SAFE USE OF MEDICATIONS IN CROATIAN HOSPITALS

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PaSQ
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Pharmaceutical Care is the responsible provision of pharmaco-therapy for the purpose of achieving definite outcomes that improve or maintain a patient’s quality of life. It is a collaborative process that aims to prevent or identify and solve medicinal product and health related problems. This is a continuous quality improvement process for the use of medicinal products.
1. Establish and maintain professional relationship
2. Collect, organize, record and maintain patient specific information
3. Evaluate information to identify, prevent, and resolve drug-related problems
4. Implement drug-therapy plan and ensure that the patient has the supplies, information and knowledge necessary to carry out the plan
5. Review, monitor and modify the drug therapy plan
During the patient admission to the hospital

- The thorough list of medications should include:
  - Prescription drugs
  - Herbal substances
  - Vitamins
  - Food supplements
  - OTC drugs
  - Vaccines
  - Diagnostic and contrast agents
  - Radioactive drugs
  - Parenteral nutritents, blood derivates and IV solutions
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- begin with the first prescription
- data from sufficient chemotherapy order form

- Note non-oncology medication too
  - ask the patient or general practitioner
  - watch out for drug therapy problems, undesirable effects on the patient (prevention)

- Cooperation with other pharmacies
  - report about medication profile for the other pharmacy or the general practitioner
  - drug “identity“ card - future
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Assessment
- Ensure all drug therapy is indicated, effective, safe and convenient
- Identify drug therapy problems to be resolved and prevented

Care plan
- prevent drug therapy problems
- support patient and oncologist to achieve therapeutic goals
- identify and resolve drug therapy problems

Evaluation
- documentation problems and record solutions
The Medication Use Process Components

- Prescribing
- Procurement
- Preparation
- Dispensing
- Administration
- Monitoring
**WHY?**

to avoid the medical error – mistakes in the treatment cycle
to avoid interactions

**WHAT IS?**

Medical error is **an unwanted** and **deterious** consequence of therapy,
created by **omission** in the treatment cycle
Errors are inevitable in each and every system
Prescribing
Prepartion
Distribution
Application
Control

Errors endanger patient safety!
There are three key points in the adjustment of medicines application in hospitals

- During the patient admission to the hospital
- During the patient transfer between wards
- During the patient dismissal from the hospital
During the patient transfer between wards

This process is divided in five steps:

(i) Make a list of existing medications
(ii) Make a list of medications that are going to be prescribed
(iii) Compare the two lists
(iv) Clinical decision based on the comparison and
(v) Distribute the new list to the healthcare professionals and the patient
During the patient transfer between wards

PROBLEMS?

- During the patient’s stay in the hospital, in the process of therapy data collection, distribution organization and application of therapy, the whole communication about therapy is not easy.

- **Big difference** in the process of pharmacotherapy anamnesis collection from the patient.

- At least **three different healthcare professionals** are included in this process: doctor, pharmacist and nurse, with very little agreement about the role of each profession and responsibility in this process.

- Often we can find **duplication** of data collected by doctors and nurses, regarding the prescribed therapy, **writing on different spots or documents**, and **seldom** are the differences between the two anamnesis compared and discussed.
During the patient transfer between wards

How to solve the problem and reduce the number of medical errors?

INTRODUCE the informatic system in the hospitals
During the patient transfer between wards

HOW?

To ensure that all healthcare professionals included in this process have the access to the data and required information
PaSQ  During the patient transfer between wards

To ensure the access to the patient’s medical documentation

- anamnesis
- pharmacotherapy anamnesis during the admission
- Results of the medical examination
- Laboratory results and serum drug concentration
- Prescribed therapy
- Discharge summary
KEMOTERAPIJSKI POSTUPNIK

■ Svaka klinička služba za kemoterapiju
  - identificirana područja, osoblje, propisi, kemoterapijski protokoli, dokumentacija o terapiji, upravljanje kapacitetima
  * Postupnik za primjenu

■ Služba za onkološko ljekarništvo
  - jasno određene odgovornosti ljekarnika, klinička praksa, aseptički uvjeti i klinička ispitivanja
  - Vanjske kontrole i nadzor nad aseptičkom pripravom i ma
SOP-ovi
Vesna Pavlica

PROCJENA RIZIKA U PROFESIONALNOJ
IZLOŽENOSTI CITOTOKSIČNIM
LIJEKOVIMA

DOKTORSKI RAD

2007.
In individual institutions, antineoplastic drugs are prepared at multiple worksites, so that the shown results are based on the following division of worksites: clinical hospitals – 20 worksites; clinical hospital centres – 9 worksites; clinics – 4 worksites; general hospitals – 14 worksites; special hospitals – 1 worksite.
Main types of cytotoxic drugs prepared in medical institutions in Croatia

Glavne vrste citotoksičnih lijekova koje se priređuju u medicinskim ustanovama u Hrvatskoj

- Paklitaksel 5%
- Mitomicin C 2%
- Mitoksantrone 1%
- Metotreksat 4%
- Karboplatin 3%
- Irinotekan 3%
- Ifosfamid 3%
- Idarubicin 1%
- Gemcitabin 3%
- 5-Fluorouracil 8%
- Fludarabin 1%
- Etopozid 5%
- Epirubicin 2%
- Doktorubicin 14%
- Vinkristin 7%
- Bleomicin 2%
- Ciklofosfamid 15%
- Cisplatina 13%
- Citozin arabinozid 3%
- Dakarbazin 3%
- Daunorubicin 1%
- Docetaksel 2%
The number of types of main antineoplastic cytotoxic drugs (CD) prepared in medical institutions in Croatia

![Bar chart showing the number of types of antineoplastic cytotoxic drugs prepared in different settings. The chart includes the following categories and numbers:
- UKUPNO: 24
- KB: 23
- KBC: 16
- KLINIKE: 15
- OB: 14
- SB: 5]
Is there written documentation about all CD preparations?

Postoji li pisana dokumentacija o svim pripravcima CL?

- DA: 85%
- NE: 15%
Is there computer documentation about all CD preparations?

POSTOJI LI RAČUNALNA DOKUMENTACIJA O SVIM PRIPRAVCIMA CL?

- BEZ ODGOVORA: 4%
- DA: 13%
- NE: 83%
IS A PHARMACIST PART OF THE ONCOLOGY TEAM

JE LI LJEKARNIK DIO ONKOLOŠKOGA TIMA?

DA
3%

NE
97%
DOES A PHARMACIST PARTICIPATE IN THE DEVELOPMENT OF PROCEDURES / TREATMENT PROTOCOLS?

SUDJELUJU LI LJEKARNICI U RAZRADI POSTUPAKA / PROTOKOLA LIJEČENJA?

DA
10%
NE
90%
IS A QUALITY MANAGEMENT SYSTEM FOR CD BEING IMPLEMENTED?

PRIMJENJUJE LI SE NEKI OD SUSTAVA ZA KVALITETNO RUKOVANJE CL (QMS)?

- DA 8%
- NE 92%
KEMOTERAPIJSKI POSTUPNIK

- Klinička služba za kemoterapiju
- Kemoterapijske smjernice po tumorskim sjelima
- Dogovorena lista kemoterapijskih protokola za svako tumorsko sjelo
- Postupnici za svaki kemoterapijski protokol

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Communication is essential
No one is right all the time
Take the time to listen
Beware of instilling an atmosphere of fear
Interdisciplinary collaboration