

Why humanities matter in medical education

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Why humanities matter in medical education?

- Humanities matter in medical education !
- Do humanities really matter in medical education?
- Humanities do not matter in medical education!
- Humanities may matter in medical education.
- What kind of evidence do we have?

Trends that ask for implementation of humanities into medical education

- The rapid development of biosciences has given the impression and belief that the possibilities of clinical medicine are unlimited
- The humanistic basis of medicine has been neglected
- The economic burden of health services
- The easy access to information about diseases and diagnostics:
 - Patients trend to become consumers and doctors are forced to be managers

Trends that ask for implementation of humanities into medical education

- Evidence-based medicine and diagnosis-oriented guidelines
- Majority of patients do not fit into the paradigm of evidence-based medicine
- Therapy is focused on diagnoses instead of suffering patients

Why humanities? Main issue!

- Because it is important to understand how sickness is related to people`s social background, values, present living, expectations and fears
- Because it is important to understand that people may suffer from sickness without having a disease and that diseases may appear without sickness
- Because we have to recognize that to suffer is individual and varies irrespective of given diagnosis

Doctors and humanities

- The medical profession by tradition looks down on humanities since "*they do not use quantitative research methods and do not produce exact knowledge.*"
- Comparative experimental research (randomized clinical trials) is considered to be the only method to search for truth

Abraham Flexner 1910

...the practitioner deals with facts of two categories. Chemistry, physics, biology enable him to apprehend one set; he needs a different apperceptive and appreciative apparatus to deal with other, more subtle elements. Specific preparation is in this direction much more difficult; one must rely for the requisite insight and sympathy on a varied and enlarging cultural experience. Such enlargement of the physician's horizon is otherwise important, for scientific progress has greatly modified his ethical responsibility... It goes without saying that this type of doctor is first of all an educated man.

Chen Kenyon (second year student) 2003

I have been told that there are two pillars in medicine – science and humanism. As basic scientists build up the first pillar during preclinical years and neglect the construction and maintenance of the second, students learn to treat patients as they might treat an experimental mouse. Idealistic notions of altruism, honesty and integrity that attracted many to the calling of medicine are mentioned in the white coat ceremony, talked about by deans, and actively discouraged through the acculturation process. This is where transformation must take place.

Why humanities for medical students?

- Humanities look at the difficult enigma of life and meaning
- Humanities look at human being from a holistic point of view – what makes us human beings
- Humanities try to define what is a good life – how we fit together the demands of individuals and the society
- Humanities have the potential of understanding people's troubles and relations to other people in a way biosciences do not succeed

Why humanities for medical students?

- Humanities and a humanistic worldview tend to enrich a doctor's day
- The encounter with patients reveals a multitude of fascinating details of human life – familiarity with humanities may facilitate understanding and interpretation
- Humanities may teach you to sense patient's feelings and reactions, a prerequisite for bringing comfort and hope

Disciplines and topics - humanities with potential impact in medical education

- Ethics
- History of medicine
- Philosophy (of medicine)
- Literature and creative writing
- Fine arts, music, drama, movie
- Religion
- Anthropology
- Professionalism and "multiprofessionalism"

Modes of implementation

- Electives
 - Compulsory, within the curriculum
 - Optional, offered outside the curriculum
- Compulsory theme-based modules
- Compulsory integrated modules
- Joint effort: members of medical faculty and humanities experts together
- Medical faculty alone vs. humanities alone

How to choose the method

- No evidence as to method of choice (?)
- Own experience:
 - Measures are needed to break the resistance of faculty
 - First to be cut down when faculty is short of money or human resources
 - Hard to find willing members of faculty – how to convince your colleagues that humanities are worthwhile
 - Need to be "smuggled" i.e. integrated into the ordinary curriculum

Do humanities matter in medical education?

- Own experiences from implementing humanities into a problem-based integrated curriculum
 - Voluntary elective "Arts and medicine", a series of seminars together with students from the humanistic faculty (literature, drama)
 - 10-15 students from both faculties
 - 2 hours, 3-4 times per semester
 - Study attainment: learning diaries and essays
- Participating medical students were those already interested in humanities or practicing music, writing or arts in general
- This elective was a success, and people outside the faculty joined our discussions

Do humanities matter in medical education?

