Introduction to Quality Use of Medicines (QUM)

Definition of Quality Use of Medicines (QUM)

- Quality Use of Medicines (QUM) means selecting and using medicines in a way that provides the best possible health outcomes for patients.
- It involves choosing the right medicine for the right patient, at the right dose, for the right duration, and at the lowest necessary cost.
- QUM ensures that medicines are used safely, effectively, and appropriately.
- The concept focuses on maximizing benefits from medicines while minimizing risks such as adverse effects, medicine errors, and unnecessary expenses.
- QUM is an important part of healthcare because improper use of medicines can lead to treatment failure, toxicity, drug resistance, and wastage of healthcare resources.

Objectives of QUM

- To ensure patients receive medicines that are appropriate for their clinical condition.
- To improve therapeutic outcomes and patient quality of life.
- To minimize medication-related problems and adverse drug reactions.
- To encourage rational prescribing, dispensing, and medicine use.
- To reduce unnecessary healthcare costs associated with inappropriate medicine use.
- To promote patient understanding and adherence to treatment.

First Hope

Principles of Quality Use of Medicines

1. Selecting Management Options Wisely

- Healthcare professionals should consider all available treatment options before choosing a medicine.
- Not every health condition requires medicine treatment.
- Sometimes lifestyle modification, dietary changes, exercise, counseling, surgery, or observation may be more suitable than medicines.
- The benefits and risks of each treatment option should be carefully evaluated.

Example

  - A patient with mild hypertension may first be advised to reduce salt intake, lose weight, and exercise regularly before starting medication.

2. Choosing Suitable Medicines When Medicines Are Needed

- If medicine treatment is required, the most appropriate medicine should be selected.

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Factors Considered

- Patient's age.
- Gender.
- Medical condition.
- Severity of disease.
- Presence of other illnesses.
- Pregnancy or breastfeeding status.
- Previous medicine history.
- Possible drug interactions.
- Cost of treatment.

Example

- A doctor may prescribe a safer antihypertensive medicine for an elderly patient instead of a medicine that has a higher risk of adverse effects.

3. Using Medicines Safely and Effectively

- Medicines should be used correctly to achieve the desired therapeutic outcome.

Important Requirements

- Correct dose should be prescribed.
- Correct route of administration should be used.
- Correct duration of treatment should be followed.
- Patients should understand how and when to take medicines.
- Monitoring should be performed to assess effectiveness and safety.

Example

- Antibiotics should be taken for the full prescribed course even if symptoms improve earlier.

4. Ensuring Patient Participation

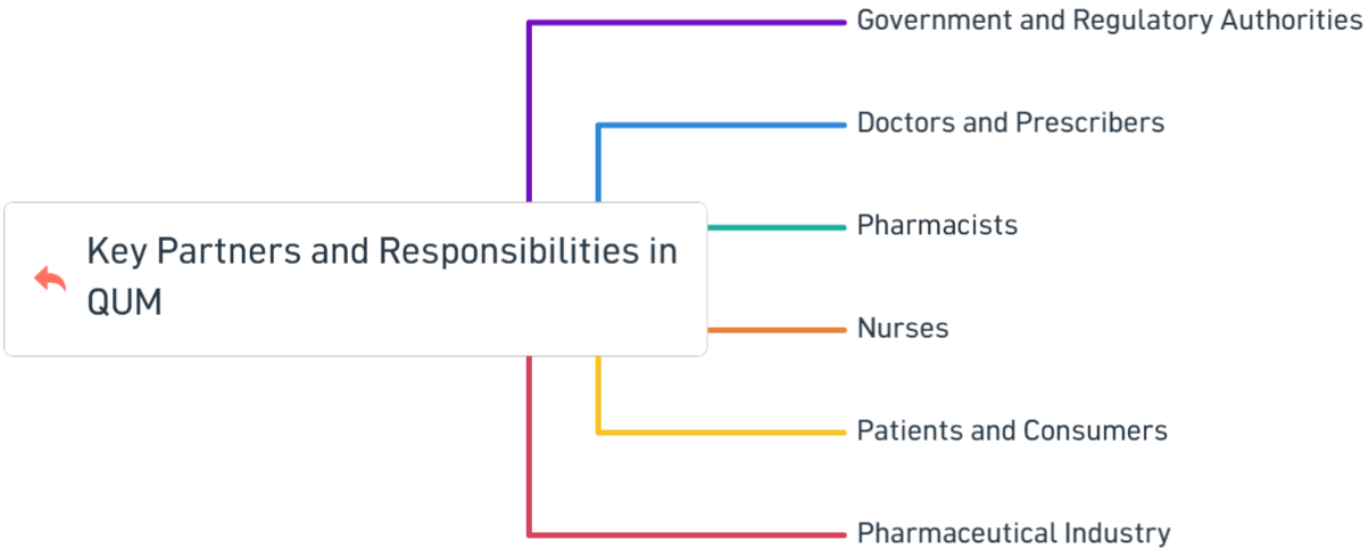
- Patients should actively participate in decisions regarding their treatment.
- Patients should receive clear information about benefits and risks of medicines.
- Patients should be encouraged to ask questions.
- Shared decision-making improves treatment adherence and satisfaction.

Example

- A doctor discusses different treatment options for diabetes and allows the patient to participate in selecting the most suitable therapy.

