Could Entrustable Professional Activities mediate community-based teaching in care integration services?

¿Podrían las actividades profesionales confiables mediar servicios de integración docente asistencial en la comunidad?

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Abstract

Competency-based medical education (CBME) is currently the most common type of curriculum used worldwide. However, its limitations include fragmented learning and difficulties to use properly the knowledge, skills, and attitudes acquired using this educational model. Having this in mind, Entrustable Professional Activities (EPA) emerge as a tool to mediate the transfer of the competency-based curriculum into physicians' professional practice in graduate medical education. Therefore, based on a narrative review of the existing literature on EPA and the authors' experience in teaching community-based health care integration services, the aim of this paper is to reflect on the possible use of these activities in undergraduate medical education for the development of a CBME model integrated with primary health care and community medicine. The reflections presented here allow suggesting that, although it is a challenging process, incorporating EPA into undergraduate medical education is appropriate to improve the provision of primary health care to individuals, families, and communities in general.
Keywords: Primary Health Care; Community Medicine; Education, Medical; Educational Measurement; Clinical Competence (MeSH).

Resumen

En la actualidad, la educación médica basada en competencias (EMBC) es el diseño curricular más utilizado en el mundo. Sin embargo, sus limitaciones incluyen la construcción fragmentada del aprendizaje y dificultades para lograr el uso adecuado de los conocimientos, habilidades y actitudes adquiridos mediante este modelo pedagógico.

Considerando lo anterior, las actividades profesionales confiables (APROC) emergen como una herramienta para mediar la transposición del currículo basado en competencias a la práctica profesional en educación médica de posgrado. Por lo tanto, con base en una revisión narrativa de la literatura existente sobre APROC y la experiencia docente de los autores en la integración de la educación y los servicios de salud basados en la comunidad, el propósito de este estudio es reflexionar sobre el posible uso de estas actividades en la formación médica de pregrado para el desarrollo de un modelo de EMBC integrado con la atención primaria de salud y la medicina comunitaria.

Las reflexiones presentadas aquí permiten sugerir que, aunque se trate de un proceso desafiante, la adopción de las APROC en la formación de pregrado en medicina es apropiada para lograr una mejor prestación de atención primaria en salud a personas, familias y comunidades en general.
Palabras clave: Atención primaria de salud; Medicina comunitaria; Educación médica; Evaluación educacional; Competencia clínica (DeCS).

Introduction

In medical education, the transfer and application of learning into practice is a demand of a new curricular model called Competency-Based Curriculum (CBC).[1] Nevertheless, the development of that competency is complex, as its focus is mainly on the development of human bonding. This competency involves the integration of health professionals' abilities, which include several components such as knowledge, skills, values, and attitudes in a specific context, as well as the expectation of a satisfactory professional performance.[2,3] For this purpose, many authors advocate the applicability and pertinence of the use of Entrustable Professional Activities (EPAs), which are units of professional work that constitute the daily practice of clinicians.[4-10]

The use of EPAs allows knowing the student's current progress, performing formative assessments, and promoting a summative and supervised learning process, not only in a simulated scenario, but, especially, in the real world.[4-6]

EPAs provide more consistent feedback on students' performance since they involve a supervision process during their practice in a real care scenario. In this sense, teachers' perception and input are critical, given the variety of factors that permeate the health professional-patient relationship.[11-14] Since EPAs bring the learning process to the delivery of care, a relevant question arises: Can they be useful in undergraduate medical education, especially in the primary health care and community medicine fields?

Taking the above into account and based on a narrative review of the existing literature on EPAs and on the authors' experience in teaching community-based health care integration services, the aim of this study is to reflect on the possible use of EPAs in undergraduate medical education for the development of a CBME model integrated with primary health care and community medicine.

