

UNIVERSITY OF ZAGREB SCHOOL OF MEDICINE

Plan of the course

End of Life Care

Academic year **2016/2017**

izv. prof. dr. sc. Dinko Tonković

I. COURSE AIMS

To provide students with knowledge of physiology, pathophysiology of patients at the end of life in ICU with special emphasis on diagnostics and therapeutic interventions in critically ill. Students will also realize that therapeutic process involves more than diagnosing and attempting to revert an altered pathophysiologic process and that illness is a complex state with medical, physical, emotional, psychosocial and spiritual elements, specially in ICU. At the end of the course students should be able to understand the basic principles of organ dysfunction, treatment options in critically ill and how to tailor and what therapeutic approach is appropriate for dying patients according to principles of medical profession and ethics ICU.

II. COURSE STRUCTURE

Course hours:

Lectures: 6

Seminar: 14

Special clinical practicals: 10

Total hours: 30

Lectures and seminars will take place in KBC Rebro

Practicals will take place in: KBC Zagreb-Rebro, KBC Sestre Milosrdnice and KB Sveti Duh, KB Dubrava

III. PLAN OF THE COURSE AND COURSE SCHEDULE

BLOCKS OF THE COURSE

Number of blocks: 1

Block number	Start	End
1.	26.9.2016	30.9.2016

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Number of blocks: 1

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1.	26.9.2016	30.9.2016

BLOCKS OF THE COURSE SCHEME

Block 1

Date	Time	Group	Course hours type	Theme	Teaching staff
Monday 26.9.2016.	08:00-09:30; KBC, edukacijski centar Lj. Čečuk	All	Lectures	Introduction, End of life problem, statistics, anthropology of death, definition of terms, admission criteria, ICU statistics, pharmacologic and non pharmacologic withholding and withdrawing treatment, last 48h, scoring system	izv. prof. dr. sc. Dinko Tonković

Date	Time	Group	Course hours type	Theme	Teaching staff
	09:45-11:15; KBC, edukacijski centar Lj. Čečuk	All	Seminar	Pathophysiology and therapy of common symptoms, delirium, nausea, vomiting, fatigue, anorexia, cachexia, nutrition, dehydration, neuropathia, myopathia	izv. prof. dr. sc. Dinko Tonković
	11:30-13:00; KBC, edukacijski centar Lj. Čečuk	All	Lectures	Management of pain and suffering in end stage disease, modalities of pain therapy	doc. dr. sc. Daniela Bandić Pavlović
Tuesday 27.9.2016.	08:00-09:30; KBC, edukacijski centar Lj. Čečuk	All	Seminar	Respiratory therapy in ICU	dr. sc. Robert Baronica
	09:30-10:15; KBC, edukacijski centar Lj. Čečuk	All	Seminar	Non invasive ventilation	doc. dr. sc. Višnja Neseć Adam
	10:30-12:00; KBC, edukacijski centar Lj. Čečuk	All	Seminar	Cardiovascular terminal pathophysiology, cardiovascular support	dr. sc. Željko Čolak
	12:15-13:45; KBC, edukacijski centar Lj. Čečuk	All	Seminar	Renal impairment and therapy in ICU, endocrine impairment in ICU	dr. sc. Tajana Zah Bogović
Wednesday 28.9.2016.	08:00-09:30; KBC, edukacijski centar Lj. Čečuk	All	Lectures	End of life in brain injured patients, symptoms for terminal stage brain death	doc. dr. sc. Ante Sekulić
	09:45-11:15; KBC, edukacijski centar Lj. Čečuk	All	Seminar	Donor support, marginal donors: Transplantation medicine - donor support	Mirjana Mirić, dr. med.
	11:30-13:00; KBC, edukacijski centar Lj. Čečuk	All	Seminar	End of life care for the dying child	dr. sc. Tajana Zah Bogović
	13:00-13:45; KBC, edukacijski centar Lj. Čečuk	All	Seminar	Neurotrauma, Peri-operative brain dysfunction and damage in the elderly	izv. prof. dr. sc. Dinko Tonković
Thursday 29.9.2016.	08:00-12:30; KBC, Klinika za anesteziologiju, Sala 1	Group 4-9	Special clinical practicals	Assesement of terminal ill patients in ICU; Physical assesement, sedation scale, pain scale & ambulatory therapy; ICU-surgery- cardiovascular support, donor support	izv. prof. dr. sc. Dinko Tonković, doc. dr. sc. Daniela Bandić Pavlović, dr. sc. Tajana Zah Bogović, dr. sc. Željko Čolak, dr. sc. Robert Baronica, Eleonora Goluža, dr. med.
	08:00-12:30; KBSD, Anesteziologija	Group 1	Special clinical practicals	Assesement of terminal ill patients in ICU; Physical assesement, sedation scale, pain scale & ambulatory therapy; ICU-surgery- cardiovascular support, donor support	doc. dr. sc. Višnja Neseć Adam

