



UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet:	Na dokazih podprta medicina
Course title:	Evidence based medicine

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
ENOVIT MAGISTRSKI ŠTUDIJSKI PROGRAM SPLOŠNA MEDICINA	Splošna medicina	2	4

Vrsta predmeta / Course type

Univerzitetna koda predmeta / University course code:

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje work	Druge oblike študija	Samost. delo Individ. work	ECTS
15	15	15	/	/	75	4

Nosilec predmeta / Lecturer:

Dušanka Mičetić Turk

Sonosilci predmeta / Lecturer:

Uroš Maver in Eva Turk

Jeziki /

Predavanja / Lectures:

slovenski slovene

Languages:

Vaje / Tutorial:

slovenski slovene

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:

Znanja iz predkliničnih predmetov in informatike

Vsebina:

Predavanja:

- Kaj je z dokazi podprta medicina (praksa)?
 - Zgodovina
 - Najzaslužnejše osebe za razvoj z dokazi podprte medicine
 - Časovni potek razvoja in integracija v medicino
 - Analogija z drugimi področji
 - Pristopi integracije po svetu
 - Podatkovne baze, sistematični pregledi in drugi pristopi sinteze znanja–osnove
- Kritična presoja obstoječih podatkov kot osnovno orodje načrtovanja v predkliničnih raziskavah in klinični praksi

Seminarji:

Uvod v EBM

- Ključna vprašanja glede EBM–PICO naloge?
- Oblikovanje raziskave/projekta?

Prerequisites:

Knowledge from preclinical subjects and informatics

Content (Syllabus outline):

Lectures:

- What is Evidence based medicine (practice)?
 - History
 - Crucial people for development of EBM
 - Timeline and integration in medicine
 - Analogy with other fields
 - Approaches around the world
 - Databases, systematic literature reviews and other approaches to knowledge synthesis- basics
- Critical appraisal of information as the core tool to research development in pre- and clinical practice

Seminars:

Introduction to EBM

- Key questions in EBM- PICO tasks?
- Project/research development
- Critical appraisal of studies
- Basics of measurement in medicine: validity,

• Kritičen pregled raziskav • Osnove merjenja v medicini: veljavnost, točnost, natančnost in zanesljivost • Diagnostika in testiranje hipotez Vrste študij • Kvalitativno raziskovanje • Kvantitativno raziskovanje • Opazovalne študije • Randomizirane klinične študije • Prikazov primera • Hierarhičnost dokazov • Drugo Kako iskati literaturo – baze podatkov? Kaj je učinkovito zdravljenje? • Sistematični pregled literature • Kdaj narediti sistematični pregled literature? • Ocenjevanje kvalitete metodologije sistematičnih pregledov • Meta analize Kako napisati članek? Kako kritično prebrati članek? Ali lahko verjamemo kliničnim smernicam? • Ravnovesje med koristmi in škodo smernic Na dokazih podprta klinična praksa	accuracy, precision, reliability • Diagnostics and hypothesis testing Types of studies: • Qualitative research • Quantitative research • Observational studies • RCTs • Case studies • Hierarchy of evidence • Drugo Literature search - data bases? What is efficient/effective treatment? • Systematic literature review • When do we need a systematic literature review? • Appraisal of methodological quality • Meta analyses How a write a paper? Hot to critically read a paper? Can we trust clinical guidelines? • What is the balance between benefits and disadvantages? EBM in clinical practice
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Temeljni literatura in viri / Readings:

- Guyatt G, Rennie D, Meade MO, Cook DJ: User's Guides to the Medical Literature – A manual for evidence-based clinical practice, 3rd edition. JAMAevidence, McGraw Hill Education, 2014.
- Cochrane Collaboration: <http://www.cochrane.org>
- Higgins, Julian PT, ed. Cochrane handbook for systematic reviews of interventions. Vol. 5. Chichester, England: Wiley-Blackwell, 2008.
- Hamer, Susan, and Gill Collinson. Achieving evidence-based practice: A handbook for practitioners. Elsevier Health Sciences, 2014.

