



**Kurdistan Regional Government – Iraq  
Ministry of Health**

**The International Congress on Reform and  
Development of the Health Care System in  
Kurdistan Region - Iraq**



# Pharmaceutical's Management

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Ministry of Health  
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- Half of the world's population lacks regular access to drugs that are absolutely essential, and in developing countries this portion is estimated to be more than 60%.
- Health economists have developed economic criteria to be used as tool in setting priorities in essential drug *selection, procurement, distribution and use.*

# Vision Statement

*To provide standard setting,  
proficient, and compassionate  
pharmaceutical care services to the  
patients and health care  
professionals*

# The Pharmacy Services relies upon five core values to serve effectively:

- 1. *Accountability***
- 2. *Adaptability***
- 3. *Excellence***
- 4. *Integrity***
- 5. *Respect***

Reform &

Development  
of the Health  
Care System

in the  
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# Department of Pharmacy

## KRG MOH

### Current situation

#### The sector consist of

- Department of pharmacy in the level of MOH and DOH
- Three main warehouses in the three governorates
- Drug quality control laboratory

#### They provide a wide range of pharmaceutical services which include:

- Pharmacies in different HFs
- Clinical pharmacy services
- Monitoring drug services

# Department of Pharmacy

KRG MOH

## Current situation -continue

- Estimation of needs based on average monthly consumption
- Receiving goods from Kimadia but with Improper delivery schedules, lack of information about the stock availability at Kimadia warehouses
- Distribution of the received items to the health facilities
- Local purchasing of urgently needed items to cover the shortages
- The current software system addresses the requirements of distribution but a new system for the long term use is recommended

