A PRE-EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAM ON KNOWLEDGE REGARDING AGE RELATED PROBLEMS AND HEALTH PROMOTION STRATEGIES AMONG CAREGIVERS OF ELDERLY IN SELECTED AREA OF JALANDHAR, PUNJAB

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ABSTRACT

Old age refers to ages nearing or surpassing the life expectancy of human beings, and is thus the end of the human life cycle. Old people often have limited regenerative abilities and are more susceptible to disease, syndromes, injuries and sickness than younger adults. A Quantitative research approach and pre-experimental one group pre- test post-test design was used to assess the effectiveness of structured teaching programme (STP) on age related problems and health Promotion strategies among care givers of elderly in selected area of Jalandhar, Punjab. Total 60 caregivers of elderly were selected by using non-probability purposive sampling technique. Structured knowledge questionnaire was used to assess the knowledge regarding age related problems and health promotion strategies among the caregivers of elderly. The collected data was analysed and interpreted by using descriptive and inferential statistics. The findings revealed that the mean pre-test knowledge score regarding age related problems and health promotion strategies among caregivers of elderly was 15.67 (+2.03) and 11.61 (± 1.78) respectively and mean post-test knowledge score regarding age related problems and health promotion strategies among caregivers of elderly was 22.05 (± 2.85) and 20.15 (+3.5) respectively. The calculated 't' value (21.495) of age-related problems and the calculated 't' value (24.016) of health promotion strategies was found to be statistically significant at 0.001 level of significance. The findings of the study revealed that after the implementation of structured teaching program there was increase in post-test knowledge regarding age related problems and health promotion strategies among caregivers of elderly as measured by structured knowledge questionnaire.

INTRODUCTION

The human life cycle. Old people often have limited regenerative abilities and are more susceptible to disease, syndromes, injuries and sickness than younger adults. The elderly also face other social issues around retirement, such as loneliness, and ageism.[1] Physical change or disease affecting ageing parents, are distressing for the family members as well as elderly themselves. Because some or all of their independent functions may be lost.[3] Even with the best resource in terms of health care facilities, financial support, social support and emotional support, all organisms lose adaptability with the passage of time.[4] The changes of ageing process, the loss of Old age refers to ages nearing or surpassing the life expectancy of human beings, and is thus the end of adaptability leads the person to increase vulnerability towards internal and external environmental changes.[6] According to World Health Organization (WHO) Ottawa Charter in 1986 stated that Health Promotion, "is the process of enabling people to increase control over, and to improve, their health.

To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy life-styles to well-being".[7]

REVIEW OF LITERATURE

In this chapter literature review has been categorised under four headings:

Section- I: Literature related to prevalence of age-related problems.
Section-II: Literature related to knowledge of caregivers regarding age related problems among caregivers of elderly.

Section III: Literature related to knowledge of caregivers regarding health promotion strategies among caregivers of elderly.

Section-IV: Literature related to effectiveness of teaching programme on age related problems and health promotion strategies among caregivers of elderly.

Neziraj Merita, Peter Hellman, Christine Kumlien, Magdalena Andersson, Malin Axelsson (2021), Conducted a retrospective cross-sectional study (n = 12,518 persons aged ≥65 years) using data from the national quality registry Senior Alert was conducted. The aim of this study was to determine the prevalence of risk for pressure ulcers, malnutrition, poor oral health and falls among older persons aged ≥65 years receiving municipal health care in southern Sweden. The prevalence of risk for pressure ulcers, malnutrition, poor oral health and falls was calculated based on categorical data from the instruments available in Senior Alert. T-tests, chi- square test, the Mantel- Haenszel test and logistic regression models were performed. The prevalence of risk for pressure ulcers, malnutrition, poor oral health and falls was 27.9, 56.3, 34.2 and 74.5% respectively. Almost 90% of the older persons had at least one health risk. The prevalence of risk for pressure ulcers, poor oral health and falls was significantly higher in dementia care units compared to short term nursing care, home health care and nursing homes. The prevalence of risk for malnutrition was significantly higher among older persons staying in short term nursing care compared to other types of housing. The odds of having a risk for malnutrition were higher in short term nursing care compared to other types of housing. The oldest age group of 95-106 years had the highest odds of having a risk for falls. The presence of multiple health risks in one subject were more common in dementia homes compared to nursing homes and home health care but not compared to short term nursing care. The prevalence of risk for pressure ulcers, malnutrition, poor oral health and falls was high, implying that these health risks are a great concern for older persons receiving municipal health care. A comprehensive supporting preventive process to prevent all the investigated health risks among older persons receiving municipal health care is recommended.[24]

