

Antihypertensives knowledge – Assessment in higher education students through digital game-based learning

Helena GONÇALVES¹, Romana CAPITÃO^{1*}, Agostinho CRUZ, Alexandra OLIVEIRA,
Ana Isabel OLIVEIRA, Cláudia PINHO, Janete BORGES and Rita Ferraz OLIVEIRA

Escola Superior de Saúde – Politécnico do Porto

¹ Both authors contributed equally to this work

* capitaopp1@gmail.com

Hypertension has been described as the most prevalent risk factor for cardiovascular diseases, which are the main cause of death worldwide. In Portugal, in 2015, its prevalence was of 36%. This pathology's therapeutic success depends upon a good knowledge about the therapeutic alternatives available. There is, therefore, imperative to insure that the learning process is efficient. In order to improve it, in a more appealing and effective way, there has been an increase in the employ of digital tools. This study aimed to assess the impact of a mobile application in knowledge's acquisition and/or consolidation about antihypertensives, in higher education Pharmacy students. The study took place in Superior Health School of Porto, Portugal, with a sample of 141 students. Data was collected by applying two questionnaires. The first was applied in the beginning of the study and the second after the usage of the mobile application. Four groups of study were defined, that varied in accordance with the application's usage frequency: group A (2/week); group B (4/week); group C (every day), group D (control group). The study revealed an evident evolution from the first to the second questionnaire, in all course years ($p < 0.001$) and study groups ($p < 0.001$). There was an evolution of 31.34% in group A, 45.18% in group B and 49.37% in group C. It can be concluded that mobile applications, namely digital games educationally directed, can be useful tools in higher education students.

Keywords: Hypertension; Antihypertensives; Digital game-based learning; e-learning