Access this article online Quick Response Code:



Website: www.jehp.net

DOI:

10.4103/jehp.jehp_1039_24

¹Deputy Director (Research and Development), Off-Campus, Datta Meghe Institute of Higher Education and Research, Wardha, Maharashtra, India, 2Head of Department, Department of Education Research. School of Higher Education and Research, Datta Meghe Institute of Higher Education and Research. Wardha, Maharashtra, India, ³Department of Community Medicine, Datta Meghe Medical College, Datta Meghe Institute of Higher Education and Research. Wardha, Maharashtra, India, ⁴Head of Department of Physiology, Datta Meghe Medical College, Datta Meghe Institute of Higher Education and Research, Wanadongri, Nagpur, Maharashtra, India, ⁵Head of Department of Physiology, Jawaharlal Nehru Medical College, Datta Meghe Institute of Higher Education and Research, Sawangi (M), Wardha, Maharashtra, India

Address for correspondence: Dr. Saurabh RamBihariLal Shrivastava, MD, FAIMER, MHPE (Indonesia), M.Phil. (HPE), PGDHHM. DHRM. FCS. ACME, MAMS., Professor, Department of Community Medicine, Datta Meghe Medical College, Off-Campus Centre of Datta Meghe Institute of Higher Education and Research, Hingna Road, Wanadongri, Nagpur - 441 110, Maharashtra, India. E-mail: drshrishri2008@

> Received: 04-06-2024 Accepted: 09-08-2024 Published: 30-04-2025

gmail.com

Training medical students in global health education through framework of entrustable professional activities

Saurabh RamBihariLal Shrivastava^{1,2,3}, Shubhada Gade⁴, Alka Rawekar⁵

Abstract:

Global health education aims to improve health standards and achieve health equity by reducing health disparities across national boundaries. In the context of global health education, entrustable professional activities (EPAs) provide a clear framework for defining specific, observable activities that a student must be able to perform independently, without supervision. To equip medical students with global health-related competencies, framing EPAs becomes crucial. This task begins with identifying the core competencies essential for effective global health practice. In conclusion, EPAs are expected to play a defining role in global health education. The need of the hour is to engage all stakeholders, systematically select the EPAs that are crucial for delivering global health education, and train medical students in the desired competencies to empower them to deliver effective healthcare services.

Keywords:

Entrustable professional activities, global health, medical education

Introduction

lobal health education is an Jinterdisciplinary domain that aims to improve health standards and achieve health equity by reducing health disparities across national boundaries.[1] This vision of global health education cannot be accomplished by the health sector alone and requires support from other sectors, such as nursing, social sciences, and the environment, as the involvement of different sectors eventually determines the development of comprehensive and sustainable health interventions.[1,2] Through this process, students learn about the potential determinants responsible for these disparities, highlighting the need to train them to address these issues effectively. [1,3] From the perspective of medical education, we must train and equip medical students who will soon become integral members of the future health workforce-with the

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

 $\textbf{For reprints contact:} \ WKHLRPMedknow_reprints@wolterskluwer.com$

desired knowledge, skills, and competencies necessary to address complex health challenges in resource-constraint settings. [4,5]

Role of EPAs in Global Health Education

Entrustable professional activities (EPAs) have been widely acknowledged and used for training medical students in various subject-specific competencies worldwide. [6] In the context of health education, EPAs provide a clear framework for defining specific, observable activities that students must be able to perform independently, without supervision.[7] These EPAs help medical students acquire competencies crucial for global health practice, such as cultural competence, understanding healthcare delivery systems, ethical dilemmas and decision-making, and more.[7] As all framed EPAs reflect real-world activities, medical students gradually develop the practical skills that are indispensable and critical for global

How to cite this article: Shrivastava SR, Gade S, Rawekar A. Training medical students in global health education through framework of entrustable professional activities. J Edu Health Promot 2025;14:167.

health-related work.^[7,8] Global health-related EPAs are designed to prepare medical students to work in low-resource settings and equip them with the ability to adapt and efficiently engage in problem-solving.^[7] Some global health-related EPAs are listed in Table 1.