Chaudary J, Jain B, Singh Ajeet B, Kishore Surekha, Aggarwal Pradeep (2020), conducted a cross sectional study for a period of 3 months among all the elderly population residing in village Thano situated in Raipur block of district Dehradun, Utta-rakhand. A total of 96 elderly were surveyed. Data was collected on sociodemographic characters of elderly as well as questions on Quality of sleep was asked based on PSQI questionnaire. Data was collected using Epi-collect5 application on phone. Data was ana-lysed and presented utilizing appropriate statistical methods. Results: Among the 96 elderly, 57.3% of the participants were females and 40.6% were from 60-69-year age group. The mean PSQI score was 5.6±1.9. Sleep quality was poor among females, smokers, widow and those with no physical activity. With advancing age sleep quality came out to be significantly poor. Conclusion: Sleep disturbances are commonly seen among the elderly. Treatment of primary sleep problems can improve the quality of life.[29]

Gundurao chilapur, Chetan Patali and Suvarna S pinnapati (2018), conducted a quasi experimental study with 80 subjects were selected through simple random sampling technique. One group pre test post test design was used. Data was collected by means of structured interview schedule which was divided in to 2 sections (sociodemographic data and knowledge regarding care of selected old age health problems among family members). The reliability of the tool was established by Split Half method. The Karl Pearson's coefficient of correlation r = 0.7999. Planned teaching programme on care of selected old age health problems was developed. It was proved that there was increase in the knowledge level of family members after implementing planned teaching programme, thus planned teaching programme on care of selected old age health problems among family members was effective. Out of 80 subjects 42(52.50%) of subjects had inadequate, 31(38.75%) had satisfactory and 7(8.75%) had adequate knowledge regarding care of selected old age health problems before teaching programme (pretest). However,

after teaching programme (posttest) about 21(26.25%) subjects had adequate knowledge and 37(46.25%) satisfactory knowledge, whereas 22(27.50%) had inadequate knowledge regarding care of selected old age health problems.[33]

S.V Dahlin, U Sonn, E Svenson (2008) conducted a randomized study was done regarding A health-teaching programme for elderly persons with visual impairments and perceived security in the performance of daily occupations. Two groups of persons with age related macular degeneration were compared: Those who had followed a newly developed health education and teaching program that was based on occupation and those who took part in a standard individual intervention program. Results showed that there are significant differences in the level of perceived security between the groups were found for 13 of 28 occupations. Participants in the health education group maintained or improved their level of perceived security in 22 daily occupations, whereas those in the individual intervention group declined to a lower level in 17 daily occupations. This study provides support for the effectiveness of the health education and teaching program to enhance security and hinder a progressive decline in perceived security in daily occupations[36.]

RESEARCH METHODOLOGY

A Quantitative research approach was considered to be appropriate for the present study as the study aimed to assess the effectiveness of structured teaching program on knowledge regarding age related problems and health promotion strategies among caregivers of elderly.

Research design: The research design is the master plan specifying the methods and procedures for collecting and analysing the needed information in a research study[38].The research design used for the present study was Pre experimental one group pre- test post-test research design.

Sampling procedure: Sampling is the process of selecting units (e.g. People, organization) from a population of interest so that by studying the sample results can be generalized on the population as whole. It is the process of selecting a portion of population. The process of sampling makes it possible to accept a generalization to the intended population on the basis of careful observation of the variables within the relatively small portion of the population. Sampling technique: In present study non probability purposive sampling technique was used to select the sample.

