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Nurses' awareness regarding nursing care of hypertensive patients in a Shar Hospital in Sulaymaniyah city

By

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Abstract

Background: Some of the most common NCDs in Sulaymaniyah include cancer, COPD, diabetes, hypertension, and heart disease which are responsible for over three-fifths of all deaths. The goal of this study was to examine nurses' knowledge of hypertensive patient nursing care.

Methods: The data for this investigation was collected using a self-administered questionnaire in a descriptive cross-sectional study design. The participants were told about the goal of the study so as to obtain their agreement. They were explicitly instructed on how to complete the questionnaires. The collected data were analyzed through Statistical Package for Social Sciences (SPSS) version 22.

Results: In this study, little more than (60%) of the participants were female, with (73%) of them being Muslims. Moreover, over half of the respondents (53.0%) held a nursing B.Sc., and the service experience of (51.3%) of them was over ten years. Around (70.4%) of them had the experience of attending a hypertension workshop, and (92.2%) knew how to assess normal blood pressure. About (92.2%) of participants are aware of the causes of hypertension, and (82.6%) are aware that hypertension management aims to reduce morbidity and death, but only (39.1%) are aware of the suggested diet for hypertensive patients.

Conclusions: The findings revealed that the nurses' knowledge of hypertensive patient treatment and hypertension knowledge was excellent. Developing nurses' expertise in respect to the important factor in planning for comprehensive nursing care for a better prognosis for the patient is hypertension.

Keywords: Nurses, Knowledge, Hypertension, Diseases

INTRODUCTION

Hypertension has been mentioned to as the commonest preventable cause of death all over the world. ⁽¹⁾ Hypertension can raise the odds of developing pulmonary embolism, chronic renal disease, diffuse atherosclerosis, aortic aneurysms, heart failure, peripheral vascular disease, strokes, and ischemic heart disease. ⁽¹⁾ It has also been proved that there is a link between hypertension and cognitive impairment and dementia. Hypertensive retinopathy and hypertensive nephropathy are two further hypertension consequences. ⁽²⁻⁵⁾ According to a study, over one billion persons, or about 22% of the world's population, had hypertension as of 2018. ⁽⁶⁾ Hypertension becomes more common as people get older, and it is slightly more common in men. It is frequent in countries with high, middle, and low incomes. ⁽⁶⁻⁸⁾ Although the USA

has long been combating a number of the world's most serious communicable diseases, which has led to a double burden of sickness, there has been a failure in terms of the successful and proper implementation of the existing surveillance system. Sixty-eight percent of deaths in the world are caused by the most common diseases like cancer, COPD, diabetes, hypertension, and stroke/heart disease. ^(9, 10) Among these diseases, the prevalence rate of hypertension has increased by 15-20 percent among adults. Cardiovascular disease and its consequences, such as heart failure and kidney failure, can develop as a result of hypertension which is a preventable risk factor. ⁽¹¹⁾ Hypertension itself can be controlled by modifying its risk factors like smoking, physical inactivity, bad quality diet, and consuming alcohol. ⁽¹²⁾

Methodology

By conducting a descriptive cross-sectional study, Shar Hospital nurses were studied in order to evaluate their knowledge of nursing care and management of patients with hypertension. Non-nursing workers were omitted from the study. Using the convenience sampling technique, a total of 100 nurses were chosen.

The study period was 5 months from May to September 2021. The study sample consisted of all of the nurses who worked at Shar Hospital during that period time. Nurses who had a minimum of 6 months of service experience and who were inclined to participate in the study were recruited. Nurses with less than 6 months of service experience or those who were sick throughout the study period were crossed out. For three weeks, data was obtained utilizing a self-administered semi-structured questionnaire.

The goal of the study was explained to the sampled respondents in order to get their agreement, and they were given explicit instructions on how to complete the questionnaires. All nurses on duty throughout the study period were handed questionnaires, and their consent to participate was obtained. Respondents were given questionnaires by the researcher and assistant, who gave them time to fill them out and then returned them before they left for home after a shift. The researcher double-checked that all of the questions were filled correctly. The collected data were numerically coded and later analyzed through SPSS version 22.0 using descriptive statistics. To work out the percentages and frequencies Tables were used to display the descriptive data analysis. Excellent (80-100%), very good (70-79%), good (60-69%), adequate (50-59%), and bad (50-59%) were used to define the degree of knowledge (0-49%).

