



# European Medical Students' Association

Association Européenne des Étudiants en Médecine

emsa-europe.eu | Rue Guimard 15, 1040 Brussels | info@emsa-europe.eu

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## Multimorbidity in Undergraduate Medical Education

Authors: Andrea Cuschieri

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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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Rue Guimard 15

1040 Brussels, Belgium

Tel : +32 2732 72 02

[www.emsa-europe.eu](http://www.emsa-europe.eu)

[info@emsa-europe.eu](mailto:info@emsa-europe.eu)

## **Problem statement.**

Multimorbidity, defined as the coexistence of two or more chronic conditions in an individual, is an escalating global health challenge that places immense strain on healthcare systems, increases healthcare costs, and complicates patient management (Barnett et al., 2012; Chowdhury et al., 2023; Head et al., 2024; Laires & Perelman, 2019; PLOS Medicine Editors, 2023; Skou et al., 2022). Despite affecting over one-third of adults worldwide, with prevalence projected to rise significantly by 2050, multimorbidity remains critically underrepresented in undergraduate medical education (Van den Akker et al., 1998; Kingston et al., 2018; Whitty et al., 2020; Bezzina & Pope, 2023; Chowdhury et al., 2023; Head et al., 2024; Bezzina et al., 2025).

Current medical curricula primarily emphasize single-disease models and acute care, failing to equip future healthcare professionals with the necessary knowledge, skills, and competencies to manage patients with multiple chronic conditions effectively (Guthrie et al., 2012; Lewis et al., 2016; Whitty et al., 2020; Bezzina & Pope, 2023). This gap in education contributes to fragmented, disease-centered care rather than a holistic, patient-centered approach, ultimately impacting both patient outcomes and the efficiency of healthcare delivery. The absence of structured, standardised multimorbidity education in undergraduate medical training leaves students unprepared to navigate the complexities of managing patients with multiple chronic conditions (Guthrie et al., 2012; Helmich et al., 2018; Lewis et al., 2016; Osborn et al., 2015; Whitty et al., 2020; Bezzina & Pope, 2023).

Studies have shown that multimorbidity is largely addressed in an ad-hoc manner during clinical rotations rather than being systematically incorporated into curricula (Harrison, 2016; Prazeres, 2023; Penner et al., 2024). As a result, medical students and newly qualified doctors report low confidence in managing multimorbidity, leading to hesitancy in clinical decision-making, increased reliance on specialist referrals, and (eventually resulting in) inefficiencies in patient care (Osborn et al., 2015;

Helmich et al., 2018; Bezzina et al., 2025). Furthermore, without clear, evidence-based guidelines for multimorbidity management, educators struggle to provide consistent and effective training, perpetuating the lack of preparedness among graduates (Guthrie et al., 2012).

This educational gap has been recognized by international organizations such as the World Health Organization (WHO) and the European Federation of Internal Medicine (EFIM), which have called for the integration of multimorbidity into medical training (World Health Organization, 2016; Academy of Medical Sciences, 2018; Rijken et al., 2017; Hurst et al., 2018; Bernabeu-Wittel et al., 2023; OECD, 2023). However, progress has been slow, and there remains a pressing need to develop structured, competency-based approaches to multimorbidity education.

The integration of multimorbidity into undergraduate medical curricula is essential to ensure that future healthcare professionals are adequately prepared to manage the growing burden of chronic diseases (Lewis et al., 2016; Whitty et al., 2020; Bezzina & Pope, 2023; Bezzina et al., 2025). Addressing this issue through curriculum reform, faculty development, and the adoption of innovative, interactive teaching methodologies will be critical to fostering a generation of doctors capable of delivering comprehensive, patient-centered care in an era of rising multimorbidity.

### **Our view. Aim**

The European Medical Students' Association (EMSA) recognizes multimorbidity as a pressing (crucial) healthcare challenge that demands urgent attention in undergraduate medical education. As an organization dedicated to advancing medical education, public health, and professional development, EMSA advocates for the integration of multimorbidity teaching into medical curricula across Europe to ensure that future physicians are well-equipped to provide comprehensive, patient-centered care. In this sense EMSA further supports the development of a structured, evidence-based, educational

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interventions that incorporate interdisciplinary collaboration, holistic patient management, and shared decision-making. This initiative directly supports EMSA's commitment to medical education reform, public health advocacy, and professional excellence, ensuring that future doctors are ready to tackle the growing burden of multimorbidity in an increasingly complex healthcare landscape.

## **Recommendations**

### 1. Medical Students & Medical Student Organizations (e.g., EMSA, IFMSA, LCs)

- To advocate for curricular reform by engaging in student-led initiatives, petitions, and discussions with faculty to push for the inclusion of multimorbidity in medical education.
- To participate in extracurricular learning by joining workshops, conferences, and research projects on multimorbidity to build knowledge and awareness beyond standard curricula.
- To develop peer-led learning initiatives by establishing student-run study groups and elective courses to enhance multimorbidity education.
- To raise awareness and contribute to research participation by engaging in research on multimorbidity and advocating for its recognition as a priority in medical training.

