The more ICU, the more I want you

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The Presidents of the Australian and New Zealand College of Anaesthetists, the Royal Australasian College of Physicians and the Australian and New Zealand Intensive Care Society, the Dean and Fellows of the Joint Faculty of Intensive Care Medicine, invited guests and friends, I must say that I feel deeply honoured in being awarded the Joint Faculty medal and would like to thank you for your kind and generous consideration.

I will use this occasion to briefly reflect on my professional life, to look forward and view what perhaps could be the future for intensive care medicine, and to highlight the importance of teaching, research and writing in the development of our discipline. My experience is modest, but it may be of interest to those of you who are just embarking on your career as an intensivist. The good news is, I will be less than my allotted 15 minutes.

Over the past 35 years, there have been numerous changes in bedside diagnostic and therapeutic techniques to benefit the critically ill patient. There have also been changes to the ICU admission criteria. The patients are now older, sicker, and have many comorbid conditions. To accommodate this group, intensive care units have had to increase their bed numbers and expand their services. Units have quadrupled in size and are often required to offer medical emergency teams, venous access and parenteral nutrition services to other inpatients; and retrieval, mechanical ventilation and parenteral nutrition services to many outpatients.

Patients can now be suspended physiologically for weeks, using modern cardiovascular, respiratory and renal support techniques. Withdrawal of therapy has now become an accepted part of our clinical practice, with relatives and friends often struggling to understand the diagnosis of futility.

Where are we heading — particularly with an ageing population, a greater expectation from the public (and our medical colleagues) as to the benefits of ICUs, and as the subspecialties of surgery and medicine (even palliative care medicine) increasingly want our units to manage their patients? Will the major teaching hospital simply become one large intensive care unit, with all patients monitored and measured, and all non-critically ill patients managed at home or in dedicated medical hotels, with telemetry keeping the clinician in touch with their progress? Hospitals as intensive care units, and intensivists as hospitalists? Will these large ICUs become more “open” and administered by nurses, with intensivists becoming resuscitation-alists, and treatment being largely protocolised or managed by the home team? Goodness knows.

However, if a community believes that their hospitals should have 20, 40 or 60 ICU beds (or even 1000 ICU beds) to manage acutely ill patients, then medical as well as nursing numbers must be commensurate to meet this need, otherwise the unit becomes dysfunctional. A culture of “inertia” develops, the unit is always full, and “we have no beds” is the constant refrain. For patients who do get admitted to the ICU, so long as they have “normal” physiological values (eg, blood pressure, pulse, arterial PO2 and pH), they remain deeply sedated, mechanically ventilated and on inotropic support, until a diagnosis of “futility” is made, and withdrawal of therapy is seriously considered. Patient care is substandard, the medical team is without enthusiasm, there is no time for formal teaching or research, and there is a high turnover of proficient staff, with those who are without skill tending to remain.

For the sake of future critically ill patients, intensive care units must remain with a “closed” format, and public teaching hospitals must allocate no more than 12 ICU beds per intensivist, with at least one advanced intensive care trainee and four primary trainees for the same number of beds. This means that the matter of a diminishing number of doctors being attracted to our discipline must be addressed urgently.

To increase our numbers we need more units with directors generating an atmosphere of excitement and fun, while providing vibrant and active teaching and research programs.
This requires intelligent and creative public hospital chairs, boards of directors and CEOs, employing talented intensivists and allowing them a free hand. As the cost of wanting to maintain life is soaring, a large amount of additional money for the public system will also be required. However, as with any enterprise, unless competent administrative staff are employed, these funds will be wasted, as an able ICU director cannot be effective in the face of poor hospital management.

Over the past 35 years, therapeutic agents to treat acutely ill patients have come and gone. Aprotinin for pancreatitis, thiopentone for cerebral resuscitation, sodium bicarbonate for cardiac arrest, dopamine for acute renal failure (all once “mandatory” treatments) have now largely disappeared. Over the same period, Australasian intensive care research and education have been advancing. Clinical research has been put on a solid platform, largely due to the efforts of the Australian and New Zealand Intensive Care Society’s Clinical Trials Group, while annual educational courses in South Australia, Queensland, New South Wales and Victoria supplementing the Joint Faculty accreditation process have made the clinical training of Australasian intensivists second to none.

