BASIC OF CANCER CARE WORKSHOP (BOCC)

WORKSHOP AIM:

This workshop is intended to provide participant discover and develop their knowledge and skill in principles and practice of cancer treatment and management; and apply them in the care of cancer patients and their families.

WORKSHOP DESCRIPTION:

- This workshop introduces participant to principles and goals of cancer treatment (systemic therapy).
- Participant would acquire knowledge, skills and attitude in the principles and practices of cancer treatment.
- They would execute cytotoxic drug, targeted therapy and immunotherapy administration, identify and manage toxicities of the treatment.
- They will deliver care of venous access devices and establish a therapeutic nurse-client relationship.
- They will demonstrate inter professional collaboration skills for optimal patient care and apply the life-long learning in academic and career development.

MODE OF DELIVERY:

Lecture, Discussion, Presentation, Demonstration and Return Demonstration.

WORKSHOP LEARNING OUTCOMES:

- Understand the principles of cancer care (treatment modalities and systemic therapy).
- Demonstrate knowledge and understanding of various systemic therapy drugs.
- Manage patients for systemic therapy and administer systemic therapy drug efficiently and competently.
- Manage and access venous access devices.
- Manage side effects of the cancer treatments.

ASSESSMENT OF LEARNING:

- Pre and Post Test (SR/MCQ)

- OSCE:-
  - Administer cytotoxic drug.
  - Venous access devices assessment.
  - Extravasation (optional procedure)
  - Cytotoxic spillage (optional procedure)

- Log book with rubric check list (continues assessment)

DURATION OF WORKSHOP:

- 4 full days (32 hours)

- 3 days theory & practical session
- 1 day (assessment- MCQ & OSCE)

ENROLMENT AND ENTRY REQUIREMENTS:

Enrolment

The workshop is open to candidates with:

- Minimum diploma in nursing /degree or equivalent from a training institution / university recognized by Public Service Department or;
- Other relevant diploma or degree approved by the Committee.

Entry Requirements

- Registered with the relevant professional body where applicable (e.g.LJM)
- Confirmed in service.
- Minimum of six months working experience in the related field.

CONTENT OUT LINE

N0	TOPIC
1.	**INTRODUCTION TO CANCER**
1.1	Definition
1.2	Factors contributions
1.3	Cancer biology - Introduction to cells, Oncogenes and TSGs - Differences between normal cells and cancer cells - Tumor classification - Routes of spread - Diagnosis and staging
1.4	Treatment modalities - Historical Perspective - Surgery - Radiotherapy - Stem Cells Transplant (SCT)
1.5	Oncology & Hematology Emergencies - Hypercalcemia - Superior vena cava syndrome (SVCS) - Spinal cord compression (SCC) - Tumor lysis syndrome (TLS) - Neutropenia fever - Hemorrhage - Hematology-Hyperleucocytosis - Hyperviscosity (HVS)
2.	**SYSTEMIC THERAPY**
2.1	**INTRODUCTION OF CHEMOTHERAPY**
2.1.1	Overview of chemotherapy - Definition - Goals of Chemotherapy
2.1.2	The principles of chemotherapy - Hematopoietic System and Solid Tumors - Cellular Kinetics - Combination Chemotherapy - Therapeutic Response ➢ Tumor variables ➢ Patients performance

2.2	**PHARMACOLOGICAL ASPECT OF CHEMOTHERAPY**
2.2.1	- Oncology drug interactions ➢ Pharmaceutical ➢ Pharmacodynamics ➢ Pharmacokinetic
2.3	**CLASSIFICATION OF CHEMOTHERAPY**
2.3.1	Alkylating agent (Covalent DNA Binding Drugs)
2.3.2	Anti-metabolites
2.3.3	Anti-tumor antibiotics
2.3.4	Plant alkaloids / Microtubule- Targeting Drugs
2.3.5	DNA-Topoisomerase Inhibitors
2.3.6	Miscellaneous
2.3.7	Others - Different types of targeted therapies ➢ Signal Transduction inhibitors ➢ Immunotherapy / Monoclonal antibodies ➢ Anti-angiogenesis - Hormonal agent
2.4.	**CHEMOTHERAPY PROCESS**
2.4.1	- Administration Of Chemotherapy: ➢ Routes of delivery of chemotherapy ➢ Systemic therapy ➢ Regional therapy ➢ The advantages & Disadvantages ➢ Nursing roles and responsibilities
2.4.2	- Chemotherapy preparation ➢ Drug preparations- BSC ➢ Patient Pre-treatment assessment ✓ Provision of information & consent ✓ Physical and psychosocial assessment ✓ Renal function
	- Dose calculation- BSA ➢ Chemotherapy protocol - Vein selections - Vascular Access Devices (VAD) ➢ Types of vascular access devices (IJC, Hickman Catheter, PICC & Chemo port) ➢ Advantages & disadvantages ➢ Care of vascular access devices - Caregiver – PPE, equipment, IV push technique, patient obs.

