

INSTITUTE OF MEDICAL SCIENCES AND SUM HOSPITAL

(Siksha 'O' Anusandhan deemed to be University)

DM CRITICAL CARE MEDICINE

10. PROGRAM OUTCOMES (POs) OF MD CCMPROGRAM

- 1. Adequate understanding of the basic sciences relevant to the concerned speciality.
- **2.** Identify and consider social, economic, and emotional determinants of health in a given case, during the planning of therapeutic, rehabilitative, preventive and primitive strategies.
- **3.** Diagnose and manage majority of the conditions in the speciality concerned on the basis of clinical assessment, and appropriately selected and conducted investigations.
- **4.** Plan and advice measures for the prevention and rehabilitation of patients suffering from disease and disability related to the speciality.
- **5.** Skills in the documentation of individual case details as well as morbidity and mortality rate relevant to the assigned situation.
- **6.** Organize and supervise the assigned health care services demonstrating adequate managerial skills in the clinic/hospital/field situation.
- **7.** Practice the speciality concerned ethically and in step with the principles of primary healthcare.
- **8.** Demonstrate empathy and human approach towards patients and their families and exhibit interpersonal behavior in accordance with the societal norms and expectations.
- **9.** Develop skills as a self-directed learner, recognize continuing education needs; select and use appropriate learning resources.
- 10. Competence in basic concepts of research methodology and

- epidemiology, and be able to critically analyze relevant published research literature.
- 11. Skills in using educational methods and techniques as applicable to the teaching of medical/nursing students, general physicians and paramedical health workers.
- 12. Implementation of national health program, effectively and responsibly.

11. PROGRAM SPECIFIC OUTCOMES (PSOs) OF DMCCM

At the end of the training in critical care medicine, it is expected that the qualified resident will be able to:

- 1. Diagnosed and manage all patients with critical illness.
- 2. Perform independently various procedures for management of critical illness.
- **3.** Perform and operate independently the ventilator management of patients.
- **4.** Perform and operate independently advanced hemodynamic monitoring.
- **5.** Supervise the activities of a critical care nurse, physiotherapist, respiratory technician and dietician wherever necessary.
- 6. Perform point of care imaging modalities on bedside.
- **7.** Is able to understand and supervise the functioning of extra corporeal therapies like CRRT and ECMO.
- **8.** To have knowledge and expertise in antibiotics prescription, antimicrobial resistance and infection control practices.
- **9.** To be able to counsel and communicate end of life information to the relatives of the patient.

COURSE OUTCOME

Paper I: Basic Medical Sciences related to Critical Care Medicine

Paper II: Clinical - Etiology, diagnosis and treatment of acute lifethreatening medical and surgical

diseases related to Critical Care Medicine

Paper III: Clinical - Procedures, interventions, professionalism, ethics

and research Methods related to Critical Care Medicine

Paper IV: Recent Advances in the field of Critical Care Medicine

PAPER I (Course Code: DMCCM1)

CO1 Basic Knowledge regarding physiological process of vital organs and systems.

CO2 Knowledge of pathophysiology of various disease processcausing critically ill patients

CO3 Understanding of basic ventilatory operation

CO4 Basic understanding of bio-statistics

CO5 Understanding of all critical care equipments

PAPER II (Course Code: DMCCM2)

CO1 Understanding of critical illnesses, various procedures in ICU & management of various medical emergencies

CO2Understanding to advanced ventilator management

CO3 Understanding of advanced hemodynamic monitoring

CO4 Understanding of infectious diseases,antimicrobialagent,antimicrobial resistance &

Basic knowledge regarding infection control practices.

CO5 Art of communication & counseling to patients relatives

PAPER III (Course Code: DMCCM3)

CO1 Understanding of critical care nephrology

CO2 understanding of critical care neurology

CO3 understanding of perioperative medicine & trauma science

CO4 Knowledge in acute coronary care & cardiac arrest management

CO5 Understanding of hematological, endocrinological & oncological issues in ICU.

