



Pharmaceutical Promotion in Medical (and Pharmacist) Training in the Netherlands: Readiness for Curriculum Change

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Introduction

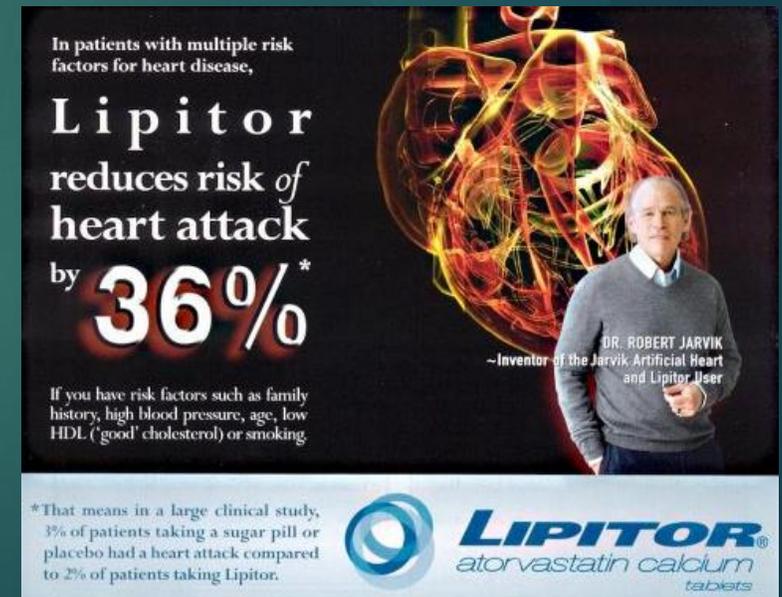
- ▶ Indispensable role of medicines in society
- ▶ Interests of the pharmaceutical industry
 - ▶ Maximizing profit
 - ▶ Returns on investment
- ▶ Interests of the general public and society
 - ▶ Safe, affordable, best-in-class medicines
 - ▶ Or, no medications at all...

↑
Potential conflict
↓



Pharmaceutical promotion (PP)

- ▶ “All informational and persuasive activities by manufacturers, the effect of which is to induce the prescription, supply, purchase and/or use of medicinal drugs” (Norris *et al.*, 2005)
- ▶ Affect the quality and frequency of prescribing
- ▶ Affect the costs and sustainability of HC systems
- ▶ **Might cause sub-optimal care for patients**



In patients with multiple risk factors for heart disease,

Lipitor
reduces risk of heart attack
by **36%***

If you have risk factors such as family history, high blood pressure, age, low HDL ('good' cholesterol) or smoking.

DR. ROBERT JARVIK
~Inventor of the Jarvik Artificial Heart and Lipitor User

*That means in a large clinical study, 3% of patients taking a sugar pill or placebo had a heart attack compared to 2% of patients taking Lipitor.

LIPITOR
atorvastatin calcium
tablets

PP in medical education

- ▶ Education as primary learning period
- ▶ Students are already exposed during education (*Austad et al., 2011*)
- ▶ Doctors/students require understanding of PP and mechanisms
- ▶ Skills to respond appropriately
- ▶ ‘Uniqueness of self-invulnerability’
- ▶ Students lack confidence in dealing with industry influence
- ▶ PP is rarely, if ever, addressed (*Mintzes et al., 2005*)

Main research question



“What factors facilitate or impede medical school’s integration of an understanding of pharmaceutical promotion in the curricula?”



Organizational readiness to change

(Holt, 2010; Jippes, 2013; Weiner, 2009)

