

Managing Hypertension among the Elderly in Old Age Homes of Gurgaon & Delhi: Effect of Planned Teaching Programme

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Abstract

The study was done among hypertensive elderly people staying in selected old age home of Gurgaon and Delhi. Convenient sampling was used to select the old age home and purposive sampling technique was used to select the sample of 30 hypertensive elderly people for assessing the management of hypertension among hypertensive elderly people. Further, 30 hypertensive elderly people had been evaluated for finding the effectiveness of planned teaching programme in terms of knowledge and attitude towards management of hypertension among hypertensive elderly people. There was deficit in knowledge and a lack of positive attitude regarding management of hypertension among hypertensive elderly people. The mean post-test knowledge scores and attitude scores were 27.5 and 71.2 respectively, which were significantly higher than the mean pre-test knowledge scores and attitude scores (23.6 and 67.3) as evident from 't' values of 24.07 and 23.07 respectively for df (29) at 0.05 level of significance. The findings of the study revealed that the planned teaching programme was effective in increasing the knowledge and developing a positive attitude of hypertensive elderly people in management of hypertension.

Demographic ageing is a global phenomenon. Seneca said; 'Old age is an incurable disease', but more recently, Sir James Sterling Ross commented: "One cannot heal old age. [However] You [can] protect it". Therefore old age should be regarded as a normal, inevitable, biological phenomenon. The world population is ageing. By 2025, the world's population is expected to include more than 830 million people above 65 years. The percentage of the population aged 65 and higher will be highest in developed countries although the absolute number will be higher in developing countries. Developing countries such as China and India have the largest total population, and will continue to have the largest absolute number of elderly people. With a comparatively young population, India is poised to become home to the second largest number of older persons in the world. From 57 million in 1991, the population of the elderly in India is projected to grow to about 324 million in 2050.

The socio-economic problems of the elderly are now-a-days aggravated by factors such as the lack

of social security and inadequate facilities for health care, rehabilitation, etc.

'Add life to their years'

The current demographic trends show rapid urbanisation and lifestyle changes that have led to emergence of a host of problems for the elderly in India, high blood pressure (BP) being most common. This often results from anger, irritation etc. so one may start taking medicine to control blood pressure as this biggest killer in the world today accounts for almost 80 percent deaths worldwide. Faulty lifestyle, wrong diet, lack of physical activity and exercise; obesity; mental stress and tensions of fast paced competitive life; pollution; alcohol and smoking are the major culprits, which manifest themselves as high blood pressure, diabetes or high blood cholesterol and then without warning, strike fatally as heart attacks, stroke or cancer. They can potentially cut short the lives or disable the patients in the most productive years of their lives. Current national recommendations for the prevention and treatment of high blood pressure emphasise lifestyle modification. Long-established lifestyle modifications that effectively lower BP include weight loss, reduced sodium intake, increased physical activity and limited alcohol consumption. In addition, the Dietary Approaches to Stop Hypertension (DASH) dietary pattern, which is rich in fruits, veg-

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etables, and low-fat dairy products and is reduced in total and saturated fat, also lowers BP.

In this study, Hypertension is defined as persistent elevation of systolic pressure 140 mm of Hg+ and above and the diastolic pressure 90 mm Hg+ and above.

Review of Literature

Janet Bond Brill, et al (2011) reported that hypertension (HTN) is a powerful and unequivocal independent risk factor for cardiovascular and renal diseases, including coronary heart disease, stroke, and renal failure. Adoption of healthy lifestyle is highly effective in both the prevention of new-onset HTN and in the treatment of those diagnosed with HTN. Due to continuing epidemic of HTN and blood pressure-related diseases and the invaluable role of applying non-pharmacological therapy in the prevention and management of HTN, a review of current therapeutic lifestyle strategies appears warranted. Authors also suggested that a healthy lifestyle prescription ideally comprising BP-lowering lifestyle intervention strategies should be dispensed by all primary care providers for both the prevention and treatment of elevated BP.

In a quasi-experimental study, Cakir & Pinar (2006) assessed the effect of lifestyle modifications of a sample of 60 hypertensive patients (mean age 52 years for intervention group and 57 years for control group). Outcome of interests were change of systolic BP and diastolic BP Intervention group: weight lost, stop smoking, learning stress management, moderate-intensity physical activity, reduction in daily intake of dietary sodium, and daily alcohol intake. Control group received routine out-

patient services and was asked to maintain usual lifestyle for 6 months until re-examination. Six-month trial showed that lifestyle modification is feasible and beneficial.

Objectives

The objectives of present study were to: (i) develop planned teaching programme (ii) assess and evaluate knowledge and attitude before and after the administration of planned teaching programme, on lifestyle modifications in management of hypertension among elderly people and (iii) find out the relationship between post-test knowledge with post-test attitude.

Methodology

A pre-experimental one group pre-test and post-test design was used to evaluate the effectiveness of a planned teaching programme in terms of knowledge and attitude of hypertensive elderly people. The sample consisted of 30 hypertensive elderly people from selected old age homes of Gurgaon and Delhi to assess their knowledge and attitude regarding management of HTN before and after the planned teaching programme. The independent variable chosen for the study was planned teaching programme on lifestyle modifications of hypertensive elderly people. Dependent variables in the study are knowledge and attitude scores of the hypertensive elderly people regarding control and management of HTN as evident from knowledge and attitude scores. A structured knowledge questionnaire and structured attitude scale were developed to assess the knowledge and attitude of hypertensive elderly people regarding lifestyle modifications for management of hypertension.

Results & Discussion

There was a deficit in knowledge and lack of positive attitude towards management of hypertension among elderly people regarding management of HTN. The planned teaching programme regarding management of hypertension was effective in terms of enhancing the knowledge and developing a positive attitude towards management of hypertension among hypertensive elderly people.

