Pharmaceutical propedeutics

Pharmacist's role in the healthcare system

Institute of Pharmaceutical Technology and Biopharmacy 2019.09.26.

Important skills

 Reading and understanding of the prescription

(recognition of false prescriptions, mistakes on prescription)

- Vision color vision
- Good communication skills
- Good health



- Patience, tolerance, attention
- Manual skills for preparation of medicines
- <u>Sufficient theoretical knowledge</u>



Color vision



Reading prescription

Dr B. Who Farmstreet 12 Kirkville tel. 3876 date 1 Nov 1994 R/ Amoxicillin 50 mg/ml Susp. da 100 ml S. 3dd 5 ml. Finish course (add 5 ml spoon) B. WM Ms/Mr Patient 29 address: age: 5 years

Other advantageous skills

- Humanistic approach
- Reliability, accuracy, responsibility
- Empathy
- Open-mindness
- Proper style of comminication
- Professionalism (sufficient knowledge)
- Good appearance (good impression)

Pharmacist

The appropriate health (immunisation) is necessary Pharmacy is the place of lots of pathogens especially in autumn and winter.

Allergy to substances can be disadvantageous, since the pharmacist gets in contact with lots of substances during the duty.

Competencies and skills of a pharmacist Directive of the European Union 85/432 EEC

This directive has defined the tasks and skills of the pharmacists, the scope of activities of a pharmacist:

- professional management of wholesale
- giving information and advice related to the medicine

Nobody else can do these tasks:

preparation, examination and dispensing of medicines

Ethic

- It is based on the common moral laws (honesty, cooperation, secrecy)
- NIL NOCERE! (Primum non nocere!) Hippocratic oath – DO NO HARM is no.1. priority!

- In Hungary: the ethical codex of the 'Hungarian Chamber of Pharmacist'
- Everybody is equal, prejudice Ø

"Do no harm!"



Pharmacist role

- The aim of a pharmacist
 - Protect the good health,
 - Prevention from diseases
 - Treatment of diseases
 - Health education, pharm. care
- If the patient can <u>trust</u> the pharmacist than we can have more success in the therapy, too!

Pharmacy as a Healthcare System

• The pharmacy is a healthcare unit.

Working in the spirit of the Hippocratic oath we have to dispense medicines and give all the information regarding the medicine!

How can we define a medicine? The *medicine is a special product:*

API(s) + excipients + technology (dosage form) + + information

The medicine is a special product, carrying confidence

Do not forget: patient has to consume something (medicine), which has unknown origin! Patient has to trust the medicine!

- The patient usually has not enough information about the medicine what she/he gets, prescribed by the doctor.
- The medication is chosen by the doctor, not by the patient.
- The medicine is made in the pharmacy or industry.

Pharmacist's work possibilities

- Pharmacy
- Industry
- Wholesaler
- Hospital (clinical pharmacist)
- Authorities, government
- Research institutes
- Universities (research and education)











Pharmacy

- Leader / owner pharmacist (employer)
- Employee pharmacists
- Pharmacist's assistents
- Cleaning staff

• They have important role is in the healthcare system (since of the direct connection with the patient).

Industry

- Pharmacists work at several levels
 - Product manager
 - Quality assurance
 - Quality control
 - Qualified persons
 - Sales representatives (Medical/Pharmaceutical)
 - Area managers
 - Drug registration
 - Pharmacovigilance monitors

Possibilities in a pharmaceutical company

Manufacture - k

- bases (basic materials)
- end product
- biological medicines (e.g. vaccines, antibodies)
- wrapping

Examination

- analytical
- microbiological

Quality assurance

- documentation (everything)

- organization of the quality control, qualifying everything (blister, product, persons, devices..)

- official document (register, pre-market approval)
- withdrawal of the register if any quality problem appears

Registration

documentation, connection with examining institutes, performing clinical trials, development

Wholesaler

- Quality control
- Quality assurance

Hospital / Clinical pharmacist

- Hopsital pharmacists
- Clinical pharmacists
- Clinical trial monitors
- Pharmacovigilance monitors

Authorities

- Controling duty of pharmacies
- Controlling industrial manufacturers
- Controlling drug registration process

'Special' fields of pharmaceutical profession

- consultant pharmacists (nursing home)
- nuclear- or radiopharmacist
- veterinary pharmacist
- military/toxicology pharmacist
- pharmacy informatics
- researcher pharmacist

Organizations connected to pharmaceutical profession

Professional:

- Societies of Pharmaceutical Sciences
- Chamber of Pharmacists
- International organizations (FIP, WHO, EMA, FDA)
- Red Cross
- Maltese Charity ...

Thank you for your attention!