



A STUDY TO EVALUATE THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE OF MOTHERS REGARDING SELECTED OPHTHALMIC EMERGENCIES (FIRST AID MEASURES) IN CHILDREN (5-13YEARS) AT SELECTED RURAL COMMUNITY, KOLAR, KARNATAKA.

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ABSTRACT

BACKGROUND: knowledge of mothers regarding selected eye problems can prevent eye injuries. Therefore, improving knowledge regarding ophthalmic emergencies on selected eye problems helps the mothers how to make first aid on eye injuries.

AIMS: The aim of the study was to assess the knowledge level of mothers of children(5-13yrs) regarding ophthalmic emergencies on selected eye problems and improve knowledge of mothers regarding selected eye problems.

METHODOLOGY: Present study was a evaluative research approach Quasi experimental(one group pre-test post-test) study conducted after obtaining the formal permission from the of Medical Superintendent of ETCM Hospital Kolar. between 07-01-2013 to 31-01-2013 among 60 mothers of childrens(5-13yrs); the subject was selected by Simple random sampling technique. The investigator given self introduction explained the purpose of the study, subject's willingness to participate in the study was ascertained. Data were analyzed using descriptive and inferential statistics.

Findings: The mean percentage of overall mean score of the subjects in pre test was 56.66%, with standard deviation 2.07. In posttest, the mean percentage of the Overall means score of the subjects in post test was 77.22%, with standard deviation 2.04. The obtained 't' value 18.94 > 0.05 there was a significant difference in pre and post level knowledge on ophthalmic emergencies on selected eye problems in children among mothers was accepted. Findings revealed that obtained χ^2 value is greater than the table value at 0.05 levels of significance. Therefore there is significant association between mother's occupation and Family income with the pre test knowledge cores of participants.

It is also evident that the obtained χ^2 value is less than the table value at 0.05 levels of significance. Therefore there is no significant association between selected demographic variables such as age in years, Education of mother, Number of children, Religion, Family type and Source of information with the pre test knowledge scores of participant

CONCLUSION: structured teaching programme regarding first aid measures on selected eye problems to mothers of childrens (5-13yrs) helps in performing first aid measures on eye injuries. Mothers may benefit from intervention related to first aid measures on selected eye problems.

KEYWORDS

knowledge, Ophthalmic Emergencies ,eye problems, first aid measures, mothers of children(5-13yrs).

INTRODUCTION:**"Sarvendriyana Nayanam Pradanam"**

A child is a precious gift who has lots of potential within, who can be best resource of the nation if raised and molded in a good manner. The health of a growing child is always a matter of great concern to the parents. The physical health of a child is important because it is associated with the mental and social development. Health care aspects of children have been neglected over years when compared to adults. Infants first learn how to interact with others by watching their parents faces. They continue to depend on sensory input for stimulation throughout life. Good health is an important part of good vision. The healthier the child the better chance to avoid risk to his eyes.¹

Good eye sight is every Childs birth right; Eye injuries occur frequently and can happen anywhere. In children eye injuries can occur at home, school or play ground and also during the festivals. Retinal burns can occur while viewing the solar eclipse without protection. They should always be aware of the best ways to protect their eye sight.² The trend of increased TV and computer exposure has led to an increase in vision-related problems in children. Very often parents don't realize that their children are suffering from vision related problems.²

Vision problems affect 1 in 20 per schooler and 1 in 4 school-age children. Since vision Problems begin at any age, it is very important that children receive proper eye care. Untreated eye problems can worsen & lead to other serious problems as well as affect learning ability, personality and adjustment in school. Without primary eye care only those individuals who present to secondary and tertiary facilities will be diagnosed and treated and little will be achieved in terms of prevention.²

Vision is something, every individual is sensitive about, and we cannot imagine life without sight. In other Worlds it can be said that, Quality of life depends and directly influences, the quality of sight.³ The eyes are wonderful sensory organs. They help people to learn about the world in which they live. The eyes have many parts all of which must function in order to see properly. Most eye problem in children can be corrected if they are detected and treated early. Appropriate eye care is essential for maintaining good vision, some problem, if left untreated even for a short period can result in permanent vision loss.³

