Influence of patients' and doctors' attitudes on prescriptions in elderly people

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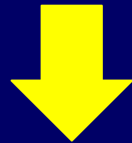
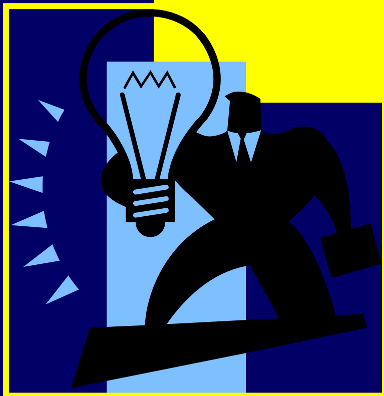
1. Introduction

- Drug-related problems (DRPs) in older persons
  - 5-17% of hospital admissions < preventable adverse drug reactions
  - Medicines are frequently overused/misused/underuse
  - 50% of older people may not be taking their medicines as intended
  - Poor 2-way communication between hospitals and primary care
- Reasons underlying inappropriate use of medicines in frail elderly patients???
  - CAUSES ? → proposal for adequate optimisation strategies
  - Influence of doctors' and patients' attitudes?

Influence of patients' and doctors' attitudes on prescriptions in elderly people



1. *Do you have any idea, any example, on how one's attitude could lead to inappropriate prescribing?*



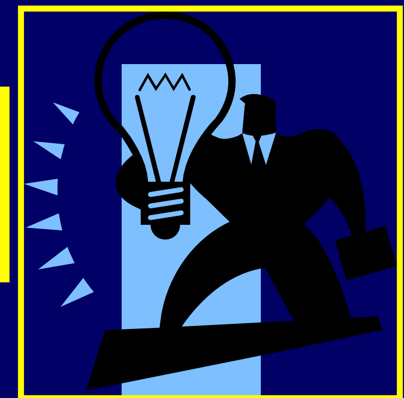
2.1. Research study - objectives

1a. To explore the perceptions of HCPs on the appropriateness of use of medicines for elderly inpatients

1b. To identify the processes leading to (in)appropriate use of medicines

with regard to prescribing, counselling, and transfer of information to the general practitioner

2. *Which research method(s) would you use to address that issue?*



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Appropriateness of use of medicines in elderly inpatients: qualitative study

Spinewine A, Swine C, Dhillon S, Dean Franklin B, Tulkens PM, Wilmotte L, Lorant V.

British Medical Journal 2005;331:935-9.

Qualitative research in health care

QUALITATIVE ↔ *quantitative*

Approach

often exploratory work: "how" and "why" ↔ how many?

hypothesis generating ↔ testing

Why does inappropriate use of medicines occur?

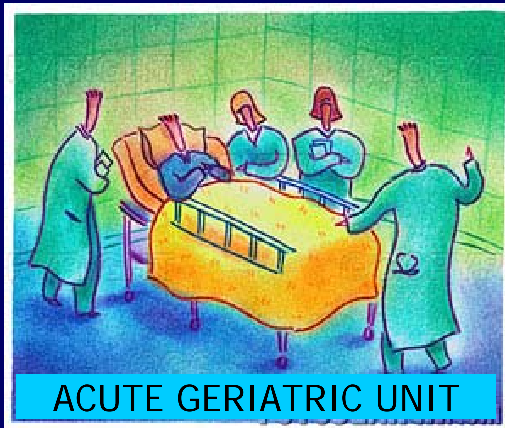
What is the % of inappropriate prescriptions?

Qualitative research in health care

QUALITATIVE	↔ *quantitative*
Approach	
often exploratory work: “how” and “why”	↔ how many?
hypothesis generating	↔ testing
Methods	
interviews, observation, documents	↔ survey, RCT
Sample	
small and purposive	↔ large, random

2.2. Qualitative study - design

1. DATA COLLECTION

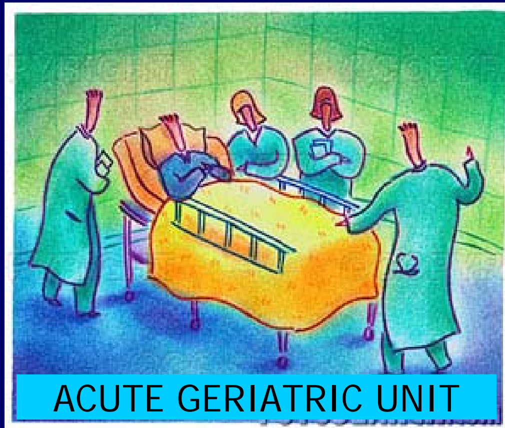


5 doctors 4 nurses 3 pharmacists	Individual interviews
17 patients	Group interviews (focus groups)
2 acute geriatric units	1-month observation by clinical pharmacists

