Assessment of effect of planned teaching on knowledge regarding hypertension among staff nurses

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Abstract

Background: Hypertension is one of the important challenging disease. Its prevalence is increasing worldwide. As nurses have to take care of hypertensive patients. They must have adequate knowledge regarding hypertension. As age increases blood pressure also increases. There are various other factors like obesity, stress, family history, dietary pattern which causes increase in blood pressure. 

Objective: To assess effect of planned teaching on knowledge of hypertension among staff nurses.

Material and Methods: The present cross sectional study had been carried out on June 2015 on 50 staff nurses aged above 40 years in selected hospital of Western India. Structured questionnaire consisting 20 questions was used to assess knowledge. After pretest assessment planned teaching was administered. After 7 days posttest was done.

Result: Total participants were 50 staff nurses. All participants were female. All staff nurses have more than 12 years’ experience. Out of 50 staff nurses, 16 (32%) were in the age group 41-50 years and 34 (68%) were in the age group above 50 years. All samples were female. Out of 50 samples 21 samples have hypertension, 5 samples have diabetes and 10 samples have both hypertension and diabetes and 14 samples have no diabetes or hypertension. Out of total 50 staff nurses only 4 (8%) staff nurses had good knowledge scores, 28 (56%) had average knowledge and 18 (36%) had poor knowledge scores.

Conclusion: Over all knowledge of staff nurses was low. Those staff nurses having high blood pressure had shown average knowledge scores. Most of the staff nurses are not done life style modifications. They are not very serious about regular exercise, yoga, meditation or dietary modification. Regular health education programmes will definitely will improve the knowledge and awareness regarding hypertension.

Keywords: Planned teaching, knowledge, hypertension, staff nurses

Introduction

Around the world. Lowest prevalence in rural India i.e.3.4% in men and 6.8% in women and the highest prevalence in Poland i.e.68.9% in men and 72.5% in women. High blood pressure (BP) is ranked as the third most important risk factor for attributable burden of disease in south Asia (2010). Hypertension (HTN) exerts a substantial public health burden on cardiovascular health status and healthcare systems in India. HTN is directly responsible for 57% of all stroke deaths and 24% of all coronary heart disease (CHD) deaths in India. The WHO rates HTN as one of the most important causes of premature death worldwide. In an analysis of worldwide data for the global burden of HTN, 20.6% of Indian men and 20.9% of Indian women were suffering from HTN in 2005. The Global Burden of Hypertension study 2005 has projected alarming rise in hypertension and GBD 2010 study shows serious picture of hypertension for Indian population. The rates for HTN in percentage are projected to go up to 22.9 and 23.6 for Indian men and women, respectively by 2025. Recent studies from India have shown the prevalence of HTN to be 25% in urban and 10% in rural people in India. According to the WHO 2008 estimates, the prevalence of raised BP in Indians was 32.5%. However, only about 25.6% of treated patients had their BP under control, in a multicenter study from India on awareness, treatment, and adequacy of control of HTN.

Materials and Method

The present cross sectional study was done in the month of June 2015 at selected hospital in Mumbai city. There were 50 staff nurses selected randomly for this study. Age of the staff nurses were above 40 years. Structured questionnaire were prepared to assess the knowledge regarding hypertension. Total 20 questions were there in the tool. First part of tool was regarding demographic data i.e. age, gender, height, weight, BMI, dietary pattern, family history of cardiovascular disease, stress, history of hypertension, medicine. Second part of Tool contains questions regarding meaning of hypertension, causes, risk factors, complications and life style modifications are included in the tool.
Tool consisted of total 20 questions and each question carry 1 mark. Minimum score is 0 and maximum score is 20. Categorization was tool was done as 0-7 poor, 8-14 average and 15-20 good. Informed consent was taken from all participants. Self-reported technique was used to collect the demographic data and data regarding knowledge of hypertension. Structured teaching plan was administered after collecting data. After 7 days posttest has been done.

Results
Out of 50 staff nurses, 16 (32%) were in the age group 41-50 years and 34 (68%) were in the age group above 50 years. All samples were female. Out of 50 samples 21 samples have hypertension, 5 samples have diabetes and 10 samples have both hypertension and diabetes and 14 samples have no diabetes or hypertension.

As per risk factor status
Body Mass Index
Out of 50 staff nurses 18(36%) staff nurses have normal BMI (18 to 24.9), 23 (46%) staff nurses were overweight (BMI 25 to 29.9) and 9 (18%) staff nurses were obese (BMI more than 30).

Family History of Hypertension
Out of 50 staff nurses, 26(42%) staff nurses do not have family history of hypertension, 11(22% ) staff nurses have one blood relative having hypertension and 13(26%)

Staff nurses have two or more blood relatives having hypertension.

Dietary Pattern
Total 39 (78%) consume mixed type of diet and 11 (22%) staff nurses were vegetarian. Most of the staff nurses reported they are not taking extra salt but consuming of bakery products, biscuits, sauce, and bread regularly.

Stress factor
Total 41 staff nurses reported moderate stress at home and 9 reported high stress at home. Reasons reported old family members at home, illness at home, children carrier, workload at home.
Total 26 staff nurses reported moderate stress at work and 24 reported high stress at work. Reasons are shift duty, excessive workload, shortage of staff, administrative burden, and disease condition.
Those staff nurses having more stress at both at work and home have diabetes and hypertension.

Other disease
5 samples have diabetes. Total 10 samples have arthritis, angina, peptic ulcer, asthma or malignancy.

Knowledge regarding hypertension
In the assessment tool total 20 questions were there. Total 20 questions were regarding definition of blood pressure, risk factors, normal BMI, normal cholesterol level, diet, salt intake, drugs used in hypertension, side effects of drugs, complications of hypertension and preventive measures to control high blood pressure. Total 20 marks. Parameters was designed like 0-7 poor, 8-14 average and 15-20 good.
Out of total 50 staff nurses only 4 (8%) staff nurses had good knowledge scores, 28 (56%) had average knowledge and 18 (36%) had poor knowledge scores.

In some of the areas staff nurses had poor knowledge i. e. normal BMI level, salt intake, sodium rich food stuffs, drugs and its side effects, complications of hypertension. Most of the staff nurses knew about hypertension, risk factors of hypertension. Many of staff nurses were not knowing about how much salt intake should be taken daily. Staff nurses only knew salt rich food stuffs like papad, pickle, wafers etc. but most of them didn’t know about the sodium content of food i. e. bakery products, biscuits, cookies, pastry, sauces, processed food which contain lots of sodium which helps to increase the blood pressure.

In posttest knowledge scores there was significant difference has been observed. To assess the difference in knowledge scores t test is calculated. Value of t is 4.65 which is more than critical value i.e. 1.676 at 0.05 level.
As calculated t value is more than table value it has been concluded that health teaching on hypertension was effective.

Conclusion
Over all knowledge of staff nurses was low. Those staff nurses having high blood pressure had shown average knowledge scores. Most of the staff nurses are not done life style modifications. They are not very serious about regular exercise, yoga, meditation or dietary modification.
Regular health education programmes will definitely will improve the knowledge and awareness regarding hypertension.

References