Adverse Drug Reactions - Learning Objectives

Module One - Adverse Drug Reactions (ADRs)

- Explain the impact that Adverse Drug Reactions (ADRs) have on morbidity and mortality in health care settings
- Explain and categorise ADRs according to the DoTS, ABCDEF systems and "on-target" or "off-target" characteristics
- Identify population groups, individuals and situations that may increase the risk of an ADR
- Describe general principles and strategies to prevent or minimise harm from ADRs

Module Two - Drug Interactions

- Describe the main mechanisms involved in drug interactions and categorise these as pharmacokinetic or pharmacodynamic
- Explain the role and significance of cytochrome P450 (CYP) and P-glycoprotein in the mechanism of drug interactions.
- Describe how individual variation including pharmacogenetics can influence drug interactions
- Identify population groups, individuals and situations that may increase the risk of a drug interaction
- Advise on the management of drug interactions in individual cases including interpretation of information resources.

Module Three - Drug Hypersensitivity and Drug Allergy

- Explain the scope of the term Drug Hypersensitivity Reaction (DHSR) and how this relates to immunological and non-immunological reactions.
- Give common practice examples of DHSR
- Explain the important principles of cross sensitivity and give examples of when this is relevant and situations when there is misinformation.
- Explain the potential problems associated with inappropriate drug allergy labelling - in particular, penicillin allergy
- Describe the limitations associated with drug allergy warnings in clinical decision support
- Explain how pharmacists can contribute to the management and prevention of DHSR.

Module 4 - ADR reporting and Pharmacovigilance

- Explain the role and function of the New Zealand Pharmacovigilance Centre and how pharmacovigilance contributes to the safe use of medicines
- Explain the basic principles of signal generation and how spontaneous ADR reports are used nationally and internationally to identify new concerns associated with a medicine's use
- Identify situations when an ADR report should be submitted and file a completed report
- Describe how other data sources such as electronic medical records and population databases can be combined with spontaneous reports to enhance our knowledge and understanding of adverse drug reactions.