LETTER TO THE EDITOR

We need better medical undergraduate education in Ecuador. The case of perinatal mortality

Necesitamos una mejor educación médica de pregrado en el Ecuador. El caso de la mortalidad perinatal

Dear Editor,

Ecuador a mid-income country has more than 15 million inhabitants with one third (36%) living in rural areas and 17.6 physicians per 10,000 inhabitants, mostly working in urban areas. Obstetrical complications account for the high maternal mortality rate of 87 per 100,000 live births.

Medical undergraduate training in Ecuador is provided in the large cities by public and private universities. Students have little or no contact with rural areas until their sixth and final year of general medical education. The under-graduate medical curriculum comprises three years of instruction in pre-clinical subjects followed by two years of clinical education in teaching hospitals. The sixth year is an internship program divided in five rotation areas: clinical, surgery, emergency, gynecology and obstetrics, and pre-rural.

The recent graduates doing their compulsory rural year are called "rural doctors". Health services in rural areas are different from those in urban settings. They are very likely to provide obstetric care and to perform more procedures than their urban counterparts due to a lack of specialists in rural communities.

A recent quantitative study showed that the skills needed in rural areas were not trained in the final undergraduate years. We assessed the possible mismatch of obstetrical skills between the training offered in Ecuadorian medical schools and the tasks required for compulsory rural service. Many perinatal skills were found to be important by the rural doctors, but they were not trained during the under-graduate curriculum (episiotomy and repair, umbilical vein catheterization, speculum examination, evaluation of cervical dilation during active labor, neonatal resuscitation and the more advanced skill vacuum-assisted vaginal delivery). The simple skill episiotomy and repair was seen as important to all respondents, but during the undergraduate curriculum only 39% of rural doctors performed the task three times and 8% even only once during the internship, similar pattern is seen in the others.

A subsequent qualitative study confirms the main findings, i.e. the lack of teaching at the medical schools does not meet the needs of the rural doctors.

We do not know what share the observed high mortality rate may be due to the way the graduates were trained in the preceding medical education. But from the public health point of view innovative teaching of students is needed. The magnitude of the mismatch between training in the medical schools and medical practice in rural areas needs to be addressed. Although in 2008, fourteen universities were closed down by the government. One of the biggest reasons of the observed translation on poor training of the graduates may be that the faculty is very volatile and the teaching methods are not meeting modern standards. There is no clear profile of the recent graduate medical doctor at the national level. The need for a common, comprehensive doctor profile that addresses health needs and clinical competences in line with real settings encountered after graduation requires a continuous updating of university curriculum.

Important issues to address include: What are the skills that young doctors need in rural areas? How well are they prepared to use them? How can we best train them and monitor the quality of their clinical work? Answering these questions like this could be a powerful first step in improving medical education nationwide. In the two universities we have knowledge of, senior faculty changes vary rapidly. For instance, at one University the Deans staff changed three times over the last 5 years, leaving partly finished innovative curriculum changes. The medical schools of Ecuador deserve more and more managerial stability and a clear vision of their essential tasks which is to provide competent young doctors.

Funding

The study is part of the VLIR-UOS Project ZEIN2010PR377 “Improving and strengthening quality for Family Medicine training in Ecuador, using distant learning and capacity building” developed in collaboration between the University of Antwerp and the Universidad Técnica Particular de Loja.

http://dx.doi.org/10.1016/j.aprim.2015.11.009

Please cite this article in press as: Sánchez Del Hierro G, et al. We need better medical undergraduate education in Ecuador. The case of perinatal mortality. Aten Primaria. 2016. http://dx.doi.org/10.1016/j.aprim.2015.11.009
Conflicts of interest

The authors report no conflict of interest.

References

5. Sánchez Del Hierro G, Remmen R, Verhoeven V, Van Royen P, Hendrickx K. Are recent graduates enough prepared to perform obstetric skills in their rural and compulsory year? A study from Ecuador. BMJ Open [Internet]. 2014;4:e005759. Available from: http://bmjopen.bmj.com/cgi/content/long/4/7/e005759

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