## The community pharmacists and their practice as health care providers

Sr. Director:

The pharmacists are probably the health professionals who are closest and most accessible to the patients and the general population<sup>1</sup>. Their opinions related to health education have an important impact on the health of the population<sup>2</sup>. The pharmacist may play the role of an active health educator by implementing interventions tending to reduce the tobacco habit or to minimizing the risks of AIDS contagion. The characteristics of the pharmacists that implement these interventions have not been identified until now.

Within a cross-sectional study carried out on a sample of 150 pharmacies of the NW of Spain, the objective of which was to identify the factors associated with the quality of dispensing<sup>3</sup>. We included several items on the interventions of the pharmacist related to health education. The objective of this analysis is to estimate the proportion of pharmacists who carry out prevention activities about tobacco and AIDS and to analyze if these activities are associated with their opinion about health education.

Level of agreement with the assertion "The pharmacist must be a health educator" (Likert-like scale 1 to 5) were considered as exposure. This variable was dichotomized: no health educator (1 to 3) and health educator (4 to 5). The presence of "do not smoke" poster, the request to customers to put out their cigarette; the availability of an automatic condom dispenser, and the availability of kits of disposable syringes for drugs addicts were considered as dependent variables. Two new dichotomous variables have been created: tobacco activities (0 = there isn't poster and he doesn't request to customers to put out the cigarette; 1 = at least one activity); AIDS activities (0 = there isn't preservative dispenser and he doesn't dispense kits; 1 = at least one activity). Chi-square and multiple logistic regression were used for data analysis.

Of the 150 sampled pharmacists, 4 were excluded. The 84.2% participated. The 69.9% were females, mean age is 42.7 and median 39, the 32.5% smoked and the 18.7% considered that the pharmacist must be a health educator. The proportion of pharmacies with preservative dispenser was 13.2% (95% CI: 7.8-20.6) and that with "Do not smoke" posters was 11.6% (95% CI: 6.5-18.7). The proportion of pharmacists who request customers to put out their cigarette was 19% (95% CI: 12.4-27.1), while 50.4% (95% CI: 41.2-59.6) dispensed kits for drug addicts.

The 36% of the health educator pharmacists requested to customers to put out the cigarette vs. the 15% of the no health educator pharmacists (OR = 3.06, adjusting by sex, age and tobacco; 95% CI: 1.06-8.83). The 22.7% of the health educator pharmacists had "Do not smoke" poster vs. the 9.1% of the no health educator pharmacists (p = 0.07). The 50%

of the health educator pharmacists carried out at least one activity about tobacco vs. the 21.2% of the no health educator pharmacists (OR = 3.57, adjusting by sex, age and tobacco; 95% CI: 1.30-9.79). On the contrary, the 13% of the pharmacists had automatic preservative dispenser and the 50% of the pharmacist dispensed kits for drugs addicts, independently of their opinion about health education.

Finally, the 50% of the male pharmacists carried out at least one activity about tobacco vs. the 23.6% of the female pharmacists (OR = 2.98, adjusting by opinion about health education, age and tobacco; 95% CI: 1.23-7.20). And, in relation to age, the 24.7% of the pharmacists younger than 50 years old carried out at least one activity about tobacco vs. the 18.7% of the pharmacists older than 50 years old.

The proportion of pharmacists who carried out activities about AIDS is higher than the proportion of pharmacists who carried out activities about tobacco. However, it is amazing that the pharmacist opinion about health education is not translated into his practices in relation to AIDS. The effect shown by the pharmacist opinion on his duty of acting as a health educator on tobacco activities turns out to be logic. Finally, the effect of age is also consistent with other studies that have shown a higher level of availability of younger health professionals towards health promotion programs.

Our study has not been designed to analyze factors related to health education interventions. This may reduce the validity of the results. However, the coherence of our results and their consistency with other studies is an argument for the association to be real<sup>4</sup>. Further research should be specifically designed to determine and quantify the pharmacists' characteristics associated with health promotion interventions by the pharmacists.

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