



# European Medical Students' Association

Association Européenne des Étudiants en Médecine

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## Conflicts of Interest in Medical Education Settings Regarding Pharmaceutical Companies

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*The European Medical Students' Association (EMSA) represents medical students across Europe. We envision a healthy and solidary Europe in which medical students actively promote health. EMSA empowers medical students to advocate health in all policies, excellence in medical research, interprofessional healthcare education and the protection of human rights across Europe.*

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## Executive Summary

Medical doctors are set to deal with pharmaceutical companies in order to offer the best medicine to their patients. Therefore, they face conflicts of interest (COIs) regularly, even at early stages. The way physicians deal with COIs is dependent on the fact if they recognize their existence or not. This in turn affects their independent decision making and research output. Several steps must be taken to avoid these conflicts such as: incorporating education on professionalism, conflict of interest, and determining drug and device safety and efficacy. Also, obligating the adoption of policies in medical faculties and hospitals as a part of the accreditation process. EMSA calls on the WHO to construct guidelines and international analyses about this subject, and to ensure that conflict of interest is incorporated into medical education in the form of courses that enables medical students to: understand the nature of conflicts of interest and how they pertain to the practice of medicine, recognize how industry can impact clinical care and develop strategies to mitigate the negative influences.

## Problem statement

Conflicts of interest in medicine can be summarized as circumstances where medical doctors come out with judgments that don't serve the best interest of their patients, they rather serve their personal or third party's financial wants. According to medical ethics, a doctor's decision-making process should be solely based on their patient's situation. It is of no doubt that when this is altered by external factors, it will have a negative impact on patients' safety and will increase costs. Therefore, clinical integrity is lost.

Physicians start to encounter conflicts of interest in their education at university (*Lieb and Koch, 2013; Lea, Spigset, and Slørdal, 2010*). Despite appearing at this early stage, most European universities do not transparently reveal these conflicts of interest to medical students. In fact, they deliver little to no education on how to appropriately manage interactions with the health industry to medical students (e.g., pharmaceutical and medical device industry) (*Santos, 2017; Tielrooij, 2016*).

The American Medical Student Association's (AMSA) "Model PharmFree Curriculum" represents one approach on how to implement transparency regarding conflicts of interest into the medical curriculum. AMSA outlines five competencies that medical students should acquire in order to be able to successfully navigate complex physician-industry interactions. The Model PharmFree Curriculum suggests concrete educational formats, topics, learning outcomes and suggestions where transparency topics can be included in the curriculum (*American Medical Student Association, 2012*).

European medical faculties hesitate to implement policies that regulate their dealing with conflicts of interest (*Lieb and Koch 2014; Scheffer et al. 2017*). However, the study by Scheffer et al. proved to have an impact on legal and academic authorities: In 2017, the Deans' Conferences of Medicine and Odontology Schools in France adopted a charter, setting responsibility guidelines for the medical

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faculties in regard to raising awareness and educating their medical students on conflicts of interest. Contrastingly, another French study that was published in 2018 included all of the 32 teaching hospitals in France. They were surrogated by using a specific system inspired by AMSA's scoring system. 4 out of the 32 hospitals have considered implementing a policy and only 2 have actually begun on applying a policy which made the highest score 24 out of 60. This manifests the shortage of policies being implemented which puts patients' health at a high risk, and doctors under undue effect of commercials. Even with the dean's conference guidelines, myriad hospitals lacked policies at all and others had ineffective or insufficient ones. Thus, further light should be shed at hospitals carrying out policies.

Moreover, it is highly recommended to adopt additional guidelines concerning scientific integrity, transparency and ethics (*Deans' Conferences of Medicine and Odontology Schools 2017*). In order to ensure that equivalent guidelines are put in place and strengthened in medical faculties all across Europe, there is an urgent need for a structured, comprehensive assessment of conflict of interest policies in universities.

In Europe, a universal legal framework for transparency in healthcare collaborations is hard to achieve due to the different legislations and responsibilities in member states that already hinder a thorough assessment of national transparency policies (*Rodzinka, Fallon-Kund, and Marinetti 2019*). This leads to the conclusion that the engagement of medical students in Europe has the potential to be the driving force for the implementation of transparency into medical education.

