Forum

Medical mistakes – a student's perspective

Gerrit van Schalkwyk, medical student

Stellenbosch University, Tygerberg, W Cape

Keymanthri Moodley, MB ChB, MFamMed, MPhil (Applied Ethics), FCFP (SA), DPhil

Associate Professor and Head, Centre for Medical Ethics and Law, Department of Medicine, Stellenbosch University

'Only one rule in medical ethics need concern you – that action on your part which best conserves the interests of your patient.'

Martin H Fischer

Introduction to the winning entry of the 2010 Stellenbosch University's Medical Protection Society Bioethics Competition

Stellenbosch University has now joined the University of the Witwatersrand in running a bioethics essay competition and it was a pleasure to read the essays submitted by the undergraduate students, a pleasure made all the more satisfying given that the essays were written by students from my own *alma mater*. A slight disappointment is that in the third year of the competition being offered only two universities have taken up the challenge.

You could say that we as an organisation have a vested interest; however we know that our members are confronted by difficult ethical problems on a daily basis and when better to start thinking about these issues than as undergraduate students? We hope that in a small way, supporting a competition like this, we will help encourage students to start to think about the ubiquitous moral dilemmas in medicine.

Ideally all universities with a medical school should participate and then we could entertain the idea of a national prize as well. The best undergraduate bioethics essay in the country – that could look good on your *curriculum vitae*. The challenge is not to the students but to the bioethics departments at the individual universities.

Turning to Gerrit van Schalkwyk's contribution, 'Medical mistakes – a student's perspective', he tackles the issue in a unique way. His refreshing perspective clearly shows that those entering the profession have ideas and when given the opportunity are able to articulate their ideas for a larger audience. Once again hats off to the editorial policy at the journal – willing to give these ideas a voice and a wider audience.

Enjoy the article, and if you are not a student or a graduate of one of the two universities running a bioethics essay competition, find out why the others are not – that's the challenge to you.

Graham Howarth

Director, MPS Africa

Although Fischer's premise seems perfectly reasonable, the alarming public perception that medical mistakes are commonplace¹ suggests that even this 'one rule' is not being followed to the extent that patients are confident that their best interests will be preserved. This article aims to explore this concept from the perspective of a medical student. Rather than offer a comprehensive review of the topic, the focus will be on some rather unusual and possibly controversial views, which aim to highlight the unique constraints and difficulties of the medical profession.

Medical education

Internationally, medicine remains one of the most competitive and demanding degree programmes, and this, coupled with entrance statistics, supports the idea that medical students represent an academically strong group. However, several interesting observations can be made in countries where medicine can be accessed through two streams — in the first place, directly upon completion of high school, and in the second instance, at a graduate-entry level. Most often, students who choose the latter option do so owing to their failure to be accepted as school-leavers, presumably because of some perceived deficiency in their preparedness.

However, in a 6-year cohort study by Shehmar *et al.*² it was shown that 'graduate-entry students performed as well as school-leaver students', even though the group of graduate-entry students had lower high-school grades. A similar study showed slightly better performance in the graduate-entry group.³ This research suggests that academic potential, as determined by high-school grades, is an imperfect measure of subsequent academic performance in a medical degree programme.

Of perhaps greater interest, however, is the perceived 'maturity' of graduate-entry students. Wilkinson et al.,4 in an important paper exploring differences between graduates and undergraduates (i.e. those with no degree prior to entry into a medical programme), show that 'age at entry to medical school brings certainty and motivation about career choice, a prior degree has some effect on approaches to studying and co-operativeness ...'. Age at entry was shown to correlate with outcomes such as 'motivation and assertiveness', and having a prior degree with 'goal orientation and co-operativeness'. Anecdotal evidence from interviews with programme directors echo these findings, with graduate-entry students in one instance being described as 'highly motivated and committed', as well as 'self-directed, challenging, demanding, questioning and more mature'.5 It would therefore appear that graduate entry students are not only able to exceed their supposed 'academic potential' to a greater extent than undergradu-

Forum

ates, but are furthermore in possession of a more mature attitude towards their studies, as well as a level of emotional intelligence to match their cognitive intelligence – important attributes required in the medical profession.

The implication in respect of medical error is twofold. Firstly, the comparatively immature attitudes of undergraduate-entry students could mean that, on average, they are less likely to be able to acquire all the competencies needed to be a safe doctor. Of greater importance, however, is the fact that by entering into the career at such a young stage, these students are simply not adequately aware of the unique constraints and challenges of the profession. Medical school brochures do not mention medical malpractice claims, and it would probably alarm many applicants to know just how closely they will be scrutinised in their future careers. This represents an important consideration when discussing medical mistakes, and one that is not often considered. A further consideration is the issue of medicine and economics

Medicine and economics

Since the development of the Scribner shunt, problems related to the cost of medical care have become prevalent in all societies, and lead to great debate regarding issues of resource allocation and policy development.⁶ While many suggest that solutions lie in policy reform, an alternative theory proposes that traditional explanations for these problems might, in fact, not represent the whole truth, and that the so-called crisis in Western medicine is an inevitable consequence of a capitalist economic system.⁷ A complex ideological discussion is certainly beyond the scope of this article, although such a theory does bring to mind ideas of more immediate relevance.

