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LETTER TO THE EDITOR

Sustainable medicines use in clinical practice—It is time to help the teacher

We read the invited review on sustainable medicines use in clinical practice by Adeyeye et al.[1] and would like to congratulate the authors with the captivating way in which they used scientific facts combined with very practical solutions to convey their call to action. This call is primarily addressed to the NHS, which the authors suspect will resonate with other health systems. While we fully agree with necessity of this top-down approach, we additionally believe that there is much to be gained by making future prescribers more knowledgeable and aware about the impact they have on planetary health. The article remains very brief about next generation of healthcare professionals by quoting the General Medical Council's statement that "newly qualified doctors must be able to apply the principles, methods and knowledge of population health and the improvement of health and sustainable healthcare to medical practice."[2] However, the underlying question—how we effectively train future healthcare professionals in these attitudes underpinned by knowledge—is not addressed.

The Association for Medical Education in Europe's (AMEE) recent consensus statement provides a clear global, collaborative, representative and inclusive vision on how to educate an interprofessional workforce that can provide sustainable healthcare and promote planetary health.[3] It includes examples of learning activities and assessment methods that can be included in daily teaching, such as roleplaying exercises and objective structured clinical examinations (OSCEs) in which the students discuss the most environmentally sustainable intervention (e.g., dry powder inhalers instead of metered-dose inhalers) with a patient and literature based research assignments (e.g., about the environmental impact of specific drug classes). However, the cornerstone of improving planetary health education is faculty engagement, and it is here that we foresee difficulties for sustainable clinical pharmacology and therapeutics (CPT) education. Like many other medical teachers, CPT teachers often have to balance their teaching tasks with clinical duties and in many countries there is a shortage of clinical pharmacologists. To incorporate sustainable prescribing in their teaching is something that most teachers simply do not have time for and even if they have the time, they may feel that there are more urgent improvements to be made. For example, CPT education in many countries is still very traditional (i.e., lecture and textbook-based) whereas problem-based teaching is more effective.[4] Moreover, the teachers may not be as invested in the issues of planetary health as the current young doctors and students and they may not feel confident that they have the expertise to teach about it.[5]

If we want large numbers of students to learn about sustainable prescribing, it is of utmost importance to make the job of the teacher as easy as virtually possible. That means not expecting everyone to single-handedly invent the wheel, but to collaboratively create standpoints, teaching materials and faculty development (or "teach the teacher") materials and to share them openly. That is free (without cost or copyright restrictions) and easy to re-use, revise (e.g., to local standards if necessary) and redistribute (e.g., local versions and improvements or translations). This is the goal of the European Open Platform for Prescribing Education (EurOP^{2}E). Aimed at improving and harmonizing international CPT education, EurOP^{2}E is an online environment for CPT teachers to collaborate and to share and create open educational resources. The framework for the platform was recently published,[6] and it is set to go live in the spring of 2022 (www.prescribingeducation.eu).

Planetary health should be a cross-cutting theme throughout the whole of medical education.[7] Within medical education, prescribing is likely to have the most impact, as human pharmaceuticals not only account for an estimated 25% of all medical greenhouse gas emissions, but also exert direct ecotoxicological effects via sewage systems.[8] Moreover, prescribers may directly influence their environmental impact through individual treatment decisions. Therefore, while any ready-to-use teaching materials will provide a welcome start, planetary health must be incorporated in the basics of pharmacotherapy education. The six-step model of the WHO guide to good prescribing and the accompanying teacher's guide to good prescribing are currently under revision[9] (http://www.guidetogoodprescribing.org). Aside from pharmaceutical advances, globalization of information and digitization of both the prescribing process and medical education, the revision will include sustainable medicines use. We expect that specifically step 3(b) of the six-step process—to verify the suitability of a (standard) treatment and adapt it to the individual needs of a patient—will be updated so that prescribers learn to take the environmental impact of their treatment decisions into account. The exact nature of the update will be decided in a consensus meeting with its users.

The authors of this letter are involved in both the development of EurOP^{2}E and the revision of the WHO Guide to Good Prescribing and actively looking for collaborators with an interest in sustainable medicines use. Interested readers may apply via the aforementioned webpages of the respective projects.

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COMPETING INTERESTS

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