



European Medical Students' Association

Association Européenne des Étudiants en Médecine

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Open Access

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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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Problem statement

Health and science are in constant evolution. The practice of Evidence Based Medicine (EBM) and its contribution towards the development of Medical Science depends on the accessibility of the most recent data for healthcare workers, students and researchers. However, EBM's effectiveness can be compromised by barriers to accessing high-quality research, limiting the ability of healthcare professionals to make informed decisions.

Nowadays, we encounter a fair share of articles and papers behind a paywall, but there is a growing use of the concept of "Open Access". Open Access refers to the unrestricted availability of scholarly literature online, allowing users to freely read, download, copy, distribute, and utilise articles for lawful purposes without financial or technical barriers. Copyright should solely ensure authors' control over their work's integrity and proper acknowledgment (Budapest Open Access Initiative, 2002).

EU's Call to Action: Open Access in Horizon 2020

A vital discussion about the design of Open Access is gaining importance. At its core is the question of who controls scholarly communication and on what terms. The promotion of Open Access, especially in scientific education, has been actively developed by the European Union (EU). In 2012, the European Commission published a recommendation on access to and preservation of scientific information encouraging all EU countries to put publicly-funded research results in the public domain in order to strengthen science and the knowledge-based economy. Furthermore, the Commission is running a pilot on Open Access to research data in Horizon 2020: the Open Research Data pilot. This pilot takes into account the need to balance openness with the protection of scientific information, commercialisation and intellectual property rights, privacy concerns, and security, as well as questions of data management and preservation (European Commission, n.d.).

Publishing Giants and Open Access

This discussion is driven by the business practices of publishing giants such as Elsevier, Springer Nature and Wiley. The monopolisation of journal publishing, the high profits of commercial publishers, their data-tracking activities, and the growing criticism of the business model are currently shaping the discourse about the future of Open Access. Two guiding principles can be discerned here: the proponents of an idealistic paradigm of Open Access associate Open Access' transformation with the concern for a profound change in the field of scholarly communication, emphasising that science can organise the publishing system itself (Pampel, 2023). From another point of view, the challenge of

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maintaining journals is a result of the delicate balance between providing and preserving valuable information without compromising integrity, while also facing the financial and technical burdens involved in running a publication. Larger, well-funded, for-profit journals are less likely to face these issues; nevertheless, the opportunity for medical students, academic physicians, community physicians, and international authors to contribute to and learn from the vast resources provided by Open Access online journals is priceless (Wang, 2019).

Open Access: Bridging the Gap in Healthcare

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member-States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth - all while tackling climate change and working to preserve our oceans and forests. Access to high-quality research literature is essential for educating nursing and healthcare students to promote evidence-based practice. Within Low-and Middle-Income countries access is limited due to financial and structural constraints within countries and institutions. Reduced access to research literature limits the achievement of the Sustainable Development Goals through its impact on the education of healthcare staff and on the development of contextually appropriate evidence for practice (Zhang, 2023), going against the Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (United Nations, n.d.).

To help narrow the gap between industrialised countries and those in emerging economies, more and more institutions are advocating for Open Access. As an example, UNESCO has decided to adopt an Open Access Policy for its publications, thereby embracing a new dimension of knowledge sharing (UNESCO, n.d.).

Medical Students and Open Access: Overcoming Barriers

Medical students face numerous challenges when it comes to Open Access. While the increasing availability of resources offers a large number of opportunities for learning and research, many students still encounter difficulties in accessing the materials due to financial constraints or limited institutional support. Therefore, to address these issues, it is crucial to encourage a deeper understanding on how to effectively find, assess and utilise these resources. Targeted training in this area will impact medical education, ensuring that future healthcare professionals are prepared to

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benefit from Open Access, and thereby enhancing their ability to deliver evidence-based care and stay updated with emerging medical knowledge (Willinsky, 2019).

In summary, Open Access offers numerous benefits, including the potential to stimulate interdisciplinary research, facilitate data reuse, minimise redundancy, and promote reproducibility. Nevertheless, significant challenges persist, particularly concerning sustainable funding models. While there are existing major data repositories and shared cloud-computing facilities, some require expansion, and achieving interoperability necessitates further development (Nature, 2017). Despite these complexities, there is a shared aspiration to advocate for equal access to knowledge within the scientific community.

Our view. Aim

The European Medical Students' Association (EMSA) acknowledges the importance of Open Access, ensuring accessibility and availability of resources to medical students and healthcare professionals, as well as to the society as a whole. EMSA believes in an inclusive environment all across Europe where individuals and institutions can freely access research outcomes, regardless of financial or academic status.

Thus, by raising awareness on Open Access, EMSA aims to empower students to promote these practices in their Local Committees, advocating for transparency, accessibility and engagement. Through campaigns, workshops and collaborative projects, EMSA aims to equip students with the knowledge, skills and resources needed to actively work on this subject.

Therefore, with this Policy Paper, EMSA calls upon stakeholders across multiple domains to collaboratively put efforts and work towards advancing Open Access, thereby fostering a culture of transparency, collaboration and innovation that not only empowers individuals but also drives progress towards addressing societal challenges.

Recommendations

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

- Raise awareness on the topic of Open Access by informing that Open Access exists and explaining why it can benefit students, researchers and the population as a whole;

- Guarantee easy access to Open Access published papers/journals by creating a list or website of trusted Open Access published journals;
- Develop ways to evaluate Open Access contributions in order to assure quality and good scientific practice;
- Integrate open access principles into its communication and dissemination strategies, raising awareness among healthcare workers, students, and researchers about the benefits of open access for advancing evidence-based medicine;
- Encourage the establishment of a centralised platform or curated list of trusted open access journals and resources, ensuring easy access to scholarly literature for healthcare professionals and academics worldwide.

EMSA calls on European Union/European Member States (European Commission) to:

- Allocate part of the Horizon Europe funds for the publishing of Open Access contributions in online journals in order to encourage researchers to publish in Open Access journals;
- Develop a new action plan following the Open Science plans established in Horizon 2020 and making Open Access publishing mandatory for all Horizon Europe projects;
- Encourage researchers to become European-Commission funded researchers and publish their contributions on the European Open Access Platform;
- Inform students and researchers about their Open Access Publishing Platform called “Open Research Europe”;
- Allocate a portion of funding from initiatives like Horizon Europe towards supporting Open Access publishing, incentivizing researchers to publish their work in Open Access journals and contribute to the democratisation of scientific knowledge.

EMSA calls on the National Governments, Ministries of Health and other relevant ministries to:

- Encourage researchers to publish their findings in Open Access Journals;
- Adopt plans of action to implement Open Access Publication in their country.

EMSA calls on research institutes and Journal editors to:

- Make their databases accessible without paywalls;
- Give preference to publishing in Open Access Journals;
- Promote and provide learning opportunities to students, such as recruiting graduate students to perform technical analysis or copyediting.

EMSA calls on medical faculties, medical students, and EMSA members to:

- Raise awareness on Open Access among students by organising workshops, activities and campaigns;
- Advocate the importance of Open Access in their universities by contacting the administration and the research supervisors in order to implement Open Access on the local level;
- Empower medical faculties, students, and research communities to advocate for Open Access through workshops, campaigns, and advocacy efforts, promoting its adoption at local levels and nurturing a culture of knowledge sharing and accessibility;
- Create opportunities for all medical students to get involved in medical research, offering necessary support, research education and resources for students;
- Ensure free subscriptions in Medical Journals for medical students;
- Organise meetings for medical students, researchers and doctors on access to medical research and how to engage in them.

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