

"Quam artem exerceat"

EDUCATING OCCUPATIONAL HEALTH IN UNDERGRADUATE SETTING

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Introduction

Medicine is now a global field: people, pathogens and progress in medical practice move easily across national borders,

Occupational Health (OH) in undergraduate settings ***need harmonized curricula, transfer and mobility of knowledge, skills and competencies....*** Bologna declaration

and

- ***to found links between education, research and practical skills in OH***



*Introduction,
Weaknesses,
Challenges,
Improvement*

Introduction

Undergraduate medical education program:

- ***the main task*** is to educate professionally competent physicians
- ***the main teaching feature*** is competency based education
- ***learning focused on outcome based education*** by carefully sequenced teaching

Aguinis et al., 1996



Introduction



EU Strategy on OSH in education and training:

- from 2002 to 2006 underlined **the need to strengthen the prevention culture** (European Commission, 2002)
- from 2007 to 2012, **risk assessment education should be included in all levels of education**
- The strategy also *recognizes the **vulnerability of young workers** and therefore the need to pay attention to their health and safety needs.*

Weaknesses....



Today

Getting into
medical school
are presenting
with

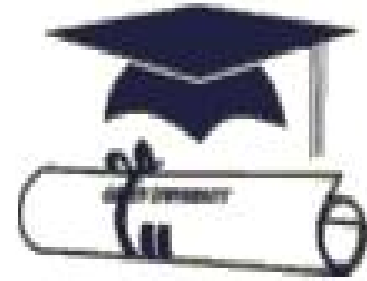
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- Curriculum

- Exams
and...

- **Low level of practice...?**

Weaknesses....



Undergraduate teaching on occupational health in EU:

- is usually very variable between faculties and within countries
- undergraduate OH teaching it is not part of the curriculum at some faculties
- undergraduate OH teaching provide very unequal education to students on the topics they will frequently come across in their working tasks

Weaknesses....

Undergraduate training in occupational health are limited with:

1. The training about ***risk assessment at workplace, new risk and ODs***

Insufficient education about:

1. preventive activities at workplace (particularly interventions),
2. promotion health at workplace
3. returning to work
4. about aging and work
5. agriculture occupational health



invisible activities in practice

Weaknesses....

and...the greatest limitation is

incompatibility of acquired knowledge and competences at undergraduate level with OH's real practice in the health sector (late reforms, especially in B&H, SEE)

Today- negative outcomes of undergraduate level training in occupational health are associated with...

- nonrecognition Ods and mismanagement of Ods and work-related diseases,
- lack of student interest?
- limited curriculum time?



Weaknesses....

Undergraduate training in occupational health are limited with:

- the training about working environment- ***risk assessment***
- do not have enough education about preventive activities and interventions at workplace
- do not have enough education about promotion health at workplace
- it is low level of education about support returning to work
- it is low level of the training about aging and work

invisible activities in practice



Weaknesses....

Skills training in OH

- **Workplace visits and case studies can be effectively applied in teaching occupational health**

