by the Government.

Eye health : Eye health refers to anatomical and physiological wellbeing of the eye and maintains a good eye

care in primary school children.

HYPOTHESES

H₁: There is a significant difference in the knowledge score of primary school teachers regarding eye health before and after the structured teaching programme.

H₂: There is a significant association of knowledge of primary school teachers regarding eye health with their selected demographic variables.

CONCEPTUAL FRAMEWORK

The conceptual framework of the present study is based on General Systems Theory with input, process, output and feedback. This model was first introduced by Ludwig Von Bertalanffy in 1968²².

METHODOLOGY

Research Approach : Quantitative approach was adopted.

RESEARCH DESIGN

The research design used in this study was Quazi experimental, one group pretest – post test design

Group	Pretest	Intervention	posttest
1	O ₁	X	O ₂

- Group : Government primary school teachers
- O₁ : Pretest
- X : Administration of structured teaching programme on eye health
- O₂ : Post test

Variables under Study

Independent Variable :The independent variable was the structured teaching programme on eye health by the investigator.

Dependent Variable : Knowledge of teachers regarding eye health was the dependent variable.

Extraneous Variables : The Extraneous variables were age , sex, religion, education, monthly income, type of family, residence and teaching experience of primary school teacher

Setting of the Study

The present study is conducted in the Government Lower primary schools under Ambalappuzha Educational Subdistrict of Alappuzha District.

Population

The population comprised of all primary school teachers in Government lower primary schools under Alappuzha District.

Sample and Sampling technique

The sample consist of 82 primary school teachers from 8 selected Government lower primary schools under Ambalappuzha Educational Subdistrict of Alappuzha Multistage cluster sampling means random selection of sampling units consisting of population elements. Then from each selected sampling unit, a sample of population elements is drawn by either simple random selection or stratified random sampling.

Alappuzha district have 11 educational subdistrict, they are Cherthala, Mavelikara, Alappuzha, Kuttanadu, Haripad, Chengannur, Kayamkulam, Ambalappuzha, Thuravoor, Mancompu, Thalavady, Veliyanadu. Where each has approximately 10 to 12 primary schools. From the 11 educational sub district in Alappuzha Ambalappuzha educational sub district was selected by random sampling using lottery method. Ambalappuzha educational subdistrict had 17 Government primary schools from that 8 Government

lower primary schools were selected by random sampling using lottery method. All the primary school teachers from the 8 Government lower primary schools of Ambalappuzha educational sub district were included as sample.

Tools for the present study were

- Tool I : Questionnaire to assess demographic data of primary school teachers
- Tool II: Structured questionnaire to assess the knowledge regarding eye health.

Inclusion Criteria

- Teachers who are working in Government lower primary schools
- Teachers willing to participate in the study.
- Teachers present during the period of data collection.

Exclusion Criteria

Teachers who have not attended the structured teaching programme

Data Collection Process

The investigator obtained permission from the institutional ethical committee, KVM College of Nursing Cherthala and from the Assistant Educational Officer of Ambalappuzha educational sub district. The data collection period was during December 2012 and January 2013

Phase I : 84 primary school teachers were selected from the 8 primary schools of Ambalappuzha suddistrict. The investigator established rapport with the teachers and obtained an informed written consent after explaining the importance and purpose of the study. Pre test questionnaire was given to each one and they were instructed to read and answer the questions.

Phase II: The investigator conducted a teaching section on eye health among primary school teachers using a structured teaching plan. The average time taken was 40 minutes for each session.

In Phase III : Post test was conducted after two weeks using the same structured questionnaire. The average time taken for the post test was 20 minutes. Data collection process was concluded by thanking each participant. Out of 84 samples 2 samples were excluded as they were absent during the post test section.

Comparison between levels of knowledge before and after administration of structured teaching programme on eye health

Level of Knowledge	Pre-test		Post-test	
	Freq.	%	Freq.	%
Good	9	11.0	77	93.9
Average	70	85.4	5	6.1
Poor	3	3.7	0	0.0
Total	82	100.0	82	100.0

It shows that comparison of pretest and post test knowledge score of primary school teachers with a structured questionnaire majority of (85.4%) primary school teachers had average knowledge,(11.0%) had good knowledge and (3.7%) had poor knowledge in the pretest. After the administration of structured teaching programme a majority of the (93.9%) had good knowledge regarding eye health and (6.1%) had average knowledge. The above data clearly shows that there is a definite increase in knowledge score after the administration of structured teaching programme.

Effect of structured teaching programme on knowledge regarding eye health among primary school teachers. Mean, Standard deviation and t value of pre test and post

test knowledge scores regarding eye health among primary school teachers.

