



Changes in medical education in Bulgaria for the 21st century

NIKOLAI HRISTOV, MD, PHD

MEDICAL UNIVERSITY OF SOFIA



Introduction

Medical education has been defined as the education related to the future practice of medical professionals, plus supporting vocational training (residency, fellowship) and continuing (lifelong) education.

Medical professions are **regulated professions**, i.e. subject to state certification and licensing, thus medical education curricula are state regulated.

Traditionally, the realms of medical education comprise **medicine, dental medicine, pharmacy, public health** and allied health professions.

Medical education is divided into pre-clinical and clinical stage.

Medical education is inevitably affected by the ongoing changes in national health policy and economics .



Modern accents in medical education

Traditional vs **Integrated** (systems-based) curriculum in the preclinical stage

Combination of medical training with **research** or management (dual degree or **joint degree**) programs (**contradictory practice**)

Continuing medical education programs as a requirement for continued licensing

Virtual learning simulations and **online** learning

Medical education supporting **evidence-based** medical practice

The need to integrate **health policy** education and **leadership** training in medical curricula



The background of Bulgaria – aged nation

21% of the population are aged 65 and over vs 14% up to 15; mean age of the population is 44 years; 71 (males) and 78 (females) life expectancy; CBR of 9 vs CDR of **15** and a RNI of **-6**

The needs of medical practice to be supported by the medical education are thus easy to define:

Heavy focus on **primary care** to cope with the early diagnosing and follow-up of multiple co-existing **chronic non-communicable** diseases

The need for the development of a **home care** system and nursing homes (independent living, assisted living and skilled nursing facilities)

Bulgaria suffers from a severe **deficit** of nurses (and any other nursing professionals, e.g. rehabilitators, midwives, etc.)



How did medical education react to these challenges?

The curriculum for medicine (and dental medicine) has been extended with one year to correspond with older EU-members. It currently comprises 2 years of pre-clinical studies (traditional approach), 3 years of clinical studies and 1 year of internship, ending with state certification exams. By default, it prepares students for the career of general practitioners (**family physicians**). **How well?**

Research is encouraged for medical students but without interruptions in clinical practice; virtual and online learning is still in the experimental stage; EBM is introduced briefly as a theoretical concept; continued medical education exists but is not tied to licensing.

Health policy education and leadership training are strongly rooted only in the curricula of public health schools; it is no wonder that GPs demonstrate severe deficiencies outside of their narrow clinical competencies (basic services package). **QUALICOPC**



The schools (faculties) of public health

The biggest novelty for Bulgaria has been the introduction of public health faculties to augment the existing medicine, dental medicine and pharmacy faculties in medical universities. This happened as part of the Bologna process, establishing the European Higher Education Area.

The Faculty of Public Health in Sofia has been established in 1995 as a Faculty of Nursing with the support of the Stability Pact and in partnership with leading institutions of EU member states and the WHO. In 2001 it has been renamed to Faculty of Public Health.

Subsequent public health faculties were formed in Plovdiv, Varna, Pleven and Stara Zagora. The new schools were based initially on the pre-existing departments of social medicine.

Allied professions fall in the domain of medical colleges, affiliated with the medical universities and with greatly expanded scope.



Departmental overview

Social medicine

Health policy and management

Preventive medicine

Health economics

Nursing care

Medical ethics and medical law

Occupational health

Health technology assessment

Medical pedagogy



Specialties offered

Bachelor's degree

Health care management; public health management; nurse; midwife; physicians assistant; physiotherapist

Master's degree

Health care management; public health management; clinical nursing care; occupational health; nutrition; cosmetics; rehabilitation and balneology; strategic pharmaceutical management

Medical college

Medical (clinical) laboratory technician; medical imaging technician; dental technician; public health inspector; rehabilitator and others



Thank you!

The full-text article will appear in a special issue of the **Journal of Nursing and Palliative Care.**