



STUDY TO EVALUATE THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE REGARDING CATARACT AMONG OLD AGE PEOPLE IN SELECTED AREA IN KARAD TALUKA

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ABSTRACT

Background: Good eyesight is an important part of well-being and a significant factor in retaining independence and quality of life as we get older. Many of the leading causes of visual impairment are associated with ageing and two-thirds of the visually impaired population is older than 65 years of age. Significant losses to eyesight can reduce the quality of life and threaten the ability to live independently at home and in the community. **Aim:** Evaluate the effectiveness of planned teaching programme on knowledge regarding cataract among old age people in selected area in Karad Taluka. **Problem statement:** "Study to evaluate the effectiveness of planned teaching programme on knowledge regarding cataract among old age people in selected area in Karad Taluka". **Objectives:** 1. To assess the existing knowledge regarding cataract among old age people. 2. To assess the effectiveness of planned teaching programme regarding cataract among old age people. 3. To find out association between level of post interventions knowledge score regarding cataract among old age people with all demographic variables. **Methodology:** An experimental group pre-test and post-test design was used to achieve the objectives of the study. The study was conducted with 30 peoples who are above 45 years old including both male and female. The Sampling techniques used for this study was non-probability convenience sampling. The tool used by investigator was a semi structured questionnaire to assess knowledge and to collect data as per objective of the study. The data obtained would be analyzed by both descriptive and inferential statistics. **Result:** In sociodemographic among majority of the age people 12 (40%) belongs to the age group 61-70 years. In gender equal ratio of sample where 15(50%) belongs to the male and 15(50%) females. In the family type majority of the old age people 18(60%) belongs to joint family. In the residential area 21(70%) of sample were residing in rural area. In the education majority of the samples 13(43.33%) completed secondary education. In the occupation majority of samples 14 (46.67%) of them are farmers. In the monthly income majority 12(40%) of samples have monthly income between 10,000-20,000 Rs. In the religion majority of 27(90%) samples were Hindu religion. In the marital status 25(83.33%) of samples were married. In the family history 23(76.67%) of samples have no family history of cataract. In the source of information 16(53.33%) samples source of information is health care worker. The paired t test was used to test the hypothesis and significant difference in the level of knowledge between pre-test and post-test of old age people residing selected area regarding cataract and is significant ($p < 0.05$). **Conclusion:** This study could help to old age peoples to increase knowledge about cataract and prevent complication and it also found that there is need for health education and awareness regarding cataract among old age people.

KEYWORDS :

INTRODUCTION:

Man is primarily a visually motivated machine. Just like our body, our eyes and vision change every passing day. As we get older and approaching 60 years, we will begin to observe that our eyes function quite differently from ways they were functioning when we were in our 30s. The changes observed, involve the eye itself, the surrounding muscles and the central nervous system that control the ocular functions. While some of these changes are considered normal, others are considered pathogenic or disease-related. Consequently, while many normal eye-related changes occur in all healthy eyes, many people also suffer from disease-related changes that further impair their vision.

Older eyes are more susceptible to some age-related diseases such as macular degeneration, cataracts, glaucoma and dry eye syndrome than younger eyes. Abanobi stated that "a person can be regarded as aging from the moment of conception or from the moment the individual reaches full maturation," while the United Nations defined an "aging person" as that "who has attained the age of 60 years or more." According to Dorland's Illustrated Medical Dictionary,

Vision, is the "special sense by which objects in the external environment are perceived by means of light they give off or reflect which stimulates the photoreceptors in the retina." This phenomenon is what we refer to as the act of seeing or visual acuity, i.e., clarity or clearness.