Data collection: Final data was collected in the month of February 20/2/2021 to 08/03/2021 after getting administrative approval. Permission has been taken from SMO of community health centre Kartarpur, Jalandhar, Punjab. Prior consent was taken from caregivers of elderly under study. Self-introduction was given to the families and caregivers of elderly, subjects were informed about the purpose of the study. Data was collected as follows:

Pre-test: Pre-test was conducted to assess the knowledge regarding age related problems and health promotion strategies among caregivers by using the structured knowledge questionnaire. Implementation of Structured teaching program (STP). The STP administered was implemented to the caregivers of elderly on the same day of pre-test.

Post-test: Post-test was conducted on 3rd day of pre-test to assess the knowledge regarding age related problems and health promotion strategies among caregivers by using the structured knowledge questionnaire.

Analysis via statistics: Data analysis and interpretation is the most important phase of the research process. Data will be analysed by using descriptive and inferential statistics.

Descriptive statistics: Frequency and percentage distribution were used to describe the socio-demographic variables of caregivers of elderly. Mean, mean percentage and standard deviation were used to

assess the knowledge regarding age related problems and heath promotion strategies among caregivers of elderly.

Inferential statistics: Paired 't' test to compare the difference between pre-test and post test knowledge regarding age related problems and health promotion strategies among caregivers of elderly. Chi -square test was used to find out the association of knowledge regarding age related problems and health promotion strategies among caregivers of elderly with selected socio-demographic variables.

Data analysis

Section I: description of socio demographic variables: Majority of the caregivers of elderly 46.67% were in the age group of 31-40 years old, 68.33% caregivers of elderly were females, 60% caregivers of elderly were belongs to Hindu, 36.67% were primary educated, 63.33% caregivers of elderly were married,66.67% caregivers of elderly had an monthly income in between 20001- 30000, 36.67% caregivers of elderly have 1-6months of experience in providing care to elderly and 36.67% caregivers of elderly have 6-12 months of experience. 10% caregivers of elderly were attended training program related age related problems and health promotion strategies and 90% caregivers of elderly have previous knowledge regarding care of elderly.

Table 1. Frequency & Percentage distribution of caregivers of elderly according to socio- demographicvariables

N = 60

Socio-demographicvariable	Frequency (f)	Percentage (%)
1.Age(inyears)		
a.≤30	22	36.67
b.31– 40	28	46.67
c.41–50	01	1.66
d.>50	09	15.00
2.Gender		
a.Male	19	31.67
b.Female	41	68.33
3.Religion		
a.Hindu	36	60
b.Muslim	00	00.00
c.Christian	00	00.00
d.Sikh	24	40
4.Education		
a.Nonliterate	01	1.66
b.Primary	22	36.67
c.Secondary	16	26.67
d.Graduate&Above	21	35
5.Occupation		
a.Self Employed	09	15
b.Govt.Employed	00	00.00
c.PrivateEmployed	33	55
d.Labourer	07	11.67
e.Unemployed	11	18.33
6.Income		
a.≤10000	00	00.00
b.10001-20000	11	18.33
c.20001-30000	40	66.67
d.≥31000	09	15.00
7.Experience		
a.<1month	06	10.00
b.1-6 months	22	36.67
c.7-12months	22	36.67
d.>12 months	10	16.66
8. Attended any trainingprogram regardingcareof elderly.		
a.Yes	06	10.00
b.No	54	90.00
9.Any previous knowledge regarding care of elderly		
a.Yes	54	90.00
b.No	06	10.00
10.Ifyes,the source of information Regarding care of elderly.		
a.Massmedia	24	40.00
b.Relatives	10	16.67
c.Friends	12	20.00
d.Healthprofessionals	08	13.33

Table 2. Mean and Mean Percentage of Pretest Knowledge score regarding age related problems among caregivers of elderly

N=60

Knowledge regarding age related problems	Range	Mean	Mean Percentage (%)	Standard deviation (SD)
Pre-testscore	(13-20)	15.67	52.23	±2.03

Maximmscore=30 Minimum score=00

Table 2. It shows mean and mean percentage of pretest knowledge score regarding age related problems among caregivers of elderly. It indicated that mean pre-test knowledge score was 15.67 (±2.03) with mean percentage 52.23%. Hence, it revealed that the caregivers of elderly were having average knowledge regarding age related problems before the implementation of structured teaching program (STP).

