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A comparative study to assess the effectiveness of planned teaching programme and information booklets on levels of knowledge regarding safety precautions among senior citizens of selected old age homes at Arani and Kalavai

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Abstract

The study was conducted to assess the effectiveness of an educational intervention on improving knowledge regarding safety precautions among senior citizens residing in old age homes at Arani and kalavai. A quasi-experimental research design was adopted with a sample size of 40 participants, divided equally into control and experimental groups. Pre-test and post-test questionnaires were used to evaluate the participants' knowledge levels.

Findings revealed that the majority of participants in both groups had inadequate knowledge in the pre-test. After the intervention, the experimental group showed a significant improvement in knowledge, with 80% demonstrating adequate understanding in the post-test, compared to only 10% in the control group. A significant association was observed between pre- and post-test knowledge levels in the experimental group, indicating the effectiveness of the educational program. Additionally, factors such as education level and duration of stay were positively correlated with higher knowledge levels.

The study concludes that structured educational interventions are effective in enhancing the safety awareness of elderly residents, thereby contributing to their overall well-being and safety in old age homes.

Keywords: Senior citizens, safety precautions, knowledge level, old age homes, educational intervention, pre-test, post-test

Introduction

Don't mess with senior citizens a little gray hair is a small price to pay for all the accumulated wisdom".

An senior citizens Are an individual's resident who attended the age of 60 years (or) Above. The phenomenon of population aging is becoming a major concern for the policy makes all over the world both for developing and developed countries. Our country too is not immune to this demographic change. The changing demographic profile has thrown many new challenges in the social economic and political domains. In population census 2020 there are nearly 104 million elderly person (aged 60 years or above) In India 53 million females and 51 million male A report released by "The United Nations populations found and help age India" suggests that number of elderly person is Expected to grow up to 173 million by 2026.In recent years the senior citizen are at high risk for falls, fracture and accident etc. If estimated that one in three senior citizen aged 65 years and above are at risk to fall. Most of the falls results in minimal injury while 20 to 25% suffer serious injury such as hip fracture and head injuries. Recent data show that about 55% of the fall injuries among senior citizens occurs outside and where as 20% of fall inside the home and 25% fall occur away from the home. Most of the falls and accident at outside of the home can prevented with adequate knowledge and awareness.

Need for the study

The purpose of the study was to develop the self-instructional inadequate module regarding safety precautions to be followed by senior citizens at both inside the home and outside and hence create awareness for the same among senior citizens. An article of study precautions of senior showed that the carelessness about the safety precautions among the senior citizen may leads to the serve complication. The medical literation is really deficient in studies which help to guide the safety Precautions among the senior citizens. There is a need to educate the senior citizens regarding safety precautions which has to been followed and other associated problems. Staying safe at home can help your elderly loved one maintain their independence and Quality of life. Preventing falls the leading cause of death and serious injury in the senior population is key to a long happy life at home, two main factors, personal and environmental contribute to senior citizens. Personal factors include muscle weakness, balance problems limited vision and certain medications. Environmental factors include home hazards such as loose rugs, poor lighting such as and a lack of stair railings or grab bars in the bathroom. Focus on balance exercise regularly to maintain strength and rise slowly after eating, sitting and loss of balance. Medical safety improper use and handling

of medication can create serious safety Concerns check medication expiring data on all prescription and over the counter medication and follow all directions. The need for the psychiatric nurses to be committed in a holistic approach to address the senior citizens is crucial and inevitable.

The psychiatric nurse provides a therapeutic healing environment that embodies the assurance we have with client family community and health care team. Professionalism is embodies in every thought, action and interaction. Nurses are positive thinkers, dependable, efficient and accountable for our actions. the pride nurse to provide optimal intervention in regarding the sleep deprivation among the senior citizens. Senior citizens, especially those residing at old age homes often suffer from sleep deprivation due to various reasons. Each problem is addressed with different medic

Statement of the Problem

A comparative study to assess the effectiveness of planned teaching programme and information booklet on levels of knowledge of safety precautions among senior citizens of selected old-age homes at Arni & Kalavai.

Objectives

1. To assess the pretest and post-test levels of the knowledge regarding safety precautions at old age home among senior citizens.
2. To Co-relate levels of knowledge regarding safety precautions among senior citizens at old age homes.
3. To associate the pre-test and post-test level of knowledge regarding safety precautions among senior citizens in old age home.
4. To evaluate the effectiveness of Power Point Presentation and information booklets on leaves of knowledge regarding safety precautions at old age homes among senior citizens.

