



The role of military clinical pharmacists in Management of infection in patients with COVID-19 admitted to ICU

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Clinical Pharmacy (Pharmacotherapy)

- ▷ Clinical pharmacy (pharmacotherapy) is one of the specialized fields of pharmacy that deals with the application of pharmaceutical sciences and pharmacotherapy at the bedside of patients.
- ▷ The most important mission of this field is to promote the correct and rational prescription and use of drugs
- ▷ Also, experts in this field are responsible for managing or implementing research and clinical projects related to drug therapy.
- ▷ The services of clinical pharmacy specialists are in both inpatient and outpatient fields, and specialists in this field help to use drugs more safely and effectively by reviewing the previous and current history of drug therapy of patients, evaluating and monitoring treatment, as well as possible problems related to drug therapy.

Clinical Pharmacy (Pharmacotherapy)

▷ Some of the duties of this group of specialists:

Examine the patient's drug history,

Provide advice related to drug therapy to physicians

Supervise the rational prescription of drugs

Monitor the correct use of drugs by the patient

Investigate the side effects of drugs and report them

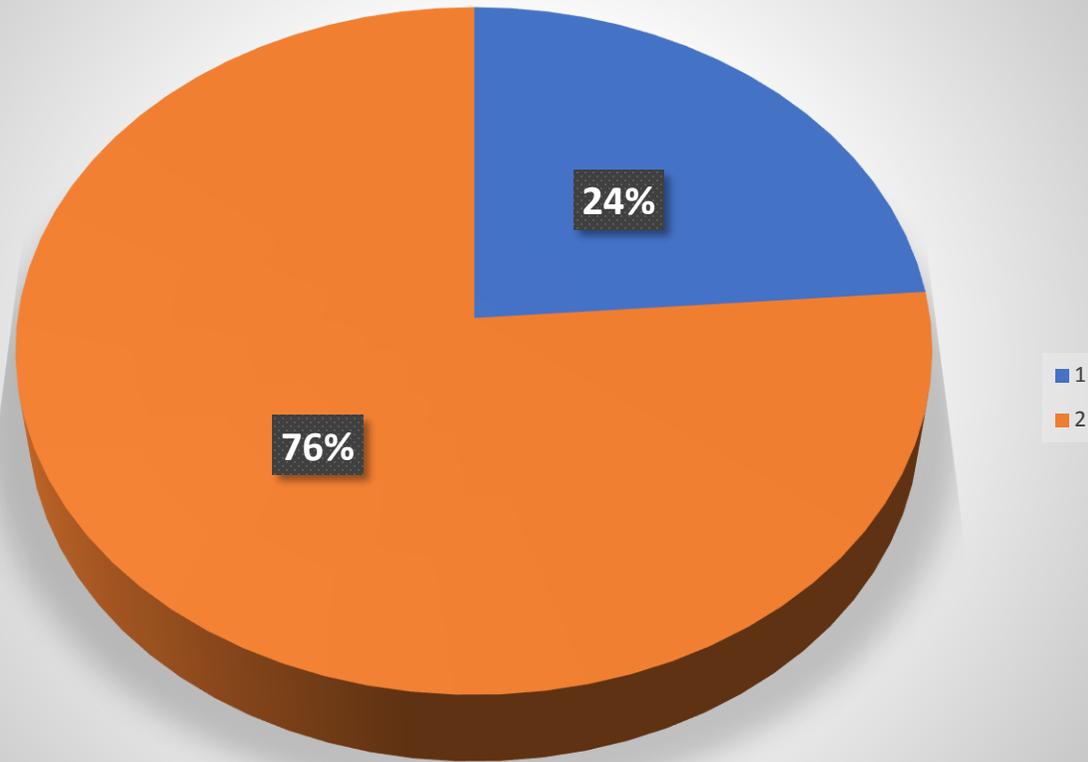
Follow-up of drug concentrations in patients to prevent poisoning, achieve the correct therapeutic dose (monitoring)

✓ At present, in Iran, it is possible to continue studying in intensive care fellowship (icu) after completing the residency, and it is also possible to pay for visits and consultations, definition and the equivalent of an internist.