Dodatna literatura

- **Jamtvedt G**, Klemp M, Mørland B, Nylenna M. Responsibility and accountability for well informed health-care decisions: a global challenge. Lancet. 2015 Jun 12. pii: S0140-6736(15)60855-8. doi:10.1016/S0140-6736(15)60855-8. [Epub ahead of print]
- Ivers NM, Grimshaw JM, **Jamtvedt G**, **Flottorp S**, O'Brien MA, French SD, Young J, Odgaard-Jensen J. Growing literature, stagnant science? Systematic review, meta-regression and cumulative analysis of audit and feedback interventions in health care. J Gen Intern Med. 2014 Nov;29(11):1534-41. doi: 10.1007/s11606-014-2913-y.
- Lavis JN, Wilson MG, Moat KA, Hammill AC, Boyko JA, Grimshaw JM, **Flottorp S**. Developing and refining the methods for a 'one-stop shop' for research evidence about health systems. Health Research Policy and Systems 2015, 13: 10.
- **Flottorp SA**, Oxman AD, Krause J, Musila NR, Wensing M, Godycki-Cwirko M, et al. A checklist for identifying determinants of practice: A systematic review and synthesis of frameworks and taxonomies of factors that prevent or enable improvements in healthcare professional practice. Implement Sci 2013;8:35
- Grønhaug G, Østerås N, **Hagen KB**. Quality of hip and knee osteoarthritis management in primary health care in a Norwegian county: A cross-sectional survey. BMC Health Services Research 2014 14, 598.
- Larsen MH, **Hagen KB**, Krogstad A-L, Aas E, Wahl AK. Limited evidence for the effects of patient education and self-management interventions in psoriasis patients. A systematic review. Patient Education & Counseling. 2014, 94(2):158-69.

- spoznati osnove »z dokazi podprte medicine«
- pridobiti pregledno znanje iz kritičnega vrednotenja obstoječih podatkov
- sistematično načrtovanje z dokazi podprtih predkliničnih in kliničnih raziskav
- sistematično načrtovanje pristopov v klinični praksi
- osvojiti podlago za na dokazih temelječe sprejemanje kliničnih odločitev

- learn the basics about »evidence based medicine«
- obtain basic knowledge of critical available data appraisal
- systematic planning of evidence based preclinical and clinical studies
- systematic planning of clinical procedures and practice
- obtain the basis for evidence based clinical decision making

Predvideni študijski rezultati:**Znanje in razumevanje:**

- spoznati osnove »z dokazi podprte medicine«
- pridobiti pregledno znanje kritičnega vrednotenja obstoječih podatkov
- sistematično načrtovanje z dokazi podprtih predkliničnih in kliničnih raziskav
- sistematično načrtovanje pristopov v klinični praksi
- osvojiti podlago za na dokazih temelječe sprejemanje kliničnih odločitev

Prenesljive/ključne spretnosti in drugi atributi:

- osnove z dokazi podprte medicine
- priprava in uporaba sistematičnega pregleda
- sistematično načrtovanje raziskav in uporaba v praksi

Intended learning outcomes:**The students gain fundamental knowledge on:**

- learn the basics about »evidence based medicine«
- obtain basic knowledge of critical available data appraisal
- systematic planning of evidence based preclinical and clinical studies
- systematic planning of clinical procedures and practice
- obtain the basis for evidence based clinical decision making

Transferable/Key Skills and other attributes:

- basics in evidence based medicine
- preparation and use of systematic reviewing
- systematic planning of studies and use in practice

Metode poučevanja in učenja:

Predavanja, seminarji, vaje.

Learning and teaching methods:

Classroom lectures, seminars, tutorials.

Načini ocenjevanja:Delež (v %) /
Weight (in %)**Assessment:****Način (pisni izpit, ustno izpraševanje, naloge, projekt):****Materialni pogoji za izvedbo predmeta :**

Predavalnica, računalniška učilnica, knjižnica.

Obveznosti študentov:

- seminar (priprava kratkega poročila na podlagi PICO vprašanj), ter predstavitev.
- opravljene vaje
- pisni izpit.

100**Type (examination, oral, coursework, project):****Material conditions for subject realization**

Classroom, computer lab, library.

Student's commitments:

- seminars (a short report on PICO questions), and presentation.
- completed tutorials
- written exam

Reference nosilca / Lecturer's references:**ČLANKI****TURK, Eva**, PREVOLNIK RUPEL, Valentina, TAPAJNER, Alojz, ISOLA, Arja. Reliability and validity of the audit on

diabetes-dependent quality of life (ADDQoL) and EQ-5D in elderly Slovenian diabetes mellitus type 2 patients. Health, ISSN 1949-5005, Mar. 2014, vol. 6, no. 8, str. 699-711.

