A Study to Assess the Effectiveness of Planned Teaching Programme on Knowledge Regarding Cataract Among the Old Age People in Selected Area in Bangalore

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ABSTRACT

This present study entitled "A study to assess the effectiveness of planned teaching programme on knowledge regarding cataract among the old age people in selected area in Bangalore". The objectives of the study are to assess the knowledge level of the old age people 60 - 75 years old in terms of pre-test score, to prepare and administer planned teaching programme on problems of cataract, to evaluate the effectiveness of planned teaching programme by comparing the pretest post-test knowledge, to find out the association between knowledge and the demographic variables such as age, gender, education status, lifestyle etc. Methods: A pre-experimental one group pretest posttest was adopted. In this study, the sample consists of 50 old age people from selected area in Bangalore who fulfilled the inclusion criteria for the study. The non-probability purposive sampling technique was used for this study. A structured socio demographic data, and knowledge questionnaire on cataract were selected on the basis of the objectives of the study. Results: In pretest maximum 10(20%) samples were having adequate knowledge, but it became 32(64%) in posttest. So, the planned teaching programme was effective. The overall calculated 't' value 6.590 was higher than the tabulated value at 0.05 level of significance with degree of freedom 49. So, the H1 hypothesis is accepted. The researcher concluded the planned teaching programme was effective. There is a significant association between pretest knowledge level and the socio demographic variables such as educational status and source of information as the chi-square value is higher than the table value at 0.05 level of significance. Planned teaching program was effective in improving knowledge regarding cataract among the old age people.

KEYWORDS: *Cataract, Old age, planned teaching programme.*

INTRODUCTION

In the 116 nations included by the blindness data bank in the WHO program for the prevention of blindness, cataract is the most common cause of blindness. In 43.6% of the nation, cataracts were shown to be the leading cause of blindness. A study was carried out to evaluate the efficacy of a planned education program on cataract disease interns' awareness among senior citizens in a particular area. In order to increase the knowledge of thirty samples, the investigator administered a specified instruction program. The mean post-test knowledge score was 16.7 greater than the mean pretest knowledge score of 11.2, according to the results. It was statistically supported and shown the effectiveness of the intended cataract education campaign in terms of knowledge among senior citizens in the chosen area.[1]

Need for the study

Nearly half (47%) of all blindness worldwide is caused by cataracts. According to reports, 50–80% of bilateral blindness in India is caused by cataracts. Cataracts are very common in underdeveloped nations. It is mostly caused by people's lack of knowledge about cataracts. Therefore, health education is necessary to raise people's awareness and knowledge of blindness. The study used an evaluative methodology. Pre-experimental study design (one group pre-test post-test design) was employed. The

Kolar district was the site of the study. The study's findings increased our understanding of older adults' awareness of cataracts.[2]

The knowledge of middle-aged persons about cataract prevention was evaluated using a pre-experimental one-group pretest-post-test paradigm. Convenience sampling was used to choose sixty samples. According to pre-test results, 78.4% of participants had an average knowledge score, 8.3% had an excellent knowledge score, and another 13.3% had low understanding about cataract prevention. Compared to the mean pre-test score of 10.75, the mean post-test knowledge score of 17.00 was greater. At the 0.05 level of significance, the computed t-value (27.62) was higher than the table value (2.00). The results of the study showed that the educational campaign was successful in raising middle-aged persons' awareness of cataract prevention.[3]

A study was carried out in a particular urban community in Mangalore to assess the efficacy of a planned education campaign on cataract prevention. The Jeppu urban community region of Mangalore served as the study's site. The paired "t" test was used to statistically test the significance of the difference between the pre-test and post-test, and the results showed that it was very highly significant (t=40.10, p<0.05). The pre-test knowledge score revealed a correlation between the pre-test knowledge and prior sources of information about cataract prevention; however, there was no correlation between the pre-test knowledge and age, gender, occupation, educational status, or family history of cataract.[4]

A study carried out in Bidar showed that the study's main conclusions According to the post-test results, the majority of caregivers—40, or 66.67%—had an average level of knowledge regarding the pre- and post-operative care of clients following cataract surgery, while 20, or 33.33% of caregivers

After a structured instruction program was administered, all caregivers had a reasonable level of expertise and none had insufficient knowledge. The results of this study showed that after receiving a systematic instruction program, the caregivers' understanding of pre- and post-operative care increased.[5]

