Journal of Clinical and Biomedical Sciences

Original Article

Knowledge of Elderly Patients and their Caregivers in the Management of Selected Health Problems of Elderly

G. vijayalakshmi[1], Sahana[1], Sarala[2]

1. Sri Devaraj Urs College of Nursing Kolar 2. Dept. of Pharmacology, Sri Devaraj Urs Medical College, Kolar

Abstract

Back ground: Increasing life expectancy has led to a risk of chronic disease conditions among the elderly population, which may increase their dependence on family members for their care. Hence care giving is not only the responsibility of health care professionals but also of their family members. **Aim:** To develop a health education booklet on selected problems of elderly based on the knowledge of elderly patients and their care givers. **Materials and methods:** Fifty elderly patients and Fifty care givers were purposively assessed for their knowledge from a medical college hospital, Kolar on health problems of elderly patients using a structured knowledge questionnaire. Based on their knowledge level, a health education booklet was prepared and distributed to all elderly patients and caregivers. **Statistical analysis:** The collected data were analyzed using descriptive and inferential statistics. **Results:** Seventy four percent of elderly patients had inadequate knowledge and 54% of their care givers had moderately adequate Knowledge. However none of the elderly patients and their care givers had adequate knowledge. The mean knowledge level of the care givers was 25.96 when compared to 23.7 in the elderly patients but it was not statistically significant. **Conclusions:** Neither the elderly nor their care givers had adequate knowledge on management of selected health problems of elderly. Hence there was a need to prepare a booklet in improving the knowledge of elderly on management of health problems of elderly.

Key-words: Knowledge, Elderly care givers, Management of elderly problems

Introduction

The elderly population in India has grown from 12.6 million in 1901 to 77 million in 2011and ranks second in the world next to Germany. The aged population in India is likely to reach 300 million by the middle of this century.[1] Research by the National Institute of Aging reports that 80% of the elderly are living with chronic conditions such as arthritis, hypertension, diabetes, heart disease and vision or hearing disorders. Although most of the elderly with chronic conditions are able to meet their own needs and only 25% of them may require a special type of care. When the elderly lose their health and independence, they lose control over their own destiny and are at the mercy of others for care. More than two thirds of the elderly (68%) live independently in a family setting and about 5% are institutionalized, which increases with advancing age. It is estimated that 10% of the elderly need some form of long-term care at home and nearly 50% of them aged 85 years and above need assistance for the management of their chronic diseases.[2,3] Research studies on knowledge of elderly patients and their caregivers on management of chronic disease conditions are sparse in the Indian context. Hence it was felt that there was a need to assess the of Knowledge among Elderly patients and their Caregivers with an objective to develop a health education booklet on management of selected problems of elderly. The conceptual framework selected for the present study was based on Imogene. M. King's (1981) Goal attainment theory. According to this theory two people who are usually strangers come together in a health care organization to help and to be helped to maintain a state of health that permits functioning in roles.

***Corresponding Author**

Dr. G . Vijayalakshmi , Principal
Sri Devaraj Urs College of Nursing ,Tamaka, Kolar
E mail : lakshmi_vijaya_venkatesh@yahoo.co.in
Received 25th April 2015 , Accepted 1th June 2015

Materials and methods

An ethical clearance was obtained from the Institutional ethical committee and written permission was obtained from the Medical Superintendent of the Hospital and research center. For the present

study a descriptive research design was used. Based on the research problem and objective of the study, 52 multiple choice knowledge questionnaire was prepared, which was then validated by ten research experts. Using purposive sampling technique, 50 elderly patients aged 65 years and above who were admitted in the Medical wards of Medical College Hospital at Kolar in Karnataka and 50 caregivers who were aged between 21to 60 years were included. Elderly patients who were critically ill and with very poor vision and hearing were excluded from the study. The data was collected in the month of November 2010 by using the structured interview schedule from elderly patients and their caregivers separately. The response to the questions to assess the knowledge level was given scores. The mean knowledge scores were calculated and grouped as inadequate (below 50%), moderately adequate (50-75%) and adequate knowledge (76% and above) **Statistical analysis:** The socio-demographic variables were presented as frequency and percentage, its mean knowledge level was found and comparison of knowledge between elderly and care givers was done using t-test. The association between knowledge score and socio-demographic variables was done using chi-square test. Based on their level of knowledge score, a health education booklet was prepared and distributed to all elderly patients and their caregivers.

