



Pharmaceutical care in geriatrics in Poland-assumptions of the project

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Pharmaceutical care in geriatrics



The first project in this area financed by National Science Centre
(2011-2016)

Head of the project: ***Dr Agnieszka Neumann-Podczaska***)

Members:

Prof. Katarzyna Wieczorowska-Tobis

Prof Edmund Grześkowiak

The aim of the project is to create a base for practice of
pharmaceutical care in geriatrics in Poland

30 pharmacies
10 patients each=
300 patients
under care

Neumann-Podczaska A, Wieczorowska-Tobis K, Grześkowiak E.
Opieka farmaceutyczna w geriatricii - założenia programu.
Farm Współcz 2014: 7(3): 126-130

QUALIFICATION TO THE PROJECT
Inclusion criteria: age > 65
>10 drugs (prescribed+over the counter)



Arrange of the first meeting - pharmacist ask the patient to provide documentation and a list of all medications

Analysis of patient pharmacotherapy and documentation by the pharmacist (up to 1 week)

Possible consultation with members of the research team (physician, physiotherapist etc)

Second meeting with the patient
pharmacist's recommendations regarding drug pharmacotherapy

Second meeting with the patient
pharmacist's recommendations regarding drug
pharmacotherapy



Drug therapy
appropriate



Potential inappropriateness
OTC drugs



Potential inappropriateness
prescribed drugs



INTERVENTION:
pharmaceutical recommendation



Recommendation:
contact with GP

**Pharmaceutical
care**



Follow up (after one month)
Third meeting with the patient to verify the
application of the pharmacist
recommendations

How to assess the appropriateness of drug treatment in pharmacy?



PREPARATION of the tool for pharmacists :
Recommended while providing pharmaceutical care in geriatrics

Criteria defining POTENTIALLY incorrect pharmacotherapy in geriatrics

Preparation : members of the research team, group of experts
based on a review of the literature and their own clinical
experience

TOOL verification IN PRACTICE!

SET OF CRITERIA



1. THERAPEUTIC SUBSTANCES AND COMBINATIONS of drugs contraindicated in geriatrics INDEPENDENT OF patient's clinical status
2. THERAPEUTIC SUBSTANCES contraindicated in geriatrics **taking into account** the patient's clinical status (evaluable by a pharmacist in a pharmacy mainstream)
3. **Double (multiple)** of each drug group
4. Patients with a history of falls (≥ 1 fall in the last 3 months)
5. Patients with pain

SET OF CRITERIA



Patients with pain

- Long-term use of strong opioids (morphine , fentanyl) as first-line treatment of mild to moderate pain
- Long-term use of opioids in patients with chronic constipation without concomitant use of laxatives
- Amizepin , valproates - with no Na control
- Chronic administration of high doses of NSAIDs in patients with a tendency to bleeding

Drug related problems in our patients



Adverse drug reaction

- 1. The patient consumes 3 times daily ferrum preparation and complains about constipation; ferrum and ferritine level correct*
- 2. The patient consumes ACE-I in the evening and complains about symptoms of orthostatic hypotonia in the morning (vertigo, dizziness, falls)*

Pharmacists recommendation

- 1. Stop the therapy with ferrum*
- 2. Change ACE-I from morning to evening schedule*

Drug related problems in our patients



Drug-disease interactions

- 1. Concomitant consumption of perindopril and ibuprofen, elevation of a blood pressure (170/100 mmHg), patient is taking captopril s.l*
- 2. Concomitant consumption of glimepiride and diclofenac, glucose level 2,5mmol/l - symptoms of major hypoglycemia*

Pharmacists recommendation

- 1. Acetaminophen (500-1000 mg single dose) instead of ibuprofen, patient education regarding blood pressure control and pain control*
- 2. Patient education regarding glucose level control and pain control, acetaminophen recommended instead of NSAIDs or if impossible/ change to metformine instead of glimepiride*

Drug related problems in our patients
30% of patients clinically important drug-drug
interaction!

Concomitant use of NSAIDs and ASA 75-150mg

- **Ibuprofen 400 mg+ASA 75mg**
- **Diclofenac+ASA 75mg**
- **Naproxen+ASA 75mg**
- **Meloxicam+ASA 75mg**

NSAIDs and ASPIRIN



U.S. Food and Drug Administration



CENTER FOR DRUG EVALUATION AND RESEARCH

September 8, 2006

Concomitant Use of Ibuprofen and Aspirin: Potential for Attenuation of the Anti-Platelet Effect of Aspirin

Conclusions

There may be a pharmacodynamic interaction between ibuprofen and aspirin when they are dosed concomitantly. This interaction may interfere with the antiplatelet activity of the aspirin, as measured by TXB2 levels and platelet activation.

The clinical implication of this interaction is unclear, but may be important since the cardioprotective effect of aspirin could be minimized or negated.

A negative clinical impact on aspirin's cardioprotection is unlikely from an occasional dose of ibuprofen because the effect of aspirin taken daily is long-lasting.

Ibuprofen given at least 30 minutes after immediate-release aspirin or at least 8 hours before taking immediate-release aspirin does not appear to interfere with aspirin's anti-platelet effect.

*Gambassi G - Opioids and other analgesics in chronic pain - Glasgow 2009
(4th EUGMS Symposium - Palliative care and the end of live care for elderly)
www.eugms.org*



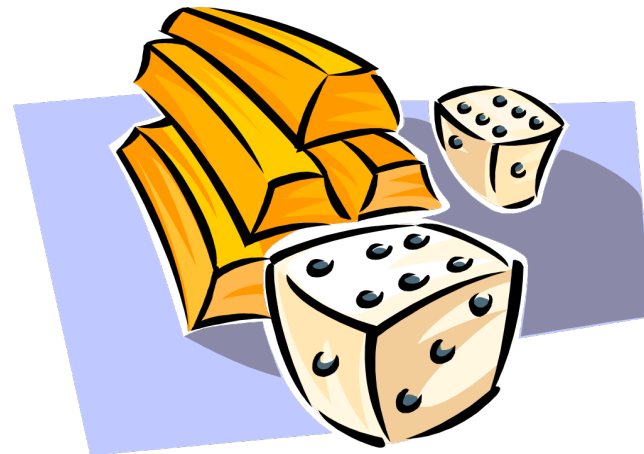
TAKE HOME MESSAGE

FARMAKOLOGY IN GERIATRICS

= ?

FARMAKOHAZARDOLOGY

M. Zetin. Int J Clin Pract 2004





*Thank you for your
attention*

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