Paediatric ADAC Learning Outcomes

Module 1: Handling hazardous drugs and related waste safely

1. Defines role, responsibilities, and professional scope in relation to the safe handling of hazardous drugs and related waste.
2. Defines role, responsibilities, and resources in relation to the education and support of patient, parents and care givers who are involved in handling hazardous drugs and related waste.
3. Outlines legislative requirements and local institutional policy and procedures for the safe handling, disposal, transport and storage of hazardous drugs and related waste.
4. Lists potential sources of hazardous substances and risks which may be encountered in a workplace and outlines methods for identifying these in the clinical environment.
5. Describes methods for minimising exposure and managing hazardous substances and risks in the clinical environment, including:
    a. policies and procedures for safe handling of hazardous drugs and related waste during preparation, transportation and storage, administration, and waste management
    b. procedures for hazardous spill & personal exposure management
    c. appropriate use of personal protective equipment (PPE) including correct selection, use, fit, maintenance, storage, cleaning, and disposal
    d. appropriate use of safety equipment
    e. local training requirements.
6. Outlines procedures for reporting incidents of spill and occupational exposure to hazardous drugs or related waste.
7. Describes first aid measures for immediate management of occupational exposure to hazardous drugs or related waste.
8. Identifies local health surveillance program and monitoring requirements

Module 2: Anti-cancer drug classification and mechanism of action

1. Outlines the goals of anti-cancer drug therapy in paediatric and AYA cancers.
2. Discusses the mechanism of action and classification of anti-cancer drugs:
    a. chemotherapy
    b. targeted therapy
    c. immunotherapy
    d. other agents e.g. steroids.
3. Understands the stages of the cell cycle and how these relate to the mechanism of action of anti-cancer drugs.
4. Outlines the principles of chemotherapy and how they relate to dosing and scheduling.
5. Describes the most common drug interactions, assesses for potential drug interactions, and identifies the institution escalation pathway for evaluation.

Module 3: Treatment-related toxicities and management

1. Describes the signs, symptoms, and grading features of common and serious treatment-related toxicities for:
    a. chemotherapy
    b. targeted therapy
    c. immunotherapy
    d. other agents e.g. steroids.
2. Outlines the individual drug specific toxicities, including monitoring, prevention, and management.
3. Identifies adjuvant drugs used in association with chemotherapy and describes their role.
4. Explains common management strategies for various treatment-related toxicities.
5. Identifies own role and scope of practice and the role of the MDT in managing treatment-related toxicities, including circumstances where referral is required.
6. Describes the patient and carer role in minimising and managing treatment-related toxicities.
7. Outlines the considerations for long-term monitoring and management of treatment-related toxicity.

Module 4: Reviewing anti-cancer protocols and prescriptions

1. Explains the importance of clinical trials in the treatment of paediatric and AYA cancers.
2. Describes the ethical and legal principles governing the conduct of paediatric and AYA oncology research.
3. Defines best practice medication safety requirements related to the prescribing, dispensing and administration of anti-cancer drugs.
4. Describes the nursing verification process in the safe delivery of anti-cancer drugs and outlines the requirements at each step including:
    a. review of commencement parameters including pre-therapy assessments, physician review, and confirmation to proceed
    b. review of treatment protocol
    c. review of prescription against the treatment protocol
    d. review of patient and protocol specific dosing variables
    e. identification of supportive care requirements
    f. appropriate documentation of the verification process.
5. Outlines the necessary calculations to verify doses on the prescription.
6. Explains the rationale for any dose modifications or delays and identifies when it is appropriate to seek further clarification.

Module 5: Educating the patient, carer and family

1. Describes the education priorities for patients receiving anti-cancer drugs, their carers and family, including:
    a. treatment and administration process
    b. treatment-related toxicity prevention and management strategies
    c. adverse reactions
    d. education priorities specific to individual drug and route of administration
    e. documentation of dosing and medication administration in the home.
2. Utilises age-appropriate strategies to engage children and young adults to facilitate understanding of their treatment.
3. Identifies own role and scope of practice and the role of the MDT in providing information and support needs (including psychological support) to patients and their families.
4. Identifies appropriate patient information and supportive resources (web and print based).
5. Outlines the importance of young adults and carers documenting medication administration in the home environment in relation to measuring treatment adherence.
6. Identifies documentation requirements for education of patients receiving anti-cancer drugs and their carers.

Module 6: Assessing patients

1. Describes the requirement of a comprehensive assessment for a patient receiving anti-cancer drugs.
2. Utilises age-appropriate assessment strategies.
3. Describes the importance of considering patient reported outcome measures.
4. Identifies assessment outcomes that require further action and explains the rationale for appropriate responses and interventions.
5. Identifies documentation requirements for assessments of patients receiving anti-cancer drugs.

Module 7: Administering anti-cancer drugs

1. Defines own scope of professional practice in the administration of anti-cancer drugs via different routes and for different drug classifications including safety and competency requirements.
2. Details the nursing verification process at the point of administration, including required protocol, prescription, medication, and patient identification checks.
3. Describes, and where required, provides a rationale for:
    a. the individual drug-related risks e.g. vesicant, irritant, anaphylaxis
    b. the order of drug administration
    c. supportive care requirements
    d. specific equipment requirements related to route of administration
    e. drug interactions and fluid compatibility.
4. Describes monitoring requirements pre, during and post drug administration.
5. Outlines how to prevent, identify, and manage immediate adverse events.
6. Describes the rationale for administration of supportive care including pre-medicines and hydration to minimise toxicity or improve anti-cancer drug efficacy.
7. Identifies safety considerations for all routes of administration and drug classes.
8. Outlines post-treatment supportive care considerations and ongoing nursing care requirements.
9. Outlines discharge requirements and considerations.
10. Identifies documentation requirements relating to administration of anti-cancer drugs, including electronic medical records and prescribing systems, if relevant.