Teaching information literacy at the University of Zagreb School of medicine
- an example of successful library and faculty collaboration

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In addition to contemporary information overload and ever-changing information environment, working with biomedical information resources poses discipline-specific challenges.

Characteristics of medical literature:
- accumulation,
- specialisation and subspecialisation,
- growth and obsolescence,
- internationality,
- public availability and public interest.
Curriculums of medical schools have to be competency-based, enabling students to acquire:

- core and professional competencies as well as
- knowledge and skills for evidence-based decisions, effective problem solving and self-directed lifelong learning.

A well designed program of IL enables students to master the skills of finding, evaluating and using information resources effectively and in an ethical manner. It is an important component in the development of critical thinking, logical inquiry and decision making...

Another point of view on IL in medicine:

- medical practitioners should be familiar with disparity of their patients’ interest in health topics (high), broad access to health information and their respective health information literacy skills (usually low).
University of Zagreb
School of Medicine

* Oldest and largest medical school in Croatia
* 33 preclinical and clinical departments
* Number of academic/clinical and research staff ≈ 470
* Number of students:
  * 2000 in graduate programme,
  * 650 PhD students,
  * 150 at specialist studies.
* Central Medical Library (CML) participates in educational programs of its parent institution at all levels, developing different teaching modules aimed at acquiring skills necessary for identification, obtaining and evaluation of information.
Graduate programme:

* **Introduction to medical research** - the most comprehensive course, compulsory, vertically organized (2nd and 5th year). CML’s modules provide students with:

* an introduction to the characteristics of medical literature,
* methods of information dissemination,
* effective searching techniques,
* systematic organization of information, but also
* familiarize them with the principles and practices of evidence-based medicine.
Graduate programme:

* The importance of evidence in medicine (elective course in Croatian track programme)
* Principles of Evidence Based Medicine (compulsory course in English track programme)
* EBM courses teach students:
  * the principles of evidence-based medicine,
  * the basic skills of evidence-based medicine,
  * how to find high-quality evidence-based information:
    * formulating a clearly focused clinical question (using the PICO model),
    * selecting an EBM resource,
    * finding the evidence using effective search techniques.
**Information literacy courses and modules**

* PhD programme, both in English and in Croatian:

  * Structure, methodology and functioning of scientific work - advanced level of information literacy including:
    * modalities of critical appraisal of scientific papers,
    * recognizing credible sources of medical information,
    * principles and practice of EBM,
    * the importance of different bibliometric indicators and
    * the appropriate use of information.
Information literacy courses and modules

* Information literacy in continuing professional development/education:
  * Finding and Appraising Medical Information:
    * carried out periodically by CML and UZSM with support of the local physicians’ licensing body,
    * information on the most important medical information resources,
    * skills needed for their effective usage,
    * hands-on exercises customized to correspond the medical specialty of participants.
CML conducted an anonymous survey in order to determine students’ perceptions and attitudes toward information literacy (2011/2012), consisting of multiple choice questions - 254 students participated:

**Should introduction to information sources and access to published medical information be a part of the curriculum?**
- Yes, compulsory: 69%
- Yes, elective: 29%
- No: 2%

**Which course topics do you find most useful?**
- Introduction to available databases: 55%
- Understanding searching techniques: 37%
- Understanding the importance of medical journals: 4%
- Multiple answers: 4%
CML survey in 2011/2012, continued:

How will you use what you learned?

- In the course of study: 60%
- During independent learning: 34%
- Will not use it at all: 2%
- Multiple answers: 4%

Mastering the content of this course will:

- Increase the awareness of the importance of medical information: 26%
- Contribute to information literacy in general: 24%
- Help to assess reliability of information sources: 20%
- Affect the attitude towards information during professional life: 10%
- Multiple answers: 20%
*Examination the effectiveness of teaching methods and course content (2013/2014):

* pre and post knowledge survey consisting of course learning objectives framed as 9 multiple choice questions (EBM - 153 5th year students):

The percentage of students who gave the correct answers before and after the course:

![Graph 1](image1.png)

![Graph 2](image2.png)
Library activities in formal teaching of IL:

* receive positive feedback from the academic community,
* increase the perception of library’s role in information literacy programmes,
* reinforce the position of the library in its academic environment.

Future plans:

* continue to evaluate and improve our programme and courses,
* contributions to Schools LMS (PPT presentations, video clips, basic concepts explained, examples, test...),
* just proposed a new elective course “Preparation of graduate theses” for 5th year students.

Conclusions
Questions?

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Thank you!