Competency-based curriculum: expectations and limitations

Competency-based medical education (CBME) emerged more than 20 years ago as a curriculum design that promotes the training of qualified physicians capable of satisfactorily meeting the demands of their patients.[2,15,16]

Professional competency has different meanings depending on the place, theoretical conception, and local policies. In Brazil, policies related to both the National Health System (NHS) and education in the health area are strongly linked and aim at developing skilled professionals for the provision of qualified healthcare assistance. Furthermore, they require constructing the curriculum in real scenarios, which allows for the transfer of cognitive, affective, ethical, psychomotor, and socioenvironmental elements, so that physicians can re-signify the care practice with responsibility and social commitment.[17-20]

In CBME, learning is promoted through performances that combine different resources and should bring the student closer to professional practice.[21] In this regard, dos Santos[22] highlights this model's capacity for practice-theory integration and disciplinary content interaction, while Epstein and Hundert, with a broader

perception, propose that professional competence is the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and the community being served.[23]

However, CBME's potential for promoting differentiated care and teamwork has not been properly demonstrated.[24] Its assessment has been fragile and knowledge construction has been fragmented.[25] On this matter, Lorelei Lingard made a detailed analysis in 2009 and described CBME as an individualistic approach, disconnected from the time-space-context, with a behavioral nature.[26]

Other authors have also criticized CBME's superficial and generic applications, citing the lack of contextualization and students' limited involvement in teamwork and healthcare production as barriers to their autonomy and responsibility acquisition.[16,27-29]

Insertion of the medical student in community medicine: a WHO demand

The World Health Organization (WHO) has long advocated medical student integration into the community as a way to improve people's quality of life and allow medical education to meet social needs. This approach is preferable for disseminating health surveillance actions to the population, especially in primary health care.[30-32] Therefore, a way to implement CBME could be teaching medical students how to provide care through the integration of services directly in the community. This multidisciplinary collaboration with local health professionals could transform primary health care by bringing an integrated approach to medical education.[31]

Some studies have demonstrated that inserting students in community health services can encourage the creation of a new health professional profile. Tamblyn *et al.*,[33] in a comparative cohort study, showed that the transition to a community-oriented problem-based learning curriculum was associated with significant improvements in preventive care and continuity of care, as well as in indicators of diagnostic performance.

A curricular construction based on practice favors the first level of care and guides students towards a comprehensive view of care, which is encouraged by WHO.[17,20,34,35] In many places, early student insertion in clinical practice is grounded on the conception of health surveillance, where promotion, prevention, recovery and rehabilitation measures are implemented to offer a better quality of life to the patient.[30,31,34-37]

Different studies have shown the potentialities of teaching and learning within a community, but that still requires the systematization of students' praxis. Considering the need for a mediating instrument that optimizes CBME implementation and more systematic activities for students in community health services, the authors propose a discussion on the use of EPAs as such a tool.

EPAs: an educational tool for curriculum effectiveness

Since 2005, EPAs have been used as an educational mediation mechanism to improve the implementation of CBME in professional practice.[4,6]

Originally, EPAs were oriented toward postgraduate medicine programs, and they have been adopted by

many medical specialties.[38-40] EPAs are associated with the translation into practice of the roles outlined for CBME in the CanMEDS Physician Competency Framework, developed by the Royal College of Physicians and Surgeons of Canada, and the roles proposed by the Association of American Medical Colleges.[41-44] Their success has led to their adoption in many medical curricula.[5,7,45,46] It should be noted that EPAs comprise various professional practices essential for daily medical work.[14,31,47]

EPAs should be systematized and described following their characteristics: 1) a title for the activity, so that it is easily identifiable; 2) specifications of its components and limitations; 3) required knowledge, skills and attitudes; 4) domains of competency; 5) conditions and implications of the entrustment decision; 6) assessment sources; 7) expected level of supervision for this EPA; and 8) time period required for a new EPA assessment. Regarding point 7, the level of supervision may vary between 1 (the student is not allowed to practice EPA) and 5 (the student is allowed to supervise others in practice of EPA); also, level 2 allows the student to practice under direct supervision, level 3 allows the student to practice under reactive supervision, and level 4 allows students to practice EPA unsupervised.[9,47]

EPAs' suitability is further justified by their proposal for the development of learning, as they require students to develop their competences when practicing in a real setting, in front of a person with a real demand for care.[6,47] This process is challenging because it requires dealing with the complexity of competence and the relationships that permeate the physicians' work.

