

# Medication Reconciliation a Good Clinical and Pharmaceutical Practice

Elias, C. \*, Almeida, P. \*\*

\* Pharmacist of the Pharmaceutical Services of HFF

\*\* Pharmacy Department Director of HFF



## 1. Introduction

Medication reconciliation is a process of medication review to ensure that all medication ordered is correct, safe, known of all physicians and that patient is adherent (1). Recent evidence has documented high prevalence of discrepancies between the medications self report and those listed in the medical record (2).

In Portugal a prevalence study from 2008 identified 11,7% (905 035 inhabitants) of the population as having diabetes, being 5,1% non diagnosed (3). Men seem to be more prevalent between 20 and 60 years and after that there is no difference between genders (3). The high prevalence of the disease is between 60 and 79 years (3).

## 2. Aim

Use the medication reconciliation to promote a better diabetes control, in patients with ophthalmic complications, by improving communication between the hospital and primary care.

## 3. Methods

According to the *European Network for Patient Safety* (EUNeTPaS), the Hospital Pharmacy developed the project "*Medication reconciliation*" in cooperation with Ophthalmology Emergency Room and with the Primary Care.

During 4 months the patients with visions disorders and with HbA1C superior to 7 attending the Ophthalmology Emergency Room were identified and interviewed by the Pharmacist. The interviews focused on the patient eating and physical exercise habits and active therapeutic. There was made a registry of the data and a written information of patient clinical status to the general practitioner with the medication, an appreciation of the eating and exercise habits, the ophthalmic condition and the level of glycated hemoglobin (HbA1c). The written information was given to patient and he should show it to his general practitioner.

Before the patient handed the hospital letter to the practitioner, was always made a previous contact with Primary Care Team.

One month after the interview the Pharmacist telephones the patient to know how he is and how did the general practitioner decide to improve his habits and adjusted his medication.

## 4. Results

Hospital Professor Doutor Fernando Fonseca EPE (HFF) is a Public Hospital within the National Health System. Serves a population of about 600 000 individuals and has 785 inpatients beds.

In the inclusion period of the study where identified 6 patients by the Ophthalmology Emergency Room (Table 1 and 2).

Patient	Gender	Age (Years)	Height (Meters)	Weight (Kg)
Patient nº. 1	Masculine	41	1,85	78
Patient nº. 2	Feminine	86	1,58	85
Patient nº. 3	Feminine	52	1,69	100
Patient nº. 4	Feminine	66	1,55	67
Patient nº. 5	Masculine	72	1,6	60
Patient nº. 6	Feminine	74	1,5	75

Table 1: Demographics characteristics of the patients; n=6.

## 4. Results

Patient	Ophthalmic Problem	HbA1c (%) *
Patient nº. 1	Proliferative Retinopathy	9,6
Patient nº. 2	Nonproliferative Retinopathy	9,1
Patient nº. 3	Nonproliferative Retinopathy	8,7
Patient nº. 4	Nonproliferative Retinopathy and macular oedema	11,9
Patient nº. 5	Nonproliferative Retinopathy	8,3
Patient nº. 6	Macular oedema	9,6

Table 2: Physiopathologic condition at the moment; \*glycated haemoglobin percentage; n=6.

The most frequent ophthalmic diagnostic was nonproliferative retinopathy. And HbA1c in all of the patients was above the limit establish by the Portuguese Diabetes Society (6,5%) (4).

All of the patients had type II diabetes, except Patient nº.1 that has type I diabetes and was the only been followed by the Diabetes Clinic of HFF. All the others here followed by the general practitioner in the Primary Care.

According with the interview all the patients had several non healthy behaviours (Table 3 and 4).

Patient	Exercise		
	Regular	Irregular	No exercise
Patient nº. 1			X
Patient nº. 2			X
Patient nº. 3			X
Patient nº. 4	X		
Patient nº. 5	X		
Patient nº. 6			X

Table 3: Exercise habits; n=6.

Patient	Nutrition	
	Number of meals/ day	Abusive intake
Patient nº. 1	3	Bread
Patient nº. 2	7 to 8	-
Patient nº. 3	4	Bread
Patient nº. 4	3	drinks
Patient nº. 5	4 to 5	Bread
Patient nº. 6	3	Bread

Table 4: Nutrition habits; n=6.

Half of the patients (patients n.º 1, 2 and 4) had serious problems of compliance with medical appointments. Two because they didn't had a general practitioner in the Primary Care and one because was unemployed and could not come to HFF for the clinical appointment.

Only two patients after the interview went to their doctors and both had their diet and exercise habits reviewed and updated.

## 5. Conclusions

The medication reconciliation is an excellent tool to use in order to guarantee medication safety. But this method isn't enough when the target population doesn't cooperate. The patient approach must be holistic, from several health professionals, to guarantee that all the interventions will be succeed in a near future.

## 6. References

- 1.- Boockvar K., *et al*; "Medication reconciliation for reducing drug-discrepancy adverse events"; *The American Journal of Geriatric Pharmacotherapy*; 2006, 4(3):236-243
- 2.- Persell S., *et al*; "Medication reconciliation and hypertension control"; *The American Journal of Medicine*; 2010, 123(2): 182
- 3.- Direção Geral de Saúde; "Estudo da prevalência da diabetes em Portugal"; PREVADIAB 2009
- 4.- Grupo de Trabalho da Sociedade Portuguesa Diabetologia; "Recomendações da Sociedade portuguesa de Diabetologia para o tratamento da hiperglicemia e factores de risco da Diabetes Tipo 2"; *Revista Portuguesa de Diabetes*; 2007, 2(4):S5-S18.