A cataract is a cloudy area in the lens of the eye that leads to a decrease in vision of the eye. Cataracts often develop slowly and can affect one or both eyes. Symptoms may include faded colours, blurry or double vision, halos around light, trouble with bright lights, and difficulty seeing at night. This may result in trouble driving, reading, or recognizing faces. Poor vision caused by cataracts may also result in an increased risk of falling and depression. Cataracts cause 51% of all cases of blindness and 33% of visual impairment worldwide. Age-related cataracts are responsible for 51% of world blindness, about 20 million people. Globally, cataracts cause moderate to severe disability in 53.8 million (2004), 52.2 million of whom are in low and middle income countries. In many countries, surgical services are inadequate, and cataracts remain the leading cause of blindness. Even where surgical services are available, low vision associated with cataracts may still be

prevalent as a result of long waits for, and barriers to, surgery, such as cost, lack of information and transportation problems.

A cataract is opacity of the lens. Some degree of cataract formation is to be expected in most people more than 70 years of age. Worldwide, cataract is the primary cause of reduced vision and blindness. More than 1 million cataract operations are now being performed annually in the United States. A person with a normal life span is more likely to undergo a cataract operation than any other major surgical procedure. The most common cataract is the age-related or senile type. Senile cataracts usually begin around the age of 50 years and consist of cortical, nuclear, or posterior sub-capsular opacities, which may coexist in various combinations. In cortical cataracts, spoke-like opacifications are found in the periphery of the lens. They progress slowly, infrequently involve the visual axis, and often do not cause severe loss of vision. Nuclear sclerotic cataracts are a result of a progressive yellowing and hardening of the central lens (nucleus). Most people older than 70 have some degree of nuclear sclerosis. Posterior sub-capsular opacities occur centrally on the posterior lens capsule and cause visual loss early in their development because they lie directly on the visual axis.³ Vision impairment due to cataract can impose a significant burden on any community. Despite being the leading cause of treatable blindness, the lack of awareness about cataract and its treatment is still a major hurdle in decreasing the blindness in developing countries.

Background of the study: Good eyesight is an important part of well-being and a significant factor in retaining independence and quality of life as we get older. Many of the leading causes of visual impairment are associated with ageing and two-thirds of the visually impaired population is older than 65 years of age. Significant losses to eyesight can reduce the quality of life and threaten the ability to live independently at home and in the community. The most recent estimates from the World Health Organization (WHO) reveal that 47.8% of global blindness is due to cataract and in the South Asia region which includes India, 51% of blindness is due to cataract. Globally, age-related cataract is responsible for 48% of blindness, which represents about 18 million people, according to the WHO. The vision 2020 program involves determining which areas have high rates of avoidable blindness and in which way services can be improved so that the burden of blindness is reduced. Since cataract is a major cause of avoidable blindness in the developing countries, the key to success of the Global Vision 2020: the right to sight initiative is a special effort to tackle cataract blindness.⁴ Age-related cataracts are responsible for 51% of world blindness, about 20 million people. Globally, cataracts cause moderate to severe disability in 53.8 million (2004), 52.2 million of whom are in low and middle income countries.

Need for study: Globally, at least 2.2 billion people have a near or distance vision impairment. In at least 1 billion – or almost half – of these cases, vision impairment could have been prevented or has yet to be addressed. The leading causes of vision impairment and blindness are cataracts. The majority of people with vision impairment and blindness are over the age of 50 years, however, vision loss can affect people of all ages. According to Murthy G et al, the absolute number of cataract blind would increase from 7.75 million in 2001 to 8.25 million in 2020 due to a substantial increase in the population above 50 years in India over this period. Cataract has been documented to be the most significant cause of bilateral blindness in India where vision < 20/200 5 in the better eye on presentation is defined as blindness. In India cataract has been reported to be responsible for 50-80% of the bilaterally blind in the country.

The lack of knowledge about the disease and its treatment is

still major obstacle in reducing blindness due to cataract in developing countries. Hence this study aimed to assess the knowledge of old age people towards cataract in karad taluka through a structured teaching programme. Title of the study: “The effectiveness of planned teaching programme on knowledge regarding cataract among old age people in selected area in Karad Taluka”.

