

# The evolution of intensive care medicine: a personal journey

## *Oration on the award of the College of Intensive Care Medicine Medal*

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Mr President, distinguished guests, Fellows, new graduands, ladies and gentlemen. While I was listening uncomfortably to your erudite but over-flattering introduction, I was reminded of Winston Churchill when he said that, in the course of his life, he often had to eat his words. Like that great man, I must confess that I have always found it to be a wholesome diet. I am truly humbled to receive the College Medal, at this great meeting, at this magnificent celebration, in this beautiful emerald city in this amazing country.

By way of disclosure, I was born in South Africa of English, Danish, German and Dutch heritage. I am Australian by choice.

Two thousand years ago, Pliny the Elder said, “ex Africa semper aliquid novi”, which translates as “from Africa there is always something new”.

Beginning my intensive care career in Johannesburg in 1980 during the height of the apartheid government was indeed a novel, albeit harrowing, experience. Every aspect of our lives was governed by the colour of one’s skin. Brutally enforced segregation meant that people were managed in white and non-white health systems. As a white male, I was the recipient of incredible privilege and opportunity. My African co-citizens were not. During my clinical training, I worked mainly in the so-called non-white hospitals. What became blindingly clear was how this grotesque system impacted on the health, structure and fabric of the majority of the population.

Despite the dreadful inequity, I came to learn about the African quality of *ubuntu*. Archbishop Desmond Tutu defined *ubuntu* as “I am what I am because of who we all are.” That there is a one-ness to humanity. That we achieve ourselves by sharing ourselves and caring for those around us.

Our 10-bed intensive care unit served a population of well over a million people. We had to apply devastating triage criteria to restrict the admission of patients. People were denied access if they were too old, that is, if they were older than 60 years; if they had malignant or neurological disease; if they had lifestyle-related diseases from alcohol or tobacco; or if we just simply didn’t have a bed. We had to refuse admission for up to 50 patients a day for people who we couldn’t admit; people who we could have saved,

who usually died as a consequence of not being admitted. Those who got into our ICU were mainly young people with community-acquired infections and non-cranial trauma. Most survived despite rudimentary and rough technology, such as the Manley ventilator; before infusion pumps, oximetry or continuous dialysis. Anuric renal failure was a death sentence. Patients survived through the dedication of the medical team working hand in glove with the nurses, desperately trying to save patients who would die without us.

It was a terrifying, humbling, exhilarating, frustrating, yet rewarding experience, no matter how old or experienced you were. Sometimes patients died when we couldn’t understand why. In 1982, I watched one of my mentors wring his hands in sheer frustration as tears poured down his face, when yet another young healthy person with pneumonia rapidly died from fulminating multiple organ failure, despite everything we could do. These patients presented with severe leucopenia and this seemed to be related to the high mortality rate. Later of course, we realised that we were seeing the first wave of the pandemic as HIV spread vertically through the African community. And inevitably, HIV became yet another criterion to exclude patients from admission to the ICU.

At that time, the average duration for an intensive care physician’s career was 10 years. Burn-out was the norm; it was a career for robust young men. You had to make sure you had a second option career, and women need not apply.

After I spent the next 4 years in and out of the military during the evolving civil unrest, I sought to spread my wings. I wanted to become the best intensive care physician I could be, in a society where equality was the norm. One my most influential mentors, Chris Schoonbee, who knew Malcolm Fisher and Bob Wright, said to me, “Johnno, go to Aussie. They play crap rugby, but they lead the world in intensive care medicine.” So I did.

On landing in Sydney in 1986, it was hard to describe the feeling at the dawn of my new life. My feelings are best summarised by what Nelson Mandela said when he came here for the first time following his release from prison some years later (in no way do I compare myself to Madiba). He said, “Australia. What a place. You can smell the peace. You can taste the freedom”.

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The main differences that struck me were not technological — after all, we had the latest technology in the white hospitals. They were the human factors. ICUs had around 10 to 12 beds, four to five consultants, four to five registrars and a team of excellent nurses, managing around 750 to 1000 patients per year. The ICUs were closed, the teams were tight, there was continuity and there was a focus on teaching and education. Learn something from each patient; first do no harm; understand the underlying disease; reverse the acute problem. The case mix was older than the mix I was used to, but futility did not seem to dominate and outcomes were good.

There was a career path, through the faculties of colleges of surgeons, anaesthetists and physicians. We had our own Society — the Australian and New Zealand Intensive Care Society (ANZICS).

We worked bloody hard, we played bloody hard. We made a lot of mistakes, often fuelled by unchecked enthusiasm. Within this muscular culture, paternalism was the norm; it was heavily dominated by men. There were fewer hospital managers (most were incompetent), and generally they left us alone.

We embraced emerging technology, played with numbers, and were seduced by industry to use expensive drugs such as dobutamine and toys such as Swan-Ganz catheters. We did little research. The drivers that changed practice were mainly technological: infusion pumps and syringe drivers; softer, mechanical ventilators; non-invasive ventilators; the miracle of continuous renal replacement therapy. We became the custodians of and experts in treating acute renal failure. Thousands of patients with acute renal failure survived who otherwise would have died.

But the real impact and success of implementing these technological advances was very much due to the remarkable and under-recognised capacity and expertise of our nurses, who adopted these technological advances into everyday clinical practice. The healing hands: our most important asset and a constant source of compassion and kindness, as it remains today.

As the new century dawned, the game changed, with the expansion of the specialty beyond the walls of the ICU. We developed, consolidated and expanded our academic profile and reputation. The ANZICS Clinical Trials Group is a testament to this reputation, enhanced and facilitated by working in the unique Australian and New Zealand healthcare systems. Every person has access to an ICU if they need it, regardless of income, class or culture, and they are treated by physicians and nurses trained in one system, focused on treating the patient, and not driven by money or the need to publish to advance one's career.

