



PHARMACEUTICAL CARE NETWORK EUROPE

Working Conference 2013 – Abstract

Collaborative pharmaceutical care in research and practice

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The above mentioned participant in the PCNE WC 2013 wishes to submit following abstract for a poster or oral communication. If accepted and presented, the abstract will be published in the International Journal of Clinical Pharmacy. Please make sure the abstract is no longer than 350 words, excl. author-details.

Title	Predictors of masked hypertension in the community pharmacy setting
Author(s)	Sabater-Hernández D, de la Sierra A, Sendra-Lillo J, Benrimoj SI, Martínez-Martínez F, Faus MJ.
Type of abstract	<input checked="" type="checkbox"/> Research <input type="checkbox"/> Practice development <input type="checkbox"/> Practice implementation
Aim of project/study	Community pharmacy-masked hypertension (CPMH) is defined by the presence of elevated ambulatory (ABP) or home blood pressures (HBP) despite normal values when measured at the community pharmacy (CPBP). We have previously reported ¹ that this is a relatively frequent condition in hypertensive patients attending community pharmacies (around 15%). As ABP and HBP are stronger predictors of target organ damage and cardiovascular events than office or casual BP, CPMH could have relevant clinical implications and should be identified. The aim of this analysis was to explore the factors associated with the presence of CPMH.
Method	BP was measured at the pharmacy (4 visits), at home (4 days), and by 24-hour ABP monitoring in 169 treated hypertensives ¹ . CPMH was defined as a CPBP (systolic BP/diastolic BP) <140/90 mmHg in the presence of either HBP or daytime ABP ≥135 and/or ≥85 mmHg. Predictors of CPMH were analysed within 124 patients with normal CPBP (mean age: 55±11 years; female: 63%), using multivariate logistic regression. As CPMH was defined using either ABP (18.5%) or HBP (22.6%) as reference methods, two different models were constructed. Independent variables were: gender, age (4 categories), smoking status, CPBP (3 categories), body mass index (3 categories), number of antihypertensive drugs (3 categories) and diabetes.
Result(s)	Regression analysis for CPMH using ABP as the reference method, revealed only systolic CPBP >130 mmHg as an independent factor [OR=6.76 (p=0.021); <120 mmHg as reference].

Otherwise, current smoking [OR=5.44 (p=0.028)], age >54 years [54 to 63 years: OR=14.32 (p=0.024); >63 years: OR=37.30 (p=0.006); <45 years as reference], diastolic CPBP >80 mmHg [80 to 85 mmHg: OR=10.66 (p=0.003); >85 mmHg: OR=7.80 (p=0.017); <80 mmHg as reference] and systolic CPBP >130 mmHg [OR=14.85(p=0.003); <120 mmHg as reference] were independent determinants of CPMH using HBP as the reference method.

In conclusion, the level of BP measured at the pharmacy is the main determinant of the presence of CPMH using either ABP or HBP as the diagnostic method. Age and smoking are also associated with the presence of CPMH determined by HBP, but not by ABP, indicating that both methods are not totally interchangeable for the diagnosis of this condition.

References

1. Sabater-Hernández D, de la Sierra A, Sánchez-Villegas P, Santana-Pérez FM, Merino-Barber L, Faus MJ. Agreement between community pharmacy, ambulatory and home blood pressure measurement methods to assess the effectiveness of antihypertensive treatment. The MEPAFAR study. *J Clin Hypertens (Greenwich)* 2012;14:236-44.

+++ NB: PhD students still pay the early bird fee for their abstract if their abstract is accepted ++++