Methodology

The study adopted a Quantitative research approach and Quasi experimental research design. The study was conducted at Arani Smile's old Age home and Kalavai Bothi Maram Old Age home. The population of the study was old age people among senior citizens. The sample consists of 40 senior citizens from Arani and Kalavai old age homes who fulfilled their inclusion criteria. 20 in Control Group and 20 from Experimental Group. The sample study comprises of senior citizen who fulfilled the inclusion. The Inclusion criteria were.

1. A senior citizens who were willing to participate in the study.
2. A senior citizens who can understand the Tamil language.
3. A senior citizens who were available during data collection.

The exclusion criteria were

1. The senior citizens who cannot read and write the Tamil language.
2. The senior citizens who were not willing to participate in the study.

Senior citizens were selected for study using purposeful sampling technique. The Description of the tool and scoring

- **Part A:** Demographic data consist of Age religion, education, marital status, occupation, parity, history of previous accidents, health status.
- **Part B:** Self-administered Questionnaire tool regarding safety precautions. The senior citizens for experimental and control group. Assess pre-test levels of knowledge regarding safety precautions among senior citizens by using non standardized tool and self-Administered questions. Lecture cum discussion with power point presentation and information booklets on safety precautions among senior citizens. Assess post-test levels of knowledge regarding safety precautions among senior citizens by using non standardized tool and self-administered questions.

Scoring key

Each correct answer is given a score was 1 and wrong answer was 0 interpret the levels of knowledge the total score of the questions was 25.

The levels of knowledge is measured in terms of score

Scores	Levels Of Knowledge
Above 20	Adequate
15-20	Moderately adequate
10-15	Average
Below 10	Poor

Lecture cum discussion with power point presentation and information booklet presentation on safety precautions which includes following objectives, Power point presentation on:

1. Definition of old age.
2. Risk factors of safety precautions
3. Prevention of home accidents
4. Complications of unsafety

Discussion

This chapter deals with the discussion on the finding of the study interpreted from the statistical and hypothesis specified in this study.

The first objective was to assess the pre-test and post-test levels of knowledge regarding safety precautions at old age homes among senior citizens

This study evaluated the effectiveness of an educational intervention in improving knowledge regarding safety precautions among senior citizens in old age homes. The participants were divided into a control group (n = 20) and an experimental group (n = 20).

Pre-Test Knowledge Levels

In the pre-test, a majority of participants in both groups had inadequate knowledge (70% in experimental and 65% in control). Only 5% in each group showed adequate knowledge, indicating a need for educational support.

Post-Test Knowledge Levels

After the intervention, the experimental group showed a marked improvement:

Adequate knowledge increased from 5% to 80% (from 1 to 16 participants).

Inadequate knowledge dropped from 70% to 5%.

- In contrast, the control group showed little change:
- Adequate knowledge increased only slightly, from 5% to 10% (1 to 2 participants).

Inadequate knowledge remained high at 60%

The data clearly demonstrate the effectiveness of the educational intervention. The experimental group showed significant improvement in knowledge regarding safety precautions, with a shift from predominantly inadequate to predominantly adequate knowledge levels. The control group, lacking the intervention, did not show comparable progress. These findings underscore the need for regular, structured safety education programs in old age homes to ensure the well-being of senior residents.

The second objective was to co-relate levels of knowledge regarding safety precautions among senior citizens at old age homes: Senior citizens aged 60-69 years had higher adequate knowledge (50%) compared to the 70-79 years group (20%). This suggests that younger seniors may be more receptive to or familiar with safety practices. Female participants showed slightly higher adequate knowledge (40%) than males (30%). However, the difference was not significant, indicating gender had minimal impact.

Participants with secondary education or above had the highest adequate knowledge (80%), while those without formal education had the lowest (10%). This shows a strong positive relationship between education level and safety knowledge. Those staying longer than 1 year had a higher percentage of adequate knowledge (55%), possibly due to longer exposure to safety practices and routines.

The frequency and percentage distributions suggest strong associations between education level and duration of stay with knowledge levels. Age showed a moderate relationship, while gender had minimal influence. These insights highlight the need for tailored educational programs, especially targeting those with lower education or shorter duration of stay.

The third objective was to find out to associate the pre and post-test levels of knowledge regarding safety precautions among senior citizens at old age homes.

