Material and methods First, QI were selected through a literature review and expert meetings within the network for healthcare institutions (Zorgnet-ICURO). Next, these QIs were assessed for content validity in two separate datasets. The first dataset was obtained from national RD (year 2017, collected from all Belgian health care insurers). The second dataset comprised facturation data (FD) from two test hospitals: one general hospital psychiatry ward (GHP) and one mental health hospital (MHH).

Results Four QIs were selected allowing in-depth evaluation of BZD use (Table). For the MHH, reimbursement data corresponded well with local facturation data (719 vs. 710 patients with ≥ 1 BZD use) but not in the GHP (161 vs. 206 patients). Upon analysis, it emerged that three-quarters of QIs could not be calculated as RD does not provide for a valid nominator at different times during hospitalisation. A subsequent survey among hospitals showed high variability in how RD are reported to insurers, explaining information loss.

Abstract 5PSQ-083 Table 1

	GHP	GHP	MHH	MHH
	FD	RD	FD	RD
Q1: admissions with BZD (%)	93/280 (33.2)	N/A	256/891 (28.7)	N/A
Q12: discharged with BZD (%)	48/280 (17.1)	N/A	179/891 (20.1)	N/A
Q13: continuous BZD use (%)	34/280 (12.1)	N/A	144/891 (16.2)	N/A
Q14: median BZD (DDD)/patient day (IQR)	1.2 (1.5)	1.1 (1.7)	0.4 (0.9)	0.4 (0.9)

Conclusion Current RD are not sufficiently detailed to evaluate BZD use within/between hospitals. However, high use of electronic prescribing in Belgian hospitals allows the use of actual prescription and administration data for this purpose but will need additional effort from hospitals.¹ A uniform structure is currently under development to allow standardised data extraction and comparison.

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No conflict of interest.

5PSQ-084 RISK OF QT INTERVAL PROLONGATION IN OLDER PATIENTS

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Background The QT interval prolongation is a rare adverse effect, but its clinical relevance is very serious, being able to trigger sudden cardiac arrest and death. The drugs most frequently involved in QT prolongation are often used among elderly patients.

Purpose The objective was to analyse the interventions carried out regarding the prescription of medications in elderly patients who prolong the QT interval.

Material and methods This was a transversal descriptive observational study in which the Access registry of the pharmaceutical interventions performed in the Institutionalized Patient Care Unit of the Emergency Department was reviewed. The

study period was from January to March 2017. Demographic data of the patients attended (age, sex) were analysed, as well as the number and type of interventions carried out and the drugs involved (no drugs/patient and pharmacological group).

Results During the study period, the treatment of 134 patients was reconciled and reviewed, of which 105 required some type of intervention in the usual treatment prescribed. The mean age of these patients was 85.7 years (64.17% females, 35.82% males) with an average of 9.5 drugs per patient.

In 18 of the 134 (13.4%) patients, the intervention was related to drugs that prolonged QT, with associations of two or more of these drugs being observed in 83% of the cases.

77.14% of the interventions corresponded with psychotropic drugs (SSRIs, tricyclic antidepressants, duloxetine, antipsychotics, trazodone); 5.71% with antibiotics (azithromycin, levofloxacin), 2.85% with rivastigmine, 2.85% domperidone; 2.85% with antiarrhythmics (amiodarone) and 2.85% with antihistamines H2 (famotidine). In all of them, caution was recommended in the use of these drugs, especially in three of them due to a cardiovascular history.

Conclusion Most drugs involved in QT prolongation are psychotropic drugs, very commonly prescribed in this population. In addition, the polypharmacy of the elderly predisposes to the association of drugs whose profile of adverse effects may be enhanced, as is the case of the prolongation of the QT interval.

It is important to make prescribers aware of the need for periodic re-evaluation of the risk/benefit of these drugs and avoid, as far as possible, these types of drugs in patients with a cardiovascular history.

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 No conflict of interest.

5PSQ-085 METABOLIC DISORDERS IN PATIENTS TREATED WITH SECOND-GENERATION ANTIPSYCHOTICS: AN OPPORTUNITY FOR PHARMACEUTICAL INTERVENTION

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Background Second-generation antipsychotics (SGAs) have improved the treatment of psychiatric disorders. Nevertheless, their use is associated with the development of metabolic disorders, which increase premature cardiovascular mortality.

Purpose To describe the prevalence of metabolic disorders in patients treated with SGAs and analyse if these comorbidities were properly monitored.

Material and methods A prospective, observational study was conducted in a tertiary hospital from March to April 2018. Inclusion criteria were: age ≥ 18 years, psychiatric patients with chronic treatment with SGAs (clozapine, olanzapine, quetiapine, ziprasidone, paliperidone and risperidone) and admission in a psychiatric ward.

We collected sociodemographic (gender, age, alcohol, tobacco, diagnosis), pharmacotherapeutic (treatment with SGAs, antihypertensive drugs (AD) and lipid-lowering drugs (LLD)) and metabolic variables (body mass index, glucose level

(GL), total cholesterol (TC), triglyceride (TG), low-density lipoprotein (LDL), high-density lipoprotein (HDL) and prolactin levels (PL). Metabolic variables were considered altered when: GL >126 mg/dL, TC >200 mg/dL, LDL >100 mg/dL, HDL <40 mg/dL, TG >150 mg/dL and PL >25 ng/mL in females and >20 ng/mL in males. Data were collected from the electronic medical record.