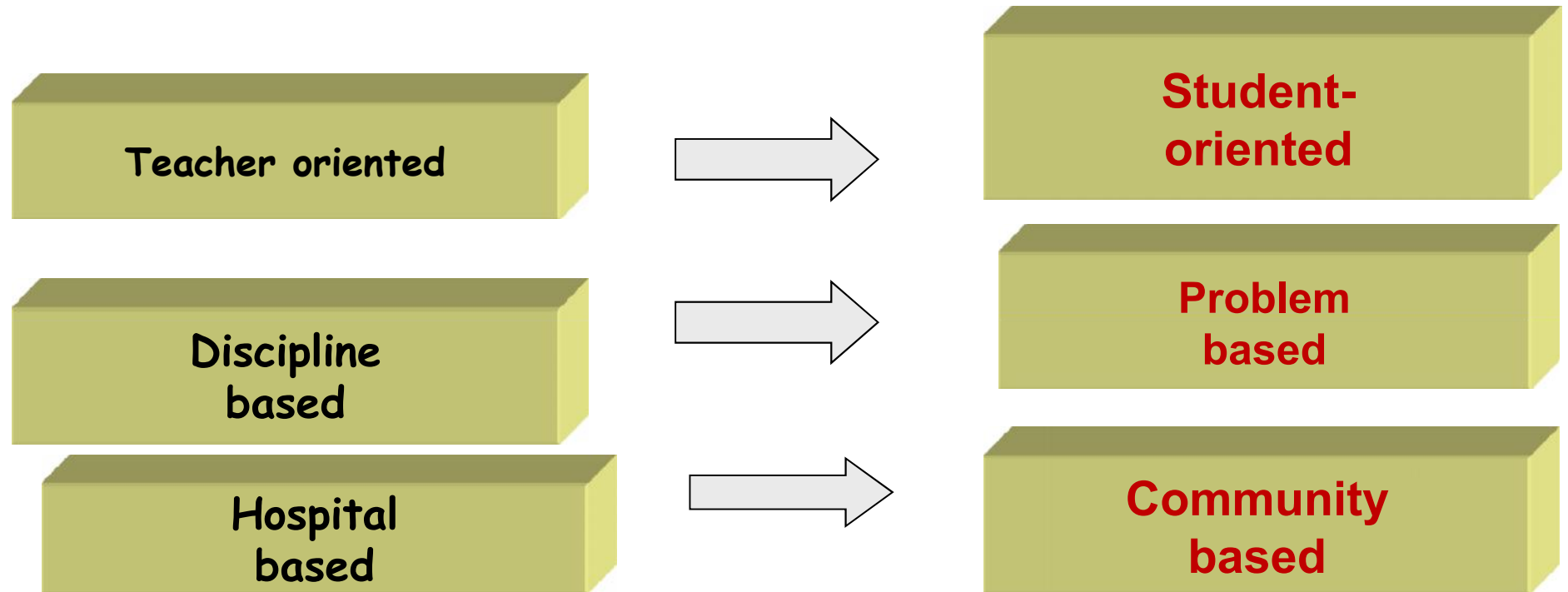
but..,

- **many training methods** are without feed back and have not been fully investigated
- **workplace visits *is very important but often* the case scenarios is irrelevant.**

Challenges: Curriculum redesign

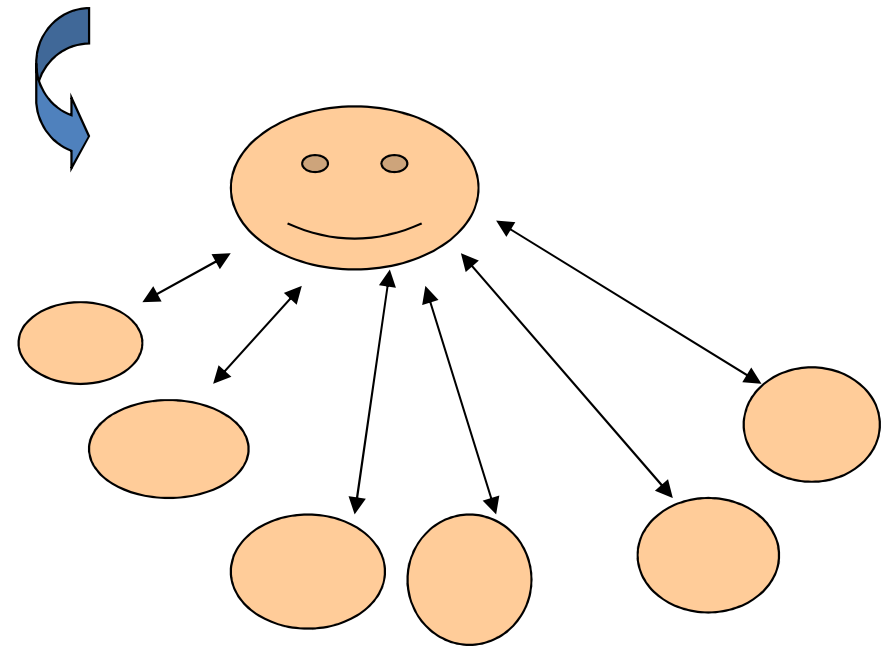
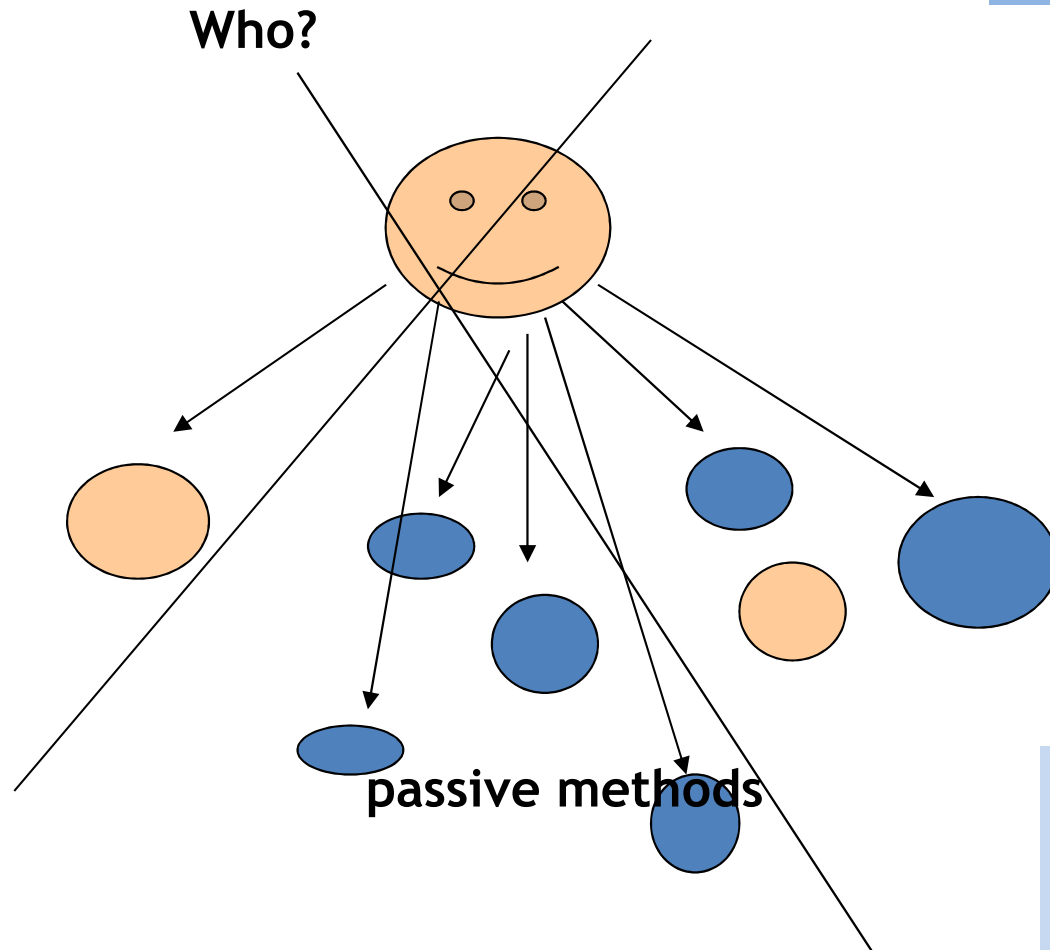
Main Principles of Curriculum redesign