Table 1. Socio-demographic variables of elderly patients and their caregivers

Variables	**Patients (n=50)**	**Caregivers (n=50)**
Age (yrs)	56%(65-70 yrs)	52% (51-60yrs)
Males	64%	20%
Females	36%	80%
Hindus	64%	64%
Married	68%	96%
Illiterates	64%	70%
Farmers	56%	64%
Income in Rupees (1000-3000)/month	64%	64%
Joint Family	64%	64%

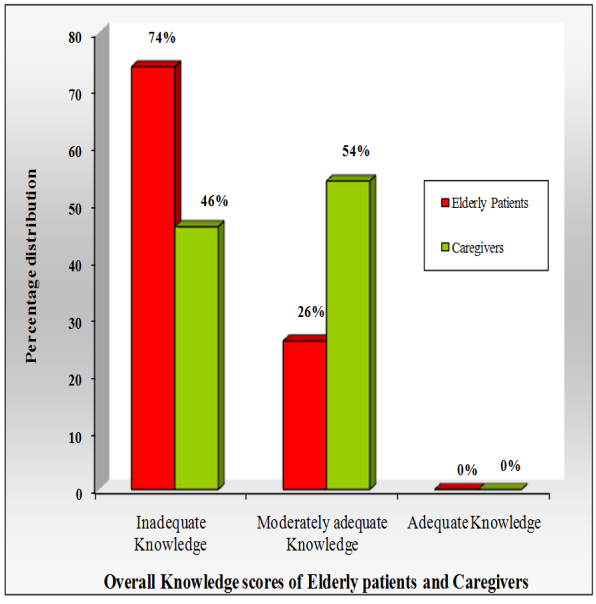
Regarding the health status of elderly patients studied, 36% of them had cataract, myocardial infarction and osteoarthritis as the presenting illness. Regarding care givers, 54% of them were wives of the elderly patients. The percentage of knowledge scores among elderly patients and their care givers according to the selected medical conditions were presented in table 2.

Table 2. Knowledge scores of elderly patients and caregivers according to the disease conditions

Disease conditions	Elderly patients	Care givers
COPD	40	43
Cataract	50	50
Osteoporosis	50	50
Osteoarthritis	52	66
Hypertension	46	45
Myocardial Infarction	47	54

Knowledge score: <50% - Inadequate knowledge, 50-75% - Moderately adequate knowledge, >75% - Adequate knowledge. Based on the mean percentage, overall knowledge scores obtained by elderly patients and their caregivers are grouped as inadequate knowledge (below 50%), moderately adequate knowledge (between 50-75%) and adequate knowledge (76% and above) fig:1.

Fig 1. Overall knowledge scores of elderly patients and their care givers.



Association between level of knowledge among elderly patients with selected socio-demographic variables revealed that there was no association between age (χ^2 =0.04), gender (χ^2 =2.07), religion (χ^2=3.54), marital status (χ^2=0.32), occupation (χ^2 =0.31), family income (χ^2 =0.31), type of family (χ^2=1.04) and present disease conditions (χ^2 =3.25) except educational status (χ^2 =13.1) which was significant at 0.05% level.

Association between level of knowledge among care givers with selected socio-demographic variables revealed that there was no association between age (χ^2=0.37), type of family(χ^2=2.02), marital status (χ^2 =0.08), educational status (χ^2 =2.73), occupation (χ^2 =0.17), family income (χ^2 =0.31), relation with elderly patient (χ^2=0.15) except gender (χ^2 =20.25) and religion (χ^2 =14.14) which were significant at 0.05% level. The compared mean level of knowledge among elderly patients was 23.7(SD-2.83) and care givers were 25.96 (SD- 3.74) and the difference was not statistically significant.