Sight is precious, considered by many to be the most essential of the five senses. Children's eyesight is especially important, because good vision is related to learning. Regular eye examinations are needed to maintain proper eye health, since some serious eye disorders produce no early warning symptoms. Although prevention is the best defense, eye problems or injuries still occur suddenly and unexpectedly. When they do, recognizing their signs and symptoms and knowing what to do is vital to preserving sight.⁴

The global initiative was launched by the WHO in Feb 1999. The objective is to make the member countries capable of taking sustainable initiatives for prevention of avoidable blindness by recognizing "Right for Vision". The concept centers round the right to have vision. The target is to be achieved by the year 2020.¹² since mothers are the primary care provider for their children at home; it is mother's knowledge that greatly affects the care of the children. Hence the investigator felt the need to educate mothers regarding first aid measures on common eye problems.⁵

MATERIAL AND METHODS**Study Design and Participants**

Present study was a evaluative research approach Quasi experimental(one group pre-test post-test) study conducted after obtaining the formal permission from the of Medical Superintendent of ETCM Hospital Kolar. between 07-01-2013 to 31-01-2013 among 60 mothers of childrens(5-13yrs); the subject was selected by Simple random sampling technique. The investigator given self introduction explained the purpose of the study, subject's willingness to participate in the study was ascertained.

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Instruments

Structured Interview schedule on first aid measures on selected ophthalmic problem in children. The first draft of the tool consisted of 36 items, based on pre-test, i.e. item analysis (Discriminative index 0.3% and Difficulty index 75%) some of the items are modified

(2,3,25,26,30, 31) in a simplified way and thus the second draft of the tool consisted of 32 items. Structured Interview schedule consist of 2 parts i.e. Part I and part II

Part I: Consists of items on demographic variables like, age, education status, Family income, occupation, Number of children, religion, Type of family, history on Eye injuries and Sources of information on ophthalmic problems.

Part II: Consists of 36 knowledge items related to first aid measures on selected ophthalmic problems which include

- General concept of ophthalmic problems
- Conjunctivitis
- Blepharitis
- Trachoma
- Eye injuries
- Foreign body in eye

Scoring key is prepared for Part-I by coding the demographic variables. For Part-II score '1' and '0' are awarded to correct and wrong response. Thus the maximum score is 36.To interpret the level of knowledge the scores subjected as follows: Inadequate <50%, Moderate 50- 75%, Adequate > 75-85%

Socio-demographic Variables and Clinical characteristics

Socio-demographic variables included Age, occupation, Income ,Number of Children, Religion, Family type, History of eye problem in family, Sources of information .

Data Collection Procedures

Prior permissions were taken from the Medical superintendent ETCM Hospital Kolar. The main study was conducted from 07-01-2013 to 31-01-2013 among 60 subjects; the subject was selected by Simple random sampling technique. The investigator given self introduction explained the purpose of the study, subject's willingness to participate in the study was ascertained. The subjects are assured anonymity and confidentiality of the information provided by them and written informed consent was obtained. The pre-test was conducted on 07-01-2013 by administering the Structured Interview schedule followed by PTP on ophthalmic emergencies on selected eye problems.

On the 7th day post test was conducted by using the same tool, each subject took 30 minutes to answer the Interview schedule.

DATAANALYSIS

Descriptive and Inferential statistics such as frequencies and percentages were used for categorical variables. Pre and post test knowledge scores of the participants were planned to be summarized in mean, standard deviation and mean percentage. The paired't' value was planned to test hypothesis for the purpose of the effectiveness of teaching programme.The chi square value were planned to be computed in order to test hypothesis to find out the relationship between pre test knowledge level and demographic variables.

