## PHARMACY LAW

### **oBJECTIVES**

- To identify the structure and mechanism of hospital pharmacies in Turkey
- To determine the hospital pharmacists job responsibilities
- To clarify the expertises in pharmacy profession in Turkey

### INPATIENT MEDICAL INSTITUTION

- Who can use?
  - Patients and wounded people
  - Those who suspected disease
- What services can be given?
  - observation, diagnosis, treatment and rehabilitation by hospitilized or ambulatory

# HEALTH INSTITUTIONS ARE DIVIDED INTO 5 GROUPS ACCORDING TO THEIR FUNCTIONS

- 1. District Hospital: It includes emergency, childbirth, outpatient and inpatient medical treatment, examination, and treatment, and 112 services additionally preventive health services. Physicians who work under such hospitals accept and treat patients. In cases requiring further examination and treatment, patients are stabilized and properly delivered proper institutions.
- **2. Outpatient Hospital:** In more than one expertise, outpatient examination, diagnosis, treatment and medical care services are provided.
- **3. General Hospitals**: There are at least 50 inpatient beds where patients are inpatient and outpatient examined, diagnosed, treated according to the fields of specialization regardless of age, gender, and any kind of emergency cases.
- **4. Private Hospitals related to one expertise:** Health institutions where a specific age and type of group patients (a particular organ or organ group pateints) are observed, examined, diagnosed, treated, and rehabilitated.
- **5. Education and Research Hospitals:** General and private health institutions where specialists and side specialists are trained and where education, training, and research were conducted.

## SERVICES PROVIDED IN MEDICAL INSTITUTIONS

- 1. OUTPATIENT SERVICES
- 2. INPATIENT SERVICES: The services provided by a team; specialists, training specialists, nurses and pharmacists, dietitians, physiotherapist, psychologist.
- 3. EMERGENCY SERVICES
- 4. LAB SERVICES
- 5. OPERATING ROOM CENTRAL STERILIZATION REANIMATION INTENSIVE CARE WAKE-UP AND END-OF-TREATMENT UNIT SERVICES
- 6. PHARMACY SERVICES

### PHARMACY SERVICES

Drugs and sanitary supplies are provided to inpatients and outpatients who need to be given medication in accordance with the law, by-laws, regulations, and orders in hospital pharmacies.

#### What are the services provided in hospital pharmacies?

- Determination of the annual pharmaceutical needs of the institution and their costs and notifying the administration
- Admission of the pharmaceuticals and medical devices to the institution in accordance with the nature of them.
- 3. Storing them properly and in accordence with office supply regulations.
- **4. Delivery of the required medicines** and medical supplies whose amount decreased during the year to the administration.
- 5. Preparation and delivery of drugs to patients properly.
- **6. Discussing with experts** to reduce the number of drugs for the same purpose.
- 7. Helping with economical and standard treatment with magistral drugs.
- 8. Informing the inpatient services frequently about the pharmacy stocks in order to provide the consumption of the least used equivalent drugs.
- **9. Providing the consumption** of upcoming drugs, if not possible, transfer to other institutions.

## THE MEDICINES IN THE HOSPITAL PHARMACY ARE USED AS FOLLOWS:

- 1. The medicines for the *hospitalized patients* are delivered to the hospital pharmacy by the pharmacist or nurse. The medicines prepared in the hospital pharmacy are delivered to the nurse.
- 2. Medicines given to *outpatients*; If there is no other community pharmacy in the place where the institution is located or if the medication will be used for an important and urgent case, the drugs that are proven to be not available in the community pharmacy can be given at the retail price.
  - The drugs should be packaged separately for each patient in the pharmacy and the name, dose, expiration date and patient information should be included on the drugs.

### **GUARD DUTY OF HOSPITAL PHARMACISTS**

- If there are **five pharmacists** including the head-pharmacist in a hospital pharmacy
- If there are **five or more pharmacists** in the hospital pharmacy, the head-pharmacist do not responsible for fulfilling the guard duty.
- The head-physician decides how many pharmacist will do guard duty according to the workload, the emergency situation if any, and the number of pharmacists.

# What are the JOB RESPONSIBILITIES of the head-pharmacistS?

- Responsible for keeping certain medicines that should be kept in the pharmacy.
- Responsible for ensuring that the medicines are always fresh and suitable according the codex.
- Responsible for the good storage of medicines, medical devices, and tools.
- Responsible for the consumption and the records of the medicines for inpatient services.
- Responsible for the arrangement of the medicines on the shelves (severe and mild toxic drugs and the drugs necessary for protection from light).
- Responsible for the registration of narcotics and consumption of them according to laws.