Results

Table 1 shows that the majority of the study participants (73.9%) were 30 years old or younger. The majority of the participants (73.9%) were female, and (69.6%) were married. Over half of the respondents (53.0%) had a nursing diploma and (30.4%) a nursing B.Sc. The service experience was ten years in slightly over half of the respondents (51.3%), ten to twenty years in (35.7%), and over twenty years in (13%). (69.6%) of those polled said they had never attended a hypertension training course.

Table 1: Sociodemographic characteristics of the respondents (n=100).

Variable	F	%
Age		
≤30	70	73.9
≥31	30	26.1
Gender		
male	30	26.1
female	70	73.9

Marital status		
married	80	69.6
single	20	30.4
Qualification		
Diploma	61	53.0
BSc. In nursing	39	30.4
Years of Experience		
<10 years	59	51.3
10-20years	31	35.7
>20 years	10	13.0
Training course		
Yes	20	30.4
No	80	69.6
Total	100	100.0

As revealed in Table 2, (94%) of the participants are aware of pre-hypertension blood pressure levels, and (91%) are aware of normal blood pressure measurement. About (91%) of the participants are aware of the causes of hypertension, while (40%) are aware of the risk factors for hypertension. Around (62%) of the respondents know about the significance of maintaining bed rest and raising the head of the bed, and (70%) know about the significance of monitoring and recording blood pressure while the patient is at rest. About (60%) of the nurses are able to track electrolytes, BUN, and creatinine, and (62.6%) know how to detect abrupt hypotension. Seventy-three percent of the respondents are aware of the significance of observing skin color, moisture, temperature, and capillary refill time, and (29.6%) are aware of the significance of monitoring reaction. Only (39.1%) of respondents knew the recommended diet for patients with hypertension, while (82.6%) said that hypertension care seeks to prevent morbidity and mortality. About (66.1%) of them are aware that hypertension patients should follow a moderate salt restriction, and (87%) believe that weight loss is vital in the therapy of hypotensive patients. Reduced ethanol intake, according to (70.4%) of respondents, aids in the treatment of hypertension, and relaxation, according to (91.3%), is a technique for reducing stress or anxiety.

Table (2) Nurses' Knowledge regarding nursing care and management of hypertensive patients.

Items	Yes (N %)	No (N %)
Knowledge regarding hypertension		
Knows normal blood pressure	91(91.0)	9(7.8)

measurement		
Knows blood pressure level that indicate pre-hypertension	94(94.0)	6(6.2)
Knows causes of hypertension	91(91.0)	9(7.8)
Knows that hypertension is a risk factor for cardiovascular diseases	40(40.0)	60(52.2)
Knows hypertension risk factors	62(62.0)	38(33.0)
Knows how to measure blood pressure of a patients	70(70.0)	30(30.0)
Systolic pressure represents the pressure when the heart contracts	81(81.0)	19(19.0)
Diastolic pressure represents the pressure when the heart is relaxed	73(73.0)	27(27.0)
Knowledge regarding nursing care for hypertensive patients		
Knows about maintaining bed rest and elevating head of bed	72(72.0)	28(28.0)
Know about assessing blood pressure in both arms during admission	69(60.0)	31(31.0)
Knows about monitoring and recording of BP while the patient is at rest	93(93.0)	7(7.0)
Can you Observe the sudden hypotension	72(72.0)	28(28.0)
Can you Monitor electrolytes, BUN, and creatinine	69(69.0)	31(31.0)
Can you Measure inputs and expenditures	70(70.0)	30(30.0)
Observe skin color, moisture, temperature, and capillary refill time	69(69.0)	31(31.0)
Instruct in relaxation techniques, guided imagery, and distractions	80(80.0)	20(20.0)
Monitoring response to medications to control blood pressure	20(20.0)	80(80.0)
Knowledge on the management of hypertensive patients		
Hypertension management aims to prevent morbidity and mortality	90(90.0)	10(10.0)
Knows the recommended diet for people with hypertension	30(30.0)	70(70.0)
Knows about advising the patient to Stop smoking	85(85.0)	15(15.0)
Knows moderate salt restriction	76(76.0)	24(24.0)

of the hypertensive patient		
Is good for the hypotensive patient to consume diets low in cholesterol	87(87.0)	13(13.0)
Weight loss is important in management of hypotensive patient	85(85.0)	15(15.0)
Decrease in ethanol intake helps in the management of hypertension	80(80.0)	20(20.0)
Relaxation is a technique that aims to reduce tension or anxiety	90(90.0)	10(10.0)

The respondents' knowledge scores were shown in Table 3. The individuals had very good knowledge about hypertension, according to their expertise (80%). In terms of understanding hypertensive patient management, the respondents were determined to have excellent knowledge (84%). The respondents, on the other hand, exhibited a good degree of understanding regarding hypertensive patient nursing care (75%).