Wider objective



Challenges: to find appropriate methods of the learning process

Cooperative Learning



Sokrats Galen or dr Silvius methods of interactive teaching process

Outcomes: knowledge, competencies and skills

Challenges: undergraduate education OH- outcome based education

- to develop clear defined learning outcomes;
- design of a curriculum,
- learning strategies and learning opportunities;
- assessment process which matches the learning outcomes
- assessment of progress of individual students in relation to defined education outcomes

(Harden, 2007; Spady, 2007; Strauss and Volkwein, 2004).

student oriented education



Improvement: change for a step to forward

- **To establish the important relationship between health, work and disability**
- **Teaching practical occupational epidemiology and research**
- **Ensure excellent and innovative research training**
- **International mobility and intersectoral collaboration**
- **EBM**

**Occupational
Health 2017**

RESEARCH AND PRACTICE

Improvement: change for a step to forward

A various learning methods including:



- small-group learning,
- interactive large-group teaching,
- field activities and e-learning,
- problem based learning (PBL)

•Competency-based training

- Topics include applied epidemiology, biostatistics, public health surveillance, scientific writing, working with the media

Improvement- basic competences in OH:

- Take a working history
- Risk assessment at workplace
- To recognise suspected occupational or work related health disorders
- Provide explanation and advice
- Assess the patient's mental state
- Make clinical judgements and decisions
- Recognise acute medical emergencies at workplace
- Carry out practical procedures



Improvement- basic competences in OH:

- Ability to communicate effectively
- To assess psychological and social aspects of a patient's disease
- Apply the principles, skills and knowledge of evidence-based medicine
- To recognise limits and ask for help
- Ability to solve problems
- Ability to make decisions
- Ability to work in multidisciplinary team
- Capacity to learn including lifelong learning?
- Capacity to applying knowledge in practice
- Capacity for organisation and planning



Medical education is not an isolated island, but it is reflected in the world's crises and hopes.



Thank you for your attention