# What are the JOB RESPONSIBILITIES of the head-pharmacistS?

- Responsible for sending medicines to analysis that are known due to lack of label and performing destruction and de-registration operations of these drugs.
- Responsible for warning the practitioner about those who exceed the maximum doses of medicines and those who do not comply with the Codex.
- Responsible for timely reporting of the pharmacy's pharmaceutical and sanitary supplies needs.
- Responsibe for providing the rulers showing the medicines and their amounts transferred to the following year at the end of each financial year.
- Responsible for dividing task among pharmacists, pharmaceutical warehouse clerks and servents.

# What are the JOB RESPONSIBILITIES of the pharmacistS?

Pharmacists are assigned to work in the pharmacy, laboratories and clinics of the hospital by the head-physician.

- Pharmacists working in pharmacies and laboratories are obliged to perform the tasks given by the head-pharmacist or the chief of laboratory.
- The pharmacist does all the tasks of the head-pharmacist in the hospital pharmacies where there is no head-pharmacist.
- Pharmacists working in clinics visit the clinic with a specialist. Take medicines prescribed from the hospital pharmacy and allow them to be duly transported to the patients.
- Completes shortcomings of emergency medicine cabinets on time.
- They give a list, shows the pharmaceuticals which are started to decrease, to the head-pharmacist.

# What are the JOB RESPONSIBILITIES of the pharmacistS?

- Weighing of toxic substances is made by pharmacists personally.
- Preparation of medicines;
  - Management of total parenteral nutrition unit and preparation of solutions,
  - Management of chemotherapy drug preparation unit preparation of drugs,
  - Management of aseptic drug preparation unit and preparation of drugs

## What are the JOB RESPONSIBILITIES of the PHARMACY TECHNICIANS?

- Removes the drugs and medical materials from their packaging and compares them office supply records. He puts it in the warehouse, if there is no warehouse officer, he records it.
- Ensures that the pharmacy is clean, tidy and the materials is ready for use.
- Helps in-service training of the auxiliary service personnel in the pharmacy.

## Hospital pharmacy in turkey

Supplying, storing, distribution (orders), preparation, implementation (?), management, documentation and monitoring medicines.

## THE EXPERTISE IN PHARMACY PROFESSION IN TURKEY

- Clinical pharmacy
- Phytopharmacy

### CLINICAL PHARMACY

- is a disipline that includes pharmacists to offer a multidisiplinary patient care service;
- to provide an optimum health treatment,
- to ensure recovery,
- to prevent diseases.
- Clinical pharmacy is a health science discipline in which pharmacists provide
  patient care that optimizes medication therapy and promotes health, wellness,
  and disease prevention.

### CLINICAL PHARMACY

- The practice of clinical pharmacy embraces the philosophy of pharmaceutical care; it blends a caring orientation with specialized therapeutic knowledge, experience, and judgment for the purpose of ensuring optimal patient outcomes.
- It aims rational drug use in every aspects of pharmacy practices.

## WHAT ARE THE RESPONSIBILITIES OF A CLINICAL PHARMACIST?

- Clinical pharmacists assume responsibility and accountability for managing medication therapy in direct patient care settings, whether practicing independently or in consultation or collaboration with other health care professionals.
- Within the system of health care, clinical pharmacists are experts in the therapeutic use of medications. They routinely provide medication therapy evaluations and recommendations to patients and health care professionals. Clinical pharmacists are a primary source of scientifically valid information and advice regarding the safe, appropriate, and cost-effective use of medications.

Clinical pharmacists cooperate closely with almost all healthcare professionals and areas of expertise as they offer pharmaceutical care services in diseases associated with almost every discipline of medicine.

#### The most common areas of cooperation:

- Internal Medicine,
- Medical Oncology,
- Hematology,
- Endocrinology and Metabolic Diseases,
- Chest Diseases,
- Infectious Diseases and Clinical Microbiology,
- Rheumatology,
- Nephrology,
- Gastroenterology,
- Immunology and Allergy Diseases,
- General Surgery,
- Neurology,
- Psychiatry,
- Cardiology,
- Neonatology,
- Pediatrics.
- Geriatrics,
- Intensive Care,
- Clinical Nutrition,
- Bone Marrow and Organ Transplantation Units

# The AIM: To IMprove the patient's quality of life and treatment outcomes

- Patient care is accepted as a multidisciplinary concept, including physicians, pharmacists, nurses, dietitians, nurses and other healthcare professionals.
- As a part of the medical team, clinical pharmacists achieved concrete success in patient education, drug therapy monitoring, drug interactions, and prevention of undesired drug reactions and other clinical practices.

