Detection of white coat hypertension and white coat effect in patients who visit community pharmacies in Andalusia. (Abstract 231 reviewers)

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Background According to the latest position paper from the European Society of Hypertension (2016), white coat hypertension (WCH) is considered to apply to individuals not being treated for HTN who show high blood pressure (BP) figures in isolated readings with normal values in ambulatory blood pressure monitoring (ABPM). Also an extension of the definition of white coat hypertension (WCH), we define the white coat effect (WCE) as the presence of WCH in patients receiving antihypertensive therapy. Its detection is important, as it is associated with an increased risk of cardiovascular events.

Purpose To determine the prevalence of WCH among the population attending pharmacies in Andalusia, confirmed with 24-hour ABPM, and determine the prevalence of the white coat effect (WCH) in people attending community pharmacies in Andalusia.

Method A cross-sectional observational study performed in community pharmacies in Andalusia registered in the accreditation programme of the MAPAfarma project promoted by the Andalusian Council of Professional Associations of Pharmacists (CACOF), carried out between June 2015 and June 2017.

Findings Out of the total of 1170 patients included in the MAPAfarma project, 522 (44.62%) were not undergoing treatment. Valid data were obtained for 501 members of this population, 298 (59.48%) were women (mean age 47.21 years (SD = 12.77 [max: 81?min: 20])), in whom a prevalence of WCH of 24.68% was observed (95% CI, 17.4?33.8); that is, of the 154 who had high values in an isolated blood pressure reading at the community pharmacy, 38 had a 24-hour ABPM within normal values. And the other hand, 648 (55.38%) were receiving pharmacological treatment for hypertension, and valid results were obtained for 619; 299 (48.30) were women (mean age 61.55 years (SD = 11.85 [max: 87?min: 27])). Of the 301 who gave high blood pressure values in the isolated reading, 69 showed normal values after ABPM was performed, and we can therefore estimate the presence of the white coat effect in the population receiving antihypertensive treatment as 22.92% (95% CI, 17.83?29.01).

Conclusion Practically one out of every four patients (24.68%) attending Andalusian community pharmacies, not undergoing antihypertensive therapy, gave a high value in the isolated office blood pressure reading and were later considered normotensive after 24-hour Ambulatory Blood Pressure Monitoring. On the other hand, two out of every ten patients (22.92%) undergoing antihypertensive therapy gave a high value in the isolated office blood pressure reading and were later considered as normotensive after ABPM was performed at Andalusian community pharmacies.