Upon the assessment of each EPA, the assessor provides students with constructive and actionable feedback, helping them address their weaknesses.[9-11] The provided feedback serves as a personalized learning path, allowing students to consolidate their strengths and focus on improving their areas of weakness, ensuring that all students attain the desired competencies regardless of their starting point or learning style.[11] EPAs emphasize that students become accountable for their learning, which translates into preparing them to confidently take responsibility for clinical assignments.[12] Furthermore, as EPAs related to global health often require collaboration across different sectors, students recognize the importance of interprofessional practice within the health sector, while also enhancing their teamwork and communication skills-both of which are crucial for delivering effective healthcare services.[7,13]

Global Health EPAs: Selection Criteria

The first and foremost criterion is that the selected EPA must be relevant to global health practice and designed with consideration for the workplace environment where students will deliver clinical care upon the completion of their training.^[7] At the same time, these EPAs should align with the core competencies essential for global health practice and must effectively contribute to the attainment of educational goals.^[7,14] The selected EPA

Table 1: Examples of global health-related EPAs

Global health-related EPA

Developing and implementing surveillance systems to monitor and respond to disease outbreaks in various populations

Coordinating efforts during public health emergencies, such as natural disasters and pandemics

Planning, implementing, and evaluating immunization campaigns to improve coverage in high-risk populations

Creating and delivering culturally appropriate health education programs to promote the adoption of healthy behaviors

Conducting holistic assessments to identify health needs, resources, and priorities in specific populations

Planning and executing research studies to address key global health issues, including data collection, analysis, and dissemination of findings

Leading the implementation, monitoring, and evaluation of health programs to ensure they meet their objectives

Engaging in policy advocacy and stakeholder collaboration to address social determinants of health and reduce health disparities Delivering high-quality clinical care in low-resource environments Training local healthcare providers to enhance the quality and sustainability of health services

must be feasible to implement and assess, with decisions made based on the availability of resources, teachers, and the learning environment. [14,15] Moreover, the tasks identified in the selected EPA must be observable and measurable, enabling teachers to accurately assess the EPAs and provide individualized feedback accordingly. [11,15,16] The selected EPA must also be customized to local contexts, taking into account the cultural factors and available resources. [7]

Process of Designing EPAs for Global Health

In our vision to make medical students competent in global health-related competencies, framing EPAs becomes crucial.^[7] This task begins with identifying the core competencies that are vital for effective global health practice.^[7,15] It is critical to perform a thorough needs assessment to identify specific needs and challenges that are relevant on a global scale, such as understanding epidemiology, the functioning of healthcare delivery systems, cultural factors influencing health, and resource constraints in different regions. [7,14-16] These activities, including the development of comprehensive and relevant EPAs, cannot be effectively accomplished without engaging all concerned stakeholders in the process.[17,18] This should be followed by breaking down the core competencies into specific, observable, and measurable tasks that students should be able to perform, ensuring alignment with the overall medical curriculum.[19]

For each framed EPA, it is essential to define the tasks that need to be performed, the settings in which they should be conducted, the expected level of proficiency depending on the stage of the medical student, and the resources required to complete the specific EPA.^[19] Additionally, rubrics with milestones should be developed for each level, along with the extent of supervision required, depending on the improvement in the performance of the student.^[20] Conducting a pilot run of framed EPAs with a small group of students and gathering their feedback regarding clarity, relevance, and feasibility is always beneficial; based on this feedback, the EPAs should be improved.^[21] We should also identify appropriate assessment tools that can be used to effectively measure different EPAs.^[10]

Conclusion

In conclusion, EPAs are expected to play a defining role in global health education. The need of the hour is to engage all stakeholders, systematically select EPAs that are crucial for delivering global health education, and train medical students in the desired competencies to empower them to deliver effective healthcare services.

Financial support and sponsorship Nil.

Conflicts of interest

There are no conflicts of interest.

