



**STRUCTURED ON-LINE DISCUSSION GROUPS FOR TEACHING EBM  
TO PRE-REGISTRATION HOUSE OFFICERS**

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**BACKGROUND:**

- Collaborative learning = productive instructional tool

**SETTING:**

- Traditional medical curriculum
- Last year students: from theory to practice during clinical rotations
- Rotations in 17 hospitals, on >100 different wards or policlinics
- Pilot project during clinical rotation in paediatrics

DISCUSSION GROUPS	
ON-LINE	FACE to FACE
<ul style="list-style-type: none"> <li>• Independent of time and place</li> <li>• Direct links to on-line information sources</li> <li>• Asynchronous: more time for reflection</li> <li>• Slow interaction</li> <li>• "Scripta manent"</li> </ul>	<ul style="list-style-type: none"> <li>• Same time, same place (&gt;&lt;working schedules)</li> <li>• (On-line) information often not readily available</li> <li>• Synchronous</li> <li>• Fast interaction</li> <li>• "Verba volant"</li> </ul>

OBJECTIVES
<ul style="list-style-type: none"> <li>• Getting acquainted with useful EBM information sources for clinical practice (Clinical Evidence, Belgian Centre for Pharmacological Information, Farmaka,...)</li> <li>• Exercise in "rational prescribing skills"</li> <li>• Exercise in consulting peers on patient management, based on evidence</li> </ul>

**CASE-BASED ASYNCHRONOUS ON-LINE DISCUSSION GROUP**

<http://allserv.ugent.be/~mvnwinck/discussiegroep>

STRICT TIME SCHEDULE: 4 weeks, 2 x 2 cases, 2 reactions /week /case /student mandatory (expected time investment: 2h/week)

3 days (cases 1&2): individually	10 days (cases 1&2): discussion and consensus based on evidence	3 days (cases 3&4): individually	10 days (cases 3&4): discussion and consensus based on evidence
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**CASES**

- Real patients, proposed by students
- Clear-cut common patient problems
- All important elements of history, clinical examination, and social context are described
- Finishing with questions focusing on patient management, putting the student in the role of a generalist: "what are you going to order/prescribe/do...what are you going to tell to the child/parents?...why?..."

**CHARACTERISTICS OF THIS DISCUSSION FORUM**

- Pass-word protected
- "Outline" mode offers overview of titles of messages in a branched structure, linking reactions to each other  
e.g. 1. Message student A  
    1.1 reaction on 1 by st B.  
        1.1.1 reaction on 1.1 by student A  
        1.1.2 reaction on 1.1 by student C  
    1.2 reaction on 1 by student C
- New messages are marked
- Participating modes: "read-only / moderated / participant / host"

TIME INVESTMENT: Students spend 4 .5 h/week (mean, range 1.5 - 9)      Tutor spends 2 - 5 h/week

EVALUATION BY STUDENT-PARTICIPANTS (questionnaire, statements with answers on 5 point Lickert-scale with 3=neutral, n=48):

• "By participating I learned a lot"      4.40 (no neg.)	• "It was fun to participate"      4.23 (no neg.)
• "I discovered new EBM information sources" 4.29 (2 neg.)	• "I learned to formulate patient management better"      3.9 (1 neg.)
• "When prescribing medication, I learned to ask what the aim of the treatment is"      4.26 (no neg.)	• "... to think on patient management in a more structured way" 3.7 (3 neg.)

**CONCLUSIONS**

- (Subjective) evaluation by students: very positive
- A structured on-line case-based discussion group is useful to train EBM skills in clinical practice
- On-line discussions do not diminish need of « tutor-time », but this « time » can be « any time »
- Students spend more time on this activity than intended

BUT how to measure the learning effect more objectively ??

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