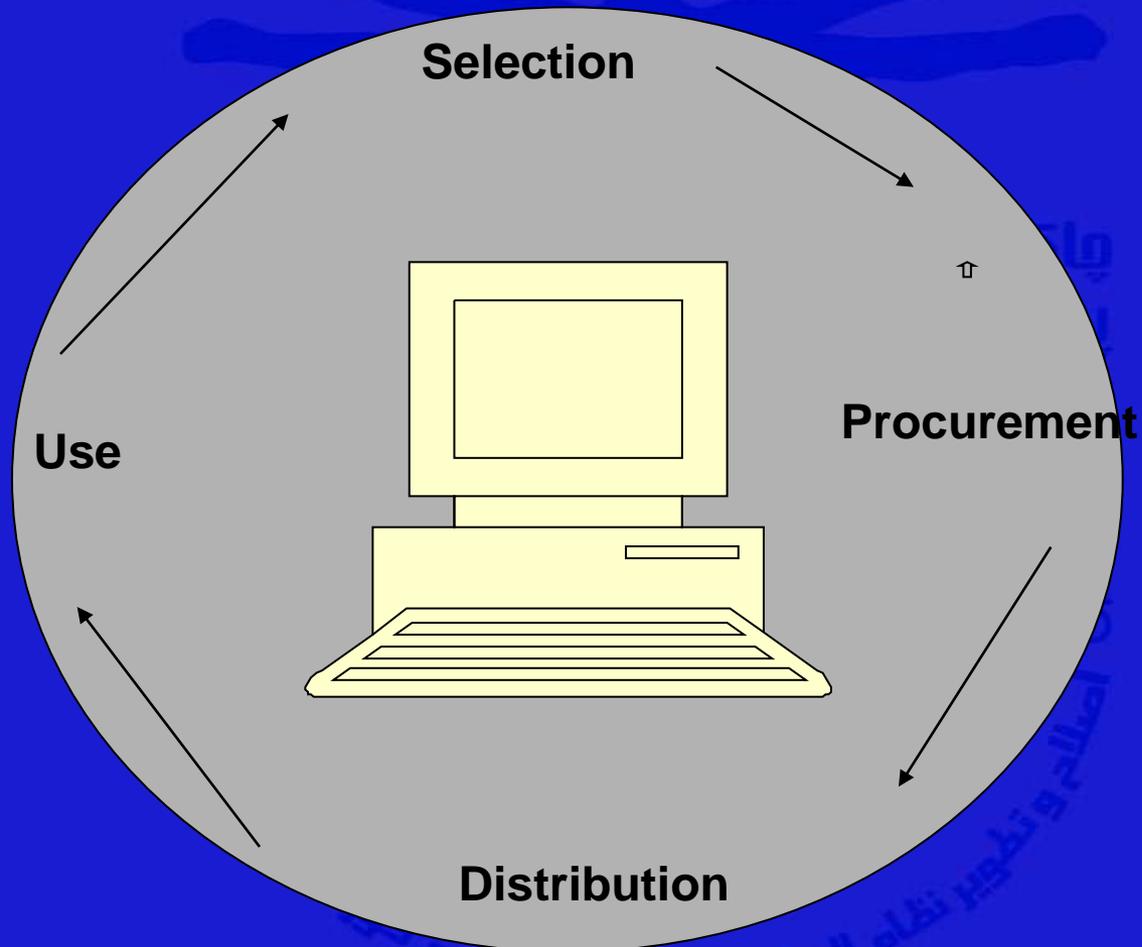
# Tasks of pharmacy department

Pharmacy department is committed to achieve best pharmaceutical care which includes:

- Providing high quality pharmaceutical services that promote the efficacy, safety, and cost-effectiveness of drug use
- Providing drug information to both patients and medical professionals
- Educating and training of junior pharmacists
- Involvement in cutting-edge scientific research programs
- Promoting pharmacy as an essential component of the health-care team

# Drug Supply System Management

The Drug Supply Cycle



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# Drug Selection

It is a process of deciding the drug types needed for prevalent diseases.

## Basic steps in drug selection:

1. Establishing Drug Selection Committee
2. Determining the prevalent health problems and patient characteristics and drugs used.
3. Deciding which health problems may be treated at each level.
4. Structure the national drugs master list either according to TG, or VEN.
5. Introducing the list to health professionals of the institutions or other concerned bodies.
6. Up-date the list periodically.



# Procurement

Purchase from the manufacturers

- Reconcile needs and funds
- Choose procurement method
- Locate and select suppliers
- Specify contract terms
- Monitor order status
- Receive and check drugs
- Make payment

# Procurement

## Procurement procedures

### Principles of Good Pharmaceutical Procurement

1. Procurement by generic name
2. Procurement limited to essential drugs
3. Procurement in bulk
4. Procurement in hospital pack
5. Formal supplier pre-qualification and monitoring
6. Competitive procurement
7. Order quantities based on reliable estimate of actual need

# Comparison between

the WHO model list and KRG list

Drug Category	No. of dosage forms	No. of dosage forms
	KRG list	WHO list
Antibacterial	100	52
Anticancer	85	52
Cardiovascular	98	47
Eye preparations	70	14

# Drug Quality Control

- The purpose of DQC is to make certain that each drug reaching a patient is safe, effective, and of standard quality.
- The most important functions of DQC lab is to test and assess the:  
**Identity, Purity, Potency, Uniformity of dosage form, Bioavailability and Stability of the imported pharmaceuticals.**

# Drug Quality Control

If the pharmaceutical item does not meet established quality standards, the possible consequences are

- *Lack of therapeutic effect, leading to death or prolonged illness*
- *Toxic and adverse reactions*
- *Waste of limited financial resources*
- *Loss of credibility of the health care delivery system*

# Distribution

Distribution process include:

- Receipt and inspection
- Inventory control
- Storage
- Requisition of supplies
- Delivery
- Dispensing to patients
- Consumption reporting

# Distribution

A well run distribution system should:

- Maintain a constant supply of drugs
- Keep drugs in good condition
- Minimize drug losses due to spoilage and expiry (FEFO)
- Rational drug storage spaces
- Use available transport tools as efficiently as possible
- Reduce theft and fraud
- Provide information for forecasting drug needs

# Distribution

The drug distribution consist of the following levels

- Central medical warehouse
- Governorate warehouse
- District drug stores
- Health facilities

Primary health care levels

Secondary Hospitals

Tertiary Hospitals

# Use

## Rational Drug Use

### In biomedical context:

**Patients should receive medications**

- **Appropriate to their clinical needs,**
  - **In doses that meet their own individual requirements,**
  - **For an adequate period of time, and**
  - **At the lowest cost to them and their community**
- (WHO 1985)**

# Use

## Impact of Irrational Use of Drug

Irrational drug use can, directly or indirectly, jeopardize the **quality of patient care** and negatively influence the outcome of treatment.