Results During the study period, 51 patients were included. The average age was 39 years $\pm$ 25 (50.9% females). 31.6% were smokers, 47.1% habitual alcohol consumers and 23.5% were treated with AD and/or LLD. The main diagnoses were schizophrenia (35%) followed by depression (16%).

From the total number of patients, 78.4% presented with some altered metabolic parameter. Thirty per cent of the patients were obese and 58.8% were overweight. GL were altered in 11% of patients, none were in treatment. From patients treated with LLD, 52% had some altered lipid parameter (14% TC, 52% LDL and 25% TG) and 82% of patients without LLD had some altered lipid parameter (36% TC, 82% LDL and 45% TG). Finally, females presented with 50% pathological PL and males 40%. A high number of patients (57%) did not have their PL checked during treatment.

Conclusion A high prevalence of metabolic disorders in patients treated with SGAs was observed and a large percentage of patients were not being properly monitored. Therefore, pharmaceutical care could help to achieve improved health outcomes in psychiatric patients.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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5PSQ-086 PREVALENCE OF ASPIRATION PNEUMONIA FOLLOWING ANTIPSYCHOTICS: A LARGE POPULATION STUDY

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Background Antipsychotics have been associated with aspiration pneumonia in older people. However, epidemiologic evidence of the association between antipsychotic drug use and pneumonia is limited.

Purpose To investigate the association between antipsychotic exposure and aspiration pneumonia during hospitalisation in a large older population.

Material and methods Retrospective cross-sectional study. We included all hospitalisations between January 2013 and December 2017 of patients aged from 65 to 85 years. Aspiration pneumonia was defined according to the discharge diagnosis codes of the International Classification of Diseases 9 and 10 and antipsychotic use as any pharmacy charge for an antipsychotic medication.

Results Our cohort included 1 06 552 hospitalisations of patients from 65 to 85 years (medium age 74.86 $\pm$ 10.61 years; 58% female). Aspiration pneumonia occurred in 1291 (1.2%) hospitalisations. Antipsychotics were used in 4484 (4.2%) hospitalisations. The incidence of aspiration pneumonia was 0.6% (612 patients) in patients not taking antipsychotics and 0.9% (41 patients) in those taking antipsychotics (OR=1.5, 95% CI 1.0 to 2.1). The magnitude of the association was only a little bit higher for typical (OR=1.6, 95% CI:

0.94 to 2.2) rather than atypical (OR=1.4, 95% CI: 1.0 to 2.0) antipsychotics.

Conclusion The use of either typical or atypical antipsychotics in older people is modestly associated with increased risk for aspiration pneumonia. Clinicians who prescribe antipsychotics should closely monitor patients for pneumonia, should consider the lowest possible dose of the antipsychotic for the shortest possible time and it should be stopped when the patient stabilises or symptoms cease.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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5PSQ-087 INAPPROPRIATE USE OF HYDROXYZINE

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Background Hydroxyzine is an antihistamine used in the symptomatic treatment of anxiety, itching and urticaria, and as an anaesthetic premedication. However, there is a risk of the prolongation of the QT interval and ventricular arrhythmia (torsade de pointes). This effect is known and is described in the technical sheet. In 2015, after the evaluation by the Pharmacovigilance Risk Assessment Committee, the Spanish Agency for Medicines and Medical Devices (AEMPS) published an informative note on restrictions in order to minimise their arrhythmogenic risk. After evaluating available data, the AEMPS recommended, among other things, not to use in elderly patients, given the lower elimination rate and higher risk of adverse reactions, mainly due to anticholinergic effects. The Beers criteria also label this medication as potentially inappropriate medication in elderly patients.

Purpose To study the frequency of these inappropriate prescriptions in order to establish strategies for their prevention.

Material and methods Retrospective study of all admitted adult patients who received hydroxyzine treatment during the 2 years immediately following the alert (13 February 2015–12 February 2017). For this purpose, prescription histories in the electronic prescribing program (Farmatools) were reviewed and data were analysed, taking into account the age of each patient. Analysis of data was done through descriptive statistics.

Results A total of 176 hydroxyzine prescriptions were found (79 males, 97 females). Mean age of the patients who received treatment was 66.32 years, with an age range of 20 to 96 years. The percentage of patients older than 65 years (% of patients with inappropriate prescriptions) was 63.58%. The average duration of treatment was 5.82 days (1–38 days).

Conclusion A high percentage of hydroxyzine prescriptions were inappropriate, although most of them were of short duration (78% less than 10 days). Given the results provided, it is evident of the need to include a review of the consumption of drugs, to contribute to an adequate use of them, as well as the awareness of professionals towards this group and the possible taking of other measures. Certain medications have a greater potential to cause problems when used by the elderly. Several studies have shown that inappropriate prescription in elderly people is highly prevalent but preventable.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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