Table 3: Knowledge scores distribution of the respondents.

Score	Knowledge on hypertension N (%)	Nursing care for hypertensive patient N (%)	Management of hypertensive patient N(%)
correct	80(80.0)	75(75.0)	84(84.0)
incorrect	20(20.0)	25(25.0)	16 (16.0)
Total	100 (100.0)	100(100.0)	100(100.0)

DISCUSSION

A total of 100 nurses took part in this study, and their responses were evaluated. The highest

The level of education attained by a person is referred to as educational attainment. Based on

Educational qualifications, more than half of the respondents (53.0%) had a diploma in nursing

Was followed by a BSC. In nursing (30.4%), the rest had a master's Degree.

Nursing is a healthcare profession dedicated to assisting individuals, families, and communities in achieving, maintaining, or regaining maximum health and quality of life. Nurses differ from other healthcare professionals in terms of patient care, education, and scope of practice (69.6%) those who said they had not attended hypertension training said they had.

A nurse can provide adequate care, and the consequences of weight loss and lifestyle improvements (smoking cessation, alcohol reduction, salt restriction, and increased physical

activity) are positive.¹³ Elderly patients suffering from isolated systolic hypertension should be treated with non-pharmacological treatment.¹⁴

According to the results, (91%) of the nurses know about normal blood pressure measurement, and (94%) know about blood pressure levels indicative of pre-hypertension. About (91%) of the participants are aware of the causes of hypertension, and (62%) are aware of the risk factors for hypertension. About (62.6%) of respondents are aware of the importance of bed rest and elevating the head of the bed, while 60% are aware. While the patient is at rest, concerning blood pressure monitoring and recording approximately (69%) of respondents can detect abrupt hypotension, and 60% can track electrolytes, BUN, and creatinine. When a nurse was involved in the treatment of patients with managed hypertension, their condition improved dramatically.

Controlled hypertensive patients in Western Australia improved from 70% to 87 percent in three years, while controlled hypertensive patients in Israel improved from 70% to 99 percent.

^{15, 16} The nurse was in charge of patient contact since she was seen to be the best at connecting with patients and maintaining continuity of care.¹⁷

More than seven-tenths (69%) of respondents are aware of the need of observing skin color, wetness, temperature, and capillary refill time, whereas (20%) are aware of the importance of monitoring response to blood pressure drugs. Only (30%) of respondents knew the recommended diet for patients with hypertension, while (90%) percent said that hypertension care seeks to prevent morbidity and mortality. About (76%) of them are aware that hypertension patients should follow a moderate salt restriction, and (85%) believe that weight loss is vital in the therapy of hypotensive patients. Reduced ethanol intake, according to (80%) of respondents, aids in the treatment of hypertension, and relaxation, according to (90%), is a technique for reducing stress or anxiety. Nurses might be able to give the patient more time. Their responsibilities in the programs included measuring blood pressure, providing information, teaching self-measurement, giving dietary recommendations, controlling medicine intake, controlling laboratory tests, encouraging the patient, and acting as an interpreter for the physician.¹⁸ The nurse saw psychological issues and adverse effects and reported them to the doctor.¹⁹ The physician was in charge of patients who had difficulties²⁰

Conclusions

According to the findings, the nurses' knowledge of hypertensive patient management and hypertension knowledge was excellent. Nonetheless, understanding of hypertensive patient nursing care was adequate. Staff nurses must make more sincere and persistent efforts to improve their knowledge of hypertension patient nursing care and management.

Recommendations

Beginning a protocol for hypertensive patient nursing care and treatment, as well as teaching the nursing staff on this topic. Raising the nurses' awareness of and building their knowledge about hypertension are the major aspects of planning for comprehensive nursing care for a better prognosis for the patient, as well as to reduce some issues and improve the quality of life of hypertensive patients. Nurses' education should be improved in general.

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