Date	Time	Group	Course hours type	Theme	Teaching staff
	08:00-12:30; KBSM, Zavod za anesteziologiju i reanimatologiju	Group 2	Special clinical practicals	Assesement of terminal ill patients in ICU; Physical assesement, sedation scale, pain scale & ambulatory therapy; ICU-surgery- cardiovascular support, donnor support	Marinko Vučić
	08:00-12:30; KBD, Klinika za anesteziologiju, reanimatologiju i intenzivno liječenje	Group 3	Special clinical practicals	Assesement of terminal ill patients in ICU; Physical assesement, sedation scale, pain scale & ambulatory therapy; ICU-surgery- cardiovascular support, donnor support	Nikola Bradić, V. pred.
Friday 30.9.2016.	08:00-11:00; KBC, Klinika za anesteziologiju, Sala 1	Group 4-9	Special clinical practicals	Neuroanesthesia monitoring; Medical care in terminally ill ginecology patients, Mother and child death at delivery, Symptoms & control in palliative; Respiratory therapy in ICU	izv. prof. dr. sc. Dinko Tonković, Eleonora Goluža, dr. med., dr. sc. Tajana Zah Bogović, doc. dr. sc. Daniela Bandić Pavlović, doc. dr. sc. Ante Sekulić, dr. sc. Robert Baronica
	08:00-11:00; KBSD, Anesteziologija	Group 1	Special clinical practicals	Neuroanesthesia monitoring; Medical care in terminally ill ginecology patients, Mother and child death at delivery, Symptoms & control in palliative; Respiratory therapy in ICU	doc. dr. sc. Višnja Neseck Adam
	08:00-11:00; KBSM, Zavod za anesteziologiju i reanimatologiju	Group 2	Special clinical practicals	Neuroanesthesia monitoring; Medical care in terminally ill ginecology patients, Mother and child death at delivery, Symptoms & control in palliative; Respiratory therapy in ICU	Marinko Vučić
	08:00-11:00; KBD, Klinika za anesteziologiju, reanimatologiju i intenzivno liječenje	Group 3	Special clinical practicals	Neuroanesthesia monitoring; Medical care in terminally ill ginecology patients, Mother and child death at delivery, Symptoms & control in palliative; Respiratory therapy in ICU	Nikola Bradić, V. pred.
Wednesday 12.10.2016.	14:00-15:00; KBC, edukacijski centar I. H. Botteri		Exam	Written exam	izv. prof. dr. sc. Dinko Tonković
Thursday 17.11.2016.	14:00-15:00; MEF Mašek		Exam	Written exam	izv. prof. dr. sc. Dinko Tonković
Thursday 15.12.2016.	14:00-15:00; MEF Mašek		Exam	Written exam	izv. prof. dr. sc. Dinko Tonković
Thursday 2.3.2017.	14:00-15:00; MEF Mašek		Exam	Written exam	Eleonora Goluža, dr. med.
Thursday 1.6.2017.	14:00-15:00; MEF Mašek		Exam	Written exam	izv. prof. dr. sc. Dinko Tonković

IV. EXAMINATIONS

Requirements to take the final exam: Students need to attend at least 80% of theoretical classes to get the attendance signature. Practical classes cannot be missed.

The examination: written test, multiple choice 25 questions, one answer is correct

Exam terms:

1st exam term: October 12th 2016.

2nd exam term: November 17th 2016

3rd exam term: December 15th 2016

4th exam term: March 2nd 2017

5th exam term: June 1st 2017

V./I. LIST OF LECTURERS AND TEACHING STAFF

1. izv. prof. dr. sc. Dinko Tonković
2. doc. dr. sc. Daniela Bandić Pavlović
3. dr. sc. Tajana Zah Bogović
4. izv. prof. dr. sc. Mladen Perić
5. doc. dr. sc. Ante Sekulić
6. doc. dr. sc. Slobodan Mihaljević

V./II EXTERNAL ASSOCIATES:

1. dr. sc. Robert Baronica
2. dr. sc. Željko Čolak
3. Mario Pavlek
4. doc. dr. sc. Višnja Nesek Adam
5. Marinko Vučić
6. Boris Tomašević, dr. med.
7. Nikola Bradić, V. pred.

V./III UNTENURED LECTURERS:

1. Eleonora Goluža, dr. med.
2. doc. dr. sc. Višnja Ivančan
3. Mirjana Mirić, dr. med.

VI. LITERATURE

A. Obligatory

1. Handouts
2. **Civetta, Taylor, and Kirby's Critical Care, 4th Edition.** 2009
3. Ballantyne J, Fishmann S.M., Abdi S. The Massachusetts General Hospital Handbook of Pain Management, Third Edition, Lippincott Williams Wilkins 2005.

B. Additional

1. Setoguchi S, Glynn RJ, Stedman M, Flavell CM, Levin R, Stevenson LW. Hospice, opiates, and acute care service use among the elderly before death from heart failure or cancer. Am Heart J. 2010 Jul;160(1):139-44.

2. Keating NL, Landrum MB, Lamont EB, Earle CC, Bozeman SR, McNeil BJ. End-of-life care for older cancer patients in the Veterans Health Administration versus the private sector. *Cancer*. 2010
3. Luce JM. A history of resolving conflicts over end-of-life care in intensive care units in the United States. *Crit Care Med*. 2010
4. Schneider CP, et al. Long-term survival after surgical critical illness: the impact of prolonged preceding organ support therapy. *Ann Surg*. 2010 Jun;251(6):1145-53.
5. Levin PD, Simor AE, Moses AE, Sprung CL. End-of-life treatment and bacterial antibiotic resistance - a potential association. *Chest*. 2010
6. Huang YC, Huang SJ, Ko WJ. Survey of do-not-resuscitate orders in surgical intensive care units. *J Formos Med Assoc*. 2010;109(3):201-8.
7. Cooke CR, et al. Predictors of time to death after terminal withdrawal of mechanical ventilation in the ICU. *Chest*. 2010
8. Celso BG, Meenrajan S. The Triad That Matters: Palliative Medicine, Code Status, and Health Care Costs. *Am J Hosp Palliat Care*. 2010;23.
9. Cheung W, et al. Palliative care teams in the intensive care unit: a randomised, controlled, feasibility study. *Crit Care Resusc*. 2010; 12:28-35.
10. McCormick AJ, Curtis JR, Stowell-Weiss P, Toms C, Engelberg R. Improving social work in intensive care unit palliative care: results of a quality improvement intervention. *J Palliat Med*. 2010;13:297-304.