Around 56% of the elderly patients in this study were in the age group of 65-70 years, 64% were males, 64% were Hindus, 36% were muslims,68% were married, 64% were illiterates, 56% were farmers, 16% were daily wage laborers, 28% were house wives and none of them had worked as employees in private or government sector. An interesting point is that, majority(80%) care givers were females. Related to overall knowledge score, majority (74%) of elderly patients had inadequate knowledge when compared to caregivers (46%), where as majority (54%) of caregivers had moderately adequate knowledge when compare to elderly patients (26%) and none of elderly patients and their caregivers had adequate knowledge on management of selected problems of elderly. Tests for association between the level of knowledge scores among elderly patients with selected socio-demographic variables showed that no significant association between age, gender, religion, marital status, occupation, family income, type of family and present disease conditions except educational status (χ^2=13.1) which was significant at 0.05% level. Hence there was no sufficient evidence to accept or reject alternative hypothesis.

Similar tests for association between the level of knowledge among care givers with selected socio-demographic variables showed that, no association between age, type of family, marital status, educational status, occupation, family income, relation with elderly patient except gender (χ^2=20.25) and religion (χ^2=14.14) which were significant at 0.05% level.

The comparison of difference between the mean level of knowledge among elderly patients and their caregivers on management of selected problems of elderly value was 23.7 and 25.96 respectively and it was not statistically significant.

Discussion

This study was undertaken on elderly hospitalized patients and their care givers in a medical college teaching hospital at Kolar. The socio-demographic features of the elderly patients in this study has similarity with respect to the age and sex of patients admitted, their religion, occupation, education and marital status of elderly hospitalized patients in various other similar studies (4-7). Chronic conditions such as coronary heart disease and osteoarthritis were the important causes for hospitalization of the elderly in the study. Visual problem due to cataract was also an important cause of hospitalization. A study conducted by Jennifer L etl (2002) showed that nearly 65% of elderly patients admitted to hospital had multiple chronic disorders (8). It is interesting to know that majority of care givers accompanying the elderly patients to hospitals were women who were aged generally between 51-60 years which was obtained by other studies (9, 10). The care givers accompanying the hospitalized elderly patient had moderately adequate (54%) knowledge on the chronic health conditions of the elderly and its general management in comparison to the elderly patients themselves (26%). This could be attributed to the knowledge acquired by the care givers in the process of providing care to the dependent elderly patients in their homes and in hospital. The knowledge could have been acquired by the care givers by keen observation of the health care personnel providing health care and also by communicating with the health care personnel. Since the elderly patients will be bedridden in the hospital, they may have been opportunities to observe the health care provided to others and to communication with other patients and personnel in the hospital.

However the knowledge acquired by either the elderly patients or their care givers were adequate. Hence there is a need to come out education activities for the elderly patients and their care givers which can improve their knowledge in the health problems of the elderly and its general management, there is a need to develop an educational material for the education process of the elderly patients with chronic problems and their care providers.

References

1. WHO. Aging Problems. Health Action. February 2004 ; 17 (2):11-12.
2. Hoff man GW. Basic geriatric nursing. 2nd ed. Mosby: A times mirror company; 1999.
3. Lewis, Heitkemper, Drikson. Medical surgical Nursing-Assessment and Management of Clinical condition. 7th edition. Missouri: St. Louis; 2007.
4. Joshi K, Kumar R, Avasthi A. Morbidity profile and its relationship with disability and psychological distress among elderly people in Northern India. Int J Epi 2010; 39 (6): 978-87.
5. Parray SH. Ahmed, Gaash. Morbidity profile of Geriatric population in Kashmir. Indian Journal for the practicing Doctor 2008; 4 (6): 1-5.
6. Sarasakumari RS. Socioeconomic conditions, morbidity pattern and social support among elderly women in rural area 2001; 5(3): 71-5.
7. Manda PK, Chakrabarty D, Manna N, Mallik S. Disability among geriatric females: Uncared agenda in rural India 2005; 4: 75-382.
8. Jennifer L, Wolff, Barbara SF, Anderson G. Prevalence, expenditure and complications of multiple chronic conditions in the elderly. Arch International Medicine 2002; 162(32): 2269-76.
9. Thomas G. Durnat. Knowledge of Family caregivers. American Journal of Nursing 2004; 46 (4): 519-24.
10. Kowsalya. All India Institute of Medical Sciences 2008; 7(2): 217-20