PRESIDENTIAL ADDRESS

ESTS Presidential Address

Books, songs and thoracic surgery

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Keywords: Thoracic Surgery • Medical publication • Clinical research • Big data

Mr President-Elect, Council Members, distinguished representatives of Sister Societies, ladies and gentlemen.

For those of you attending this meeting every year, the Presidential address is probably considered the easiest talk along the congress: no questions or discussants are allowed at the end!

But for me, coming up to the podium today, feeling enormously honoured and still not believing that I am the President of the European Society of Thoracic Surgeons (ESTS), this is really a hard task, believe me. I am used to 10 min presentations on highly specialised topics, and now I am requested to speak half an hour on whatever I want...

When I started thinking on how to fix my speech, a Woody Allen sentence came to my mind: ‘The trick is to start at the ending... Get a good strong ending and then write backwards’ [1].

In my case I had crystal clear in my mind what the ending would be and had a curious title. I just had to put something in between.

I should have been a music player. In fact, Gonzalo Soriano, a famous Spanish piano player was my favourite cousin and my Godfather (Fig. 1). As a child, he took me many times to big theatres where he was performing, sometimes surrounded by a big orchestra, sometimes alone. I admired him while he was playing in front of a multitude. As a consequence, nice melodies and good songs have been in my mind all my life, occasionally inspiring my decisions.

When I was 7, I wanted to be a knight. At school, we were obliged to read Don Quixote [2] out loud, from our chairs. I started to dream in great adventures, like Don Quixote fighting the windmills—ferocious dragons inside of his sick mind—but soon I identified the barber—one of the characters in the book—as my favourite. The barber was a quiet man trying to cure Don Quixote from his mental sickness by burning all his chivalry books with the help of the priest and some of Don Quixote’s relatives. As it is well known, in medieval Europe barbers had the role of the modern surgeons. That was my first clumsy approximation to the medical world. Regarding music, I was not very much attracted by the classics at that time. I spent my time rocking and twisting. No exciting lyrics to pay attention to.

Soon I forgot chivalry stories when, in my early teens, a nice novel entitled The Citadel [3] was given to me by my old aunts. I didn’t know at that time that the book was a former bestseller, both in Europe and North America, and that its rerelease in the late 40s served to increase people’s expectation before the launch of the National Health Service in Scotland [4].

In the novel, a young idealistic Scott, Andrew Manson, after graduating in Medicine comes to South Wales as a rural family physician. His qualities and commitment to patients soon lead him to establish a wealthy high-class practice in London. A few years later, he sells all his estate and comes back to rural practice to spend his time in what he considers to be the real Medicine.

After reading that fantastic novel I decided that I had to become a family physician.

Dr Manson represented all I appreciated in a doctor: he was knowledgeable, skilled, responsible, innovative and empathic. At that time, mid-60s, modern music was full of strong social and idealistic messages. Those were changing times; just remember the impact of songs like Dylan’s ‘The times they are a-changin’, The Beatles’ ‘She’s leaving home’ or the sweet Elvis Presley voice singing ‘If I can dream’.

Not many years later, during a rotation as intern in cardiothoracic surgery, I had the privilege of working under the supervision of Prof. Carlos MG Duran (Fig. 2). I was fortunate enough to work with him for two years and I was caught by his commitment to patients, superb surgical skills, and scientific approach to surgery. Thus, I changed my mind and decided to become a surgeon. As in the lyrics of the famous Hotel California by the Eagles: ‘I could check-out any time I liked, but I could never leave... surgery’. When I conveyed to Dr Duran my idea of becoming a thoracic surgeon he answered: ‘You’d better be a good doctor first. Surgeons need to have a deep knowledge of cardio-pulmonary physiology, good clinical skills and sound habits for clinical reasoning and decision-making. Only after that you’ll be ready to start your training in surgery’. Since then I have always tried to be just a reasonably good doctor.

CLINICAL SKILLS

A few months ago, a 63-year old female patient was referred to our Department. She was suffering progressive visual impairment. Before referring to us, a huge mass was found at brain MRI compressing the optic chiasm. Neuro-rhinosurgical approach for biopsy...
revealed a metastasis of chondrosarcoma. Combined computed tomography (CT) and fluorodeoxyglucose-positron emission tomography (FDG-PET) scan showed no ‘hot’ spots but a tumour was found in her left chest wall (Fig. 3A). A young fellow in thoracic surgery discovered that the patient was complaining for months of a slowly growing lump in her chest (Fig. 3B). No physician paid attention to it and attributed her chest symptoms to some non-adverted trauma. Once at the hospital, not one single doctor proceeded to complete her medical interview and physical exam. They just ordered image tests, one after the other. The patient underwent successful surgery for both primary and metastatic tumours.

This case illustrates how, sometimes, youngest physicians and surgeons are not correctly trained in traditional clinical practices while more sophisticated technology is praised by teachers. Both, traditional skills and up-to-date technology are complementary. We should teach youngsters the value of listening to the patient and carefully exploring him or her before any other clinical decisions are taken.

In my case, passionately reading Dr Manson’s adventures in fiction and Dr Duran’s advice made me appreciate being trained and helping others to learn good basic clinical skills before starting their surgical training.

PUBLISHING CLINICAL RESEARCH

The first notice I took in my life about medical publishing came also from The Citadel. As a G.P. in fiction, Dr Manson published a successful paper describing macroscopic changes in the miners’ lungs caused by dust inhalation at work. Many years later, serving as Associate Editor for the European Journal of Cardio-Thoracic Surgery, I witnessed the permanent efforts of my colleagues for improving medical knowledge and patient’s outcomes by reporting the results of their clinical investigation. During 3 years, I edited almost 1600 manuscripts and had the opportunity of learning from authors and reviewers. Thanks to the hard work of hundreds of committed doctors, we can today treat thousands of patients, offering extraordinary results to them in terms of survival and palliation, not foreseen a few decades ago.

