

Why not turn it the other way around?

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Specialist training in Sweden

- Since 2008 all Swedish resident physicians should acquire a "scientific approach" during their training
- We found that it was difficult to inspire resident physicians for scientific knowledge and research
- They seemed to have other priorities for their professional development

According to Ramsden

“...any course that does not engage students’ interest, especially from the start, is heading for trouble. Material should preferably be ordered in such a way that it proceeds from common sense and everyday experiences to abstractions, and then back again to the application of the theoretical knowledge in practice.”

Ramsden i ”Learning to Teach in Higher Education”

Focus interviews

- Two focus groups with around six resident physicians in each group,
- The groups consisted of resident physicians in general medicine, gynaecology, psychiatry, neurology, general internal medicine, infectious diseases and orthopaedics

The following questions were discussed:

1. What is research?
2. What do you think is meant by "having a scientific approach"?
3. What are your previous experiences of research?
4. Why should a doctor have a scientific approach?
5. Why does one lose one's interest for research?
6. How can your interest for research be stimulated?

Findings

- You do research in order to improve the future and to do your work more effectively,
- It is to not accept old and new methods without first reflecting,
- To put in question what you do and your practice should be based on scientific evidence,
- To be able to critically assess scientific results and medical articles,
- Understanding that there are not only one truth and different perspectives

Findings

- To have a basic scientific foundation of knowledge to be able to assess a research study's relevance and quality,
- To be able to critically evaluate what is presented by the the pharmaceutical industry,
- To be able to discuss scientific news/findings with your patients and to be able to answer their questions derived from newspapers, web etc.
- Since we have great influence in our work, it is important that our actions are not guided by emotions and shallow reasoning – otherwise we risk loosing respect in the society and are accused for being unscientific

A new science course

- 20 days over a period of 4 months,
- Not an academic course; no academic credits; part of the professional role; all should improve; at least 90% of participants should be approved,
- The aim is to train competent consumers of science,
- Based on EBM-pedagogics, McMaster, PBL, Research Training Course for resident GP:s University of Copenhagen
- The Aim is to lay the foundation for and provide the means for continuous learning in the profession

Short lectures

- Research principles and theory
- Ethical considerations
- Study types
- Statistics
- Qualitative research methods
- How to find and evaluate scientific literature
- How to write a project plan
- How to make a scientific presentation

Seminars in groups

- 5 days scattered throughout the course
- 6-9 participants in each group
- Seminar leaders approve continuing the participants' research questions, descriptions and formulations of the research project
- Seminar leaders ensures the scientific level
- Ends in a scientific review concerning a clinical method/treatment presented in IMRAD format
- Presented and reviewed at a final seminar for the whole group

Critical appraisal

- Two supervisors per group of 6-9 participants
- Training in reading and critical assess six scientific papers with different study designs
- Simple roles of the thumb
- Learn how to learn – students take turns as group leaders

Process

From idea – freely formulated, impressions from the environment, search results, etc.



Focused researchable question in PICO-format



Project plan with history and references



Abstract



Presentation