PAPER IV (Course Code: DMCCM4)

CO1 Knowledge regarding medico-legal issues, after life care

CO2 Learning recent advances in field of critical care medicine including diagnostics, monitoring & therapeutic advances

Soft Skills (Course Code DMCCM5) Elective courses:

CO1: Medical Ethics

CO2: Ability to function as the member of a team

CO3: Ability to organize public health programs

CO4: Acquisition of skills in administration of a department.

Mapping of CO Vs POs

Course 1 (DMCCM1)

	PO 01	PO 02	PO 03	PO 04	PO 05	PO 06	PO 07	PO 08	PO 09	PO 10	PO 11	PO 12
CO1			/									
	✓											
CO2			✓				✓					
CO3							✓					
	✓		/									

CO4					√	✓	✓
CO5	✓	\			\		

Course 2 (DMCCM2)

		- (
	PO 01	PO 02	PO 03	PO 04	PO 05	PO 06	PO 07	PO 08	PO 09	PO 10	PO 11	PO 12
CO1	~	\	\									
CO2			~		✓		✓					
CO3			\		✓		~					
CO4							✓		✓		/	
CO5		✓		✓		✓		✓				

Course 3 (DMCCM3)

	PO 01	PO 02	PO 03	PO 04	PO 05	PO 06	PO 07	PO 08	PO 09	PO 10	PO 11	PO 12
CO1	✓		✓	✓								
					✓							
CO2	✓		✓	✓								
					✓							
CO3			✓	✓	/							
	✓											
CO4	✓		✓	✓	✓							
CO5	✓		✓	✓	✓							

Course 4 (DMCCM4)

	PO 01	PO 02	PO 03	PO 04	PO 05	PO 06	PO 07	PO 08	PO 09	PO 10	PO 11	PO 12
CO1		\				\					\	
CO2					√			✓	✓			

Mapping of CO Vs PSOs Course 1 (DMCCM1)

		PSO 02	PSO 03	PSO 04	PSO 05	PSO 06	PSO 07	PSO 08	PSO 09
CO1	✓								
							✓		
CO2	✓								
		✓							
CO3			√		√				
CO4				✓	√				
CO5			✓	✓			✓		

Course 2 (DMCCM2)

	PSO 01	PSO 02	PSO 03	PSO 04	PSO 05	PSO 06	PSO 07	PSO 08	PSO 09
CO1		✓							
	✓								
CO2		✓							
			✓		✓				
CO3		✓		✓	✓				
CO4	✓							✓	
CO5		✓							√

Course 3 (DMCCM3)

	PSO 01	PSO 02	PSO 03	PSO 04	PSO 05	PSO 06	PSO 07	PSO 08	PSO 09
CO1	✓	✓					✓		
CO2	✓	✓				-/			
CO3	✓	✓				<u> </u>			
CO4	✓	✓				✓			
CO5	✓	✓							✓

Course 4 (DMCCM4)

	PSO 01	PSO 02	PSO 03	PSO 04	PSO 05	PSO 06	PSO 07	PSO 08	PSO 09
CO1					/		✓		✓
CO2	✓	✓				✓	✓		

CO in relationship to Skill, Employability and Entrepreneurship

Course1 (DMCCM1)

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	Skill	Employability	Entrepreneurship
CO1	✓	✓	
CO2	✓	✓	
CO3	✓		
CO4			✓
CO5	✓		✓

Course2 (DMCCM2)

	Skill	Employability	Entrepreneurship
CO1			
	✓	✓	
CO2			

		✓	✓
CO3		✓	
			✓
CO4	✓		
CO5	✓	✓	

Course3 (DMCCM3)

	Skill	Employability	Entrepreneurship
CO1			
	✓		
CO2			
	✓		
CO3			
	✓		
CO4	✓	✓	
CO5	✓		

Course4 (DMCCM4)

	Skill	Employability	Entrepreneurship
CO1			
	✓	✓	
CO2			
	✓		