Problem statement: “Study to evaluate the effectiveness of planned teaching programme on knowledge regarding cataract among old age people in selected area in Karad Taluka”.

Objectives: 4. To assess the existing knowledge regarding cataract among old age people. 5. To assess the effectiveness of planned teaching programme regarding cataract among old age people. 6. To find out association between level of post interventions knowledge score regarding cataract among old age people with all demographic variables.

Operational definition: Evaluation: According to Cambridge dictionary the process of judging or calculating the quality, importance, among, or value of something. In this study: Evaluate to make judgement about the knowledge of cataract. Effectiveness: According to Oxford Dictionary effectiveness is the capability of producing a desired result. In this study: Effectiveness means change in the knowledge of old age people brought by planned teaching programme by measuring score. Planned teaching programme: According to set of information's given to the high school teachers regarding safety and first aid measures on selected emergency conditions that commonly occur at the school. In the study: planned teaching programme refers to information provided systematically through planned teaching programme to old age people regarding cataract. Knowledge: According to Oxford Dictionary, knowledge is a facts, information and skills acquired through experience or education. In this study: It refers to the score obtained by the old age people by giving correct responses to structured knowledge. Cataract: According to WHO the opacification (clouding) of the lens of the eye, which prevents clear vision and often progresses to blindness if left untreated. In this study: It refers to clouding of the eye's lens that prevents light from passing through clearly. Old age people: According to UN, 60+ years will be referred as the older population or elderly. In this study: The old age people's age group is above 60 years people. Hypothesis: H 01: There will be no significant difference between pre-test and post-test on knowledge score among old age people on cataract. H 02: There will be no significant association between knowledge score on cataract and selected variables among old age people. H 1: There will be significant difference between pre-test and post-test knowledge score among old age people on cataract. H2: There will be significant association between knowledge score of cataract and selected variables among old age people. Assumption: • Old age people have some knowledge regarding cataract. Delimitation: The study is delimited to old age people who are above 45 years in selected area and selected taluka.

REVIEW OF LITERATURE:

1. In India, cataract is responsible for 50-80% of the bilateral blindness in the country. A cross-sectional, observational study was carried out at Durg, Chhattisgarh, India over a period of 12 months from October 2018 to September 2019. The study comprised 48 consecutive and consenting adult patients of bilateral mature and hypermature cataracts reporting to the outpatient ophthalmology department of a medical college included by convenience sampling. All patients were subjected to detailed history taking and ocular examination. Sociodemographic details and reasons for delay in reporting were obtained with a face-to-face interview.

Descriptive data 14 analysis was conducted and reported as mean, standard deviation, frequencies and percentage. Results: The mean age of patients was 68.45 ± 7.4 years. About 29 (60.42%) patients were females, 70.83% patients were unemployed or retired. About 87.5% patients stated having systemic co-morbidities. Lack of awareness, old age, systemic ailments, want of assistance and fear of surgery were the prime factors revealed for the delayed presentation to the hospital.

2. To determine the prevalence of cataract and its association with sun exposure and other environmental risk factors in three different geographically diverse populations of India. People aged ≥ 40 years residing in randomly sampled villages were enumerated (12021) and 9735 (81%) underwent ophthalmic evaluation from plains, hilly and coastal regions (3595, 3231, 2909 respectively). A detailed questionnaire-based interview about outdoor activity in present, past and remote past, usage of sun protective measures, exposure to smoke, and detailed ophthalmic examination including assessment of uncorrected and best corrected visual acuity, measurement of intraocular pressure, slit lamp examination, lens opacities categorization using LOCS III and posterior segment evaluation was done. Lifetime sun exposure hours, smoking, indoor kitchen smoke exposure and their association with cataract and subtypes.