## The TRAINING process of clinical pharmacists

Clinical Pharmacy Expertise training process includes;

- 1. theoretical training,
- 2. clinical trainings,
- 3. field works
- 4. thesis preparation and defense of a thesis/resentation.

The evaluation of training is done theoretical and practical exams, pharmacist's report and thesis defense.

3 years

# You can reach the curriculum of clinical pharmacy: <a href="http://euk.saglik.gov.tr/">http://euk.saglik.gov.tr/</a>

In 2015 a commission was established to create a curriculum and to provide a standardization of this education.

In February 2018, the core curriculum had been designed.

## The TRAINING process of clinical pharmacists

#### theoretical training

- at the beginning of the training: for 1 month (basic clinical pharmacy)
- before every clinical education: for 1 week (related clinics)

#### clinical training

 for 22 months (Internal Diseases- 7 months, Child Health and Diseases- 3 months, Infectious Diseases and Clinical Microbiology- 3 months, Intensive Care- 3 months, Cardiology- 2 months, Medical Oncology- 2 months and Neurology- 2 months)

It is essential that clinical pharmacy expertise is provided by training the experts in the process of clinical training.

To strengthen the knowledge gained during the clinical training and gain a clinical pharmacy vision; it is obligatory that students should present their patient cases at the their Faculties to their trainers at least once a week.

### **CAReeR** oppurtunities

 Can take place in the activities including evaluation and monitoring drug treatment, education, research and development in academy, public and private sector.

# Clinical pharcmacy cURRICULUM: competencies

- 1. To give pharmaceutical care service
- 2. To provide train and give information
- 3. To participate different committees (Infection control committee; committee for the management and use of medicines; formuar committee; pharmacovigilance committee)
- 4. To referral of clients to physicians about preventive health education
- 5. To support physicians in risky patients
- 6. To support physicians in the treatment of common diseases
- 7. Research/ Planning and carrying out a project

## Phytopharmacy

If the physician wants to prescribe a herbal medicinal product (phytopharmaceutics) that was standardized according to Pharmacopeia, a phytopharmacists gives counseling in the protection and healing of patient health in collaboration with physicians in accordance with the treatment protocol.

This disiplinary is for only pharmacists.

## Why phytopharmacy?

- There may be a risk of a interaction betwen the biological effects of the active substances of phytopharmaceutics and the medicines that physician administers.
- Phytopharmaceutics: the products scientifically prepared from medicinal plants suitable for oral administration, dermal or inhalation.
- The main role of the phytopharmacists is to cooperate with physicians in the treatment of diseases by herbal medicinal products and if needed giving consultation to physicians.

### The TRAINING process of phytopharmacy

**Clinical Pharmacy Expertise training process includes;** 

- 1. theoretical training,
- 2. Labrotory trainings,
- 3. clinical trainings,
- 4. thesis preparation and defense of a thesis/resentation.

The evaluation of training is done theoretical and practical exams, pharmacist's report and thesis defense.

3 years

### The TRAINING process of phytopharmacy

### theoretical training

for 8 months

### clinical training

 for 12 months (Skin and Venereal Diseases- 2 months, Internal Medicine- 2 months, Child Health and Diseases- 2 months, Chest Diseases- 2 months, Medical Oncology- 2 months, Public Health- 2 months)

It is essential that phytopharmacy expertise is provided by training the experts in the process of clinical training. The training period is structured.

### **CAReeR** oppurtunities

- Can take place in the a position as an expert in public and private sector, traditional and complementary medicine practice centers, poisoning centers, public health centers, clinical research centers.
- Can take place in the activities including evaluation and monitoring all kinds of herbal medicinal products, education, research and development in academy, public and private sector.

# PHYTOPHARMACY cURRICULUM: competencies

- 1. To provide quality standards in phytopharmaceutics
- 2. To prepare phytopharmaceutics and evaluate the chemical content, effects, and uses
- 3. To provide counseling on the use of phytopharmaceutics
- 4. To gain an expertise on traditional and complementary medicines
- 5. To be a part in the applications on phytopharmaceuticals in clinical setting (patient-provider, patient-patient communication; risky patients; childeren, pregnants, vulnerable groups; support the physicians in the decision-making process)
- 6. To provide training and give information

Thank you for this week...