Table 3. Meanand Mean Percentage of Pretest Knowledge Score regarding health promotion strategies among caregivers of elderly.

N=60

Knowledge regarding health promotion Strategies	Range	Mean	Mean Percentage (%)	Standard deviation (SD)
Pretest	(08-16)	11.61	38.7	± 1.78

Maximumscore=30 Minimumscore=00

Table 3: Shows the mean and mean percentage of pretest knowledge score regarding health promotion strategies among caregivers of elderly. It indicated that the mean pre-test knowledge score was 11.61 (±1.78) with mean percentage of 38.7. Hence, it revealed that the caregivers of elderly were having average knowledge regarding health promotion strategies before the implementation of structuredteaching program (STP).

Table 6. Frequency and Percentage distribution of pretestlevel of knowledge regarding age related problems among caregivers of elderly

N=60

Level of knowledge	Frequency(f)	Percentage (%)
Good(23– 30)	00	00.00(%)
Average(15– 22)	43	71.67(%)
BelowAverage(0–14)	17	28.33(%)

Maximumscore=30 Minimum score=0

Table 6. Shows the frequency and percentage distribution of pre-test level of knowledge regarding age related problems among caregivers of elderly. It Indicates that the majority of caregivers of elderly 71.67% were having average knowledge and 28.33% of caregivers of elderly were having below average knowledge. No caregivers of elderly were having good knowledge regarding age related problems.

Table 7. Frequency and Percentage distribution of pretestlevel of knowledge regarding health promotion strategies among caregivers of elderly

N=60

Level of knowledge	Frequency(f)	Percentage (%)
Good (23– 30)	0	0(%)
Average (15– 22)	3	05(%)
Below Average (0–14)	57	95%

Table 7: Shows the frequency and percentage distribution of pre-test level of knowledge regarding health promotion strategies among caregivers of elderly. It Indicates that the majority of caregivers of elderly 95% were having average knowledge and 5% of caregivers of elderly were having below average knowledge. No caregivers of elderly were having good knowledge regarding age relatedproblems. Table 8: Shows the mean and mean percentage of post-test knowledge score regarding age related problems among caregivers of elderly. It indicated that the mean post-test knowledge score was 22.05 (+2.85) with mean percentage of 6.615%. Hence, it revealed that the caregivers of elderly were having average knowledge regarding age

related problems after implementation of structured teaching program (STP).

Table 8. Meanand Mean Percentage Post-test Knowledge Score regarding age related problems among caregivers of elderly

Knowledge regarding Agerelated problems	Range	Mean %	Standard deviation (SD)
Posttest score	17-28	6.615	±2.85

Table 9. Meanand Mean Percentage Post-test knowledge score regarding health promotion strategies among caregivers of elderly

N=60

Knowledge regarding health promotion strategies	Range	Mean %	Standard deviation (SD)
Posttest score	16-26	67.16	±3.5

Table 9: Shows the mean and mean percentage of post-test knowledge score regarding health promotion strategies among caregivers of elderly. It indicated that the mean post-test knowledge score was 20.15 (+3.5) with mean percentage of 73.5%. Hence, it revealed that the caregivers of elderly were having average knowledge regarding health promotion strategies after implementation of structured teaching program (STP).

Table 12. Frequency and Percentage distribution of post-test level of knowledge regarding age related problems among caregivers of elderly

N=60

Level of knowledge	Frequency (f)	Percentage (%)
Good(23 –30)	24	40(%)
Average (15 –22)	36	60(%)
Below Average(0–14)	00	00.00(%)

Table 12: Shows the frequency and percentage distribution of post-test level of knowledge regarding age related problems. It indicates that indicates that the majority of caregivers of elderly 36(60%) were having average knowledge, 24(40%) of caregivers of elderly were having good knowledge and 0 (0%) caregivers of elderly was having below average knowledge regarding age related problems of caregivers of elderly.