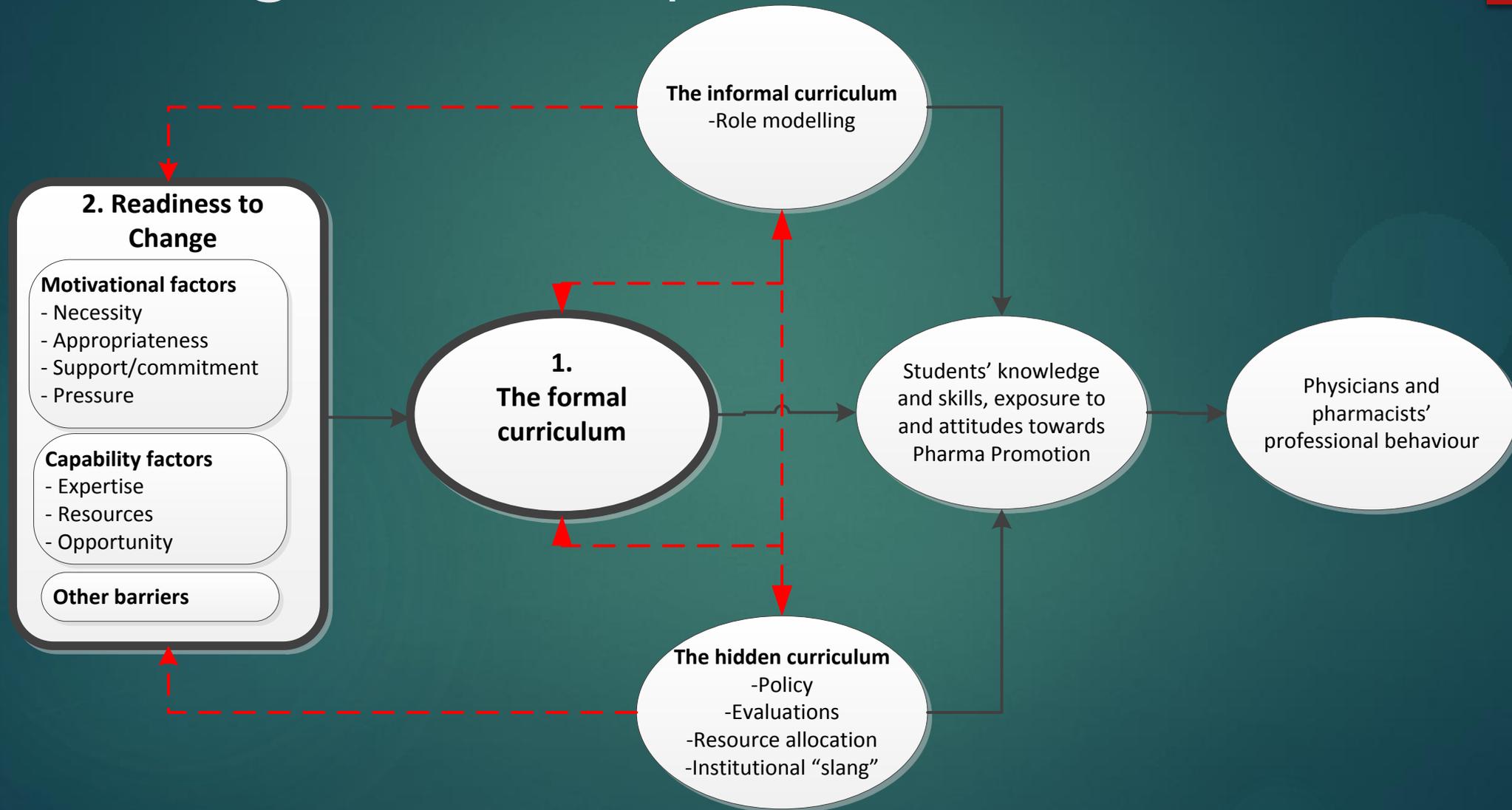
- ▶ Construct used to identify factors that can facilitate or impede change
 - ▶ Motivational factors
 - ▶ Reflect the collective attitudes, beliefs and commitment
 - ▶ Capability factors
 - ▶ Expertise, resources
 - ▶ Possibility of deploying that capability

The formal, informal, and hidden curriculum

(Hafferty, 1998)

- ▶ The formal curriculum
 - ▶ Stated, formally offered curriculum
- ▶ The informal curriculum
 - ▶ Level of interpersonal interactions among and between faculty and students
 - ▶ Role models
- ▶ The hidden curriculum
 - ▶ Commonly held understandings, customs, rituals, and taken-for-granted aspects
 - ▶ Level of organizational structure and culture

Building a conceptual framework



Research questions

1. Which aspects of the effects PP are addressed **in the formal medical** undergraduate curricula?
 1. What factors facilitate or impede medical school's **readiness** to address the impact of PP in the curricula?
2. Is the influence of PP covered in **the hidden curriculum** of Dutch medical schools in relation to the influence of pharmaceutical promotion, and if so;
 1. What factors facilitate or impede medical school's **readiness** to address PP in the hidden curricula?
3. To what extent does the **informal curriculum** influence medical students' knowledge and skills, exposure to and attitudes towards PP

Methodology

- ▶ Desk research
- ▶ Interviews
 - ▶ 18 Semi-structured interviews
 - ▶ 50 min (SD 15 min)
 - ▶ Audio recorded, transcribed verbatim
 - ▶ Open & closed coding (Atlas.ti)
 - ▶ Thematic analysis
- ▶ Respondents
 - ▶ 13 medicine, 5 pharmacy
 - ▶ 1 dean, 1 vice-dean
 - ▶ 7 involved in curricula development
 - ▶ 8 pharmacologists/pharmacotherapists
 - ▶ 1 ethicist

The formal curriculum

Which aspects of the effects of pharmaceutical promotion are explicitly or implicitly addressed in the formal medical undergraduate curricula?

“If you ask me whether it is sufficiently embedded in the learning goals of a medical student then I would say poorly. It is there, but if you really take it serious, and I expect we do, then poorly.”