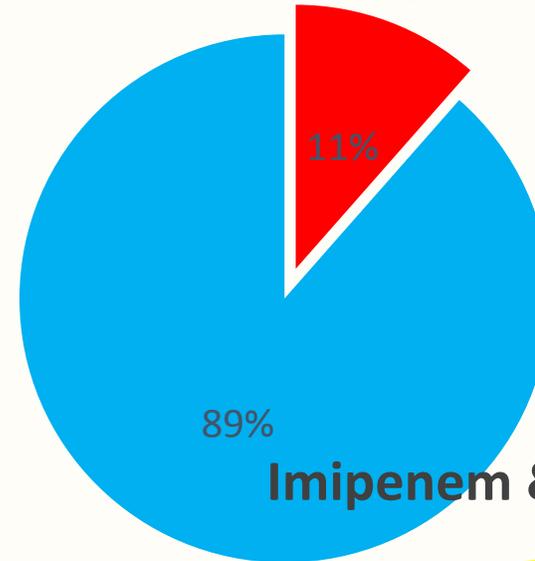
- ▷ **Drug interactions** occur when a drug's mechanism of action is disturbed by the concomitant administration substances such as foods, beverages or other drugs. The cause is often the inhibition of the specific receptors available to the drug, forcing the drug molecules to bind to other non-intended targets which result in an array of side-effects.