## Our view. Aim

Medical students observe physicians throughout their training and learn by taking them as their example. From here it can be said that the way in which universities and university teachers handle conflicts of interest holds great importance for the scientific and professional integrity of future European doctors (*Wayne, Green, and Neilson, 2017*). The implementation of policies regulating the manner in which medical schools handle conflicts of interest has proven to have a significant positive impact on physicians' prescription behavior (*King et al., 2013*). However, so far, there has been no structured, comprehensive assessment of conflict of interest policies at European universities. Studies from Germany and France show that only a few medical faculties adopted guidelines on how to deal with conflicts of interest (*Lieb and Koch, 2014; Scheffer et al., 2017*).

Following AMSA releasing their guideline, they kept on performing regular research on this topic until the present day. Also, they have been continually evaluating conflict of interest policies at American faculties since 2008. To do this, they created a particular scorecard that is being used to give certain scores to faculties. Their follow-up and up to date research has led to the continual increase in American faculties scores. (*Carlat et al. 2016*). The quality of medical education is an essential primary interest in healthcare that should be protected against any secondary interests (*Lo, Field, and Institute of Medicine (U.S.), 2009*). If medical students lack awareness of conflicts of interest in their academic surroundings, they risk compromising their independent decision-making ability (*Wayne, Green, and Neilson 2017*). The negative effects of interactions between the health industry

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and healthcare professionals on prescription behavior, research output and the emergence of ethical dilemmas have been described in various studies (*Latten et al. 2018; Yeh et al. 2016*). Thus, in order to prepare medical students to handle conflicts of interest adequately, they need to receive appropriate education on the topic (*Kao et al. 2011; Maury Pasquier 2015*).

AMSA insists on the vitality of including conflicts of interest, evidence-based medicine (EBM), as well as on drug development, marketing and approval in the medical curriculum, and this is because exposure to pharmaceutical marketing happens early in medical education (*Austad, Avorn, and Kesselheim 2011*). The involvement of drug companies in medical education has proven to lead students to develop a more positive opinion of the pharmaceutical industry (*Stanley, Jackson, and Barnett, 2005; Wofford and Ohl, 2005*).

In addition to that, an enormous amount of awareness of the critical role of conflict of interest in health care and legislates changed during the benfluorex safety scandal of 2009-2010 where it was found that the French drug company Servier's benfluorex which is licensed as a booster of hyperlipidemia and diabetes and also used off-label for obesity, has caused between 500-2000 deaths in a 33 years total time it was in the market. Servier was put on trial for relentlessly marketing the drug. This highlights the huge importance of conflict of interest education where this situation could have been easily avoided if the doctors were able to have the correct judgment about the drug. It also illustrates how massive an effect it has on patients' health where too many innocents' lives were lost in this process.

A study done by Chimonas et al. in 2021 reveals the ever-present ties between the pharmaceutical industry and the medical profession in general. In addition to highlighting these ties in clinical care, they also emphasize the presence of medical education in this network. Figure 1 below demonstrates these highly integrated relationships between the industry and the different aspects of medicine, including medical education. It is therefore evident that the influence of COIs can be substantial, especially if policy makers do not try to address and be transparent about them.