3.	**SAFE HANDLING OF ANTINEOPLASTIC AGENT**	
3.1	Potential routes of exposure to cytotoxic drugs ➢ Routes of exposures ➢ Effects of exposures	
3.2	Safe Handling	
	3.2.1	Drug Preparation eg. CDR facility
	3.2.2	Drug Administration
	3.2.3	Drug Disposal
	3.2.4	Transport and storage
	3.2.5	Patient care issues – linen, excreta and home care
	3.2.6	Management of cytotoxic spillage
3.3	Care of patients with chemotherapy	
	3.3.1	Management of extravasation
	3.3.2	Anaphylaxis-Hypersensitivity reactions (HSR)
	3.3.3	**Health education** Potential drug side effects - GIT – nausea vomiting, mucositis, diarrhea or constipation. - Cutaneous toxicity - Hematological toxicity
4.	**SUPPORTIVE CARE**	
4.1.	**Pain Management**	
	- Pain assessment - Classification of pain - Principles in pain control	
4.2.	**Psychosocial dimension of care**	
	- Altered body image - Wound care - Mental health care (distress, anxiety & Stress).	
4.3.	**Palliative and end-of-life care**	
	- Symptoms management for terminally ill patient - Grief & Bereavement care to family members - Support for primary career and family members	

References

1. Allison M.D. (2021). *The Impact of Cancer on Mental Health: Recognizing Symptoms and Providing Support.* https://www.oncologynurseadvisor.com
2. Alok Gupta. *Oncology Emergency.* Presentation was made at Oncology Nursing Conference held at All India Institute of Medical Sciences (AIIMS), New Delhi in March 2016. https://www.slideshare.net
3. American Spinal Injury Association (ASIA) International Standards Committee. *International standards for neurological classification of spinal cord injury*. 2015 worksheet. http://goo.gl/OOyFul
4. Bo Chen,et.al.(2021). Management of acute spinal cord compression in multiple myeloma, critical Reviews in Oncology/Hematology, *Volume 160, 103205, ISSN 1040-8428.*
5. Doyle. D. et al (2004) *Oxford Textbook of Palliative Medicine (3rded.)* Oxford University Press Inc: New York.
6. Esperança-Martins M,et.al. *Multidisciplinary Approach to Spinal Metastases and Metastatic Spinal Cord Compression*—A New Integrative Flowchart for Patient Management. Cancers. 2023; 15(6):1796. https://doi.org/10.3390/cancers15061796
7. Hamidi et.al. (2020). Cancer MAS Dashboard: Data Visualization of Cancer Cases in Malaysia. *Journal of Physics: Conference Series. 1529. 022019. 10.1088/1742-6596/1529/2/022019.*
8. Langhorne M.E. , Fulton J.S. & Otto S.E., (2007). *Oncology Nursing*. 5th ed. Mosby:New York.
9. Ministry of Health Malaysia, (2015). *Advance Diploma Oncology Care (ADOC).* Training Management Division:KKM .
10. Ministry of Health Malaysia, (2019). *Post Basic Stoma & Incontinence.* Training Management Division:KKM
11. Naurois de J., & et.al. (2010). *Management of febrile neutropenia:ESMO clinical Practice Guidelines.* https://doi.org/10.1093/annonc/mdq196
12. Nursing@Georgetown. (2021). *Managing Mental Health After a Cancer Diagnosis. the online MSN program from the School of Nursing & Health Studies.* https://online.nursing.georgetown.edu
13. Otto, S. E. (1997). *Oncology Nursing*. (2nd ed.). Mosby: Kansas.
14. Tadman M. & Roberts, D., (2007). *Oxford Handbook of Cancer Nursing*. Oxford University Press:USA.
15. Tano, K.J. & Taoka, N.J., (2005). *Core Curriculum for Oncology Nursing.* 4th.ed. Saunders:USA