RESULTS

A: Sample characteristics

majority of subjects 48.3% belong to the age group of 26-35 years, 40% belong to 15 – 25 years and only 3.3% were in the age group of 46-55 years. 28% of subjects were Illiterates and completed PUC respectively 18.3 % completed primary education, 8.3% of subjects have completed Diploma and only 6.7% of them were completed secondary education. 40% of mothers were house wives, 28.3% were self employed, 18.3% were private employee, 10% were daily wagger and only 3.3% were government employee. 40% of subjects Family income is less than 4000, 26.7% subjects income was 6000 to 10000, 23.3% family income was more than 10,000 and only 10% had Rs. 4000-6000. 53.3% of subjects had only one child and 38.3 % had two children and only 3.3 had four and children. 91.7% of subjects belong to Hindu religion and only 8.3% belongs to Muslim religion. 63.3% of subjects belong to Nuclear family and33.3% belong to joint family and only 3.3% belongs to extended family. 100% of subjects had no history of ophthalmic problems in family. 41.7% of subjects had information from TV/ Radio and 28.3% had information from family and relatives and 20% had information from neighbors and only 10% had information from friends .83.3% of participants had moderate knowledge and only 16.7% had inadequate knowledge in pre test and in post test 50% had adequate knowledge and moderate knowledge respectively.

B: Assessment of Mean, Mean Percentage And Standard Deviation For The Pre Test Knowledge Of Mothers.

Table shows that the maximum mean percentage obtained by the subjects is found in the aspect of general concept (70.5%) followed by Trachoma (65%) Eye injuries (59.5%) Conjunctivitis (58.83%), Blepharitis (46.14%), and least mean score (37.6%) found in the aspect of foreign body. The overall knowledge scores of respondents were found to be 56.66% with standard deviation 2.07 in pre test.

Table 1: Levels of Mean, Mean Percentage And Standard Deviation For The Pre Test Knowledge Of Mothers.

Sl. No.	Knowledge aspects	No. of Items	Max Score	Mean	Mean %	Median	SD
1	General concept of Eye problem	6	6	4.23	70.5	4	0.72
2	Conjunctivitis	6	6	3.53	58.83	4	1.14
3	Blepharitis	7	7	3.23	46.14	3	0.65
4	Trachoma	6	6	3.9	65	4	0.84
5	Eye injuries	6	6	3.57	59.5	4	1
6	Foreign body in Eyes	5	5	1.88	37.6	2	0.99
Overall		36	36	20.4	56.66	21	2.073

C: Assessment of Mean, Mean Percentage And Standard Deviation For The Post Test Knowledge Of Mothers

table shows that the maximum mean percentage obtained by the subjects is found in the aspect of trachoma (82.16%) followed by Eye injuries and conjunctivitis (81.66%) General concept of eye problems (74.16.5%) foreign body in eyes (71.6%) and least mean score (71.42%) found in the aspect of Blepharitis. The overall knowledge scores of respondents were found to be 77.22% with standard deviation 2.04 in post test.

Table 2: Levels of Mean, Mean Percentage And Standard Deviation For The Post Test Knowledge Of Mothers.

Sl. No.	Knowledge aspects	No. of Items	Max Score	Mean	Mean %	Med	SD
1	General concept of Eye problem	6	6	4.45	74.16	5	0.77
2	Conjunctivitis	6	6	4.9	81.66	5	0.88
3	Blepharitis	7	7	5	71.42	5	0.8
4	Trachoma	6	6	4.93	82.16	5	0.63
5	Eye injuries	6	6	4.9	81.66	5	0.82
6	Foreign body in Eyes	5	5	3.58	71.6	4	0.87
Overall		36	36	27.8	77.22	27.5	2.04

D: Comparison of pretest and post test knowledge scores of mothers regarding first aid measures on selected of ophthalmic problems in children

table it is evident that the obtained "t" value 18.94 is greater than the table value at 0.01 level of significance. Therefore, "t" value is found to be significant. It means there is gain in knowledge level of mothers. This supports that Planned teaching programme on First aid measures of selected ophthalmic problems in children is effective in increasing the knowledge level of mothers.(Table 3).