<u>Rationale</u>:
- To uncover behaviors or routines of which the participants themselves may be unaware
- To overcome the discrepancy between what people say and what they actually do

2.2. Qualitative study - design

1. DATA COLLECTION



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2. DATA ANALYSIS

Read transcripts → themes → coding → …

Inductive, multidisciplinary approach

Software support: QSR N-Vivo

2.3. Qualitative study - results

Summary of participants' characteristics

Characteristics	Doctors (n=5)	Nurses (n=4)	Pharmacists (n=3)	Patients (n=17*)
No of women	3	2	3	10
Age range (years)	25-41	31-44	25-28	73-92
Teaching:non-teaching setting	3:2	2:2	3:0	17:0
Experience in care of elderly (years)	1-10	1-30	NA	—
Mean No of medicines on admission (range)	—	—	—	7 (3-12)
Mean No of changes in treatment (range)	—	—	—	7 (3-12)

NA: not applicable because pharmacists in Belgium are not directly involved in care of patients on wards. These pharmacists were not involved in other parts of study.
*Four focus groups comprised three patients each. Five patients were interviewed individually.

2.3. Qualitative study - results

- Perceived appropriateness
  - Inappropriate prescribing does occur
  - Patient counselling is insufficient
  - Information given to the general practitioner upon discharge, and relating to medicines, is insufficient

→ Why does this occur?

Categories underlying inappropriate use of medicines

1. **Reliance on general acute care and short term treatment**
   - Review of treatment driven by acute considerations; other considerations overlooked
   - Limited transfer of information on medicines from primary to secondary care
   - "One size fits all": prescribing behaviour not tailored to the older patient
2. **Passive attitude towards learning**
   - Anticipated inefficiency in searching for medicines information
   - Reliance on being taught (teacher centred) rather than self directed learning
3. **Paternalistic decision making**
   - Patients thought to be conservative
   - Patients declared as unable to comprehend
   - Ageism
   - Difficulty in sharing decisions about treatment with other prescribers

2.3. Qualitative study - results

Categories underlying inappropriate use of medicines

Reliance on general acute care and short term treatment

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- "One size fits all": prescribing behaviour not tailored to the older patient

Undermedication, it's important, but we don't consider that issue enough. It's clear that we don't treat hypertension enough, for example. And that's maybe more difficult in the hospital because we are in acute care, and so we first see the problem that brings the patient into hospital (doctor 5, geriatrician).

Doctors' attitude v. environmental issue

2.3. Qualitative study - results

Categories underlying inappropriate use of medicines

Reliance on general acute care and short term treatment

- Review of treatment driven by acute considerations; other considerations overlooked
- Limited transfer of information on medicines from primary to secondary care
- "One size fits all": prescribing behaviour not tailored to the older patient

When house officers come on our ward, they haven't necessarily been trained in geriatrics. So they arrive here, and then they start with 10mg of morphine every four hours. That's too much (doctor 2, geriatrician)

2.3. Qualitative study - results

Categories underlying inappropriate use of medicines

Environmental factors: high workload, lack of time, access to medicines information services

Passive attitude towards learning

- Anticipated inefficiency in searching for medicines information
- Reliance on being taught (teacher centred) rather than self directed learning

[House officer talking about drug interactions with warfarin, leading to increased international normalised ratio—that is, overanticoagulation] I still don't really know them well. And to always go and look in the compendium [a reference book with scientific information on licensed medicines] is a bit difficult in terms of time. I think that's the main reason why we don't check (doctor 3, house officer).

2.3. Qualitative study - results

Categories underlying inappropriate use of medicines

Passive attitude towards learning

- Anticipated inefficiency in searching for medicines information
- Reliance on being taught (teacher centred) rather than self directed learning

Observation in relation to the care of an 80 year old man complaining of insomnia] The geriatrician suggested that the house officer prescribe a preparation of chloral hydrate. The house officer prescribed it, using the formula available in the office. She later told me that she didn't know this drug at all, but that apparently the geriatrician was used to prescribing it. Contraindications and drug interactions had not been considered (observer 1).

2.3. Qualitative study - results

Categories underlying inappropriate use of medicines

For example, for an antidepressant that had been given for a minor depression and that the patient is on for life, that nobody tried to stop a year or so later, well they [patients] are attached to it, it's difficult to go against that (doctor 2, geriatrician).