Yet, in spite of these advances, the question remained, “What about the written word?”

To our new graduates I would say this: there is nothing like writing to force you to get your thoughts straight. It sharpens the intellect like no other communication, as you place your thoughts in the public arena for scrutiny and critique. The experience may be brutal, but is rewarding and necessary if you wish to communicate globally.

Concerning the Australasian intensive care medical scene: as I aged, the more intensely I believed that we needed our own journal to encourage our trainees to write and submit articles to a relevant publication. While some believed that we were serviced effectively by journals that were currently available, others did not. Undaunted, in March 1999 and heading into a stiff headwind of criticism, a quarterly entitled Critical Care and Resuscitation was published.

However, I wasn’t alone in this venture and must acknowledge many people. Andrew Holt, Andrew Bersten, Rinaldo Bellomo, Bala Venkatesh, John Morgan, Neil Matthews, Jamie Cooper, John Myburgh and John Moran, among others, contributed without hesitation to this novice publication.

Indeed, it was hard to stop John Moran whenever I asked him to submit a statistical piece, and, bless their hearts, Rinaldo Bellomo and John Morgan would always write the antithesis to every piece I presented on “strong ions”. Geoff Parkin even submitted a piece pertaining to the mean systemic pressure (a notion which he firmly believes is the “big bang” theory of the circulation). Neil Matthews has always been supportive and, as Dean of the Joint Faculty of Intensive Care Medicine, was instrumental in making Critical Care and Resuscitation the journal of the Faculty, commencing from March 2004. He also suggested that Vernon van Heerden would be an ideal editor to shepherd the publication through its next phase. Both ideas have not only served the Journal well, but have enhanced its standing. The journal is now Medline indexed.

I must also thank Paul Glover who, from the Royal Victoria Hospital in Belfast, tirelessly reviewed with me most of the journal’s manuscripts during the first 6 years. Thank goodness for email.

Finally, I must thank my wife Janice. When she first realised that I was considering writing, editing, publishing, posting and soliciting manuscripts and subscriptions for a new journal, she was not all that enthused and asked me “Why?” I think I said, “Life is a great big canvas; throw all the paint on it you can”, which I don’t think helped, as she responded, “Well make sure that you don’t use any of my paint and don’t splash my canvas”.

It wasn’t her dream. Nevertheless, during the first 6 years of the Journal’s life, she helped enormously as she managed the advertisements and merchant banking and allowed our kitchen table to be the Journal’s “canvas”. Indeed, I think that she was even a little sad when we finally handed all this over to the Joint Faculty secretariat.

Incidentally, during the past year or so, while I have spent more time at home quietly and at leisure, I have probably not warmed as much to Janice’s ideas of gardening, tidying the shed, pruning roses or cleaning gutters as I should have. So much so that, when I told her that I was about receive the Joint Faculty award of a medal, she said, “What exactly does this award do?” I replied, “Well it doesn’t do anything”. She shrugged and said, “Then they are giving it to the right person”.

I have had a fortunate and enjoyable professional life and have met many amazing people along the way: the fun and fellowship I had with the first ANZICS executive, with people like Bob Wright, Geoff Clarke and Malcolm Fisher making decisions for the Society with little reference to anyone; the arguments we had with the Faculty of Anaesthetists and College of Physicians during the development of the inaugural ICU diplomas; the ease with which we were able to undertake many of our early clinical studies before ethics committees were mandatory; the eagerness and enthusiasm of trainees when they saw their first article in print; the ICU nursing staff, for whom I have enormous respect, and their tolerance of my occasional acidic remark; and finally the sharing of both joy and grief with critically ill patients and their relatives. I have loved it all.

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