Impact of a pharmaceutical-medical intervention to minimize patients at risk by high dose of zolpidem and factors associated with deprescribing.

Ingrid Ferrer Lopez, Juan Carlos Dominguez Camacho, Sandra Regina Benavente Cantalejo, María de la O C araballo Gutierrez, Juan Francisco Gutierrez Gil, Daniel Palma morgado.

Background Andalusia has a high use of benzodiazepines and Z-drugs (BZDZ), around 13% of the adult population using them. This chronic use causes tolerance and dependence, doubling the risk of mortality, increasing fractures and falls (66%) and cognitive deterioration (60%). Assuming all this it’s a public health risk. In January-13 the FDA and later the AEMPS, made a drug safety communication: warned of the risk of using the higher dose of zolpidem (ZPD), can increase the risk of next-day impairment of driving and other activities that require full alertness.

Purpose To assess the impact of an education intervention carried out with doctors to reduce the number of patients treated with high doses ZPD. Also determine which are the variables influence on deprescribing.

Method Intervention study with control group over all the population of the province of Seville uses of ZPD. The intervention was a strategy designed by primary care pharmacists, consisting on informing to the doctors over the alert with the list of affected patients and proposals for their review using educational material for them and patients. The comparison group was the population, under the same circumstances, of the rest of the Andalusia provinces. The main result is to decrease the number of doses per thousand of patient per a day(DHD)of ZPD and secondary results are variations BZDZ-DHD, number of patients, and referrals to mental health care(DSM). The independent variables from patient are: age, sex, pensioner/active regime, economic income, time of prescription and for the management are: health center, medical prescription synthetic index of quality(ISCC) and BZD rates. Information sources are the Andalusian Health Service dispensing databases and we use a descriptive statistics and ANOVA.

Findings A advice note with counseling and a list of patients were sent to 1,076 doctors. The patients affected were 17,117, average of 67.6 years, where 71.8% were women. 18 months after the intervention, the variation ZPD-DHD decreased 26.3%. The number of patients at risk decreased 50.5%. BZDZ-DHD decreased 12.5%, with no increase in DSM were observed. The probability of withdrawal with p<0.001, by order depends on the health center,BZD rate,time of prescription and ISCC. Currently the patients at risk have increased.

Conclusion A simple intervention, divides by two the number of patient at risk, without observing deviations to other drugs, without increasing the mental health care. The probability of withdrawing depends, fundamentally, on management variables and not so much on variables associated with patients. These interventions lose their impact through over time and we keep working on it.