LEGIDO-QUIGLEY, Helena, PANTELI, Dimitra, BRUSAMENTO, Serena, KNAI, Cecile, SALIBA, Vanessa, **TURK, Eva**, SOLÉ, Meritxell, AUGUSTIN, Uta, CAR, Josip, MCKEE, Martin, BUSSE, Reinhard. Clinical guidelines in the European Union : mapping the regulatory basis, development, quality control, implementation and evaluation across member states. Health policy, ISSN 0168-8510, 2012, vol. 107, str. 146-156.

KNAI, Cécile, BRUSAMENTO, Serena, LEGIDO-QUIGLEY, Helena, SALIBA, Vanessa, PANTELI, Dimitra, **TURK, Eva**, CAR, Josip, MCKEE, Martin, BUSSE, Reinhard. Systematic review of the methodological quality of clinical guideline development for the management of chronic disease in Europe. Health policy, ISSN 0168-8510, 2012, vol. 107, str. 157-167.

DOVNIK, Andraž, MUJEZINOVIĆ, Faris, TREIBER, Milena, PEČOVNIK-BALON, Breda, GORENJAK, Maksimiljan, **MAVER, Uroš**, TAKAČ, Iztok. Seasonal variations of vitamin D concentrations in pregnant women and neonates in Slovenia. European Journal of Obstetrics, Gynecology and Reproductive Biology, ISSN 0301-2115. [Print ed.], 2014, vol. 181, str. 6-9.

MAVER, Tina, **MAVER, Uroš**, STANA-KLEINSCHKEK, Karin, SMRKE, Dragica, KREFT, Samo. A review of herbal medicines in wound healing. International journal of dermatology, ISSN 0011-9059. [Print ed.], Article first published online: 24 Mar. 2015, vol. , iss. , str. [1-12].

6. DEVETAK, Miha, PERŠIN, Zdenka, STANA-KLEINSCHKEK, Karin, **MAVER, Uroš**. Utilization of optical polarization microscopy in the study of sorption characteristics of wound dressing host materials. Microscopy and microanalysis, ISSN 1431-9276. [Print ed.], Apr. 2014, vol. 20, iss. 02, str. 561-565.

MAVER, Uroš, VELNAR, Tomaž, GABERŠČEK, Miran, PLANINŠEK, Odon, FINŠGAR, Matjaž. Recent progressive use of atomic force microscopy in biomedical applications. TrAC, Trends in analytical chemistry, ISSN 0165-9936, Available online 15 March 2016, vol. , str. 1-4, doi: 10.1016/j.trac.2016.03.014.

MIČETIĆ-TURK, Dušanka, ŠIKIĆ POGAČAR, Maja. Klinična uporaba probiotikov v pediatriji = Clinical use of probiotics in pediatrics. Zdravniški vestnik, ISSN 1318-0347. [Tiskana izd.], dec. 2011, letn. 80, št. 12, str. 933-943.

TURK, Eva, ZALETEL, Jelka, ORMSTAD, Sari Susanna, **MIČETIĆ-TURK, Dušanka**, ISOLA, Arja. Is a multi-disciplinary approach in the delivery of care for patients with Diabetes mellitus Type 2 cost effective? A systematic review. HealthMed, ISSN 1840-2291, 2011, vol. 6, no. 2, str. 711-719.

COSTA, Stefano, ASTARITA, Luca, HARIZ, M. Ben, CURRÒ, Giovanni, DOLINŠEK, Jernej, KANSU, Aydan, MAGAZZU, Giuseppe, MARVASO, Stefania, **MIČETIĆ-TURK, Dušanka**, PELLEGRINO, Salvatore, PRIMAVERA, Giuseppe, ROSSI, Pasqualino, SMARRAZZO, Andrea, TUCCI, Francesca, ARCIDIACO, Carmela, GRECO, Luigi. A point-of-care test for facing the burden of undiagnosed celiac disease in the Mediterranean area: a pragmatic design study. BMC gastroenterology, ISSN 1471-230X, 2014, vol. 14.