- This objective aimed to assess whether a significant association existed between the pre-test and post-test levels of knowledge among senior citizens who received the educational intervention.
- Pre-test and Post-test Knowledge Levels - Experimental Group (n = 20)
- Before the intervention, 70% of the experimental group had inadequate knowledge, and only 5% had adequate knowledge.
- After the educational intervention, adequate knowledge increased significantly to 80%, while inadequate knowledge decreased to just 5%.
- The improvement suggests that the educational program had a strong positive impact on the participants' understanding of safety precautions.
- A Chi-square test was performed to determine the association between pre-test and post-test knowledge levels in the experimental group.

Chi-square value = 18.5 p-value = 0.001 ($p < 0.05$)

This result indicates a statistically significant association between pre- and post-test knowledge levels. The change in knowledge is not due to chance, but due to the intervention.

There is a strong and statistically significant association between the pre-test and post-test levels of knowledge among senior citizens in the experimental group. This confirms the effectiveness of the educational intervention in improving awareness and understanding of safety precautions in old age homes.

Distribution of variables

Pre-test knowledge	Experimental group (n=20)	Control group (n=20)
Inadequate knowledge	14 (70%)	13(65%)
Moderate knowledge	5(25%)	6(30%)
Adequate knowledge	1(5%)	1(5%)

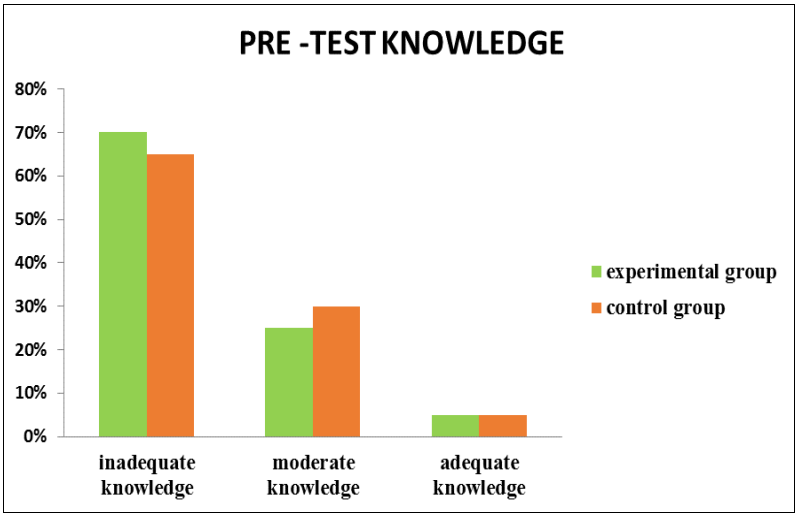

Fig 1: Shows that in pretest, majority of participants in both groups had inadequate knowledge (70%) in experimental group and 65% in control group). only 5% in each group showed adequate knowledge.

Post-test Knowledge level	Experimental group (n=20)	Control group (n=20)
Inadequate knowledge	1 (5%)	12(60%)
Moderate knowledge	3(15%)	6(30%)
Adequate knowledge	16(80%)	2(10%)