Test	Mean	S.D.	N	Mean Improvement in Knowledge	S.D.	T	Df
Pre-test	12.65	1.76	82	9.44	1.67	51.15	81
Post-test	22.09	1.85					

** Significant at 0.01 level

The Mean column in the paired-samples t test table displays the average difference between the pre and post tests of the study. The Standard Deviation column displays the standard deviation of the average difference score.

Since the significance (p-value) is less than 0.01, we can conclude that the average improvement of the knowledge, 9.44 is significant. So there is a highly significant effect of Structured Teaching Programme of knowledge on Eye Health among Primary School Teachers.

Comparison of ttc and bed teachers knowledge regarding eye health. Mean, Standard deviation and t value of TTC and BEd regarding eye health among primary school teachers

Education	N	Mean	Standard deviation	T	df	P value
TTC	41	13.22	1.475	3.103	80	P< 0.01
Bed	41	12.07	1.849			

The mean knowledge in pretest of primary school teachers having the qualification of TTC has 13.22 and the mean knowledge in pretest of primary school teachers having the qualification of BEd has 12.07. So the primary school teachers with qualification of TTC had more knowledge than BEd on knowledge regarding eye health.

DISCUSSION

The present study focus on the effect of structured teaching programme on eye health among primary school teachers in Government primary schools of Alappuzha district. From the study it was revealed that in the pre test scores of primary school teachers regarding eye health, it was found that 11% had good knowledge, 85.4 % had average knowledge and 3.7% had poor knowledge. From the post test scores of primary school teachers, it was found that most of them 93.9% had good knowledge and 6.1 % had average knowledge. The effect of structured teaching programme was evaluated using paired 't' test and level of significance was less than 0.05. Thus it can be concluded that increase in knowledge scores was because of the effectiveness of structured teaching programme on eye health. Those findings are consistent with a quantitative study conducted by Rohit Thummalapalli about effect of education sections of a structured school eye screening programme on Indian schoolteachers. The study revealed that comparison of pre test and post test knowledge scores highlighted the higher in the post test than the pre test. so there is a significant effect in the education section.

Findings of the Study

The present study was done to assess the effect structured teaching programme on eye health. The findings of the present study revealed that

- In pretest majority of primary school teachers (85.4%) had average knowledge, 11% had good knowledge and 3.7 % had poor knowledge regarding eye health.
- In post test majority of primary school teachers (93.9%) had good knowledge and 6.1% had average knowledge regarding eye health.
- The significance (p-value) is less than 0.01, we can conclude that the average improvement of the knowledge, 9.44 is significant. So there is a highly significant effect of

structured teaching programme on eye health among primary school teachers.

- There was no association between level of knowledge regarding eye health with their selected demographic variables.
- TTC teachers had more knowledge than BEd teachers on knowledge regarding eye health.

Nursing Implications

The present study emphasizes the effectiveness of structured teaching programme on eye health among primary school teachers. The findings of the study may provide useful information to health care providers, teachers to control the eye problems in school children. This study has a number of implications in nursing practice, nursing education, nursing administration and nursing research.

- In Nursing Practice nurses play an important role in the preventive aspect rather than curative aspect. The school nurses can utilize the teaching programme to impart knowledge on eye health. The community health nurses working among primary school teachers can also utilize the teaching programme in motivating them against eye problems in school children. Continuing education programme can be organized for the purpose of prevention and also need to be planned and implemented for the nurses working in hospitals and schools.
- In Nursing Education the teaching programme can be utilized by the student nurses to organize awareness regarding eye health. .
- In Nursing Administration the nurse administrator has to plan and organize a training programme for the nursing personnel on preventive and control measures on eye problems in school children, organize educational programmes in the schools and community settings. In collaboration with the department of education, nursing administrators should take initiatives in organizing in service and continuing education programmes for the nurses regarding the importance of eye health in primary school children.
- More research can be carried out on the primary school teachers regarding eye health in order to improve the health status of school children. Research can also be conducted to assess the learning needs of the school teachers and the general public in order to increase the awareness regarding eye health. This study reveals that there is a dearth of knowledge among primary school teachers which calls for further research

Limitations

1. The findings of the study cannot be generalised as the sample size is 82.
2. The structured knowledge questionnaire used for data collection restricts the amount of information that can be obtained from the respondents.

Recommendations

1. The study can be replicated with a large sample size.
2. A similar study could be conducted with the control group.
3. A follow-up study can be conducted to determine the effect of teaching in terms of gain in knowledge of eye health.
4. A study can be done to assess the prevalence of eye problems among primary school children in rural area.

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