**The under use** of ORS for acute diarrhea can hinder the goal of treatment; namely, **to reduce under-5 mortality**.

**Over or under usage** of antibiotic or chemotherapeutics can also lead to the rapid appearance of **resistance strains of bacteria**.

**Overuse of nonessential drugs** (e.g. multivitamin and cough preparations), even essential ones, **drains limited resources**.

**Over prescribing** communicates to patients that they **need medication for any and all conditions**, even trivial (minor) ones.

# Use

## Prescribing practice in Kurdistan

### Indicator

value

Optimal value

Kurdistan

Average No. of  
drugs/prescription

- 3.5

< 2

3

% Antibiotic

- 70

< 20

65

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كوردستان - العراق

# Recommendations for drug selection

Establishment of drug selection committee

*The main functions of DSC*

## 1-Managerial :

- **Effective drug selection**
- **Setting Standard Treatment Guidelines, and protocols (disease oriented)**
- **Auditing and feedback on prescribing practice**

## 2-Regulatory

- **Banning unsafe drugs**
- **Strict registration principles (need clause)**
- **Level-of-use prescribing restrictions**
- **Limited dispensing**
- **Establishing a first line treatment list of medication for chronic conditions which is cost effective and dose not compromise patient quality of life**

# Recommendations

for drug procurement

Establishment of Procurement office and Tender board to:

1. Settle on the importing list
2. Select the most cost effective essential drugs to treat commonly encountered diseases
3. Quantify the needs (quantification)
4. Identify sustainable sources of funds
5. Pre-select potential suppliers
6. Manage procurement and delivery
7. Monitor the performance of suppliers and the procurement system

*Failure in any of these areas leads to lack of access to appropriate drugs and stock*

# Recommendations

for rational use of drug

## Establishment of Pharmacy and Therapeutics Committee PTC

**PTC** is a policy recommending body to:

The medical staff, and the administration of the hospital *on matters related to the therapeutic use of drugs.*

**PTC** composed of

Physicians, Pharmacists and other health professionals

**PTC** formulates policies regarding:

- Therapeutic use of drugs
- Evaluation
- Needs Estimation

# Recommendations

for rational use of drug

## Educational:

- **Effective training in rational prescribing**
- **Equitable and objective information**

Promoting rational prescription (training the physicians )

Ensure good dispensing practice (pharmacists training)

Establishing (DIC) drug information center in the level of MOH  
and DOH

# Recommendations

for rational use of drug

## Structural:

- Team approach to patient care
- Effective information, education and communication to patient and community

# Recommendations

## Quality Control Laboratory

Strengthening the Quality Control Laboratory in term of

- Recruiting international experts consultants on short term to monitor the process and train the national staff
- Escalating the manpower with skilled pharmacists and biochemists to be able to test the huge batch numbers of the imported drugs
- Providing sufficient sophisticated biomedical equipment
- Securing sufficient amount of needed laboratory reagents, and standards
- For the time being, we should get benefit from the contract labs in the neighboring countries for testing the commodities

# Recommendations

## Short term action plan

- More accurate information needed about Kimadia stocks and Kimadia distribution plan
- Urgent provision of continuous and reliable communication system linking the three Governorates warehouses
- Updating the existing M-Drug software system to provide more accurate reporting data
- Training of drug warehouse staff at the Governorate level in system of management and maintenance.
- Logistic support to the warehouses

## Conclusion

The current supply management lacks professional drug selection criteria and requires clear steps for procurement as well as deficiency of rational guidelines for pharmaceuticals use hence

A drug supply system reform is highly recommended



Thank you

