Bologna’s Ba-Ma structure in Dutch Medical Education

Olle ten Cate
University Medical Center Utrecht
Overview

- Dutch Medical Education - some facts
- Curriculum developments in recent decades
- Bologna’s Ba-Ma reception in the NL
- How medicine adopted the two-cycle model
- Current state of the art
- Speculations and concerns about the future
- 16.5 mln inhabitants
- 8 University medical centres
- Government-determined total enrolment: 2850/year
- Selection (still) predominantly by weighted lottery
- 30% males, 70% females
- No national examinations
- Limited attrition (85% finishes)
- 6 year curriculum --> MD license
- 90% goes into postgraduate residency training
Should med educ transform into 2 cycles?

- Yes: 7
- No: 19
- Perhaps: 15

Patrício et al. Med Teacher 2008;30:597-605
Considerations on EU level

Currently there is little harmonisation of medical education across EU countries:

- No similar objectives
- Different length before license
- Different diploma terminology
- Different curricular models and varying extent of horizontal and vertical integration
- Limited student mobility
Considerations on EU level

- Mutual recognition of EU doctors requires harmonisation
- There is little information exchange on details of curriculum content
- Horizontal integration leads to phantasy names of curriculum units
- ECTS exchange is hampered if no common language of medical education exists
- Assessment of non-EU international medical graduates should roughly be equal (quod non)
Dutch legislation

- BaMa required for *all* of higher education
- Study load for all Dutch university Bachelor’s courses, including medicine: 180 credits
- Study load of Master’s course in medicine: 180 credits
- [Study load of Master’s course in *medicine, clinical researcher*: 240 credits]
Reasons to comply

- All Dutch higher education was urged to implement all Bologna components, including medicine
- It could give chances to improve curricula
- No serious objections from (most) medical schools
Arguments in favour

- stimulate development of international standards
- enhance student mobility if bachelor objectives are comparable
- Students with a Ba degree can pursue a science Ma degree (+/- continue medicine)
- Graduate-entry of non-medical bachelors in medical master phase may be possible
- A master diploma can stimulate research interest in doctors
Arguments against

- It does not fit well with an integrated curriculum
- Training medical bachelors who do not proceed is a waste of resources
- Early clinical training is not meant for those who will not become a doctor
- Society has no employability for medical bachelors
Example: Dutch curricula, developing from H to Z structure
Example: Dutch curricula, developing from $H$ to $Z$ structure

Clinical training

little guidance; much responsibility

theoretical foundation

much guidance; little responsibility
The Utrecht 6 year medical course

Integrated theme block

Clinical reasoning & skills training

Clerkship

Elective

Research

Theory line
Current feelings in NL

- Medical schools accept it
- It may provide options for students
- No problem awarding a Bachelor diploma after 3 years
- Necessary curriculum adjustments are limited
- Fits with new graduate-entry Ma-programs

In short:

“It doesn’t help, but it doesn’t hurt either”
The Bachelor cut

- Clinical training
- Theoretical foundation
- Bachelor diploma
- Master = MD diploma
Graduate entry

- GE allows non-medical bachelors to finish with a MD diploma

- A four year “clinician-researcher master program” is now established in legislation; two schools offer it

- Other schools allow non-medical bachelors to apply for the existing Ma course after additional year of education
Utrecht and Maastricht medical programs

Post graduate training

Ma-program
- regular curriculum

Ba-program
- (300 / yr)

graduate entry
- medical
- research master
- (40 / yr)

selection

Academic BSc, e.g., Life Science, Biomedicine, Health science

acad. high school

acad. high school
Other schools, e.g. at Groningen

- Post graduate training
  - Ma-program
    - regular
    - curriculum
  - Ba-program
    - (300 / yr)

Transitional year

Academic BSc, e.g., Life Science, Biomedicine, Health science

acad. high school

selection
Current state of affairs in NL

- All schools slightly adapted the curriculum (e.g. Dublin Descriptors), or built in the BaMa in a larger curriculum reform
- Groningen graduated the first medical masters in 2009
- Most other schools have graduated medical bachelors
- The Dutch Blueprint of Objectives for Medical training 2009 now includes (1) Ba and Ma objectives and (2) integrated CanMEDS model competency-objectives
How do students feel?

- Does it affect career considerations?
- We surveyed Pre-BaMa and BaMa Utrecht students in 2008 and 2009
- *Would a Ba-Diploma make you consider a permanent or temporary stop?*

<table>
<thead>
<tr>
<th></th>
<th>Pre-BaMa</th>
<th>BaMa</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>104 (y3)</td>
<td>159 (y2)</td>
</tr>
<tr>
<td>2009</td>
<td>103 (y4)</td>
<td>156 (y3)</td>
</tr>
</tbody>
</table>
% Pre-BaMa students considering interruption

![Bar chart showing the percentage of Pre-BaMa students considering interruption. The chart compares 3rd year students in 2008 (blue bars) and 4th year students in 2009 (red bars). The categories are 'YES', 'MAYBE', and 'NO'. The 'MAYBE' category shows the highest percentage for both years.](image-url)
% BaMa students considering interruption

![Bar chart showing percentage of students considering interruption. The chart compares 2nd year students in 2008 and 3rd year students in 2009. The categories are YES, MAYBE, and NO. The percent ranges vary from 0 to 60.]
Would you be interested to switch to another med school?

- **YES**
  - pre-BaMa studs 2009: 5
  - BaMa studs 2009: 5

- **UNSURE**
  - pre-BaMa studs 2009: 20
  - BaMa studs 2009: 20

- **NO**
  - pre-BaMa studs 2009: 45
  - BaMa studs 2009: 80
Conclusion

- Prospect of a Bachelor diploma does not affect students’ opinion on interruption, nor switch of schools
- Limitation: only Utrecht students surveyed (Utrecht is a popular med school)
Overall conclusion so far

- Dutch medical schools comply by government request to introduce BaMa
- Curricula and Objectives Blueprint are adapted
- Integration philosophy not compromised
- Staff has no strong opinions
- Students do not see clear benefits (yet?)
- We all count on 100% enrolment of Ba-student in Ma courses in same school
The Dutch have always felt comfortable with a two-cycle model.
The Dutch bi-cycle model
Some personal concerns

- Recently, Education Minister issued to abandon smooth transitions from Ba to Ma, to stress independence of Ba and Ma courses
- Voices heard to drastically increase enrolment fixus
- What if numerus fixus would not be equal for Ba and Ma? Or moved from Ba to Ma?
What if all interested applicants would enter the Ba course?

Capacity of, and interest in Dutch medical education

- Fixed national enrolment number
- Interested applicants
No separation of Ba and Ma

Post graduate training

Ma-program

(300 / yr)

Ba- program

(600 / yr)

Fixus and selection

academic high school
Some personal concerns
Final statements

- BaMa model is executable in medical education
- Most medical students and staff have no strong feelings about BaMa
- It could lead to enhanced EU cooperation between medical schools and development of standards
- The unity of the medical course should remain protected