References

- 1. Lee A, Quinn M. Global health education in U.K. universities. Glob Health J 2021;5:155-62.
- Williams JH, Des Marais EA. Global health education. Soc Work Res 2016;40:3-6.
- Mendes IAC, Ventura CAA, Queiroz AAFLN, de Sousa ÁFL. Global health education programs in the Americas: A scoping review. Ann Glob Health 2020;86:42.
- Volaric AK, Zadeh SL, Dusenbery AC, Coppock JD, Dibbern ME, Jenkins TM, et al. Global health education in pathology residency. Am J Clin Pathol 2021;156:478-90.
- Harvey M, Neff J, Knight KR, Mukherjee JS, Shamasunder S, Le PV, et al. Structural competency and global health education. Glob Public Health 2022;17:341-62.
- Ross M. Entrustable professional activities. Clin Teach 2015;12:223-5.
- Steeb DR, Brock TP, Dascanio SA, Drain PK, Squires A, Thumm M, et al. Entrustable professional activities (EPAs) for global health. Acad Med 2021;96:402-8.
- Francischetti I, Holzhausen Y, Peters H. Entrustable professional activities for junior Brazilian medical students in community medicine. BMC Med Educ 2022;22:737.
- Norcini J, Burch V. Workplace-based assessment as an educational tool: AMEE Guide No. 31. Med Teach 2007;29:855-71.
- Douthit NT, Norcini J, Mazuz K, Alkan M, Feuerstein MT, Clarfield AM, et al. Assessment of global health education: The role of multiple-choice questions. Front Public Health 2021;9:640204.
- Pelgrim EA, Kramer AW, Mokkink HG, van der Vleuten CP. The process of feedback in workplace-based assessment: Organisation, delivery, continuity. Med Educ 2012;46:604-12.

- 12. Fincke F, Prediger S, Schick K, Fürstenberg S, Spychala N, Berberat PO, *et al.* Entrustable professional activities and facets of competence in a simulated workplace-based assessment for advanced medical students. Med Teach 2020;42:1019-26.
- Ten Cate O, Pool IA. The viability of interprofessional entrustable professional activities. Adv Health Sci Educ Theory Pract 2020;25:1255-62.
- Bussell SA, Kihlberg CJ, Foderingham NM, Dunlap JA, Aliyu MH. Global health education in general preventive medicine residencies. Am J Prev Med 2015;48:593-8.
- Civitelli G, Tarsitani G, Censi V, Rinaldi A, Marceca M. Global health education for medical students in Italy. BMC Med Educ 2021;21:355.
- Christie BM, Kurnik NM, Park E, Ranganathan K, Smith AA. Rethinking global health education in plastic surgery residency. Plast Reconstr Surg Glob Open 2021;9:e3775.
- 17. Huth K, Henry D, Cribb Fabersunne C, Coleman CL, Frank B, Schumacher D, *et al*. A multistakeholder approach to the development of entrustable professional activities in complex care. Acad Pediatr 2022;22:184-9.
- Salisbury SK, Rush BR, Ilkiw JE, Matthew SM, Chaney KP, Molgaard LK, et al. Collaborative development of core entrustable professional activities for veterinary education. J Vet Med Educ 2020;47:607-18.
- Ten Cate O, Chen HC, Hoff RG, Peters H, Bok H, van der Schaaf M. Curriculum development for the workplace using entrustable professional activities (EPAs): AMEE Guide No. 99. Med Teach 2015;37:983-1002.
- 20. Shrivastava SR, Chacko TV, Bhandary S, Shrivastava PS. Development, validation and use of appropriate assessment tools for certification of entrustable professional activities in community medicine to produce a competent postgraduate: A pilot study. Indian J Public Health 2019;63:277-81.
- Felicelli C, Gama A, Chornenkyy Y, Choy B, Blanco LZ Jr, Novo JE. From principles to practice: Implementation of entrustable professional activities (EPAs) for surgical pathology residency education in a large academic hospital. Acad Pathol 2023;10:100097.