Table 3: Comparison of pretest and post test knowledge scores of mothers regarding first aid measures on selected of ophthalmic problems in children

Sl. No.	Knowledge aspects	Pre test		Post test		Mean difference	t Value	Df	Inference
		Mean	S D	Mean	S D				
1	General concept of Eye problem	4.23	0.72	4.45	0.77	0.217	1.56	59	NS
2	Conjunctivitis	3.53	1.14	4.9	0.88	1.367	7.75	59	S
3	Blepharitis	3.23	0.65	5	0.8	1.767	13.06	59	NS
4	Trachoma	3.9	0.84	4.93	0.63	1.033	8.88	59	S
5	Eye injuries	3.57	1	4.9	0.82	1.333	7.73	59	S
6	Foreign body in Eyes	1.88	0.99	3.58	0.87	1.700	10.18	59	S
Overall		20.4	2.073	27.8	2.04	7.417	18.94	59	S

E: Association of pre test knowledge scores of mothers with selected demographic variables.

Table Shows that the obtained χ^2 value is greater than the table value at 0.05 levels of significance. Therefore there is significant association between mother's occupation and Family income with the pre test knowledge cores of participants. The above table shows that the obtained χ^2 value is less than the table value at 0.05 levels of significance. Therefore there is no significant association between selected demographic variables such as age in years, Education of mother, Number of children, Religion, Family type and Source of information with the pre test knowledge scores of participants. (Table 4).

Table 4: Association of pre test knowledge scores of mothers with selected demographic variables

Variables	Chi square	Df	P value (0.05)	Inference
1. Age in years	4.503	3	7.82	NS
2. Education of mother	8.034	5	11.49	NS
3. Occupation of mother	14.460	4	9.49	S
4. Family income	12.137	3	7.82	S
5. Number of children	7.584	3	7.82	NS
6. Religion	7.133	1	3.84	NS
7. Family type	4.112	2	5.99	NS
8. History of ophthalmic problem in family	-	-	-	-
9. Source of information	5.110	3	7.82	NS

*P<0.05

DISCUSSION

The main objective of the present study was to Evaluate the effectiveness of planned teaching programme on knowledge of mothers regarding ophthalmic emergencies on selected eye problems in childrens (5-13years). A quasi-experimental design and evaluative approach was used in the study. The data was collected from 60 samples through Simple random sampling technique. The data collected was subjected to analysis using descriptive statistics in terms of frequencies, percentage and inferential statistics like 't' test and chi square association.

Findings revealed that, overall knowledge scores of respondent were 56.66 with standard deviation 2.07 in pre test and overall knowledge scores of respondents were 77.22 with standard deviation 2.04 in post test. Findings revealed that, overall mean knowledge scores of respondent were 20.4 in pre test and overall knowledge scores of respondents were 27.8 in post test.the improvement mean score for overall knowledge was 7.4 with 't' value of 18.94 and found significant at the level of p<0.01

A significant association was found between mother's occupation and Family income with the pre test knowledge cores of participants. It is evident that the obtained χ^2 value is less than the table value at 0.05 levels of significance. Therefore there is no significant association between selected demographic variables such as age in years, Education of mother, Number of children, Religion, Family type and Source of information with the pre test knowledge scores of participants.

Recommendations

Interventions should be aimed at improving the knowledge and prevention of selected eye injuries of mothers at community as it has been shown that higher injuries in community level. Community-based workers and health professionals should provide education to mothers regarding first aid measures on selected eye problems so that their knowledge could be improved.

CONCLUSIONS

The study is helpful to the mothers to acquire knowledge and awareness regarding first aid measures on selected ophthalmic problems in children (5-13years) at selected rural community Kolar. Its evidenced that developed Planned teaching programme was effective in improving the knowledge of mothers regarding first aid measures on eye problems in children..Future researches can investigate the effects of awareness programme on prevention of childhood accidents to reduce the mortality and morbidity of childrens due to accidents.

Ethical Clearance

Ethical clearance was obtained from the Ellen Thoburn Cowen Memorial college of Nursing,Kolar

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Conflict of Interest: Nil

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