

Drug prescription in primary care: what are the objectives?

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Identifying the objectives of prescription

- A key element of any prescription process
 - The six steps for a prescription (*WHO, 1995*)
 - Define the problem, specify the objective, verify the suitability, write the prescription, inform the patient, monitor the treatment
 - Most often implicit (*Rijken, Health Expect, 2014*)
- Stakes
 - Effective shared decision making (*Reuben, N Engl J Med, 2012*)
 - Based on evidence-based medicine
 - Individualized (beyond the guidelines)
 - Aiming at patient's adherence and satisfaction
 - Patient follow-up
 - Quality of care assessment

Study objectives

- To describe the distribution of the main objectives associated with drug prescriptions in general practice
- To measure the level of agreement on these objectives between the physician and the patient

A cross-sectional study

- Design
 - Multicentre study, conducted in 23 training surgeries in general practice in the Rhône-Alpes region
- Investigators
 - 11 postgraduate trainees under direct supervision
- Inclusion criteria
 - All patients consulting the trainers of the investigators
 - Over 5 working days in December, 2015

Data collection and analyses

- Data collected for each encounter
 - Patient characteristics
 - For each drug prescription
 - Drug name (Thériaque, ATC)
 - Related health problem (ICPC-2)
 - Main objective of the prescription according to the physician
 - Also collected according to the patient for 20% of the encounters
- Data entered
 - On a paper questionnaire, during the encounter
 - Into a centralized database, secondarily
- Analyses
 - Cohen's kappa coefficient of agreement

Classification of the objectives

To decrease the risk of mortality (global or specific)

To decrease the risk of morbidity (disease or complications)

To cure or provide remission of disease

To relieve symptoms

To improve or maintain quality of life

To improve or maintain functioning

Other objective

No objective

The database content

	n	Per encounter	Per health problem
Encounters	2141		
Health problems	3319	1.6 (1.5-1.6)	
Drugs / Objectives	5036	2.4 (2.3-2.5)	1.5 (1.5-1.6)

Distribution of the objectives of prescription of physicians and patients

Objectives	Mortality	Morbidity	Cure	Symptoms	Quality of life	Functioning	Other	None
Physicians (n=5036)								
n	429	1128	587	2183	534	91	60	24
(%)	(8.5%)	(22.4%)	(11.7%)	(43.3%)	(10.6%)	(1.8%)	(1.2%)	(0.5%)
(range)	(0-22.6)	(7,1-34,4)	(4,2-35,2)	(17,4-64,1)	(0-35,3)	(0-5,2)	(0-3,8)	(0-2,1)

k (95% CI): 0.26 (0.23-0.30)

Most frequent health problem per objective

Objective	Most frequent health problem	Most frequent drug
Mortality	Hypertension, uncomplicated	Enalapril/HCT
Morbidity	Hypertension, uncomplicated	Ramipril
Cure	Depression	Paroxétine/Escitalopram
Symptom	URTI	Acetaminophen
Quality of life	Depression	Escitalopram
Functioning	Preventive medicine	Cholecalciferol
Other	Oral contraception	Monophasic COC
None	Preventive medicine	Cholecalciferol

Symptomatic prescriptions dominating

- Almost half treatments symptomatic
 - Mainly pain killers and et NSAIDs
 - Acetaminophen ranked 1st, consistent with sales data (*ANSM, 2014*)
 - Tixocortol-pivalate ranked 4th, despite moderate medical interest (*HAS, 2012*)
- Chondroitin sulfate
 - Ranked 1st to improve functional status, despite poor medical interest (*HAS, 2013*)
- Objectives variability among physicians
 - Distribution of health problems or drugs
 - Perception of the objectives
 - Limitation to the main objective per prescription

Some conclusions

- Objectives of prescription should be more discussed during the primary care encounter
- The evidence-based data on care processes should be made more accessible to GPs and patients
- Clinical trials should provide assessment of care processes based on outcome criteria that matter for patients