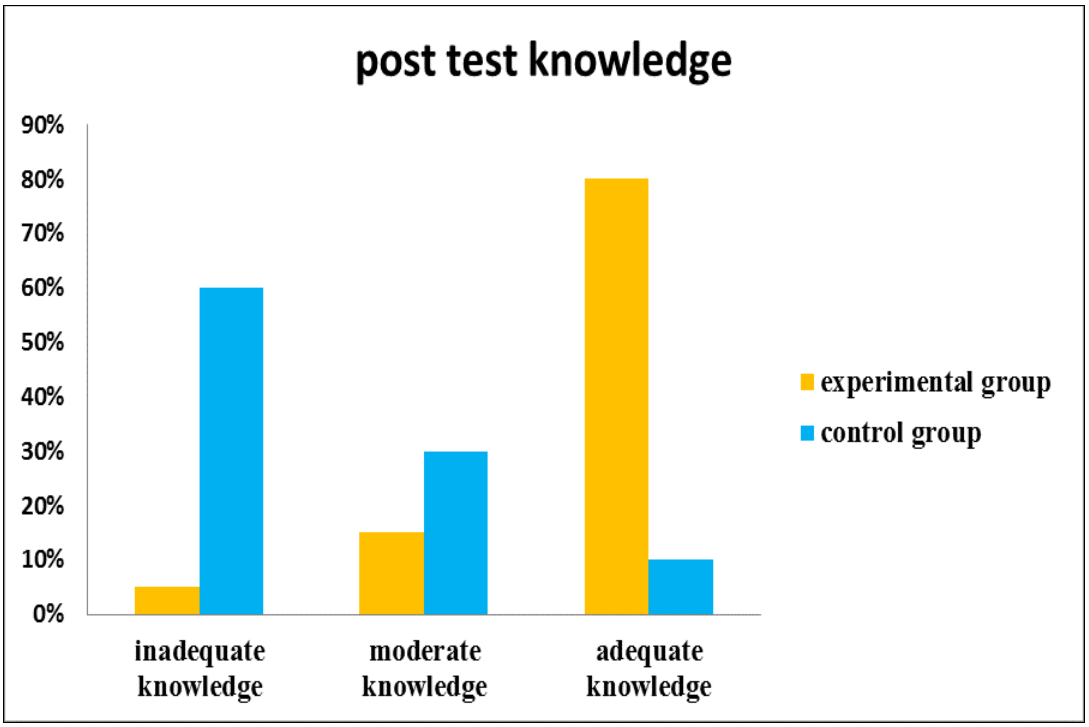

Fig 2: shows that in post-test adequate knowledge increased from 5% to 80% in experimental group compared to control group slightly increased from 5% to 10%.

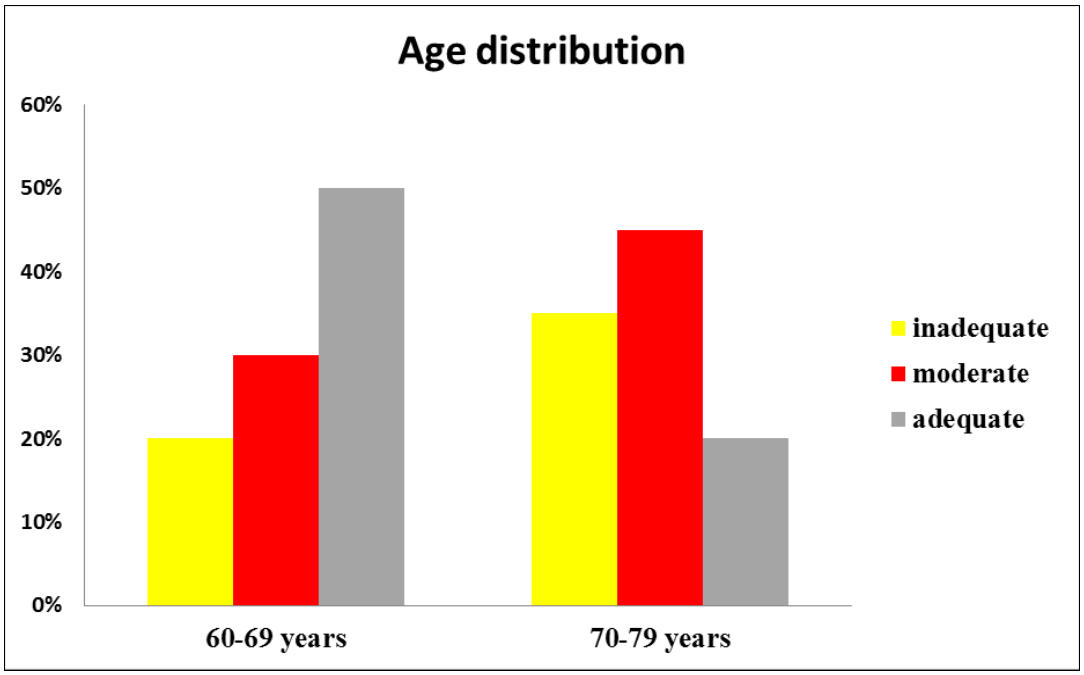

Fig 3: shows that senior citizens aged 60-69 years had higher education adequate knowledge (50%) compared to the 70-79 years group (20%)