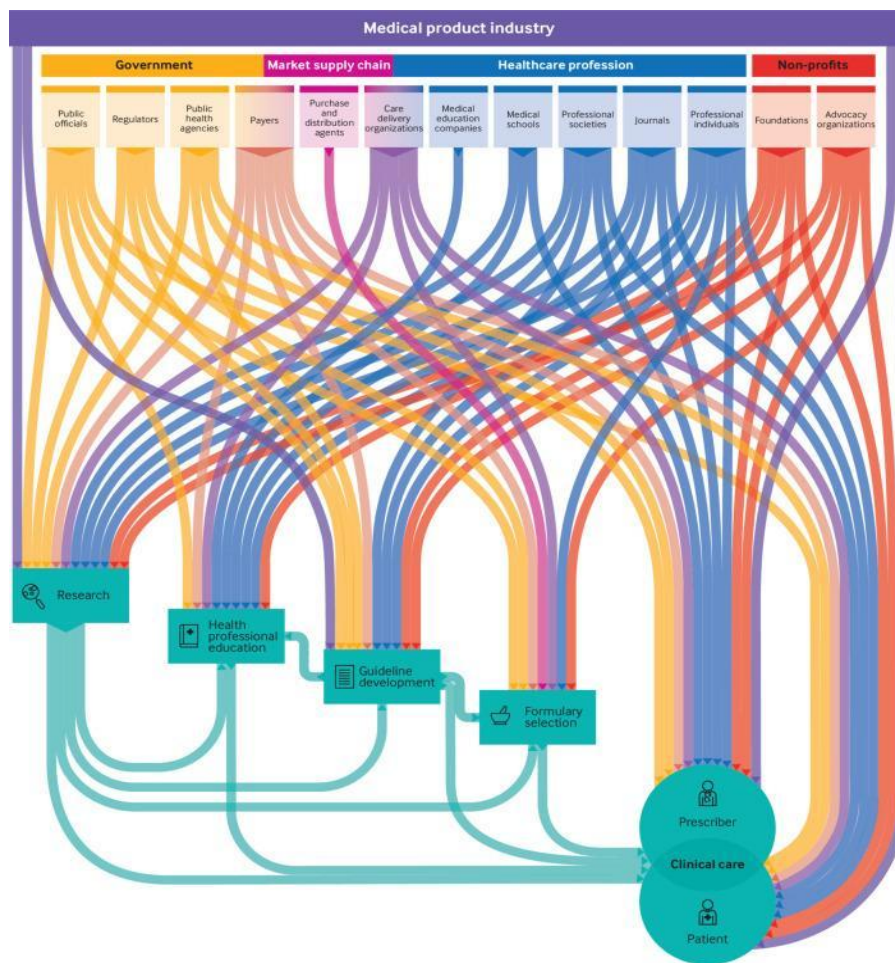


Figure 1. Ties between the medical product industry and healthcare ecosystem (Chimonas et al., 2021)

A guide published and shared by the International Federation of Medical Students Association (IFMSA) in 2020 illustrates a simple method in which medical students can advocate for the inclusion of COI teaching in medical education. This is referred to as a ‘3B Movement’ (IFMSA, 2020). The first ‘B’, the first step, includes medical students building capacity, hence educating themselves on the topic at hand. The next step involves being the voice of medical students in their own faculty, which involves understanding the view of the faculty’s medical students towards COIs and the pharmaceutical industry’s influence on education and clinical decision-making, and starting initiatives to share their views. The last step is to build a network of stakeholders in order to support their message. This approach thus encourages students to be more active in the process of building transparency and awareness around COIs in medical practice and education.

Awareness of conflicts of interest in healthcare collaborations and education on how to handle them are essential for the professional and scientific integrity of future doctors. This is being widely neglected in European medical faculties. Unfortunately, as long as there is a lack of awareness, transparency, and regulation, in relation to the influence of pharmaceutical industry ties in medical care, there is a greater opportunity for this to continue without public knowledge or accountability (Chimonas et al., 2021). Therefore, EMSA calls on European medical faculties to: firstly, implement

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courses on how to deal with conflicts of interest and secondly, adopt a guideline regulating their own handling of conflicts of interest. Furthermore, EMSA calls on European Institutions and member states to raise public awareness of this topic, encourage medical schools to implement courses on the topic and allocate financial resources on training and research regarding conflicts of interest in healthcare. EMSA acknowledges the importance of handling conflicts of interest as part of medical education and commits itself to work on it.

## **Recommendations:**

EMSA calls on the World Health Organization (WHO) to:

- highlight the presence of conflicts of interest in medical practice, by working to construct guidelines and international analyses about the subject;
- encourage the teaching of health professions trainees and students about the importance of conflicts of interest in their clinical clerkships and future practice;
- ensure that there exists an open environment in clinical teaching settings that enables a healthy and thorough conversation around COIs and also allows medical students to apply their new knowledge in different ways, such as:
  - standardized patient encounters with scenarios adapted to the specific context,
  - case-based discussion opportunities that allow for students to collaborate, exchange ideas and learn from each other;
- support the creation of initiatives that encourage student participation and that monitor the progress made with the implementation of teaching on COIs and their potential influence on medical practice.