What we did over the past 25 years was to create new knowledge that provided the answers to clinically relevant

questions where there was clinical uncertainty. That research produced results that changed clinical practice both nationally and internationally and saved thousands of lives and millions of dollars. We developed a culture of critical thinking; of being sceptical of magic bullets. We learnt that less is better than more, we learnt to avoid harmful and toxic treatments, and we got better outcomes. This journey is the epitome of excellence. It has been a singular honour to be a small part of this journey with some of my most respected colleagues, many of whom have become lifelong friends.

The College of Intensive Care Medicine shines as another beacon of our success. It is built on the shoulders of many dedicated, selfless, people who have given enormous amounts of time and energy to build it from disparate beginnings. The establishment of the College in 2010 epitomised our maturation as a defined specialty. This is one of the highlights of my career. The educational, training and advocacy role of the College is unparalleled anywhere else in the world. The College Annual Scientific Meeting (ASM) has become the premier ICU meeting in Australia and New Zealand, and one of the best in the world, where we celebrate our educational and research heritage with outstanding local speakers, old and young. Our ASM is where we joyously welcome our new graduands to Fellowship in front of your families, mentors and friends. So, to our new graduands, make sure you recognise the contribution of the foundation Fellows, your mentors and teachers, and make with your own contribution.

But recognise that there are considerable challenges ahead.

First, there is an ethical and societal imperative to address the gender gap in our specialty. Despite its masculine culture, intensive care medicine is weaker for this lack of diversity, because there is an urgent need to make the specialty and workforce more humane. The contribution of women in our specialty is under-recognised, despite the fact that the majority of people looking after critically ill patients at the coalface are women. I stand here and recognise the exceptional contribution that women intensive care physicians have made to all aspects of intensive care medicine despite the additional barriers to career progression that men do not experience. There are truly exceptional women who have profoundly influenced my own career — Felicity Hawker, Robyn Norton, Deborah Cook and Kathryn Maitland. And I am delighted to see Priya Nair and Penny Stewart's election to the College Board.

Second, we have become the custodians of hospital medicine. Make no mistake — every patient referred to us becomes our responsibility. This has resulted in a seismic shift in how ICUs are organised, staffed and run. ICUs have effectively become acute care hotels, and acute care

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palliative care units. ICUs with over 40 beds, 20 consultants and brigades of registrars are becoming the standard in the large cities. Expanding teams rotating in 8-hour shifts with rolling handover have unparalleled access to technology: mechanical ventilation, dialysis and ECMO. So, the ICU has become a place where the patient is lost in a sea of point-of-care numbers and echo reports often driven by cross-referrals or clinical practice guidelines that result in overinvestigation and overtreatment. We are increasingly forgetting the imperatives — to understand the natural history of the presenting illness and where the patient fits into the disease trajectory; to clinically assess whether the treatment is actually effective; to produce a functional survivor who does not carry an increased burden of disease; and to recognise that, in many instances, it is in the best interests of the patient to be allowed to die — peacefully, with dignity. This is the art of medicine, founded on sound knowledge and experience.

Third, healthcare systems have become deeply de-personalised. They have become asphyxiatingly bureaucratic, driven not by meeting clinical needs focused on patients, but by meeting the bottom line. Unit managers see the workforce as a series of full-time equivalents, regardless of age, experience or diversity of talents. There is lip service paid to research and education within hospital structures. Excellence has been stifled by enforcing compliance to mediocre benchmarks that are primarily designed to protect the system, not the patient. There is an entrenched culture of workplace bullying and harassment, with dysfunctional relationships between colleagues resulting in mental illness, stress, burnout, marital breakup and suicide.

But, despite these challenges, there is much to be positive about.

We are charged with the extraordinary privilege of caring for and treating the sickest and most vulnerable people in our hospitals. This is the toughest job in medicine. We have the best and strongest foundations of clinical excellence, research and education anywhere, in the best two countries in the world. Look around you tonight to affirm that.

The key to addressing these challenges is to restore and nurture the most important human qualities encapsulated in the College motto, *Scientia sapientia cura* — Caring with knowledge and wisdom.

The key is to foster the ultimate human quality: kindness.

Be kind to your patient, do what is best for her or him. Take time to understand the patient's journey. Focus on the humanity, not the technology. Do not add to their burden or that of their families.

Be kind to your colleagues. Listen to them, support them, encourage them, be aware of their stress and do not regard this as weakness. Do not add to it through selfish behaviour. Speak out against bullying and harassment.

Be kind to your trainees. It is a privilege to be in a position of such influence in another person's life. Teach something on every case. Listen to them and learn from them; be humble.

Be kind to the nurses. They are the healing hands, they make all the difference. Complement their kindness and compassion with your own. Be inclusive.

Be kind to your family. The burden they carry supporting you throughout your career is immense and permanent. I speak from personal experience and draw inspiration from my daughters seated here tonight — my proudest achievement.

Be kind to yourself. Strive for excellence in every aspect of your life whether it is personal or professional. Contribute to humanity; leave a footprint. Develop and foster interests outside of medicine to achieve balance in your life, this will make you a better physician. Aristotle said:

Excellence is an art won by training and habituation. We do not act rightly because we have virtue, but rather because we have acted rightly. We are what we repeatedly do. Excellence is then not an act, but a habit.

It aligns with the African quality of *ubuntu*.

My friends, I stand here tonight as a proud migrant to Australia. It was a decision that changed my life and one that has provided incredible opportunity, for which I am and will be eternally grateful. This award from the College is the pinnacle of my career. I am deeply humbled and grateful for such an honour. And I thank you so much for listening to me.

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