In the thirties and forties, most of the reported studies consisted of the descriptions of individual or single-institution experiences. Sentences like ‘using this procedure I’ve had excellent results’ or ‘this technique is usually well tolerated’ were frequently read in medical reports at that time. No need for demonstration. The science of clinical epidemiology was still not developed enough as to permit comparing series of cases and transforming new ideas into standard surgical practice. The open-minded character of our predecessors has changed the medical world. Maybe James Hetfield, the singer of the metal band Metallica, was inspired by surgeons when he wrote these lyrics: ‘every day for us something new, open mind for a different view, and nothing else matters’.

Today, being up-to-date in thoracic surgery is not easy. Dozens of interesting originals are published every month and we have to be very selective, finding the time to read the most relevant for our practice. Due to the increasing numbers of papers we have every day to deal with, bringing back to young investigators the advice of a former Nobel Price winner could make sense [5]. In a book first published in 1897, Santiago Ramón y Cajal—largely responsible for the modern conception of the brain—wrote about the requirements for a good scientific paper. The first one was: ‘Have something to say’. In my daily routine I always try to help young fellows to fix their first presentations and manuscripts asking them: what is the main message of your talk or manuscript? If you can’t summarize your message in 140 characters—as to be published on Twitter—you have to rework.

PATIENT-CENTRED SURGICAL PRACTICE, NOT ONLY HIGH TECHNOLOGY

I used to say that in my practice, the technology helping to get the best outcomes costs only €40. In 2003, we redesigned the peri-operative pathways in our settings to promote quicker patient
recovery from lung resection. Not too long after, we were able to measure a very relevant decrease in surgical risk not related to the surgical approach [6]. Besides other measures, patients are currently wearing a small and non-expensive pedometer hanging on their waist. This simple device encourages them to exercise after the procedure, competing to each other to see who’s the leading one in postoperative exercise.

What I learned from this is that technology matters indeed, but careful design of patient care pathways cannot be neglected. Today we are moving to patient-centred care. Patient values should guide all clinical decisions and we have to be ready to detect elements contributing to misinform health care stakeholders.

Misinformation starts with biased funding research and continues with incomplete reporting and misunderstanding of medical statistics [7]. Many years ago a curious book entitled ‘How to lie with statistics’ [8] illustrated how wrong interpretations of statistics may lead to incorrect conclusions in every activity in life. More recently, the book from Tyler Vigen [9] can be recommended as a humorous example on how the lack of any hypothesis can finish by finding statistically significant correlations that don’t make any sense.

Something similar could happen if we forget patient concerns and just pay attention to making fancy technology available in our departments. Both as an editor and a reader I could detect many times in the past how authors are trying to demonstrate, using complicated or non-required statistical methodology, irrelevant advantages or non-existing correlations between expensive techniques and favourable outcomes.

I’m not trying to despise high technology; in fact, as stated below, sophisticated tools will help us in the future to prevent and treat millions of cases. But I think that emphasizing the value of patient-centred care over relying on low-efficient technology is our responsibility.

BIG DATA TO SAVE THE WORLD AND THE MYTH OF THE UNICORN

Our healthcare systems are still rooted in the previous century were hospitals were at the centre of the health care universe [10]. The scenario has changed by an ageing population with multiple chronic diseases. On the other hand, modern wearable technologies allow us to collect an incredible amount of physiological data. Hopefully not a long time ahead, scientists will be able to develop predictive analytic solutions for accurately predicting the trajectory of a patient and intervening just on time to set him on the proper course. Undoubtedly, the exploitation of big data will modify surgical practice. Better case selection, better pathways and more accurate decisions will replace or modify the way we are using individual expertise today.

The conviction that big data will be the future in every industry, including health care, has opened the doors for the search of the so-called data scientists. In our milieu, an expert surgeon combining knowledge on traditional research and software, plus education in computer science, mathematics and statistics and adequately trained in machine learning, would be most desirable in big institutions. Unfortunately, or maybe fortunately, this kind of a surgeon should still be considered as a myth or, as frequently called, a Unicorn.

For some people, incorporating such a kind of mythical creature to medical teams will help to discover magical data correlations. A view closer to reality is that only if we are able to construct big questions (hypothesis) based on daily clinical observation, and cooperate inside of integrated teams of scientists, hidden correlations between data will come to light.

WITH A LITTLE HELP FROM MY FRIENDS

Before finishing, I’d like to thank all my friends for their support. It’s because of them that I am your President today, not because of my merits. Gaetano Rocco and Dirk Van Raemdonck were the first inviting me to being part of the ESTS. Later on, Gaetano, Alex Brunelli and myself started a fruitful cooperation leading to a nice scientific production and friendship for life. My progression in the ESTS was due to them and also to Richard Berrisford, who invited me to become a member of the Database Committee, Walter Weder and Laureano Molins, who proposed me as a councillor, and Pascal Thomas, who was my predecessor and mentor as Editor of the Society.

Both my work and continuous trips for the Society during the last years have been made possible thanks to the support of my colleagues and friends Marcelo F. Jiménez, Nuria Novoa, Esther del Barrio and the whole Thoracic Surgery team at Salamanca University Hospital. I’d like to thank also my sons and daughters
and their wives and husbands: Gonzalo and Laura, Maria and Javier, Isabel, Paloma and Salvador and Miguel. They are the reason why I've been working that hard. Finally, all thankfulness to Isabel, my beloved wife. In the words of John Lennon: 'I can hardly express my inner feelings and thankfulness. After all, I'm forever in your debt'.

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