

Medice, cura te ipsum

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Doctors don't dress like this anymore. They sat in neat rows, impeccable white coats pressed and hair pin-sharp. All of them men, bar only a handful of women, and among them my grandmother. RCSI class of 1952. The class photo was one of only a few of medical relics that I found in her house after she died. But I think the class photo speaks far more as to how medicine once was than her antiquated stethoscope or her mercury thermometer. God knows what she might have written, should she have been tasked with this essay, but we can well imagine how different and alien her prose might have been. I'm in my penultimate year of medicine now, and when she was in my position roughly 6 people in Ireland died per day from tuberculosis¹. In truth, I've not yet spent long on the wards, but I don't even think I've yet seen a patient with active TB, let alone someone gravely ill with it. And while the relentless march of medical progress has changed utterly the nature of work for doctors, Ireland and elsewhere, our successes have wrought challenges probably inconceivable for the physicians of my grandmother's generation. The freshly minted Dr Maureen Healy would have been a houseman (we call them interns today) when Watson and Crick published their 1953 Nature article on the structure of DNA. It would take years until this structural understanding transmuted itself to actionable technologies with real clinical applications. And now, it seems so trivial that a great deal of the preclinical medical curriculum is spent memorising genes, their mutations, and translocations. In my three week placement in oncology, the prescribing of medicines that would have been incomprehensible (and still yet unpronounceable) to my grandmother's generation was a daily occurrence.

Our burgeoning mastery of molecular biology has rendered diseases like chronic myelogenous leukaemia, once a death sentence, in essence a chronic illness. Cystic fibrosis, which cruelly cut so many lives short, has now been so radically altered by new CFTR modulator drugs that obesity of all complications, is becoming a growing issue of concern. While these drugs are yet so new, life expectancy is almost certain to rise as the natural history of CF has been radically altered². From a relatively niche area of biochemistry in my grandmother's day, to real living, and thriving patients in mine, it is self-evident that scientific progress has radically improved medicine within the space of only two generations. So what on earth then, am I complaining about? How are these advances in anyway going to impact the work of my generation when we qualify?

We've come such a long way. Best practice for the treatment of myocardial infarction when my grandmother first began working as an NCHD was bedrest, oxygen, and morphine. Morbidity and mortality, unsurprisingly, were exceptionally high. In the decades that have followed, introduction of the coronary care unit, the advent of cardiac catheterisation,

thrombolysis, and angioplasty have thoroughly improved outcomes, including survival, in heart attacks for the better³. And this represents only one medical emergency in one specialty. The cumulative effect of these advancements has unquestionably been the rise of life expectancy. In that same report outlining TB mortality in 1950s Ireland, life expectancy for one born in 1951 was 63.7 for males, and 66.6 for females¹. Recent research published in the Irish Medical Journal demonstrates girls born in Ireland last year may expect to live 92.6 years, and boys 90⁴. Naturally, this represents a seismic demographic shift, with the WHO estimating over 1.5 million elderly people living in the state by the year 2050⁵. Obviously, it goes without saying that the preservation of life such that people can lead such long lives is a wonderful thing, but looking only at the age one lives to tells only one side of the story. And it is only when we examine the unintended consequences of the rise of the elderly population without an attendant decrease in disease burden that we can appreciate the myriad of challenges that faces the NCHD of tomorrow.



Most doctors practicing today cannot fathom the challenges this generation of medics faced.

But would they recognise ours?

While our elderly population has increased year on year thanks to the medical advancements previously outlined, our capacity to treat them in the public system has not kept pace. According to the IMO, we are far below the OECD average for hospital beds per capita, and

consequently our hospitals average near total capacity at any given time⁶. While this burden is obviously shouldered by doctors and their allied colleagues alike, it's shouldered perhaps disproportionately by the NCHD. How on earth can teams be expected to safely function in the face of such burgeoning, ever growing demand without relying on the good will of their juniors to pick up the slack and work frankly unsafe hours? Only this week I found out my team's intern had just finished his first placement in the ward my sister is about to start working in as a nurse. When I asked him how it was, he told me that he averaged an 86 hour work week. That was nothing, according to our SHO, however, who had once pulled a 110 hour week in Letterkenny. He said it left him a broken man, and I'm inclined to believe him.

One of the first patients I ever saw on placement was an elderly lady admitted with sepsis. She had been an inpatient for weeks, and there seemed to be little prospect of getting her well enough to discharge to convalescence or a long-term care, let alone home. By the same token, many frail patients may well be medically fit, but for financial or other concerns, cannot be discharged. Without adequate social care systems in place, we cannot safely see these patients discharged. This keeps the patients in hospital, a harm in and of itself, and contributes to our sky-high occupancy rates. In turn, NCHDs are overstretched, and many leave for greener pastures. The workload increases and the challenges faced by the juniors worsen in turn.

And it was exactly this that happened to my grandmother in the final years of her life. I don't think I ever remember her ever being particularly well. But certainly by my early teens I was aware that she was particularly weak, and increasingly immobile. Eventually, a diagnosis of carotid artery disease was made and she was admitted to St Michael's University Hospital in Dun Laoghaire. She was deemed unfit for carotid endarterectomy, but remained there for 12 weeks. We had no means of caring for her ourselves at home, as grandad, her husband, lived with us with his dementia. I suppose, if you were so callously inclined, she might have been the prototypic example of a bed blocker. A more compassionate view holds that these patients are in dire need of help that simply isn't available to them.

My grandmother's story, and indeed the history of medicine in the past century, are part and parcel of the great challenges facing NCHDs in the past, present, and for the foreseeable future. Medicine has advanced to the point of keeping so many of us alive for so much longer than was ever envisioned even in living memory. With that has come a generation of people growing older than ever before, and growing sicker with that. While we have extended life, we have also extended the portion of life that people spend ill and in need of medical attention. While I do not doubt that one day, hopefully soon, we will have the technology to alter the course of the numerous chronic illnesses afflicting our population, that is not the reality facing the modern NCHD. We've never needed more of them, and yet only last week the HSE announced a recruitment freeze which paradoxically included junior doctors. If ever there was

a time to increase the number of junior doctors, or to better their conditions to coax more home, now is the time. Yet we seem to have done the opposite.

When first considering what challenges I anticipate facing working in medicine post-qualification, there were several knee-jerk responses that I had to resist writing on; the eye-watering cost of rent near St Vincent's compounded by the GEM-loan that I, and a large proportion of my class, will start paying back soon after intern year starts. These are indeed massive issues that urgently require addressing if we are to stop haemorrhaging NCHDs to the Antipodes and beyond. The reason I chose not to speak on these at length however, is that they are to some extent local, Irish-specific issues that with any luck should be transitory. In contrast, the significant mismatch in supply between our ever growing and ageing population and the relatively few NCHDs to look after them, not only seems not to be improving-but is actively deteriorating with time. We are lucky to know now that there is to be a massive increase in disease burden in the coming years. We know that this will come with the need for more doctors than ever before. Now is the time to expand training posts for our NCHDs, to better their conditions, to recruit more of them, so that when our population comes to rely on doctors more and more, there will be enough to meet this increased demand.

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