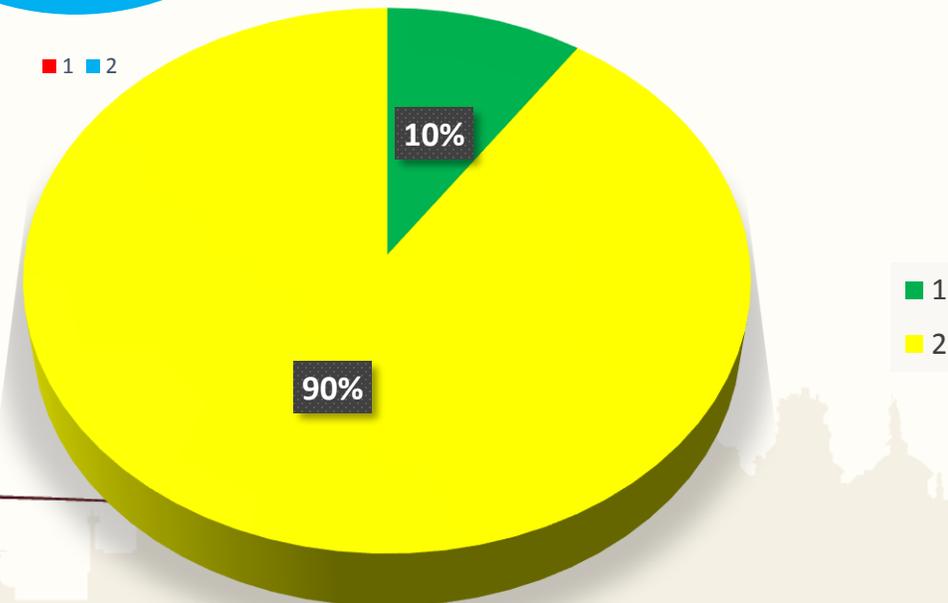
Drug interactions



Ciprofloxacin & Theophiline

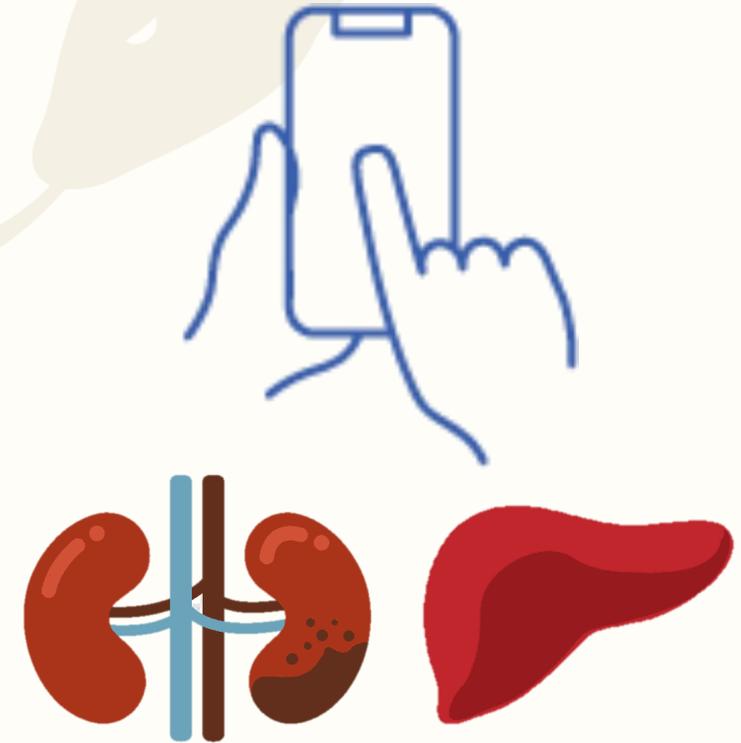


Imipenem & Sodium valproate

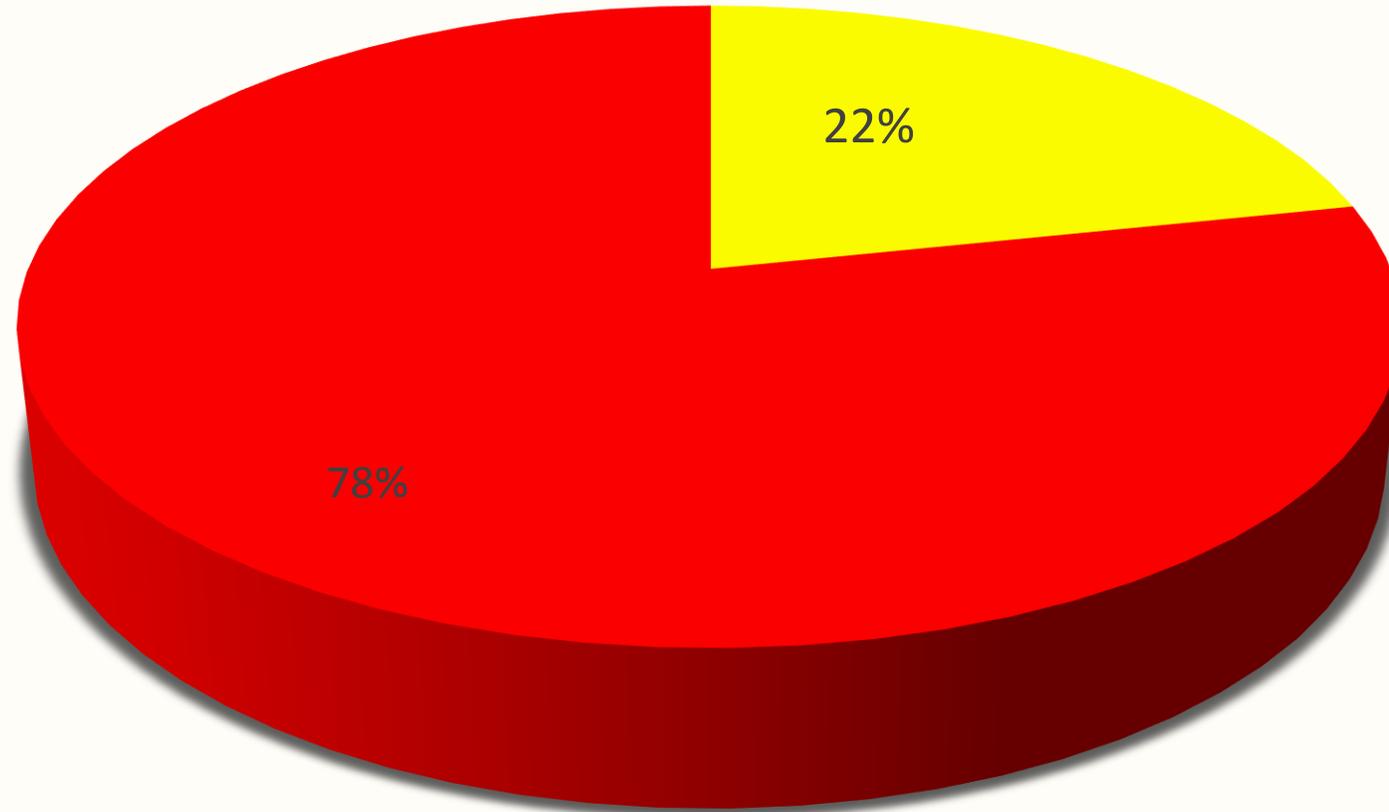


Dose adjustment in MOF

- Chronic kidney disease affects renal drug elimination and other pharmacokinetic processes involved in drug disposition (Absorption, drug distribution, nonrenal clearance [metabolism]).
- Drug dosing errors are common in patients with renal impairment and can cause adverse effects and poor outcomes.
- Dosages of drugs cleared renally should be adjusted according to creatinine clearance or glomerular filtration rate and should be calculated using online or electronic calculators.
- Recommended methods for maintenance dosing adjustments are dose reductions, lengthening the dosing interval, or both.