Paternalistic decision making

- Patients thought to be conservative
- Patients declared as unable to comprehend
- Ageism
- Difficulty in sharing decisions about treatment with other prescribers

2.3. Qualitative study - results

Categories underlying inappropriate use of medicines

I think that some illnesses don't get enough treatment… probably in part due to what is called ageism. You say to yourself, What good will it do? … Is it worth optimising treatment? (doctor 5, geriatrician)

Paternalistic decision making

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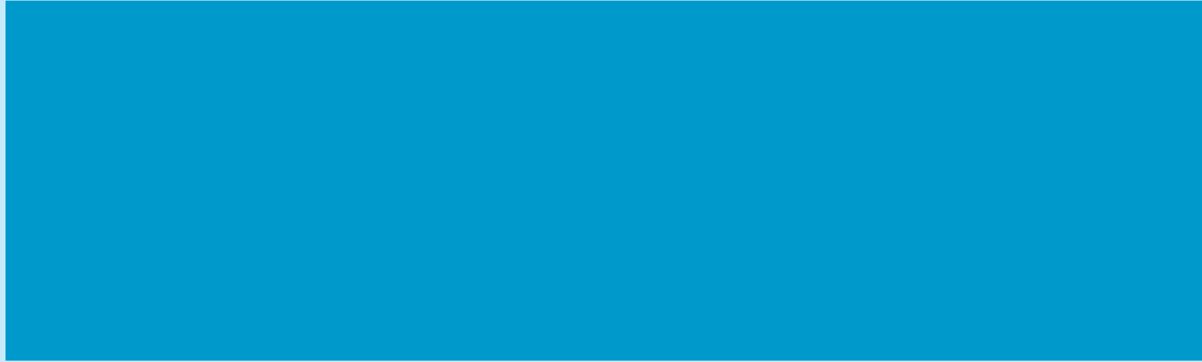

A patient had heart failure, NYHA [New York Heart Association] stage II. I asked the house officer why she was not getting an ACE inhibitor. He answered: "In fact ACE inhibitors are a first choice in heart failure and this patient is not getting them, but she is under the care of a cardiologist, so I'm not going to change the treatment" (observer 2).

Paternalistic decision making

- Patients thought to be conservative
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2.3. Qualitative study - results

Categories underlying inappropriate use of medicines

I'm completely lost . . . My medicines were replaced by different ones, but I don't know who decided that . . . and I don't know what they are. . . . I would like to know what I'm taking and what I am being treated for. I like to know the "why" (patient).

Paternalistic decision making

- Patients thought to be conservative
- Patients declared as unable to comprehend
- Ageism
- Difficulty in sharing decisions about treatment with other prescribers

2.3. Qualitative study - results

- Factors leading to a BETTER use of medicines
  - Multidisciplinary team
    - Identification of drug-related problems by team members (nurse, physiotherapist,…)
      → communication to the prescriber

When nurses find our tablets too big, for example . . . they ask me to find something else because it will never go down (doctor 3, house officer).

  - Input of geriatricians

    ↔ « one size fits all »

When I see a patient who is on prazepam, for example [a benzodiazepine to be avoided in elderly people because of its long half life], well, I often ask for a review of the prescription, and to see if it wouldn't be more appropriate to select a drug with a shorter half life, for example (doctor 2, geriatrician).

2.4. Qualitative study - discussion

- Strengths of the study
  - Topical issue; not previously investigated
  - Triangulation
- Results
  - « New » and « already known » factors
- Weaknesses
  - Generalisability
  - Researcher-respondent interaction (Hawthorne effect)

Categories underlying inappropriate use of medicines

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Who has ever encountered 1 of these situations?

Who has ever encountered more than half of these situations?

3. Similar findings from the litterature

Preventive strategies often poorly applied in acute care

- Reasons: absence of positive reinforcement, lack of awareness or belief in research evidence, environmental disincentives (Cook 2004)

Causes of prescribing errors in hospital inpatients

- Interview of 44 prescribers who made potentially serious prescribing errors, UK
- Errors-producing conditions: work environment (eg staffing and workload), team (eg communication), individual (eg skills and knowledge)

Cook DJ et al., Lancet 2004; 363: 1224-30 --- Dean B et al., Lancet 2002; 359:1373-8.

3. Similar findings from the litterature

Geriatrics training

- Improvements needed in the training of residents in the care of older adults (Landefeld 2003)
- Recent improvements in training programs in the US (Warshaw 2006)
- Situation in Europe?