- Own experiences from implementing humanities into a problem-based integrated curriculum
- Two examples of fiction to induce contemplation and improve self-understanding
 - New students were provided, together with their letter of acceptance, with a copy of a fragment from a novel and were told that this will be discussed at their introductory module.
 - Fourth year students were given William Styron's book "Darkness visible" before leaving for summer vacation, were asked to read it and prepare themselves to take part in a discussion at autumn during their psychiatric module.

Do humanities matter in medical education?

- Own experiences from integrating humanities into a problem-based integrated curriculum
- One example of how ethics are involved in dealing with a severe epidemic
 - Before starting the infection-module students got a reprint of the article:
 - Singer PA, Benatar SR, Bernstein M, et al. Ethics and SARS: lessons from Toronto. *BMJ* 2003;327:1342-44.
 - The article was then discussed at the presence of experts of infectious diseases and ethics.
 - This was very useful as a number of key ethical values were reviewed.

Do humanities matter in medical education?

- One example of how a movie was used as starting point for discussing and contemplating on professionalism
 - Medical students at the border of graduating were gathered together to watch the "Red Beard" by Akira Kurosawa.
 - A lively discussion was provoked by the about three-hour movie.
 - Of special value for the discussion was that a number of faculty (clinical professors and teachers) joined and the students had some clinical experience.

How much evidence do we have that humanities matter in medical education?

- Looking at the recent literature the evidence of long-term impacts of integrating humanities into undergraduate medical education is sparse.
- The majority of papers deal with descriptions of courses and arguments in favour of implementing and how to overcome existing impediments
- Only few experimental studies have been performed
 - Difficulty of assessment
 - Problems with recruitment and methodology
 - Low response rates in survey studies

Ousager J, Johannessen H. Humanities in undergraduate medical education: A literature review. Acad Med 2010;85:988-998.

- Search of literature Jan 2000-Dec 2008.
- 1020 papers >775 irrelevant>245 left for scrutiny:

Pleading the case 68

Course descriptions and evaluations 156

Seeking evidence of long-term impact 9

Holding the horses 12

Peters AS, et al. Long-term outcomes of the new pathway program at Harvard Medical school: A randomized controlled study. Acad Med 2000;75:470-479.

- The new pathway (NP) is an experimental problem-based integrated curriculum, that was offered to new students during the years 1985-1987. The program contained integrated humanistic elements.
- In this study a telephone interview was completed in 1998: 50 NP students were compared with 50 who took the traditional curriculum.
- Survey items (#22) were developed to measure attitudes and self-reported behaviours in humanistic medicine, life-long and social learning.
- 40% of NP students went on to practice psychiatry or primary care compared to 18% of the traditional students.
- NP-students rated their ability higher than did traditional students: management of patients with psychosocial problems, practice of humanistic medicine.
- The conclusion was that humanistic medicine can be taught and learned.

Mangione S, et al. Medical students' exposure to the humanities correlates with positive personal qualities and reduced burnout. A multi-institutional U.S. survey.

J Gen Intern Med 2018; 33: 628-34.

- All students enrolled at five U.S. medical schools during 2014-15 were invited by email to report on their exposure to the humanities (music, literature, theater, visual arts) and completed rating scales measuring personal qualities.
- Exposure to humanities was *significantly correlated* (p-values 0.02 -0.001) with positive personal qualities: empathy, tolerance for ambiguity, wisdom, emotional appraisal, self-efficacy and spatial skills and *inversely correlated* with components of burnout.
- Main limitations: low response rate (23.8%), potential biases in recall and reporting, study identifies correlations not causality.

Humanities for medicine: my personal history

- Devoted believer since early 1990-ies
- Almost solitary implementor 1994-2007
- Practically no aftergrowth left, faculty not interested (?)
- Less certain about impact than before due to scarcity of experimental evidence and the controversy that exists among scholars
- But: *Do we need experimental evidence?*
 - *Anecdotal evidence:* Former students whom I occasionally meet are repeatedly thankful for having been directed towards the significance of humanities in medical practice.