

Trauma Care Teaching in Colombian Medical and Nursing Schools: A Training Curriculum Analysis

Dear Editor,

Trauma is a global disease representing a public health problem. Medical education focused on public health issues is a tool for prevention and sound medical care. We wanted to bring attention to this issue not just globally but also in our regional community, presenting the results of our recent research. Our study was published in the Panamerican Journal of Trauma, Critical Care and Emergency Surgery in May–August 2015;^[1] the aim was to analyze trauma care teaching status in the training curricula of medical and nursing schools in Colombia, where trauma is a significant public health problem.

We performed an observational study from primary sources of curricula from medical and nursing schools in Colombia. Fifty-two medicine and 60 nursing programs were active in Colombia. Only 13.4% of medical schools had courses related to trauma care. Specific data about use or clinical simulation for trauma teaching was not available. Only two nursing programs had a course related to trauma, both from the same university but located in different regions [Table 1].

The WHO has been developing strategies to prevent traumatic deaths and decrease associated disability. However, in the last 10 years, trauma as disease remains an important issue with a greater burden in low- and middle-income countries. Medical education and specifically training curriculum design are fundamental aspects to build a different context for injury prevention and integral trauma care. Trauma is a social and biological disease. Prevention strategies and basic and advanced clinical management need to be taught in-depth to health providers in areas of the world where this issue presents a greater burden.

Studies have shown that preventive strategies and appropriate integral care in patients with trauma are essential to reduce risks and complications.^[2] However, when the healthcare staff is not contextualized during training, it is difficult to find an appropriate discussion of preventive strategies with communities at risk.

Trauma care training has been developed with the aim of improving the quality of basic and advanced care, specifically focused on different areas according to resource availability and level of training of the health providers.^[3] Sometimes, these concepts are not discussed in-depth with students due to the lack of teacher's expertise in some educational

Table 1: Characteristics of medical and nursing programs in Colombia, according to the National Higher Education Information System through November 2013

Program	Medicine n (%)	Nursing n (%)
Number of programs	52	60
Characteristic		
Type of school		
Technological school	7 (13.5)	12 (20)
University	45 (86.5)	48 (80)
Sector		
Official	18 (34.6)	24 (40)
Private	34 (65.4)	36 (60)
Recognition by the ministry of education		
High-quality registry	21 (40.4)	22 (36.7)
Qualified registry	31 (59.6)	36 (60)
Not available	0	2 (3.3)
Duration of the program in semesters		
8	0	25 (41.7)
9	0	9 (15)
10	3 (5.8)	26 (43.3)
11	0	0
12	39 (75)	0
13	8 (15.4)	0
14	2 (3.8)	0
Mean	12.12	9.02
Location of the program by regions of Colombia		
Amazon region (8 states)	0	0
Andean region (10 states)	30 (57.6)	36 (60)
Caribbean region (7 states)	11 (21.1)	12 (20)
Insular region (3 states)	0	0
Orinoquia region (4 states)	1 (1.9)	3 (5)
Pacific region (4 states)	10 (19.2)	9 (15)

modules. When key topics in medical education are included as a small fraction of an entire module (for example, trauma in the general surgery module), the student is overloaded with different information on many other topics, and this can make it difficult to focus the learning process on key issues.^[4,5]

According to this evidence, few medical and nursing training curricula contain specific modules for teaching trauma care in Colombia. It would be important to modify training curricula to educate both physicians and nurses in the comprehensive management of this high-burden disease. On a final note, this is the first part of the project as we are advancing on a wider program, including samples of other Latin American countries.

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Conflicts of interest

There are no conflicts of interest.

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References

1. Montenegro JH, Romero AF, Solano KY, Gonzalez E, Lozano SL, Rubiano AM. Trauma teaching-learning in Colombia: An analysis of undergraduate study plans. *Panam J Trauma Crit Care Emerg Surg* 2015;4:70-6.
2. Zafarghandi MR, Modagheh MH, Roudsari BS. Preventable trauma death in Tehran: An estimate of trauma care quality in

teaching hospitals. *J Trauma* 2003;55:459-65.

3. Mock C, Kobusingye O, Joshipura M, Nguyen S, Arreola-Risa C. Strengthening trauma and critical care globally. *Curr Opin Crit Care* 2005;11:568-75.
4. Vaughn L, Baker R. Teaching in the medical setting: Balancing teaching styles, learning styles and teaching methods. *Med Teach* 2001;23:610-2.
5. Shah IM, Walters MR, McKillop JH. Acute medicine teaching in an undergraduate medical curriculum: A blended learning approach. *Emerg Med J* 2008;25:354-7.

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