RESEARCH METHODOLOGY:

Research methodology is a systematic way to solve a research problem. It may be understood as a scientific way of doing research. It deals with defining the problem, formulation of hypothesis, method adopted for data collection and statistical techniques used for data with logical reason behind it. This chapter deals with the description of research methodology and different steps, which were undertaken for gathering and organizing data for the investigator. It includes description of research approach, research design, setting of the study. Population, and sample and sampling technique, development and description of tool. Testing of the tools, pilot study, procedure for data collection, plan for data analysis.

Research approach: Research approach and research design are two terms that are frequently used interchangeably; however, research design, which governs it. A research design is the conduct study, and research approach framework or guide used for the planning, implementation and analysis of a study. It is a systematic plan of what is to be done, how it will be done and how the data will be analyzed. Research design basically provides an outline of how the research will be carried out and the methods that will be used. It includes the description of the research approaches, dependent and independent variables, sampling design and a planned format for data collection, analysis and presentation. An evaluative research approach was used to evaluate the effectiveness of planned teaching programme through the difference between the pretest and post-test knowledge score. The study undertaken was to find out effect of planned teaching on knowledge regarding cataract among old age people. Based on the statement of the study and objectives, an evaluative research 21 approach was considered an appropriate research approach for the present study. In our study one group pretest post test research approach is used.

Research design: A research design is the framework or guide used for the planning, implementation and analysis of a study. It is a systematic plan of what is to be done, how it will be done and how the data will be analyzed. Research design can be defined as a blueprint to conduct a research study, which involves the description of research approach, study setting, sampling size, sampling technique, tools and method of data collection and analysis to answer specific research question or for testing research hypotheses.³¹ In this present study the

researcher selected, experimental group pre-test and post-test design, keeping in the view the objectives of the study. The researchers, observed the group prior to the pre-test and after pre-test, intervention planned teaching was administered to the same group and was then again assessed the post test.

Independent Variable: In this study planned teaching programme is the independent variable. **Dependent Variable:** In this study dependent variable is knowledge regarding cataract among old age peoples.

Sample technique:

Sampling is the process of selecting a representative part of the population. There are several methods or techniques of sampling; however, basically sampling techniques are classified in two broad categories, that is probability and non-probability sampling techniques.

Criteria for sample selection:

- Inclusion criteria: -Peoples who are above 45 years old including both male and female. -Old age people who are available at the time of data collection.
- Exclusion criteria: -Old age people who are not willing to participate in the study. -Old age people who are not able to understand, read, write Marathi or English.

DISCUSSION AND SUMMARY: IMPLICATION OF STUDY

The findings of the study have implication for nursing services, nursing education, nursing administration and nursing study. **Nursing service:** The finding of the study could be utilized to improve patient care, including early detection, effective interventions and improve the quality of life for elderly cataract patients. It helps nurses to understand the causes, progression, and management of cataract, nurses can develop and implement effective strategies for patient education, self-care, and post-operative care.

Nursing education: The findings of the study can help nurse educator by providing evidence-based knowledge on the prevalence, management, and impact of cataract on older adults, enabling nurses to provide better care and advocate for improved eye health outcomes.

Nursing administration: The finding of study can help the nurse administrator to improve care by informing strategies for early detection, optimizing surgical outcomes, and addressing the impact of vision loss on quality of life and functional independence.

Nursing research: The finding of study benefits nursing researcher by informing evidence-based practice, improving patient outcomes, and enhancing understanding of patients needs, and improve quality of life for individuals with cataract. **Recommendation:** According to oxford dictionary recommendation means an official suggestion about the best thing to do. The present study was conducted to evaluate the effectiveness of planned teaching programme on knowledge regarding cataract among old age people in selected area in Karad Taluka. 1. A similar study can be done on a large sample. 2. A similar study can be done in different study setting. 3. An information booklet can be developed on preoperative and postoperative management.

CONCLUSION:

From the result of study, it is evident that the finding suggest that there is the need for continued research in this area to identify the most effective way to provide knowledge of cataract among older adults. Finding of the present study showed that pre-test mean score percentage and post-test mean score percentage of old age people regarding cataract.

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