

Abstract

Pulse Check in Pharmacies VI

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Introduction: Atrial fibrillation (AF) is one of the most common heart diseases and one of the most common arrhythmias. AF is up to 40 % asymptomatic. Pharmacists are in contact with many patients every day, as a result, can play a role in detecting many diseases, including AF. The screening of AF in pharmacies is now recognized as one of the established strategies for opportunistic screening of AF.

Aim: The aim of this study was to demonstrate the possibility of pharmacist involvement in AF screening to potentially detect AF and other heart conditions. A sub-objective of the project was to increase awareness of AF among the general public.

Methods: The measurements took place in a community pharmacy located within a health center for several weeks between July 17, 2023 and August 25, 2023 and during two weeks in March 2024. Patients were included in the study according to the entry criteria, which were age over 55 years and no chronic anticoagulant treatment. Patients were offered measurements. If they agreed, a short questionnaire regarding their health status, symptoms and diseases was completed. This was followed by heart rate (HR) measurement using three different methods – palpation, KardiaMobile 6L ECG monitor and Microlife BP B3 AFIB blood pressure monitor, which was also used to measure blood pressure (BP). Patients at high risk of developing AF or with high BP or unusual heart rate values were referred to a physician.

Results: A total of 85 patients were measured (67,1 % women; average age of $71 \pm 8,7$ years). The most common symptom reported was fatigue in 31.8 % people, followed by *dyspnoea* in 22,4 % people. Forty-nine persons had arterial hypertension. The average palpation-measured HR was $73,8 \pm 12,3$ bpm, with the KardiaMobile 6L device it was $74,6 \pm 11,9$ bpm, and with the Microlife BP B3 AFIB device it was $75,2 \pm 12,2$ bpm. Palpation method underestimated HR value both compared to examination performed using KardiaMobile 6L ($P = 0.0246$) and compared to examination performed using the Microlife BP B3 AFIB device

(P = 0.0018). The average blood pressure value was 139/79 ($\pm 14.8/ \pm 10.6$) mm Hg. The average CHA2DS2-VASc score was 2.6, with a higher value observed in women. Six patients had HR outside the normal range and were referred to a physician. Additionally, 13 patients were referred to a physician due to high BP. Feedback was recorded only in one patient with high BP. The patient was already being treated for high BP, and the doctor supplemented her treatment with indapamide.

Discussion and conclusions: Involving pharmacists in AF screening is beneficial as they can reach a larger proportion of the population through their availability. In pharmacies, it's possible to reach a larger portion of the population, which increases awareness of this issue among patients. To maximise the benefits of early detection in patients with AF, interdisciplinary collaboration should be encouraged.

Key words: atrial fibrillation, pharmacy, pharmacist, screening, heart rate