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Colombian anesthesiology at a crossroad?

¿La anestesiología en Colombia ante una encrucijada?

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The S.C.A.R.E. members assembly held on March 31st, 2021, was quite revealing: its leitmotiv was the challenging work situation experienced by the colleagues across the country. The similarity with the very first assembly meeting I attended in Pasto in 1990 as a young anesthetist, invited by the tireless of doctor Jorge Osorio, was mystifying. It is rather striking to see how history repeats itself after 31 years, bringing back times that we thought were something of the past.

What happened during this time? Law 6 of 1991 which regulates the anesthesiology specialty, and Law 100 of 1993 were passed. Both laws had a huge impact on the practice of anesthesia. The former saw the light as a result of the hard work of leaders of the specialty and their unfailing lobbying in Congress. It was the first to regulate the practice of any medical specialty in this country, and a true landmark. It was then reinforced by the regulatory decree, basically a reflection of the Minimum Standards published by SCARE in 1992 (1), whose implementation was driven by doctor Manuel Galindo and which were soon adopted by the Government in its licensure decrees. This brought about the transformation of the specialty, as it raised the standards of the practitioners and limited the practice only to specialists. So quick was implementation that within 4 years non-specialists had disappeared from the scene. This, added to improvements in oversight systems, led to a drop in lawsuits related to this medical specialty as an indirect indicator of the enhanced quality of anesthesia practice in the country (2).

In turn, Law 100 revolutionized nationwide health coverage, substantially increasing resources for the sector and driving the demand for surgical services previously beyond the reach of many Colombians. This naturally increased the demand for anesthetists, who also benefitted from a system in which all citizens now had a "payer". Moreover, the wrongly called "charitable" services - together with the human dramas of people having to resort to raffles and other means to collect the money needed for a procedure - simply disappeared. This happened in parallel with a weakening of the surgeon's standing as the "captain of the ship," as health management organizations or their equivalents took over as "owners" of the patients.

The combination of these circumstances born from Laws 6 and 100 led to what was, in my opinion, the blossoming of the specialty as reflected in the creation of FEPASDE and the feverish academic activity within S.C.A.R.E., and in graduate programs and anesthesia departments. The specialty was promoted to such an extent that graduating physicians wanted to become anesthetists, contributing to a thriving specialty.

However, victims of our own success, the growing prestige of the specialty led to a big demand for training places, and physicians who could not enroll in national programs left for other countries and, upon graduating, came back to find a place in the labor market. This has resulted in a crisis for our specialty because the arrival in the market of more than twice as many anesthetists (the numbers trained abroad are almost equal to those trained in the country) has meant a 46% growth in the labor force over a period of only 7 years (counting the retirement figure of 6%), reaching a figure of more than 4000 anesthetists in the country.

In the face of a 46% increase in labor supply, the only way to maintain the status quo would be through higher demand for services; however, given that the demand for essential surgeries is almost fully met (3), the surplus should focus on meeting non-essential needs as is the case in more affluent economies, including, for example, providing sedation for procedures where it is not usually provided, cosmetic interventions, and new activities such as perioperative medicine. However, during the past 7 years, the growth of the GDP at 17% was much less than was required, creating a gap of almost 30%. There is an inevitable supply surplus

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as compared to the demand for services. The situation may worsen in view of the potential economic impact of the pandemic in 2020, creating an even greater gap.

In our economic system, the only expected consequence of a growing supply of services with no parallel increase in demand is a fall in the price of the service. This creates great pressure on the labor market in which anesthetists, affected by an increasingly lower compensation for their work, are compelled to find work wherever they can, filling in a greater number of hours. Using the trend towards a larger number of lawsuits* as a gross gauge of "wellbeing" among the members of our speciality, we may infer the onset of symptoms of weakening of our professional group.

If an analysis is done with the absolute number of anesthetists, 8/100,000, more would be needed, at least in theory (4); however, in all countries with higher numbers, the per capita income is much higher and their economies can afford the costs of non-essential medical care. In Colombia, the need for essential surgeries is apparently met according to the Lancet Commission (5), with adequate essential surgery rates reported for the country.