EMSA calls European medical faculties and university hospitals to:

- provide financial and educational support for the implementation of educational modules about conflicts of interest;
- advocate for discussions around COIs integrated into pre-clinical and clinical curricula;
- highlight and share more about their work on enlightening both patients and medical students on conflicts of interest in medical settings, in order to document progress and to encourage more institutions to engage in such initiatives;
- Sustainably implement courses that enable medical students to:
  - Understand the nature of conflicts of interest and how they pertain to the practice of medicine,
  - Recognize how the industry can impact clinical care and develop strategies to mitigate the negative influences, and
  - Properly manage industry relations to maximize patient and societal benefit, in their curricula, starting from the first year, conform to the AMSA PharmFree curriculum;
- Incorporate education on:
  - Professionalism and Conflict of Interest,
  - Drug and Device Development,
  - Determining Drug and Device Safety and Efficacy,
  - Marketing and Physician Practice,

- Continuing Medical Education, into their curricula, starting from the first year, conforms to the AMSA PharmFree curriculum;
- Adopt a policy or guideline regulating the handling of conflicts of interest encompassing:
  - To oblige professors and teachers in medical education to disclose conflicts of interest with companies of the health industry to the audience before they hold an educational format,
  - To oblige medical faculties and their employees to disclose conflicts of interest with companies of the health industry on a public, easily accessible platform,
  - To abandon industry participation in medical education,
  - To prohibit lecturers in preclinical education who have conflicts of interest regarding topics they hold lectures on,
  - To obviate medical students' encounters with sales representatives of the health industry during clinical education.
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EMSA calls on EMSA members and medical students to:

- educate themselves on the potential significance and consequences of being unknowingly under the influence of COIs in clinical practice by joining webinars and reading guidelines prepared by authorized medical organizations;
- construct and engage in initiatives that aim to increase students' understanding of ethical dilemmas and skills regarding this subject;
- seek and be active in the discussions about the development of their curricula in order to ensure adequate teaching about COIs.

## **Conclusion:**

Becoming a medical doctor is a tough path that faces a myriad of complex moral disagreements and conflicts of interests. Having the ability to recognize COIs when they are present and owning the proper flexibility and knowledge needed to overcome them is vastly crucial to ensure the ethical and scientific integrity of each future doctor, as well as, preserving patients' wellbeing is always the utmost priority. However, despite the continuous efforts, this topic is still being widely neglected in European medical faculties, which is directly affecting the quality of the healthcare system.

Therefore, EMSA calls on the World Health Organization to highlight the presence of conflicts of interest in medical practice, to encourage the teaching of present and future health professionals about the presence of conflicts of interest, to ensure that exists an open environment in clinical teaching settings to discuss these topics in a healthy way and to support the creation of initiatives that encourage student participation and that tracks the progress made with the changes implemented on teaching on COIs and their potential influence on medical practice. Furthermore, EMSA calls on European Institutions to implement courses on how to deal with conflicts of interest, to adopt guidelines that may help regulate their own handling of conflicts of interest, to provide financial and educational support for the implementation of these measures, to promote more discussions around these topics and to highlight and share about what is being

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done so far. Moreover, EMSA calls on EMSA members and medical students to encourage them to educate themselves on the potential significance and consequences of being unknowingly under the influence of conflicts of interest in clinical practice, in being a part of initiatives that aim to increase students' understanding of ethical dilemmas and to seek and be active in the discussions about the development of their curricula in order to ensure adequate teaching about COIs.

Finally, EMSA commits itself to advocating for the inclusion of discussions around conflicts of interest as an effective part of medical education. This way we guarantee a safer future for our patients.

**List of abbreviations:**

COIs: Conflicts of Interest

EMSA: the European Medical Students' Association

AMSA: the American Medical Student Association

EBM: Evidence-based medicine

IFMSA: International Federation of Medical Students Associations



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