

Doolin Memorial Lecture 2022 - In Defence of Uncertainty

Delivered by Dr. Ronan Glynn, Partner, Health Sector Lead, EY Ireland
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Commentary by J.F.A. Murphy - Editor of the Irish Medical Journal

The Doolin Memorial Lecture was delivered by Dr. Ronan Glynn on December 3rd, 2022. He is best known for the invaluable public health role he played during the Covid-19 national crisis.

He began with a number of reflections about the Covid-19 pandemic. It was a time of great uncertainty, with a virus that had no clear definition, no clear pathogenesis, no clear solution, and there was limited understanding as to how it might evolve over time. The other stand out point was that it was the first pandemic to have taken place in the social media era; it was effectively livestreamed, with developments reported in real time. This proved to be a challenge as, with masses of often contradictory data coming at them, it was challenging for people to know where to look for reliable information.

While we were all faced with the same pandemic, the reality is that our individual circumstances, our gender, age, our medical histories, differed considerably – and so each of us experienced the pandemic differently. And yet, in order to achieve a successful response, it was necessary to achieve collective action with everyone working together to protect one another. This happened. The public co-operated with the many restrictions and sacrifices deemed necessary in the control of the spread of the virus.

The scientific community met the challenges posed by this hitherto unknown viral infection in a speedy and efficient manner. The genome was sequenced in a matter of days. A vaccine against Covid-19 was produced in a record short period of time.

However, the uncertainties of the scientific process - the necessity of working with imperfect and incomplete information, and the need to frequently change course was on public view as never before.

Unfortunately, there were those who wilfully misrepresented these normal parts of the scientific process in order to suit their own agenda. There were some who sought to oversimplify very complex issues and to ignore or obscure nuance. Also, to frame issues as either black or white when the reality was that the majority of what we were dealing with could be best described as a shade of grey.

Dr. Glynn moved on to reflect on the early days of his career. He remembers his first day as a medical student. The professor told the class that they had now crossed a line; they had become part of the 'medical community'. In retrospect, the professor's words were Dr. Glynn's first introduction to medicine's 'hidden curriculum' - the unintended things that we learn or are exposed to during our medical education; the customs and rituals inherent in medical practice; the unspoken values and norms perpetuated by senior role models; a focus on linear thinking; the notion that we must unify a constellation of signs, symptoms and test results into a solution; the expectation that diseases will present uniformly, progress similarly, and respond to treatments accordingly.

All of this has a negative impact on our ability to recognise and tolerate the uncertainty that inevitability surrounds us in our daily medical practice. This can lead to excessive use of diagnostic tests where their value is likely very low; it promotes the excessive use of antibiotics and can make the profession slow to drop practices even where new evidence suggests that those practices are of limited, if any, benefit. Intolerance of uncertainty also impacts on the nature of the doctor-patient relationship with evidence suggesting that we rarely communicate our uncertainties to them, thereby diluting the potential for shared decision making. Finally, uncertainty also impacts on us as individuals, with studies demonstrating an association between a doctor's discomfort with uncertainty and an increased risk of maladaptive perfectionism, burnout, and lower career satisfaction.

There needs to be a new approach to uncertainty in healthcare. Uncertainty is present in all aspects of medical care. Clinical decisions have to be made on the basis of imperfect data and limited knowledge, coupled with unpredictable responses and outcomes that are far from binary. These points were well appreciated and concurred with by the audience, many of whom are practicing clinicians.

The point was made that nobody can keep up with the quantum of new medical information. Some estimates suggest that medical knowledge is now doubling every few months whereas in the 1950s it doubled every 50 years. Ironically, the level of information now available to us has actually increased complexity, and, in turn, has amplified uncertainty. This is because the more knowledge we accumulate the more we perceive the differences in each individual situation we are faced with.

The public need to have a better understanding of uncertainty in the provision of medical care. Uncertainty does not equate to failure. Doctors cannot know everything. We must disabuse the notion that clinical knowledge exists in a binary format of 'knowing' or 'not knowing', and better explain to the public that 'truth' and knowledge are by their very nature nuanced and complex. We need to communicate to the media and to wider society that scientific and medical research is rarely conclusive, that no test is 100% accurate, to explain that sometimes not taking action – based on reasoned judgement – is the best course 'of action'.

Of course, we must continue to try to address our uncertainties. In this regard, Dr. Glynn recommended that we continue to build on the progress that has been made in Ireland over recent years with regard to evidence synthesis. We must see the continued development of robust processes and structures around these functions so that we can benefit from their outputs in policy-relevant timeframes and thereby have evidence informed debate, policy and decision making.

Dr. Glynn noted that a defining feature of the pandemic has been the way in which citizens engaged with their own health, the health system and with public communications in new and innovative ways. As such, he suggested that we are now well positioned to have a society wide and indeed a profession wide conversation about the nature of medicine, what it is and what it is not. While this conversation will not eliminate the uncertainty that is inherent in medicine, by acknowledging and helping people to see that uncertainty exists, it could foster more realistic expectations of outcomes, of what medicine can and cannot do.

In the concluding section of his talk, Dr. Glynn set out a number of suggestions for dealing with uncertainty at a personal level. By acknowledging our uncertainties, we give ourselves a measure of control – we can better anticipate the range of possible outcomes which might occur in a given situation and thereby be better prepared to meet those eventualities. We should understand that the uncertainties we feel are not themselves the problem, but rather our cognitive, emotional, and behavioural responses to them. To balance these responses, we need to be grounded, to be clear on what we can be certain about, to have faith in our abilities as doctors, to have faith in our experience, our expertise, while recognising that there is always more to learn, that there are other points of view, that there are many different ways of achieving a given outcome. Recognise that we are all in the same boat when it comes to uncertainty - we all miss things, make mistakes, we all get things wrong. None of us are Dr House.

The concluding remark was that uncertainty is the only certainty in medicine. Ultimately, we must reframe uncertainty as intrinsic to the process of finding out what we do not know, rather than a weakness to avoid. We should try to embrace our uncertainties, reflect on them, and harness them for positive growth, remembering that the evidence on any issue is only ever evolving and is therefore always incomplete. To quote Adam Grant, “..knowing what we don’t know is wisdom”.

Doolin Memorial Lecture

The Annual Doolin Memorial lecture takes place on the first Saturday of December in honour of Dr William Doolin (1887-1962), editor of the journal of the Irish Medical Association and President of the Royal College of Surgeons in Ireland. The IMO invite a speaker to deliver the lecture on a topic of their choice to members and invited guests.