Vancomycine Dose adjustment



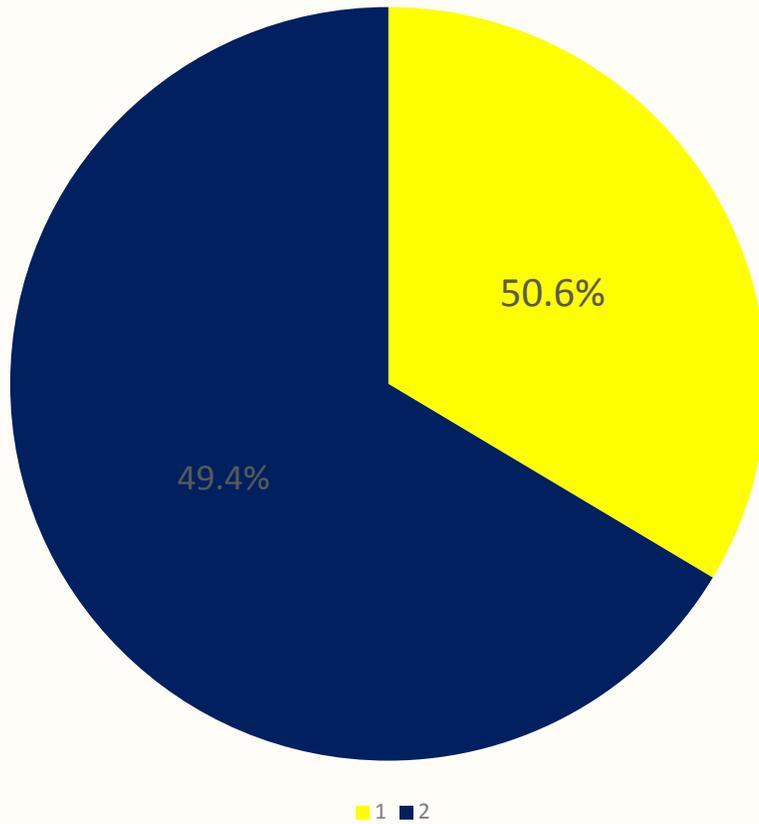
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Rational Uses of drugs

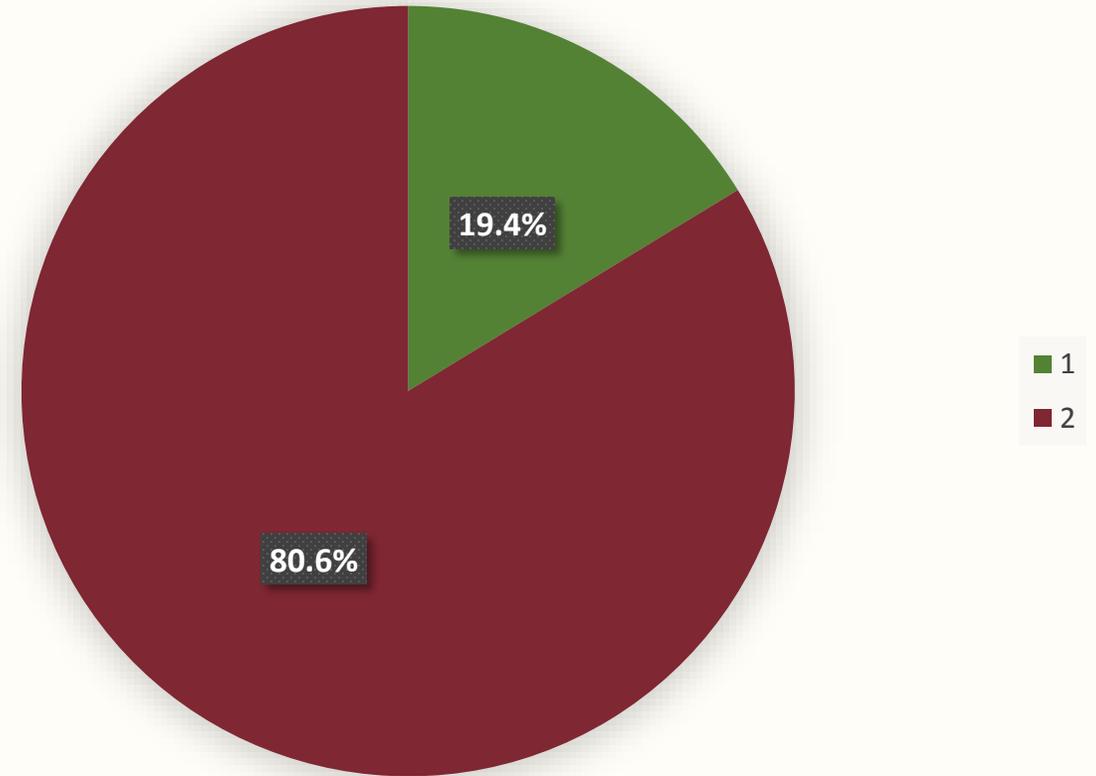
- Rational use of medicines requires that "patients receive medications appropriate to their clinical needs, in doses that meet their own individual requirements, for an adequate period of time, and at the lowest cost to them and their community.



Drug suggestions



Lab Tests Evaluation





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