WHAT TO DO IN THE FACE OF THIS DAUNTING REALITY?

As with any market initiative, and as I stated back in 1990 when I was just a fledgeling delegate, a product will only cost more if it is of higher quality or scarce. Apple devices are a case in point, commanding a substantially higher price because of their design and feature innovations, although they serve the same basic purpose as other brands; higher quality commands a price premium. As for scarcity, oil prices, against a background of marginal quality differences, are defined by the supply/demand ratio. In the United States in the summer, the use of vehicle increases, leading to higher demands and higher prices; or if a ship runs ashore in the Suez canal restricting oil supplies, prices will rise temporarily.

As practitioners of a profession, our main duty is to society, hence the priority of quality of care. This is a major problem because of the uncertain nature of quality measures in the practice of anesthesia. An example of the difficulty in assessing the quality of our practice is a recent study that examined maintenance of mean arterial pressure above 65 mm, a "quality" parameter that could be expected to be of benefit, and showed it might not have an impact on the majority of patients (6).

The quality of the practice of anesthesia that actually translates into objective outcome benefits will probably be only determined within the context of multidisciplinary teams, where it is very difficult to determine the impact of an isolated factor. However, there are a few simple measurements that could be useful, including nausea and vomiting, unplanned hospital or ICU admissions, failed blocks, post-puncture headache, operating room turnaround time and efficiency. These are measurements than can help demonstrate better quality care reflected in greater patient comfort and even cost reductions from unplanned hospital or ICU admissions, or operating room performance with expedited care, which is also a quality parameter.

Numbers, as the other determinant, are also a complex problem. The first thing to consider is the quality of the training of the colleagues who enter the labor market. How can the adequacy of their training be determined? Several graduate programs have significant weaknesses in their training offering because of minimal exposure to neonatal surgery, thoracic surgery, craniotomies, peripheral nerve blocks, complex patients, to name a few examples.

An added difficulty regarding this question is determining the profile of the anesthetist for Colombia: Is an anesthetist capable of managing selective ventilation or esophageal atresia needed in Sibundoy, Putumayo? Or can an anesthetist without those competencies work in a level III hospital in a big city? If the answer to the former is yes and the answer to the latter is no, then how to discriminate between titles for the two types of sites? A dilemma would also ensue if graduate programs were to train basic and advanced anesthetists.

But if the answers to these two questions are different and all trained anesthetists are to be capable of doing any job in a hospital with no highly specialized cases, as is the case with the vast majority of our hospitals, then those of us who are in charge of training have the social responsibility of making sure that all the graduating anesthetists fit that general profile for Colombia.

It follows then that graduate programs should determine the minimum competencies required by their trainees. Recently, as a result of a meeting of anesthesia graduate program directors, S.C.A.R.E. published a document describing the rotations considered essential in this country (7). However, this works in theory, because having a rotation does not necessarily guarantee that it will achieve what it is meant to achieve, that is, competency in the area, because our hospitals rarely have sufficient subspecialized cases to guarantee exposure to representative cases. That being the case, many graduating anesthetists have never had to administer anesthesia for a cerebral or aortic aneurysm, or for an omphalocele; and potentially too, there may be a not negligible number of anesthetists with inadequate experience in very common settings such obstetric analgesia, pain management or sedation in patients taken to MRI or dental procedures.

For this reason, more than rotations, it is critical to define the basic specific competencies. This requires documenting the necessary case volumes for the country and doing it as soon as possible in order to ascertain the national profile.

Once this is done, the recognition and validation process can be intervened. If Colombian graduate programs fit the profile, anesthetists trained abroad should

*Gómez LM. Incidence of anesthesiologists cases FEPASDE (Personal communication), 2019

be subjected to the same standard. This kind of approach may be a responsible solution for society and for the specialty: ensuring that national and international trainees provide services with the minimum acceptable quality for the country, and gradually raising the bar. This would mean that some graduate programs might need restructuring, reducing the number of places or merging with others; and also, that the possibility of licensing physicians with lower training level than required in the country should be restricted. This would be a favorable scenario for our fellow citizens, for anesthetists (improved supply/demand ratio) and for the specialty (enhanced academic level in the country).

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