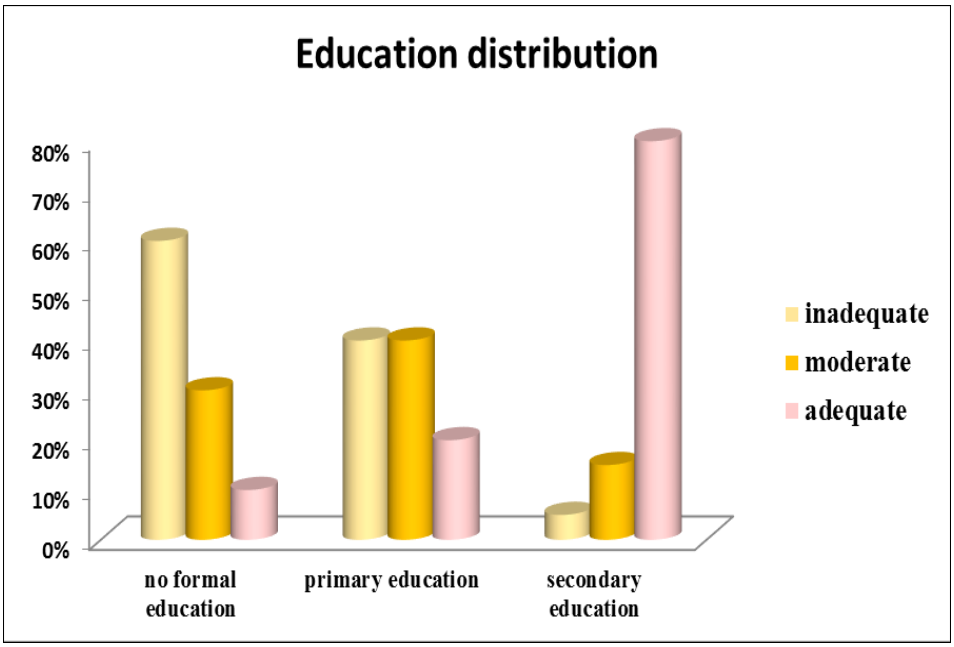

Fig 4: revealed that secondary education had the highest adequate knowledge 80% while those without formal education had lowest 10%

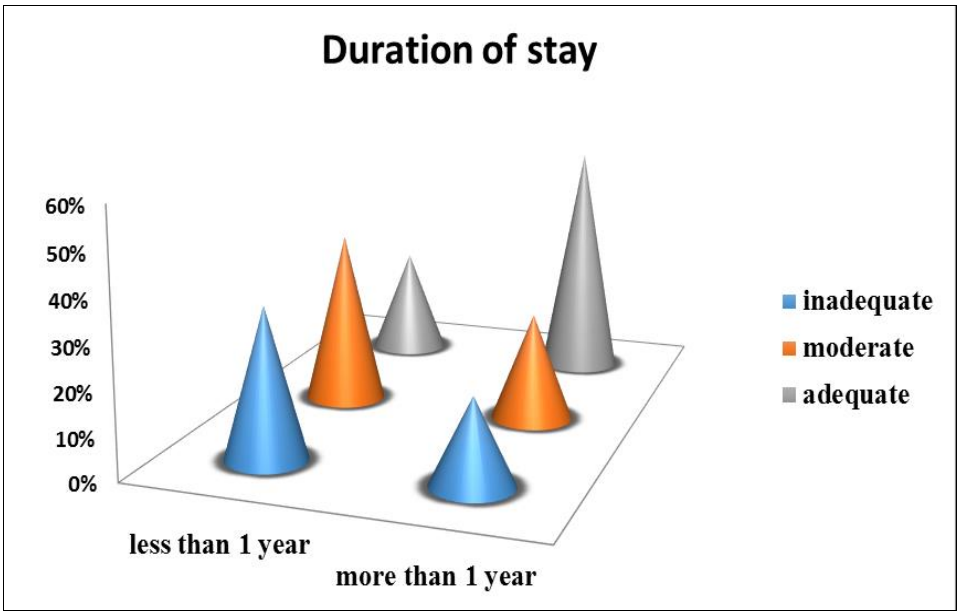

Fig 5: shows that those who staying longer than 1 year had a higher percentage of adequate knowledge 55% compare to short stay.

Recommendation

1. Old age homes should incorporate structured and periodic educational sessions focused on safety precautions to enhance and maintain the knowledge of senior citizens.
2. Educational content should be designed considering the age, literacy level, and cognitive ability of elderly residents, using simple language, pictorial representations, and demonstrations.
3. Safety awareness should be integrated into the daily care routines and activities of residents to ensure practical application and habit formation.

Conclusion

The present study was conducted to assess the effectiveness of an educational intervention in improving the knowledge of senior citizens regarding safety precautions in old age homes. The findings revealed that the pre-test knowledge levels among both control and experimental groups were generally low, indicating limited awareness of basic safety practices. However, after the intervention, the experimental group showed a significant improvement in their post-test knowledge scores, while the control group exhibited minimal change.

A statistically significant association was observed between the pre- and post-test levels of knowledge in the experimental group, confirming the effectiveness of the educational program. Moreover, the study also found that demographic factors such as education level and duration of stay were positively correlated with higher levels of knowledge.

These results emphasize the importance of structured and

regular educational programs for the elderly to enhance their understanding of safety precautions. Implementing such interventions in old age homes can greatly contribute to the prevention of accidents, promote independence, and ensure a safer living environment for senior citizens.

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