Hipertensión
y riesgo vascular

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ORIGINAL ARTICLE

Are nurses sufficiently well prepared to take on the detection of hypertension?

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Abstract

Background: The detection of arterial hypertension requires training and knowledge by the responsible health professional. The current guidelines recommend doctors and nurses to work together for the screening of hypertension.

Objectives: To assess the level of knowledge among primary healthcare nurses' in the screening of arterial hypertension.

Methods: Descriptive, observational and transversal study. A random representative sample of 165 nurses working with adult patients in community-based primary healthcare centres were asked to complete an evaluation test of theoretical knowledge about hypertension. Higher scores indicated a greater knowledge about the detection of hypertension.

Results: 32.1% of the participants obtained a score equal to or more than 72.7 which corresponded to the 75th percentile of correct answers. Nurses with lower scores were older, permanent employees with technical training studies. A higher age and technical training studies contributed independently to a lower score. In the multiple linear regression model, age and type of studies contributed independently to questionnaire's score variance.

Conclusion: Currently, primary care nurses in the studied region do not have sufficient theoretical knowledge to detect hypertension. The results show the need to establish strategies to achieve the necessary knowledge for the implementation of a correct hypertension screening. For professional nurses, continuing education is essential to safe and effective nursing care.
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PALABRAS CLAVE
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¿Está el personal de enfermería lo suficientemente preparado para detectar la hipertensión?

Resumen
Antecedentes: La detección de la hipertensión arterial requiere formación y conocimientos por parte del profesional sanitario responsable. Las directrices actuales aconsejan a los doctores y enfermeros que trabajen juntos para diagnosticar la hipertensión.
Objetivos: Evaluar el nivel de conocimiento entre el personal de enfermería de atención primaria para detectar la hipertensión arterial.
Métodos: Estudio descriptivo, observacional y transversal. Se pidió a una muestra aleatoria de 165 enfermeros que trabajaban con adultos en centros de atención primaria que completaran una prueba de evaluación de sus conocimientos teóricos acerca de la hipertensión. Un resultado más alto indicaba un mayor conocimiento a la hora de detectar la hipertensión.
Resultados: El 32,1% de los participantes obtuvo una puntuación igual o superior a 72,7, que se correspondía con el percentil 75 de respuestas correctas. El personal de enfermería con puntuación más baja fue el de los empleados más mayores, fijos y con estudios técnicos. La edad más avanzada y tener estudios de formación técnica contribuyeron de manera independiente a una menor puntuación. En el modelo de regresión lineal múltiple la edad y el tipo de formación contribuyeron de manera independiente a la variación del resultado.
Conclusión: En la actualidad el personal de enfermería de atención primaria de la región estudiada no cuenta con suficientes conocimientos para detectar la hipertensión. Los resultados muestran la necesidad de establecer estrategias para alcanzar los conocimientos necesarios y poner en marcha un adecuado plan de diagnóstico de hipertensión. Para los enfermeros profesionales una formación continuada es clave para un cuidado seguro y eficaz.

Introduction

Hypertension is a well known and highly prevalent cardiovascular risk factor. According to the World Health Organization, hypertension affects 45% of the world population, a higher percentage of men than women have high blood pressure until age 45. From ages 45–64, the percentage of men and women is similar; after that a much higher percentage of women than men have high blood pressure reaching 76.1% in individuals older than 75 years.[1] Globally, hypertension is responsible for 7.6 million premature deaths, which represents 13.5% of all deaths, and is the cause of some type of disability for 92 million people.[1,2] Inadequate control of blood pressure, together with the presence of other cardiovascular risk factors, increases cardiovascular morbidity and mortality.[3–5] Different studies have described the nurse's role in the detection of hypertension and several authors suggest that nursing, for their training, should be responsible for the screening and the application of clinical protocols for blood pressure detection and is especially important in the monitoring.[6–8] The activities to be carried out by professionals treating patients with hypertension have been clearly detailed in protocols and clinical guidelines.[9] Nevertheless, implementing these protocols requires that nurses get specific knowledge and training in the proper use of instruments and blood pressure measurement techniques.[10]

However, there is inadequate evidence to affirm the viability of the nursing role in the screening of hypertension. The detection is based on a good technique, but also requires significant knowledge. The objectives of this study are to determine the degree of nurses' specific knowledge about the technical capacity to obtain accurate readings of blood pressure and to identify the factors that indicate a risk of unawareness, in order to define specific strategies for improvement.

Material and methods

A descriptive, observational, transversal study was carried out in all of the 23 community-based primary health-care centres (CBPHCs) in Girona (Spain), belonging to the National Health System (NHS). All primary care nurses working with adult patients in these CBPHCs were included in the study. The sample was performed with a dual system: first a multietage sampling to determine the number of centres that would be included in the sample and subsequently the random inclusion of the number of professionals in each centre. A representative random sample of 165 participants was selected; the sample size was calculated to achieve an alpha risk of 0.05 with a precision of $\pm 0.05\%$ units to detect an estimated difference of 44% in a two-sided test, including a possible 20% loss. There were no losses because the randomization was contemplated. All selected professionals answered the questionnaire.

The study was approved and accepted by the ethics committee of Primary Care. Patients with hypertension were monitored in the primary care environment, within the framework of defined clinical protocols.[10] The current public