

Omboni S, Ballatore T, Rizzi F, Tomassini F, Campolo L, Panzeri E.

Feasibility of 24-h blood pressure telemonitoring in community pharmacies: the TEMPLAR project.

J Hypertens. 2021 Oct 1;39(10):2075-2081.

Objectives: Low-quality ambulatory blood pressure monitoring (ABPM) due to recurring artifacts may limit its clinical value. We evaluated the features and impact on BP control and patient management of ABPMs performed in Italian community pharmacies, according to their quality.

Methods: Twenty-four-hour ABPMs were obtained by a clinically validated, automated upper arm device and uploaded on a certified web-based telemedicine platform (www.tholomeus.net). The system automatically evaluated the quality of the recording according to current guidelines. In case of poor ABPM quality, the pharmacist was prompted to repeat the test. All the ABPMs were labeled as valid or invalid. Demographic and clinical characteristics of the patients and BP control were compared between the two groups.

Results: A total of 45232 ABPMs were obtained in as many patients through 812 pharmacies (87.7% recordings were valid). Factors significantly associated with a better ABPM quality were younger age, use of antihypertensive medications, presence of at least one cardiovascular risk factor, concomitant disease or treatment, a test performed in the coldest months, and residence in the cooler northern regions of the country. The 24-h and daytime ambulatory BP level and the prevalence of ambulatory hypertension and white-coat hypertension were higher, and the prevalence of masked hypertension lower in patients with valid recordings. High odds of obtaining a valid recording were observed in patients repeating the ABPM.

Conclusion: Ambulatory BP telemonitoring is feasible in community pharmacies as long as potential predictors of unsuccessful outcomes are taken into account and adequately managed.

doi: 10.1097/HJH.0000000000002895

https://journals.lww.com/jhypertension/Abstract/2021/10000/Feasibility_of_24_h_blood_pressure_telemonitoring.18.aspx