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Editorial

Fostering interest in surgery in medical students: The experience of the Gimbernat Surgical Association[☆]



Fomentar en los estudiantes de medicina el interés por la cirugía: la experiencia de la Asociación Quirúrgica Gimbernat

Men and women act as they think
Eric Carlton (*War and Ideology*, 1990)

It is now ten years since my short stay in the Department of Surgery at the University of Birmingham, which was then headed by Professor Derek Alderson. It was during that time that I accepted his kind invitation to meet with the steering committee of the Birmingham Surgical Society. I was unaware then of everything behind this type of student association. During that meeting with the students, not only suturing and other surgical skills workshops were planned, but also lectures on surgical anatomy and other topics that could be relevant in fostering the students' interest in surgery and its specialties. After that meeting, I learned of the existence of other student surgical societies in the UK and how they operated.¹ I was convinced of the need to start a similar society in our medical school.

In October 2011, together with a group of enthusiastic students, the Asociación Quirúrgica Gimbernat (AQG) was founded as a not-for-profit, student-led organisation, whose fundamental aims are to foster an interest in surgery and inspire future surgeons, increase extracurricular learning in surgery, provide critical information about surgery, establish contacts with other student surgical societies, and enrich the curriculum in its anatomical, clinical and humanistic aspects.

Since its foundation, the continued dedication of the students and the 7 boards of directors who have led the association, with my support and that of the General and Digestive Surgery Service of the Hospital del Mar, has made it possible not only to consolidate, but to improve this great

project, year on year, with new initiatives. Every academic year, around 80 students from all academic years of the joint degree in Medicine of the Universitat Pompeu Fabra/Universitat Autònoma de Barcelona enjoy the activities of the AQG. At the beginning of each academic year, the AQG Steering Committee presents its activities to students starting their studies to encourage them to join and actively participate in the association. At its inception a blog was created and, soon after, a website in English (www.aqgimbernat.com) which includes all information relating to the AQG. Social networks have been very useful in disseminating the association's activities among its members and in other academic fields.

The knotting and suturing workshops are among the activities that the students value most highly, which is consistent with the experience published by other surgical societies.^{2,3} Each year, about 40 students in the first 3 years complete a 2 h "knotting and suturing workshop" given by residents and members of the surgical department. This interesting interaction of the students with the residents is often very stimulating and can initiate and strengthen their interest in surgery.⁴ After completing these workshops, students have the opportunity to attend minor surgery operating theatres throughout the year and participate as assistants.

In the last 2 years, 2 symposia (SCALPEL Symposium) have been held with remarkable success with the participation of all AQG students and some students from other medical schools, combining motivating lectures on surgery, with a wide range of skills workshops (knotting and suturing, pelvitrainer, cardiac surgery, arthroscopy, simulation of the care of a

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polytrauma patient, etc.). The organisation of these 2 symposia undoubtedly fostered the students' leadership skills and highlighted the importance of teamwork.

In parallel to the skills workshops, there have been engaging lectures on surgical specialties, surgical anatomy, academic surgery and on how to plan future surgical training in foreign centres, taking advantage of the previous experiences of surgeons opting for this challenge. Periodically, lectures have been given on the important participation of women in the surgical profession, overcoming the difficulties they have encountered in the past and breaking down old stereotypes.⁵ The aim of all these lectures has been to arouse students' curiosity about surgery and to provide them with models of male and female surgeons whose clinical, scientific, and academic careers make the speciality of surgery appealing.⁴

Over the years, more than 30 AQG students have had the opportunity to spend short stays (summer clerkships) or Erasmus placements in prestigious surgical departments in the United Kingdom, Ireland, and Italy, making full use of the close relationship of our surgical department with these centres. These stays, sometimes combined with a few weeks of research, have been decisive, in some cases, in consolidating the students' prior interest in a surgical speciality. Moreover, because of the relationship established by the AQG with other surgical societies, students who are members of these associations (King's College London, Erasmus Medical Centre Rotterdam) have enjoyed fruitful stays in our surgical department.

It should be noted that the AQG, in its commitment involving students early in research, has collaborated in recent years with EuroSurg, a network of medical students and surgeons, whose mission is to conduct European multicentre studies, in which our students have participated.⁶

The introduction of the medical humanities was a priority from the outset among the activities of the AQG to promote in students an interest in all that is human in the doctor-patient relationship, and in medicine which becoming increasingly technological. A vision of surgery through literature, poetry, philosophy, cinema, or painting could help to raise students' awareness of the more human aspects of our profession.⁷ We were privileged to have the philosopher Emilio Lledó ("A philosophy of the body"), the philosopher Rafael Argullol ("The wound as a philosophical and literary metaphor") and the urologist Ricardo Álvarez Vijande ("A journey through surgery through its old texts and instruments") among our speakers.

A survey conducted in 2016 among AQG members and presented at the XXXI National Congress of the Spanish Association of Surgeons identified that 66% of the students considered that being part of the AQG had been very important in their academic training and that it had guided them in their decision later to opt for a medical or surgical specialty. The activities most highly rated by the students were the workshops on knotting and suturing (99%), asepsis and antisepsis (97%), lectures on surgical specialties (93%), assisting in minor surgery operating theatres (90%), and lectures on medical humanities (80%).

In recent years, studies in the United States, Australia, and the United Kingdom have shown that medical students are

less interested in surgery and its specialties.^{8,9} Similar studies are not available in Spain, but an analysis of the data from the last MIR (resident medical intern) call reveals, for example, that only 16.2% of the general and digestive surgery places were allocated among the first 1,600 positions.¹⁰ Factors that could explain this trend are the significant reduction in students' exposure to surgery in faculties' curricula, the lack of critical information about surgery and the lack of adequate interaction of students with mentors and residents to foster their interest in surgery, certain persistent stereotypes associated with surgeons and, finally, aspects related to the recognised demands of the profession, during and after the training period.¹¹⁻¹³

Increasing the early exposure of students to surgery in the undergraduate medical curriculum and encouraging the creation of student surgical societies could be, as has already been demonstrated, an effective strategy to reverse this situation.^{2,14,15} A Columbia University study described that entry rates into general surgery residency programmes tripled after the creation of groups of students with an interest in and early exposure to surgery.¹⁵

The Royal College of Surgeons of England has been supporting more than 30 student surgical societies in England for many years and seeks to mentor students who wish to set up a surgical society in their own medical school.¹ They also created the Future Surgeons Forum to improve the connection between medical students, surgical residents, and the Royal College itself. The primary objective of this forum, which brings together annually all the representatives of the surgical societies, is to promote surgery as a specialty of choice among medical students.

In our setting, with the experience already accumulated by the AQG and the experience of other surgical societies consolidated in other countries,^{2,3,16} we believe that now could be the appropriate time to set up similar projects in many of our medical schools, and it would be useful if they could count on the support of the Spanish Association of Surgeons.

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