### 2. Medical Faculty & Educators

- To integrate multimorbidity into teaching by embedding content on multimorbidity into existing modules such as internal medicine, geriatrics, family medicine, and public health.
- To promote case-based and interdisciplinary learning by using problem-based learning (PBL), simulation-based teaching, and real-world case studies to improve student engagement.
- To develop competency-based assessments by implementing structured evaluations to assess students' ability to manage patients with multimorbidity holistically.
- To encourage faculty development by providing training on multimorbidity education through workshops, seminars, and professional development programs.

### 3. Medical Schools & Universities

- To revise curricula to include multimorbidity by developing dedicated modules or integrating multimorbidity principles across disciplines to ensure longitudinal exposure.

- To foster interdisciplinary collaboration by strengthening partnerships with nursing, pharmacy, social work, and public health programs to provide comprehensive training.
- To ensure access to learning resources by providing open-access materials, digital learning tools, and clinical guidelines on multimorbidity management.
- To encourage research and innovation in education by funding and supporting studies on effective multimorbidity teaching methodologies.

#### 4. International & European Health Organizations (e.g., WHO, EFIM, CPME, EJD)

- To develop standardized guidelines by creating evidence-based recommendations for multimorbidity education in undergraduate medical training.
- To support policy implementation by encouraging national governments and medical regulatory bodies to mandate multimorbidity teaching in medical schools.
- To provide funding for educational initiatives by supporting the development of open-access digital resources and international training programs.
- To promote global collaboration by establishing working groups to share best practices and innovative teaching approaches.

#### 5. National & European Medical Associations (e.g., CPME, EJD, UEMS)

- To advocate for multimorbidity policy inclusion by engaging with policymakers to prioritize multimorbidity education in medical training frameworks.
- To support continuous medical education (CME) by ensuring multimorbidity remains a focus in postgraduate education and lifelong learning programs.
- To facilitate cross-sector collaboration by working with healthcare systems, universities, and student organizations to create a unified approach to multimorbidity education.

#### 6. Policymakers & National Governments

- To mandate multimorbidity education in medical training by establishing national policies requiring its integration into undergraduate and postgraduate curricula.
- To invest in healthcare workforce training by allocating funding for faculty development, curriculum reform, and interprofessional education on multimorbidity.
- To ensure equitable access to resources by supporting initiatives that provide open-access educational materials, particularly in low-resource settings.

## **Definitions**

WHO - World Health Organization

EFIM - European Federation of Internal Medicine

CPME - Standing Committee of European Doctors

EJD - European Junior Doctors Association

UEMS - European Union of Medical Specialists (Union Européenne des Médecins Spécialistes)

IFMSA - International Federation of Medical Students' Associations

LC - Local Committee

## **References**

- Bezzina, C., & Pope, L. (2023). Multimorbidity and the need to rethink medical education. *Journal of Multimorbidity and Comorbidity*, 13, 26335565231207811. <https://doi.org/10.1177/26335565231207811>
- Bezzina, C., McQuade, R., Lowe, W., Mair, F., & Pope, L. (2025). Shattering the shield: Embracing complexity in undergraduate medical education. *The Clinical Teacher*, 22(1), e70018.
- Barnett, K., Mercer, S. W., Norbury, M., Watt, G., Wyke, S., & Guthrie, B. (2012). Epidemiology of multimorbidity and implications for health care, research, and medical education: A cross-sectional study. *The Lancet*, 380(9836), 37-43.
- Bernabeu-Wittel, M., Para, O., Voicehovska, J., Gómez-Huelgas, R., Václavík, J., Battegay, E., Holecki, M., van Munster, B. C., & EFIM Multimorbidity Working Group. (2023). Competences of internal medicine specialists for the management of patients with multimorbidity. *European Journal of Internal Medicine*, 109, 97-106. <https://doi.org/10.1016/j.ejim.2023.01.011>
- Chowdhury, S. R., Chandra Das, D., Sunna, T. C., Beyene, J., & Hossain, A. (2023). Global and regional prevalence of multimorbidity in the adult population in community settings: A systematic review and meta-analysis. *EClinicalMedicine*, 57, 101860. <https://doi.org/10.1016/j.eclinm.2023.101860>
- Guthrie, B., Payne, K., Alderson, P., McMurdo, M. E., & Mercer, S. W. (2012). Adapting clinical guidelines to take account of multimorbidity. *BMJ*, 345, e6341. <https://doi.org/10.1136/bmj.e6341>
- Harrison, E. (2016). Multimorbidity in family medicine clerkship: The student perspective. *University of Western Ontario Medical Journal*, 84(2), 5-7.
- Head, A., Birkett, M., Fleming, K., Kypridemos, C., & O'Flaherty, M. (2024). Socioeconomic inequalities in accumulation of multimorbidity in England from 2019 to 2049: A microsimulation projection study. *The Lancet Public Health*, 9(4), e231-e239.