The purpose of the study was to evaluate the efficacy of a structured teaching program on cataract knowledge among patients undergoing cataract surgery. A one-group pretest-posttest pre-experimental design was used. The 100 samples were chosen using non-probability convenience sampling. The Jayabharat Hospital in Nellore was the source of the participation. According to the t test, the results show that the structured teaching program was successful in raising the subjects' cataract-related knowledge. While there was no significant difference between the two groups' pre-test means, the experimental group's post-test mean (23.8 ± 2.4) was substantially greater than the control group's (mean ± SD 11.2 ± 3.4).[6]

Problem statement
"A study to assess the effectiveness of planned teaching programme on knowledge regarding cataract among the old age people in selected area in Bangalore"

Objectives
1. To assess the knowledge level of the old age people 60 - 75 years old in terms of pre-test score.
2. To prepare and administer planned teaching programme on problems of cataract among the old age people in Bangalore.
3. To evaluate the effectiveness of planned teaching programme by comparing the pretest post-test knowledge.
4. To find out the association between knowledge and the demographic variables such as age, gender, education status, lifestyle etc.

Hypothesis
H1: The mean post-test will be significantly higher than the mean pre-test score regarding the problems of cataract among the old age people (60 to 75 yrs.) in selected area in Bangalore.

H2: There will be a significant association between the knowledge on problem of cataract and selected demographic variables such as age, gender, educational status etc.

Assumptions
1. Cataract old age people may have less knowledge on lifestyle modification of cataract.
2. The post-test means score knowledge is higher than the pre-test knowledge after administering structured teaching programme.
3. Significant association between the mean pre-test & post-test knowledge scores regarding cataract with their secured demographic variable.

Operational Definitions
Assess: In this study it refere that to evaluate or estimate the nature, or effectiveness of planned teaching programme on knowledge regarding cataract among the old age people in selected area in Bangalore.

Effectiveness: In this study it refere that the degree to which planned teaching programme is successful in producing knowledge regarding cataract among the old age people in selected area in Bangalore.

Planned teaching programme: In this study it refere that the structued and organized way of teaching programme provide to increase the knowledge regarding cataract among the old age people in selected area in Bangalore.

Knowledge: In this study it refere that awareness regarding cataract among the old age people in selected area in Bangalore. It inludes that the basic information, causes, clinical manifestation, diagnostic measures, treatment, and post operative care of cataract.

Cataract: In this study it refere that a medical condition in which the lens of the eye becomes progressively opaque, resulting in blurred vision among old age people in selected area in Bangalore.

Old age people: In this study it refere that the later part of normal life in the age between 60 - 75 years old, who are all residing in the selected area at Bangalore.

Material Method:
Research approach: Pre experimental one group pre-test and post-test design approach.

Dependent variable
In this study dependent variables are knowledge on cataract among old age people.

Independent variable
In this study the planned teaching programme is the independent variable.

Demographic variables
In this study it refers to age in years, gender, educational status, occupation, monthly income of family (in Rs.), source of information.

Setting of the Study
The setting is the location where a study is conducted. The study was conducted in selected area in Bangalore.

Population
The population referred to us is the target population, which represents the entire group or all the elements like individuals or objects that meet certain criteria for inclusion in the study. In this study the population are old age people in selected area in Bangalore.

Sample
The sample consists of 50 old age people in selected area in Bangalore who fulfilled the inclusion criteria for the study.

Sampling Technique
The non-probability purposive sampling technique, a type of non-probability sampling approach was found to be appropriate for the present study.

Sampling Criteria
Inclusion Criteria
The study includes old age people who are:
1. Old age people who having cataract in selected area in Bangalore.
2. Old age people with cataract who are willing to participate in this study.
3. Old age people with cataract who are available during study period.

Exclusion criteria
The study excludes old age people who are:
1. Older people who's having cataract not feeling well at the time of data collection.

Selection and Development of Tool
Description of the Tool
Section – A: Socio- demographic data consist of '6' items such as age in years, gender, educational status, occupation, monthly income of family (in Rs.), source of information.

Section – B: The knowledge questionnaire on cataract consists of 30 items which includes introduction basic information, causes, clinical manifestation, diagnostic measures, treatment, and post operative care.

Content validity
Validity of the tool was established in consultation with guide and experts from the field of Medical Surgical Nursing. The recommendations and suggestions were considered, and tool was reframed accordingly.

Reliability
The reliability of the tool was established by using test re-test method for knowledge questionnaire on cataract. Using the obtained values coefficient correlation was done with the help of Karl Pearson's formula. The reliability score obtained was, r= "0.88". Which showed knowledge questionnaire on cataract were highly reliable. Hence the tool was considered as statistically reliable for main study.

Ethical consideration
Ethical consideration was done by taking prior permission from the higher authority of selected area in Bangalore and from the participants before conducting the pilot study. No ethical issues raised during the study.