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Key Partners and Responsibilities of the Partners



A. Government and Regulatory Authorities

Responsibilities

- Develop national medicine policies and guidelines.
- Ensure quality, safety, and efficacy of medicines.
- Regulate manufacturing, distribution, and marketing of medicines.
- Monitor adverse drug reactions through pharmacovigilance programs.
- Promote public awareness regarding proper medicine use.
- Support educational programs related to QUM.

Example

- Drug regulatory agencies approve medicines only after evaluating their safety and effectiveness.

B. Doctors and Prescribers

Responsibilities

- Diagnose diseases accurately.
- Select the most appropriate treatment.
- Prescribe medicines rationally.
- Consider patient-specific factors before prescribing.
- Monitor treatment outcomes.
- Educate patients regarding medicine use and possible side effects.

Example

- A doctor adjusts the dose of a medicine in a patient with kidney disease to avoid toxicity.

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C. Pharmacists

Responsibilities

- Dispense medicines accurately.
- Check prescriptions for errors and interactions.
- Counsel patients on proper medicine use.
- Monitor medication safety.
- Encourage adherence to therapy.
- Provide drug information to healthcare professionals and patients.

Example

- A pharmacist explains the correct technique for using an inhaler to an asthma patient.

D. Nurses

Responsibilities

- Administer medicines correctly.
- Monitor patient responses to treatment.
- Observe and report adverse drug reactions.
- Educate patients regarding medicine use.
- Ensure medication administration follows prescribed instructions.

Example

- A nurse monitors blood pressure after administration of an antihypertensive medicine.

E. Patients and Consumers

Responsibilities

- Follow prescribed treatment plans.
- Take medicines according to instructions.
- Report side effects or unusual symptoms.
- Attend follow-up appointments.
- Avoid self-medication without professional advice.
- Maintain accurate medication records.

Example

- A patient informs the doctor about an allergy to penicillin before receiving treatment.

F. Pharmaceutical Industry

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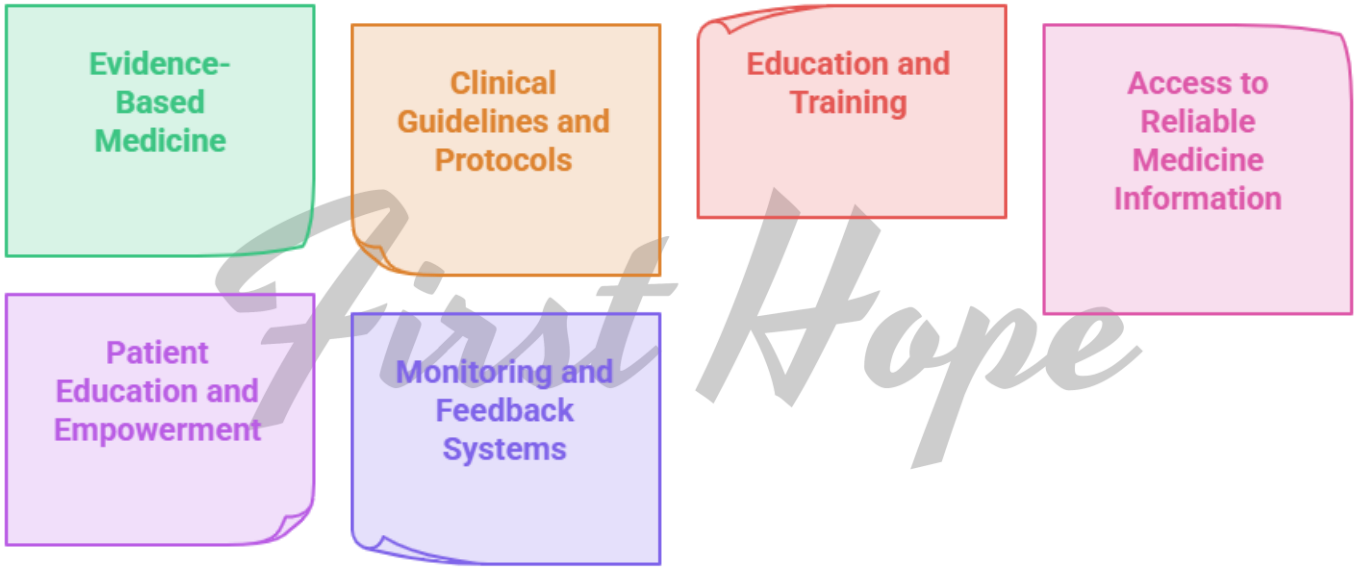
Responsibilities

- Manufacture quality medicines.
- Conduct ethical research and development.
- Provide accurate medicine information.
- Follow regulatory requirements.
- Report safety data to regulatory authorities.

Example

- A pharmaceutical company reports newly identified adverse effects of a medicine to health authorities.

Building Blocks in QUM



1. Evidence-Based Medicine

- Evidence-based medicine means using the best available scientific evidence when making treatment decisions.

Importance

- Ensures medicine choices are supported by research.
- Reduces inappropriate prescribing.
- Improves treatment outcomes.

Example

- Prescribing statins for patients with high cardiovascular risk based on clinical guideline recommendations.

2. Clinical Guidelines and Protocols

- Clinical guidelines are systematically developed recommendations that help healthcare professionals make appropriate treatment decisions.

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