- Helmich, E., Diachun, L., Joseph, R., LaDonna, K., Noeverman-Poel, N., Lingard, L., & Cristancho, S. (2018). "Oh my God, I can't handle this!": Trainees' emotional responses to complex situations. *Medical Education*, 52(2), 206-215. <https://doi.org/10.1111/medu.13472>
- Hurst, J. R., Dickhaus, J., Maulik, P. K., Miranda, J. J., Pastakia, S. D., Soriano, J. B., Siddharthan, T., Vedanthan, R., & GACD Multi-Morbidity Working Group. (2018). Global Alliance for Chronic Disease researchers' statement on multimorbidity. *The Lancet Global Health*, 6(12), e1270-e1271. [https://doi.org/10.1016/S2214-109X\(18\)30391-7](https://doi.org/10.1016/S2214-109X(18)30391-7)
- Kingston, A., Robinson, L., Booth, H., Knapp, M., Jagger, C., & Modem Project. (2018). Projections of multi-morbidity in the older population in England to 2035: Estimates from the Population Ageing and Care Simulation (PACSim) model. *Age and Ageing*, 47(3), 374.
- Laires, P. A., & Perelman, J. (2019). The current and projected burden of multimorbidity: A cross-sectional study in a Southern Europe population. *European Journal of Ageing*, 16, 181-192.
- Lewis, C., Wallace, E., Kyne, L., Cullen, W., & Smith, S. M. (2016). Training doctors to manage patients with multimorbidity: A systematic review. *Journal of Comorbidity*, 6(2), 85-94. <https://doi.org/10.15256/joc.2016.6.87>
- Multimorbidity: Technical series on safer primary care. (2016). Geneva: World Health Organization. Licence: CC BY-NC-SA 3.0 IGO.
- Organisation for Economic Co-operation and Development (OECD). (2023). Getting healthcare professionals ready for integrated care: Skills needs and development (Output 4). [https://www.oecd.org/content/dam/oecd/en/about/programmes/dg-reform/ireland/Getting%20healthcare%20professionals%20ready%20for%20integrated%20care%20-%20skills%20needs%20and%20development%20\(Output%204\).pdf](https://www.oecd.org/content/dam/oecd/en/about/programmes/dg-reform/ireland/Getting%20healthcare%20professionals%20ready%20for%20integrated%20care%20-%20skills%20needs%20and%20development%20(Output%204).pdf)
- Osborn, R., Moulds, D., Schneider, E. C., Doty, M. M., Squires, D., & Sarnak, D. O. (2015). Primary care physicians in ten countries report challenges caring for patients with complex health needs. *Health Affairs*, 34(12), 2104-2112. <https://doi.org/10.26099/cfcb-tq81>

- Penner, K., Wicklum, S., Johnston, A., & Kelly, M. A. (2024). Teaching multimorbidity to medical students. *The Clinical Teacher*. <https://doi.org/10.1111/tct.13794>
- PLOS Medicine Editors. (2023). Multimorbidity: Addressing the next global pandemic. *PLOS Medicine*, 20(4), e1004229.
- Prazeres, F. (2023). Teaching exchange: Medical students' experience with a pre-recorded seminar on multimorbidity during Coronavirus Disease 2019 pandemic. *Cerrahpaşa Medical Journal*, 47(2), 202-206.
- Rijken, M., Struckmann, V., van der Heide, I., Hujala, A., Barbabella, F., van Ginneken, E., Schellevis, F., & Richardson, E. (Eds.). (2017). How to improve care for people with multimorbidity in Europe? European Observatory on Health Systems and Policies.
- Skou, S. T., Mair, F. S., Fortin, M., et al. (2022). Multimorbidity. *Nature Reviews Disease Primers*, 8, 48. <https://doi.org/10.1038/s41572-022-00376-4>
- Van den Akker, M., Buntinx, F., Metsemakers, J. F., Roos, S., & Knottnerus, J. A. (1998). Multimorbidity in general practice: Prevalence, incidence, and determinants of co-occurring chronic and recurrent diseases. *Journal of Clinical Epidemiology*, 51(5), 367-375.
- Whitty, C. J. M., MacEwen, C., Goddard, A., Alderson, D., Marshall, M., Calderwood, C., Atherton, F., McBride, M., Atherton, J., Stokes-Lampard, H., Reid, W., Powis, S., & Marx, C. (2020). Rising to the challenge of multimorbidity. *BMJ*, 368, l6964. <https://doi.org/10.1136/bmj.l6964>