Table 13. Frequency and Percentage distribution of post-test level of knowledge regarding health promotion strategies among caregivers of elderly

N=60

Level of knowledge	Frequency (f)	Percentage (%)
Good(23– 30)	15	25(%)
Average(15– 22)	44	73.33(%)
Below Average(0–14)	1	1.67(%)

Table 13: Shows the frequency and percentage distribution of post-test level of knowledge regarding health promotion strategies among caregivers of elderly. It indicates that the majority of caregivers of elderly 44(73.33%) were having average knowledge, 15(25%) of caregivers of elderly were having good knowledge and 1 (1.67%) caregivers of elderly was having below average knowledge regarding age related problems of caregivers of elderly.

Table 14. Comparison of the Mean Pre-test & Mean Post-test knowledges core of caregivers of elderly regarding age related problems

N=60

Knowledge score	Mean	SD	MD	df	t-value
Pre-test	15.67	+2.03	6.38	59	21.495***
Post-test	22.05	+2.85			

***Highly Significant at P<0.001evel

Table 14: Shows that the mean pre-test knowledge score regarding age related problems was 15.67 (+2.03) and mean of post-test knowledge score regarding age related problems among caregivers of elderly was 22.05 (+2.85). The calculated 't' value (21.495) was found to be

statistically significant at 0.05 level of significance. Hence, it revealed that the difference in the mean pre-test and mean post-test knowledge score regarding age related problems among caregivers of elderly was a true difference not by chance. Thus research hypothesis (H1) was accepted.

Table 15. Comparison of the Mean Pre-test & Mean Post-test knowledge score of care givers of elderly regarding health promotion strategies

N=60

Knowledge score	Mean	SD	MD	df	t-value
Pre-test	11.61	±1.78			
			8.54	59	24.016***
Post-test	20.15	±3.5			

Maximum score=30
***Highly Significantat P<.10 level Minimum score=00

Table 15: Showsthat the mean pre-test knowledge score regarding health promotion strategies among caregivers of elderly was 11.61 (+1.78) and mean of post-test knowledge score regarding health promotion strategies among caregivers of elderly was 20.15 (+3.5). The calculated 't' value (24.016) was found to be statistically significant at 0.05 level of significance. Hence, it revealed that the difference in the mean pre-test and mean post-test knowledge score regarding health promotion strategies among caregivers of elderly was a true difference not by chance. Thus research hypothesis (H$_1$) was accepted.

Section V: Association of pre-test knowledge regarding age related problems and health promotion strategies among care givers of elderly with their selectedsocio- demographic variables by using Chi-Square test.

Objective V: To find out the association of pre-test knowledge regarding age related problems and health promotion strategies among caregivers of elderly. Association of pre-test knowledge score regarding age related problems and health promotion strategies among caregivers of elderly with their selected socio- demographic variables such as age, gender, religion, education, occupation, monthly income, marital status, any previous experience, attended any training program, any previous knowledge had calculated 't' value and Chi-square value less than the table value which was found to be statistically non-significant at p<0.05 level. Indicates that the association of knowledge score regarding age related problems and health promotion strategies among caregivers of elderly with their selected socio-demographic variables such as source of information (25.52) was statistically significant at 0.05. Hence it revealed that socio demographic variablesuch as source of information had influence on knowledge regarding age related problems and health promotion strategies among caregivers of elderly. Whereas the association of pretest knowledge score regarding age related problems and health promotion strategies among caregivers of elderly with their socio demographic variables such as age, gender, religion, education, occupation, monthly income, marital status, previous, experience, attended any training had Chi-Square test value less than the table value which was found to be statistically non-Significant at p<0.05 level.

CONCLUSION

It was concluded from findings of the study that there was significant increase in post-test knowledge regarding age related problems and health promotion strategies among caregivers of elderly in selected area of Jalandhar Punjab.

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