Description of tool
Section-A:
Socio – demographic data comprises of age, educational qualification, type of family, duration of experience, religion.

Section-B:
Self-structured questionnaire consists of 30 questions about various methods of family planning. The tool

was validated by the experts in the nursing field. The final draft of the questionnaire was prepared after including the suggestions from the experts.

Procedure for data collection:
A formal written permission was obtained from the higher authority of selected area in Bangalore. The data collected from 17-01-2020 to 22-02-2020 from old age people who fulfilled the inclusion criteria. The socio demographic data, and the knowledge questionnaire on cataract were administered to collect background information. The data collection took 30 – 40 minutes. Before conducting the study, consent was taken from samples by explaining the purpose of the study.

Results and interpretation

Table 1: Comparison of pretest and post-test knowledge scores

n=50

Knowledge levels	Pretest		Posttest	
	Frequency	Percentage	Frequency	Percentage
Inadequate	24	48	5	10
Moderate	16	32	13	26
Adequate	10	20	32	64

In pretest, Maximum 24(48%) samples were having inadequate knowledge levels, 16(32%) samples were having moderate knowledge levels and the remaining 10(20%) samples were having adequate knowledge levels. Whereas in posttest, Maximum 32(64%) samples were having adequate knowledge levels, 13(26%) samples were having moderate knowledge levels, and 5(10%) samples were having inadequate knowledge levels. In pretest maximum 10(20%) samples were having adequate knowledge, but it became 32(64%) in posttest. So, the planned teaching programme was effective.

Table 2: Overall Assess significant difference between pretest and post-test knowledge scores

S. NO.	Test	Samples	Mean	SD	Std. Error Mean	Paired t test
1	Pretest	50	16.20	6.101	.863	5.928;
2	Posttest	50	22.20	5.639	.797	df=49; p<0.05; S

S=Significant; NS= Not Significant

The above Table 2 depicts the overall calculated 't' value 5.928 was higher than the tabulated value at 0.05 level of significance with degree of freedom 49. So, the H1 hypothesis is accepted. The researcher concluded the planned teaching programme was effective.

There is a significant association between pretest knowledge level and the socio demographic variables such as educational status and source of information as the chi- square value is higher than the table value at 0.05 level of significance. Therefore, H2 hypothesis was accepted.

Conclusion
Since education directly affects early identification, treatment uptake (particularly surgery), and favourable recovery rates, it is essential for controlling cataracts in older persons. Misconceptions and ignorance are major obstacles to prompt and efficient care, frequently resulting in needless vision loss.

Recommendations
1. The study can be conducted in the different set ups like government and private hospitals and ophthalmic research centre hospitals.
2. In experimental study can be carried out with different teaching methods to know the effectiveness of each teaching method on cataract awareness among the clients with cataracts.
3. A comparative study can be conducted to find out the differences and similarities between rural and urban clients with cataract.
4. An experimental study can be conducted with control group for comparison.
5. The teaching and demonstration materials can be videotaped and can be shown to the clients with cataract in outpatient department and ophthalmic wards of the hospitals.

Implications
Nursing Administration:
The nurse administrator should organize the in-service educational training programmes to update the nursing personnel knowledge about cataract and National Programme. The nurse administrator motivates the health care professional to organize the awareness campaigns to the elderly clients by providing adequate information on cataract for the prevention of cataract blindness by initiating them to undergo surgery.

Nursing Education:
Nursing curriculum should focus on impact of cataract blindness on society as well as national

health strategies. The nursing curriculum should consist of knowledge related to teaching strategies and various modalities. So that nursing students can use different teaching methods to impart the appropriate knowledge on cataract to the focus group. The students learning experience should provide an opportunity to conduct health education campaigns and supervised nursing practices about specific topics.

Nursing Practice:

The nurse can create a better awareness of cataract among the elderly clients by conducting planned health programme with the use of variety audio visual aids either in the hospital settings i.e. both inpatient and outpatient department as well as in the community field. The teaching strategies should be simple, clear cut, understandable and able to follow the post operative practices and the nurse should educate about the utilization of local health services and seek voluntary agencies assistance in organizing mobile camps and informing the clients through propaganda and mass media about the information related to organization of mobile camps and advantages, beneficial effects related to utilization of advanced services.

Nursing research

The findings of the study show that majority of the clients with cataract have lack of knowledge about cataract and its management. Based on the findings future researchers or student nurses can conduct further studies on awareness of cataract in a large sample. The study will motivate the beginning researchers to conduct same study with different variables and large scale.

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