Landefeld et al., Ann Intern Med 2003;139:609-14 --- Warshaw et al., JAGS 2006;54:1603-9.

3. Similar findings from the litterature

Doctors' attitudes towards age of patients

- 85 doctors (cardiologists, care of the elderly specialists, GPs)
- 46% treated patients with angina aged 65+ differently to those under 65, independent of comorbidity
- Some doctors saw old age as a contraindication to treat

Harries, Qual Saf Health Care 2007;16:23-7

3. Similar findings from the litterature

Hospital doctors′ views of factors influencing their prescribing

- The junior doctors often referred to the senior doctors as important sources of information; (therapeutic tradition, personal habit)
- Few of the respondents talked specifically about discussing different treatment options with the patient

Ljungberg et al., J Eval Clin Pract 2007;13:765-71

3. Similar findings from the litterature

Misunderstandings in prescribing decisions between prescribers and patients

- Qualitative study, 20 GPs and 35 consulting patients
- Misunderstandings in 28/35 consultations
  - Associated with patients' lack of participation in the consultation
  - Often based on inaccurate guesses and assumptions on the part of both patients and doctors
  - All associated with potential or actual adverse outcomes

Britten N et al., BMJ 2000; 320; 484-8.

Doctor-patient relationships

- CONCORDANCE describes the process whereby the patient and doctor reach an agreement on how a drug will be used, if at all
- « The prescribing process has to change for concordance to be achieved. It is no longer tenable for doctors to prescribe without first completing 4 largely neglected tasks »

1. Elicit the patient's views on the possibility of having to take medicine
2. Explore those views with the patient
3. Inform the patient of the pros and cons of (not)taking medicine
4. Involve the patient in the treatment decisions – over time, if necessary, and after reflection

Elwyn et al., BMJ 2003; 327: 864-7

Doctor-patient relationships

- <u>What concordance is NOT:</u>

"When we want your opinion, we'll give it to you"

Do elderly patients want to be involved?

- Not all patients want to participate in decision making – preferences for an active role declined above 45 y (Levinson 2005)
- Interviews with 48 patients with AD (Mi-Mo stages); 92% of patients wanted to be involved in making treatment decisions, and caregivers generally willing to involve them – but only 40% of patients considered to be competent (Hirschmann 2005)
- Mail survey, 5199 older adults – the majority preferred high levels of information exchange but differed in preferences for discussing and selecting treatment choices (Flynn 2006)

Levinson et al., J Gen Intern Med 2005;20:531-5 --- Flynn et al., Soc Sci Med 2006;63:1158-69 --- Hirschmann et al., Gerontol 2005;45:381-8

Do elderly patients want to be involved?

- 2 qualitative studies, interviews with (1) 406 elderly outpatients in 11 Europ. countries, (2) 51 persons ≥65, taking ≥1 medicine
- Similar results, ie variability in perceptions
  - Some participants: paternalistic approach → decisions deferred completely to the physician
  - Others: more participatory role for the patient
- Ccl:
  - Variability in priorities among older patients → Electing patient goals and preferences is a fundamental aspect of decision making

(1) Bastiaens et al., Pt Educ Couns 2007; 68: 33-42 --- Belcher et al., J Gen Intern Med 2006;21:298-303.

Feasibility and impact of better concordance

- Use of a shared-decision making (SDM) instrument (Naik 2005)
  - Focus groups with 41 older persons and 11 clinicians
  - Participants supported the use of a SDM instrument to keep « the doctor and the patient on the same page » = a tool to facilitate agreement with treatment goals and plans

- Potential impact of better concordance (Bogardus 2004)
  - 1-year prospective cohort study, 200 patients and their caregivers at a geriatric assessment center
  - Caregiver agreement with treatment recommendations predicted adherence to recommendations and goal attainment in adjusted analyses

Naik AD et al., J Gen Intern Med 2005;20:640-3; Bogardus ST, JAGS 2004; 52:99-105

4. Conclusions

- Patients′ and doctors′ attitudes influence prescribing in several ways
  - Patient-doctor relationships also…

- These data should be used to design strategies for improvement, eg:
  - Develop incentives for active learning in geriatrics by junior doctors
  - Increase involvement of patients, encourage constructive communictaion between prescribers
  - Encourage the input of geriatricians, as well as multidisciplinary communication

4. Conclusions

- Personal thoughts…
  - In my practice as a clinical pharmacist …
- Any thoughts/reflection on your daily practice?