Medical and nursing students’ knowledge of accurate blood pressure measurement procedure in University Malaysia Sarawak

Khin Cho Aung1,*, Mar Mar Lwin1, Khin Than Yee2, Wai Wai Myint3

1 Department of Basic Medical Science, Faculty of Medicine and Health Science, University Malaysia Sarawak (UNIMAS), 94300, Sarawak, Malaysia
2 Department of Paraclinical Science, Faculty of Medicine and Health Science, University Malaysia Sarawak (UNIMAS), 94300, Sarawak, Malaysia
3 Rehabilitation Center, Faculty of Medicine and Health Science, University Malaysia Sarawak (UNIMAS), 94300, Sarawak, Malaysia

ARTICLE INFO

Article history:
Received 27 August 2017
Received in revised form 5 October 2017
Accepted 6 October 2017
Available online 18 October 2017

ABSTRACT

Blood pressure measurement is a basic, frequently-used clinical procedure. Nowadays with increasing use of automatic devices, blood pressure measurement procedure is the most inaccurately performed by the healthcare professionals. The medical and nursing students need good knowledge of accurate measurement procedure for correct diagnosis of hypertension. Our study assessed the knowledge of blood pressure measurement procedure among medical and nursing students in Faculty of Medicine and Health Science of University Malaysia Sarawak (UNIMAS). This was a quantitative, cross-sectional study. Data were collected from total 242 students (171 medical and 71 nursing programmes) with a pre-tested questionnaire including patient’s position, application of instruments, and measurement technique and blood pressure reading. Of 16 items tested, correct answers for 9 items were less than 70%: proper patient’s position (66.9%), choice of the arm (59.1%), appropriate cuff size (51.2%), chest piece (bell or diaphragm) of stethoscope used for listening of Korotkoff sound (11.6%), estimated inflation cuff pressure (66.1%), recommended deflation rate (65.3%), preference of last digit of blood pressure reading (60.7%), awareness of the auscultatory gap (31.0%), and habit of palpatory method (27.7%). 51.7% of total students (n= 242) had good knowledge scores. There was no significantly different between the medical and nursing students’ mean knowledge scores (p value=0.099). Our study found that the students need subsequent learning and practices to improve their knowledge for accurate blood pressure result.

Keywords:
Blood pressure measurement procedure, knowledge, medical and nursing

1. Introduction

Arterial blood pressure, one of the “vital signs,” is an important indicator of a person’s state of health. Blood pressure (BP) measurement is always done to screen for hypertension which is a major