Table 1 indicates the mean post-test knowledge scores of 27.5 of hypertensive elderly people regarding lifestyle modifications regarding management of hypertension was higher than the mean pre-test knowledge scores (23.6). The findings also revealed that post-test knowledge scores are more homogenous (SD 2.13) than the pre-test knowledge scores (SD 2.90), indicating that the group become more

Table 1: Mean, Median and SD of pre-test and post-test knowledge scores of elderly people on lifestyle modifications regarding management of HTN (N= 30)

Knowledge scores	Mean	Median	Standard deviation
Pre-test	23.6	23	2.90
Post-test	27.5	27	2.13

*t' 29 at 0.5 level of significance=2.04
Maximum possible score = 33.*

Table 2: Mean, Median and SD of Pre-test and Post-test Attitude Scores of elderly people on lifestyle modifications regarding management of hypertension (n=30)

Attitude scores	Mean	Median	Standard deviation
Pre-test	67.3	67	3.40
Post-test	71.2	71	2.62

*t' 29 at 0.5 level of significance=2.04
Maximum possible score = 61-100.*

Table 3: Co-efficient of Correlation between Post-test Knowledge and Post-test Attitude Scores of Hypertensive elderly people (n=30)

Variable	Mean	SD	'r'
Post-test knowledge scores	27.5	2.21	0.70
Post-test attitude scores	71.2	4.09	

Df(28) t=5.18; table value at 0.05 is 2.05 and significant

homogenous after administration of planned teaching programme.

The mean post-test attitude scores (71.2) of hypertensive elderly people regarding lifestyle modifications for management of HTN was higher than their mean pre-test attitude scores (67.3) with a mean difference of 3.9 (Table 2). The 't' value of 24.07 for df(29) was found to be statistically significant at 0.05 level. This shows that the obtained mean difference was a true difference and not by chance. Hence null hypothesis (H02) was rejected and research hypothesis (H2) was accepted. It can be inferred that the planned teaching programme for hypertensive elderly people was an effective method for improving the attitude of hypertensive elderly people regarding lifestyle modifications for management of HTN.

The data presented in Table 3 indicated the mean post-test attitude scores (71.2) of hypertensive elderly people regarding lifestyle modifications for management of hypertension was higher than the mean pre-test attitude scores (67.3). The findings also revealed that post-test attitude scores are more homogenous (SD 2.62) than the pre-test attitude scores (SD 3.40), indicating that the group become more homogenous after administration of planned teaching programme.

Table 3 also shows that the co-efficient of correlation between post-test knowledge and attitude scores was 0.70 which indicates a significant positive relationship between post-test knowledge and attitude scores at 0.05 level of significance. The findings suggest that there is a significant positive relationship between post-test knowledge and attitude scores of hypertensive elderly people regarding lifestyle modifications for management of HTN. Thus null hypothesis (H03) was rejected and research hypothesis (H3) was accepted. It can be inferred that the planned teaching programme for hypertensive elderly people was an effective method for enhancing knowledge as well as attitudes of hypertensive elderly regarding lifestyle modifications for management of HTN.

The present study indicated that there was a lack of knowledge among hypertensive elderly

people regarding the effectiveness of lifestyle modifications for management of hypertension as they had lower mean knowledge and attitude scores. However, after the administration of planned teaching programme they obtained significantly higher scores in knowledge and attitude scores. Hence the planned teaching programme was found to be an effective strategy in enhancing the knowledge and attitude of hypertensive elderly people.

Implications of the study

Community Health Nursing Practice

Geriatric health has emerged as a focus issue because it is a vulnerable period of life in all societies and there occur a lot of physical and emotional changes. Elderly people generally neglect their health; also proper education (awareness) regarding health is lacking.

Nursing Administration

While planning health care services at large, administrators should focus on epidemiological factors related to health conditions, social factors influencing the health issues, resources available in terms of time, money, man and material, so that the services which are planned and organised will be accepted and accessible to all.

Nursing Education

Nursing education must be reoriented to primary health care approach, thus enabling prospective nurses to be well-prepared to assist clients and community at large to develop their self-care potentials. This will help in achieving the goal of "Health for All".

Nursing Research

Extensive and intensive researches in India are required to fight against hypertension. We need to have regular surveys or studies to identify the management of hypertension and its contributing factors, so as to minimise the risk factors. Also experimental studies can be conducted to test the efficacy of various interventions to manage as well as control hypertension.

Public Education

Strategies should be developed carefully to teach the general public. It will help in creating awareness among the general public about hypertension among elderly people, its consequences, the contributing factors of its development, and the ways to prevent developing hypertension by adopting a healthy lifestyle and change in diet patterns.

Recommendations

- The study can be replicated on large samples to validate the sample and the findings can be generalised for a larger population.
- A follow up study can be conducted to evaluate the effectiveness of planned teaching programme on management of hypertension by assessing the retention of knowledge and attitude of hypertensive elderly people.
- Similar study can be (a) replicated using different strategies, viz. information booklet, interview schedule, and video films (b) conducted on experimental research approach i.e. pre-test and post-test experimental and control group.
- A comparative study can be conducted in order to compare the prevalence of hypertension (a) in different parts of states and (b) in urban and rural old age homes.
- Health education regarding management of hypertension should be a part of school's curriculum as it is an emerging problem and is a precursor of non-communicable diseases.

Conclusion

There was a deficit in knowledge among elderly people regarding management of hypertension. However, after the intervention of planned teaching programme the elderly people of Old Age Homes not only had enhanced knowledge towards managing hypertension but also tended to develop a positive attitude towards coping with hypertension.

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