Australian Government

Assessment Requirements for HLTPHA029 Apply knowledge of chemical principles as they apply to pharmacy activity

Release: 1

Assessment Requirements for HLTPHA029 Apply knowledge of chemical principles as they apply to pharmacy activity

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- conduct one continuing education session for peers on chemical principles and reactions, as they apply to pharmacy activity that includes:
  - the key concepts of pharmacokinetics
  - basic chemistry concepts:
    - structures that are vulnerable to an acidic environment
    - factors affecting rates of reaction pH and neutralisation reactions
  - how medications are metabolised
  - how medications are eliminated from the human body
  - physiological factors affecting medication
  - fundamentals of drug to drug, drug to food, drug to alcohol interactions
  - medication administration routes
  - key information to convey to patients about the administration of dosage forms
  - medication shelf-life considerations.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- references available, including:
  - Therapeutics Guideline: Antibiotic
  - Australian Medicines Handbook (AMH)
  - Australian Pharmaceutical Formulary Handbook (APF)
  - Monthly Index of Medical Specialities (MIMS) or AusDI Advanced
  - Micromedex
- legal responsibilities of patient rights, duty of care and implications of negligence
- limitations of own work role including identification and referring of issues outside scope of own practice to an authorised person
- relevant National, State or Territory regulatory and legislative requirements
- key concepts of pharmacokinetics:
  - absorption, distribution, metabolism and elimination

  - bioavailability
  - sites of absorption
  - factors affecting absorption
  - therapeutic range
  - half-life and effect on dosing intervals
- how medications are metabolised
- medications that are vulnerable to an acidic environment
- how medications are eliminated from the body
- bioequivalence
- physiological factors affecting medication, including:
  - breastfeeding
  - pregnancy
  - geriatrics
  - paediatrics
  - hepatic impairment
  - renal impairment
- fundamentals of drug to drug, drug to food, drug to alcohol interactions, including:
  - concerns with taking medications with iron and calcium supplements
  - effect antacids can have on medication absorption
  - effect of grapefruit juice on medications
  - effect alcohol can have with medications
  - rationale behind taking medications with food, with a fatty meal and on an empty stomach
- stability considerations:
  - shelf life
  - effect of temperature on medications
  - understanding the strengths and weaknesses of the following dosage forms
- continuous education session delivery methods, including:
  - digital presentation
  - demonstration
  - referral to findings
  - activities or questions.

Assessment Conditions

Skills must be demonstrated in the workplace or in a simulated environment that reflects workplace conditions.

Assessment must ensure access to:

- use of suitable facilities, equipment and resources, including:
  - relevant legislation, regulations and guidelines

- chemical pharmacy resources
- authorised person with whom to consult.

Assessors must satisfy the Standards for Registered Training Organisations' requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ced1390f-48d9-4ab0-bd50-b015e5485705