

To Check the Knowledge of Hypertension Amongst Undergraduate Physiotherapy Students

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Abstract

Aim: To check the knowledge of hypertension amongst undergraduate physiotherapy students.

Background: Hypertension is considered to be a serious medical condition that significantly increases the risk of heart, brain, kidney and other diseases. It is also called the "silent killer". Sedentary lifestyle, obesity, excessive salt intake, consumption of tobacco are risk factors of hypertension. Hypertension is present in the curriculum of the 4 year long bachelor of physiotherapy course where main emphasis on this topic is usually in the last year of the course.

Case description: 125 students filled a hypertension knowledge assessment questionnaire. The mean result obtained was 12.8 from an 18 point questionnaire.

Conclusion: The study concludes that there is moderate knowledge of hypertension amongst undergraduate physiotherapy students.

Clinical significance: Knowledge of hypertension is needed in physiotherapy students to help prescribe a proper exercise regime for patients suffering from hypertension and also help them improve their quality of life. Physiotherapist can also play a major role in preventing hypertension.

Keywords: Hypertension • Knowledge • Undergraduate physiotherapy students

Introduction

Hypertension is seen widely in developed and developing countries. Hypertension is one of those diseases that slowly kill your body by affecting each and every system of the body. It is called the silent killer. Studies have shown that people suffering from hypertension in India in 2005 were around 20.6% and this rate would further increase to 22% by the end of 2025 [1].

A person can be defined hypertensive if his systolic blood pressure is more than 120 mmHg and diastolic pressure is more than 80 mmHg. As per the JNC 7 criteria individuals whose blood pressure is between 140-159/90-99mmHg are considered to be in stage 1 of hypertension. An individual whose blood pressure is more than 160/100-110mmHg are considered to be in stage 2 of hypertension [2-5].

There are two types of hypertension usually seen, primary and secondary. Amongst these primary also known as essential hypertension accounts for 85% of the cases where 70% of them have a familial history.³ Secondary hypertension is usually caused by a specific disease or abnormality and usually accounts for the remaining 15%.

Ideally to measure blood pressure the patient should be sitting in a comfortable position with his feet touching the ground and arms resting on the chair and back supported by the chair. No tobacco and caffeine intake should be done prior to measuring of blood pressure. Systolic blood pressure is a better predictor of cardiovascular disease than diastolic blood pressure.

For the treatment of hypertension the first and foremost thing to do is modification of lifestyle. This can be done by various measures such as reduction in weight for obese or overweight individuals, maintain a diet plan, sodium dietary intake to be reduced and the most important thing to do is stop smoking and also reduce the alcohol intake.

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Physiotherapists deal with a variety of patients who suffer from different kind of problems. Patients suffering from hypertension should be clearly instructed by the therapist to exercise regularly and remain healthy or it may affect their health status. Hypertension can also be prevented by maintaining a healthy lifestyle by adapting to some changes in the lifestyle of an individual.

Studies have shown that knowledge of hypertension is preferably moderate in medical university going students so here we check the knowledge of hypertension among undergraduate physiotherapy students to see how much a physiotherapist actually knows regarding this disease and this may help increase the awareness of hypertension among young individuals [6-10].

Case Report

A google form was created and sent to various undergraduate physiotherapy students of various colleges in Gujarat. Students that were asked to fill the form were in second, third and final year of physiotherapy.

A questionnaire was asked to fill by the students which was adapted from the hypertension evaluation of lifestyle and management scale (HELM). This questionnaire was first used in a study where the knowledge of hypertension was checked in nurses pre and post their training in task shifting strategies.² The questionnaire evaluated nurses' education, and current hypertension knowledge with questions such as; interpretation of systolic and diastolic blood pressure numbers, ultimate consequences/comorbidities of persistent hypertension, lifestyle changes for hypertension prevention, motivational interviewing technique, and their confidence in detecting and treating hypertension. 2

Scoring was done on the basis of allotting each question a single mark and further the total was calculated.

Discussion

Out of 125 students that participated in this survey, 81 students were in the final year of physiotherapy, 41 students were in their third year of physiotherapy and 3 students were in their second year of physiotherapy.

When the students were asked if someone's pressure is 115/75 it is normal, high or low, 96 students out of 125 opted for normal and 27 students said that

it is low whereas the remaining said it was high.

The second question that was asked in the survey was that if someone's blood pressure is 160/100 it is considered high, low or normal and according to the survey students that opted for the correct answer were 120 out of 125.

Students were asked that when the person is suffering from hypertension how they should take their medicines, 113 students out of 125 students said that people suffering from high blood pressure should take their medicines regularly, 8 students answered that an individual should take their medicines a few times a week and 2 students out of 125 opted for the answer that only when the person feels sick.

When asked if high blood pressure can cause heart attacks, 123 out of 125 students opted for yes and the remaining opted for no.

When asked a person who has high blood pressure should eat more fruits and vegetables 113 students out of 125 opted for yes, 6 opted for no and the remaining opted for the option do not know.

When the students were asked that high blood pressure can cause a person to have stroke, 95.2% students said yes whereas 1.6% of students out of 125 said no that high blood pressure cannot be a cause for a person to suffer from stroke. This question was answered correctly by most of the students.

The average score found from the survey was 12.8 indicating moderate knowledge of hypertension among young physiotherapy students.

At last the students were asked if they were comfortable in treating patients with hypertension and 60 out of 125 students said that were confident enough to treat people with hypertension.

Students usually when studying hypertension pay more attention on the causes of hypertension and how it is treated, they sometimes neglect the pathophysiology of the hypertension a

The study concludes that there is moderate knowledge of hypertension among undergraduate physiotherapy students and there is a need to increase awareness of hypertension of students and how it affects an individual's lifestyle.

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