Omboni S, Mancinelli A, Rizzi F, Parati G; TEMPLAR (TEleMonitoring of blood Pressure in Local phARmacies) Project Group.

Telemonitoring of 24-Hour Blood Pressure in Local Pharmacies and Blood Pressure Control in the Community: The Templar Project.

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BACKGROUND: The analysis of ambulatory blood pressure monitorings (ABPMs) performed in 639 Italian pharmacies in the context of a telehealth-based service allowed to evaluate the level of blood pressure (BP) control in the community. METHODS: Twenty-four-hour ABPMs were performed by a clinically validated, automated, upper-arm BP monitor. Recordings were uploaded on a certified web-based telemedicine platform (www.tholomeus.net) and remote medical reporting provided. In each subject, an automatic BP measurement was obtained in the pharmacy and clinical information collected before starting the ABPM. RESULTS: A total of 20,773 subjects (mean age  $57 \pm 15$  years; 54% females; 28% receiving antihypertensive medications, 31% with any cardiovascular [CV] risk factor) provided valid ABPMs. BP control was poor, but better in ambulatory conditions (24-hour BP <130/80 mm Hg 54% vs. pharmacy BP < 140/90 mm Hg 43%; P < 0.0001) and in drug-treated subjects. Sustained normotension was reported in only 28% subjects. Isolated nocturnal hypertension (16%; nighttime BP ≥120/70 mm Hg with normal daytime BP) was more common (P < 0.0001) than isolated daytime hypertension (9%; daytime BP  $\geq$  135/85 mm Hg with normal nighttime BP). Sustained hypertension (43%) was more common in younger males at the lowest CV risk, with daytime hypertension. White-coat hypertension (14%) was more common in females. Masked hypertension was not uncommon (15%) and more often observed in older males with an elevated nocturnal BP. CONCLUSIONS: A telemedicine-based service provided to community pharmacies may facilitate access to ABPM, thus favoring a more accurate hypertension screening and detection. It may also help describe the occurrence of different 24-hour BP phenotypes and personalize the physician's intervention.

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