On the other hand, the implementation of EPAs is based on two strong pillars: daily practice and permanent formative assessment, which require a close and effective supervisor-student partnership.[13,14,47] The execution of EPAs will be delegated by a supervisor to the student, if it is understood that said student is eligible to bear such responsibility.[47]

According to ten Cate and Hoff, "an essential component of training is the regular transfer of responsibilities if the situation allows for it. A supervising physician does this when she feels that the skills of the learner at that time match the complexity of the patient, and the risks in doing this are acceptable. These are called ad-hoc entrustment decisions."[12,p 386]

Thus, when monitoring an EPA, the supervisor will oversee several competences of the student, and, when carrying out a summative assessment, he or she will issue a Statement of Awarded Responsibility (STAR), which can ensure the integration of CBME with clinical practice.[4]

The supervising teacher will accompany the student and will be responsible for the entrustment decision, encouraging the student to perform the proposed task. The student, in turn, must have confidence to act on behalf of the patient. Thus, the students' achievement of trust and responsibility during the EPA implementation strengthens their autonomy and responsibility regarding their professional practice.[14,31] ten Cate further added that EPAs would be able to develop not only students' abilities, but also their practice of desirable attitudes such as integrity, reliability, and humility.[48]

The use of EPAs in primary care, public health, preventive medicine and family healthcare has proved to be appropriate for postgraduate programs, indicating a path of change towards a more holistic and multidisciplinary training, focused on people's health needs. This can be applied to undergraduate medical programs as well.[46,49-52]

EPAs for teaching service integration in undergraduate medical education

Although the transposition of EPAs, which were originally thought for use in graduate medical education (GME), into undergraduate medical education (UME) is challenging, some possibilities were proposed by Chen *et al.*,[5] in 2015. They suggested building EPAs for undergraduate courses by simplifying the EPAs specific to GME that were already in use in graduate schools and combine them with the improvement and expansion of the attribution scale. Medical education curricula should be developed in an EPAs continuum, from UME to GME. Furthermore, student expectations at each stage of their training should progressively evolve in an interactive and dynamic manner.

EPAs may be suitable for UME because they would favor the continuity and progression of the students' development, as they ensure proper student assessment, competence development and professional quality in daily practice.[5]

The interaction between UME (medical students and supervisors) and primary health care has shown excellent results in Brazil, Canada, and the United Kingdom.[18,52-54] There is ample evidence of the importance of primary care to community health and physicians' education, emphasizing the great potential that real, experienced care has for producing significant learning.[18,52-55]

Two of the authors of this article are professors in the CBME course and work with medical and nurse student groups in primary health care services. Each group consists of eight medical students, four nursing students, two teacher supervisors, and a local physician and nurse that also serve as supervisors.

Students acquire knowledge and expertise by collaborating with the primary healthcare teamwork during its routine practice and under supervision during the first and second years of medical school. They work in groups of two or three students to do the tasks under reactive supervision. This experience leads us to reflect on the capability of EPAs to organize the learning process for students, supervisors, and healthcare teamwork.[37]

Consequently, we suggest the adoption of EPAs taking into account the Brazilian education and health policies and the care integration service in the community teaching model implemented in Brazil, which has a similar organization to that of the Brazilian Unified Health System, where 1st-2nd year medical students participate in primary health care services, 3rd-4th year students, in secondary health care services, and 5th-6th year students, in tertiary and quaternary health care services.[56]

In this scenario, it is important to bear in mind the meaningful learning process arising from the integrator context that results from community-based medical education, as reported by Kelly *et al.*[57]

Finally, it is worth mentioning that two practices should be assessed: the quality of learning and the results of the service offered by students. These are important reflections, especially in countries where the public health system has the provision of comprehensive, universal, and

humanized care as its cornerstone, and where primary care is the main point of entry to health services.[17,31,32,34-36]

Conclusions

Faced with a new health professional profile to attend to people's health needs, the early insertion of medical students in the community and the expansion of healthcare to health surveillance seem to be ideal.

The adoption of EPAs can strengthen and encourage a better understanding of reality in students and can promote teamwork and offer integrated health care. Immediate feedback from the supervisor, among other aspects, is very important because it helps individuals, their families, and the community to reflect on and perceive their health needs.

EPAs can facilitate community health education so that the patient is no longer seen as a care recipient only, but as a partner in the construction of care and an active contributor to the education of health professionals.[57,58]

To conclude, the presented analysis supports the educational use of EPAs as a tool for teaching-service integration in community medicine. However, as any other tool, it must be adjusted to the reality and context of each community.[38]

Conflicts of interest

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