

# Appropriateness of drug use in Belgian older inpatients -A preliminary study

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## INTRODUCTION

Inappropriate drug use in older patients has been widely reported in the literature. An approach for optimisation is the involvement of clinical pharmacists. Such data has not been studied in Belgian older patients.

This study is part of a broader project that will evaluate the impact of a clinical pharmacist providing pharmaceutical care to Belgian older patients admitted on geriatric wards.

# **AIM AND OBJECTIVES**

The <u>aim</u> was to gain insight in the appropriateness of drug use in older Belgian patients admitted on geriatric wards, from the perspective of health care professionals (HCPs).

The objectives were to describe:

- the perceived level of appropriateness of drug use in practice, including issues or difficulties encountered by HCPs and influencing factors

- the potential role of a clinical pharmacist involved in the multidisciplinary team

## METHOD

Qualitative study combining different methods:

#### 1. Semi-structured interviews

- Purposive sample of doctors, nurses and pharmacists (n=12) working with older patients on four geriatric wards

- Interview guide developed and piloted
- All interviews taped and transcribed verbatim

#### 2. Participant observation

Geriatric ward of a teaching hospital, 1-week period
A clinical pharmacist attended multidisciplinary meetings,

medical rounds, and had access to patient data

- Data collected using a pre-developed observation grid

Transcripts of interviews and observations were coded and analysed using QSR NUD\*IST Vivo. The coding framework was developed both inductively and deductively. Reliability of the coding process was checked (Cohen's kappa).

# **RESULTS: INTERVIEWS**

#### A. Perceived appropriateness of prescribing

- Special attention is paid to reviewing the whole drug regimen; this seems to be specific to geriatric wards

- Types of difficulties/events of inappropriate drug use: drug interactions; overuse and underuse of drugs; inappropriate duration of treatment; inappropriate form of drug; cost of treatment not enough taken into consideration

" We do not pay enough attention to potential underuse" (consultant 1.5 ) " The formulation is not always adequate" (nurse 2.3)

- Influencing factors: lack of time, lack of training to ensure optimal drug use, difficult access to drug information, influence of the patient (reluctance to treatment changes)

"We are not trained enough to good prescribing" (consultant 1.2)

- Differing views: some doctors less prone than others to identify difficulties or events of inappropriate prescribing

## **RESULTS: INTERVIEWS** (continued)

## B. Perceived appropriateness of patient counselling

- Counselling on medicines perceived to be insuffisicient by most participants

"We do give some information, but it is insufficient" (nurse 2.3)

- Influencing factors: lack of skills; lack of time

" I do not know this very well actually" (house Officer 1.3)

## C. Perceived appropriateness of discharge planning

- Differing views - Problems identified: lack of information given to general practitioner; discrepancies in discharge prescriptions; patient not prepared

"Information on drugs is lacking in the discharge letter" (pharmacist 3.1)

### D. Views on clinical pharmacists

- Very positive attitude toward the involvement of a clinical pharmacist in the team

- Perceived potential roles: support for prescribing, patient counselling and medicines management

"I think that pharmacists will pay more attention to drug interactions and side effects. That they will propose interesting alternatives to current treatments, and take costs into account." (nurse 2.3)

# **RESULTS: OBSERVATION**

- Main findings from the interviews confirmed

- Very positive attitude of team members toward the pharmacist; many questions asked by the doctors *Examples: pharmacokinetic data, interactions, choice of drug* 

- Identification of events of inappropriate prescribing; all interventions accepted by the doctors *Examples: duplication of treatment, wrong time of administration* 

# DISCUSSION

This preliminary study highlights that there are opportunities for improvement in the use of drugs for older inpatients, and that doctors and nurses are open to collaboration with a clinical pharmacist. We used several methods of data collection to increase the validity of the results. The Hawthorne effect (bias due to researcher-respondent interaction) is a potential limitation although we attempted to minimise it. Generalisability is limited to older patients admitted on geriatric wards in Belgium.

We plan to complement these data with (i) an additional 1month observation on a second geriatric ward by another pharmacist and (ii) 4 focus groups with inpatients admitted on these wards. These results will then be used to design an intervention study.

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