(Professor clinical pharmacy)

“Very little. I can tell you, that happens maybe in 1 or 2 lectures. We have 1 lecture which addresses manipulation in drug advertising. But training on how to deal with pharmaceutical sales representatives and so forth, to take a critical look and critically handle it, there is very little training on that.”

(Head pharmacotherapy section)

- + Critical attitude
- + Evidence based medicine
- + Cost awareness
- + Critical appraisal of literature

Motivation to change the formal curriculum

What motivational factors facilitate or impede medical school's readiness to address the impact of pharmaceutical promotion in the curricula?

- + Considered necessary and appropriate
- + Hobby/devotion of individual professor

"In my opinion, this should receive more attention, structural attention, so not only by people that are interested in it like me"

(Professor clinical pharmacy and pharmacology)

- Curricula are overloaded
- Matter of prioritizing

"You have to create space yourself. The curriculum is packed, so if you want space for something it is a matter of push and pull and actually it means that something else must give way"

(Coordinator of medicines education)

Capability to change the formal curriculum

What capability factors facilitate or impede medical school's readiness to address the impact of pharmaceutical promotion in the curricula?

▶ Expertise

"I have dedicated a lot of attention to this in the course of my career, precisely to be able to recognize it and be able to point it out to others. So I do think that know-how is present"

(Head of hospital pharmacy)

"If you really want to go in-depth on the subject you can never do that from within the faculty, because they just do not have the know-how"

(Head of pharmacotherapy section)

▶ Resources and opportunity

"You must find the right place to fit this in the curriculum. When we all say that we find it important that students are being educated about it than money and the necessary resources are available"

(member curriculum committee)

The hidden curriculum

Is the influence of pharmaceutical promotion covered in the hidden curriculum of Dutch medical schools in relation to the influence of pharmaceutical promotion?

- ▶ Policies by universities

- ▶ Lack of awareness on their existence
- ▶ Public disclosure of potential conflict of interest

“It is not that you may not have any contact with the industry per se, but people in the environment must be enabled to form their informed judgement”
(Vice-dean of faculty)

- ▶ No commercial influence of industry in education
 - ▶ Does occur in peripheral hospitals

- ▶ Institutional ‘slang’

- ▶ Negative towards marketing
- ▶ ‘Greedy grabbers’

The informal curriculum

To what extent does the informal curriculum influence medical students' knowledge and skills, exposure to and attitudes towards pharmaceutical promotion?

"I think that most doctors in the hospital are aware of it, but I do not think they communicate it explicitly to students."

(Vice-dean)

"I think you can formalize and educate about the industry what you want, but at the moment a professor tells a student that he's going on a 'paid holiday' to Barcelona because of a short presentation for company X, then all the education has been for nothing because that has become the norm"

(Professor in training and education)

"I think the norm is shifting. Legislation has played a role here, and some doctors have explicitly stated not to do it anymore at all. You notice this is becoming the norm but that takes a while"

(Professor in training and education)

Conclusion

What factors facilitate or impede medical and pharmacy school's integration of an understanding of pharmaceutical promotion in the curricula?

- ▶ Large difference between pharmacy and medicine
- ▶ Medicine students are not explicitly trained about PP
- ▶ Implicit education covers a great deal
- ▶ Faculty generally motivated to educate about PP
- ▶ Lack of priority due to overloaded curricula
- ▶ Big potential for both policy and role modelling

Questions?



References

- ▶ Austad, K. E., Avorn, J., & Kesselheim, A. S. (2011). Medical Students ' Exposure to and Attitudes about the Pharmaceutical Industry : A Systematic Review. *PLOS Medicine*, 8(5), 1–12.
- ▶ Hafferty, F. W. (1998). Beyond Curriculum Reform: Confronting Medicine's Hidden Curriculum. *Academic Medicine*, 73(4), 1–5.
- ▶ Mintzes, B. (2005). *Educational initiatives for medical and pharmacy students about drug promotion: an international cross-sectional survey*.
- ▶ Norris, P., Herxheimer, A., Lexchin, J., & Mansfield, P. (2005). *Drug promotion, what we know, what we have yet to learn: Reviews of materials in the WHO/HAI database on drug promotion*. Amsterdam.
- ▶ Weiner, B. J. (2009). A theory of organizational readiness for change. *BioMed Central*, 4(67), 1–9.

Statements

- ▶ In your view, what are the main barriers that prevent education on pharmaceutical promotion from being adequately addressed?
- ▶ Students: How exposed have you been to pharmaceutical promotion?
- ▶ Students: Do you feel adequately educated about interactions with the pharmaceutical industry and pharmaceutical promotion?
- ▶ How can critical thinking amongst faculty be stimulated in so they can help to transmit certain values to students through the informal curriculum?