With few exceptions, the purpose of a business is to generate profit for the investors. The only constraint is the law, and within its boundaries manipulation and greed are not only tolerated, but also expected. As Friedman⁷ succinctly states in *Capitalism and Freedom:*

'there is one and only one social responsibility of business – to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud.'

Within this profit-driven system, healthcare forms an island of different expectations. In other words, doctors are expected to make a profit in a capitalist society, while being motivated primarily by the best interests of the patient. Doctors are held to a higher ethical standard, and are expected to go to extreme lengths to prevent mistakes and harm to their patients. This results in a constant battle between business and medicine that can, in certain cases, represent an impossible balance. Evidence for this proposition is the virtual absence of practising obstetricians within certain USA counties, where the fear of being held to this elevated ethical standard prevents viable participation within a profit-driven economy. The fear of mistakes and litigation therefore does little to improve patient care, as any decrease in error is largely offset by the resultant resource limitation.

The tension between these two paradigms is clear, as is the resultant implication for medical mistakes. When deciding whether or not a doctor has acted in the best interests of his patients, ideally one would be free of such considerations. However, until a system is engineered which allows for the relative isolation of the medical profession from the ebb and flow of market trends and the harsh world of competition, these considerations will have to remain central to any assessment of what constitutes reasonable action on the part of the doctor — who, as a participant in the economy, should be allowed to do all he can to increase his profits — as long as he or she stays within the boundaries of the law.

When doctors have found ways to remain economically viable, the result is often another unwanted phenomenon – defensive medicine in response to rising healthcare litigation and 'risk management'.9 While such practices may result in fewer overt mistakes, they represent a clear shift from a patient-centred focus, and can in many instances result in very negative consequences for the patient. The 'double effect' is certainly one of the more pertinent examples, where doctors may withhold potent pain medication from dying patients in order to avoid the risk of subsequent litigation, should the patient eventually die from a medication side-effect. This practice protects the doctor, but in a bizarre irony is actually far worse for the patient than the alternative outcome that may in fact expose the doctor to future liability.

These examples illustrate the important point that doctors are forced to make decisions in the light of considerations that should really not be theirs to consider. A doctor should be able to achieve viability without doing unnecessary investigations, and without the need to avoid difficult procedures, which may expose him to greater risk. The doctor should be able to fulfil Fischer's injunction without any consideration as to how this will affect his own circumstances. The present system does not allow for such autonomy of thought.

The ethics of responsibility

At the same time, to shrug off all responsibility under the guise of being 'economically strained' would be to participate in what Keshavjee¹⁰ describes as the 'detrimental ethical shift' occurring in the field of medicine. It is therefore important that we consider the concept of responsibility, and try to define reasonable boundaries for when a doctor should be held responsible for adverse consequences.

Simon Blackburn, in his compelling book Think, dedicates a substantial amount of effort to the concepts of free will and responsibility.11 Although the exact definitions he uses are complicated and beyond the scope of this article, he includes a number of important factors. Firstly, he highlights how, in order to be responsible for an action, one must have had the opportunity to act otherwise. This is an extremely pertinent point in the context of resource-limited settings, where mistakes may occur as a direct result of simply not having the necessary tools to provide appropriate care. The second point has a rather more controversial implication to medical ethics, where he emphasises that the blame for an action should only hold if someone could be 'reasonably expected' to have known otherwise. In medicine, what one is 'reasonably expected' to know can vary immensely, depending on the stage of one's career, with a 'continuum of responsibility' that increases from the time one is a medical student, up until the adoption of the consultant role. However, even consultants will make mistakes because of a lack of knowledge, and it becomes difficult to decide whether or not their ignorance can be regarded as reasonable or not. Blackburn's approach and the

Forum

closely related system in bioethics of 'ethics of responsibility' therefore provide much insight in framing some of these issues, although absolute clarity remains elusive.

A crucial point that is not clearly addressed by these theories is the shift towards a more systems-based approach to medical care. Where in the past, one doctor might have been responsible for the holistic care of a patient, modern trends involve the inclusion of numerous practitioners. This has implications for medical mistakes, and a recent study suggests that it may provide doctors with an important mechanism for 'dealing' with the stressors involved with mistakes in patient care. 12 The extract below is the report of a doctor who was interviewed during the study, and is particularly illuminating:

I'd have been absolutely devastated if I'd been the one who "lost" that patient [a girl in her early twenties] ... However, I've learned so much about medical mistakes, which to such a large extent are related to systems. You cannot walk around with that individualistic approach saying, "if it goes well, then it's my honour, and if it goes bad, it's my fault." That's not the way it is, because there's so incredibly much cooperation. And if you in your life as a physician do not dare taking the risk of making a mistake sometimes, including having a human life on your conscience, to put it straight, or a prolonged sickbed – if you cannot tolerate that risk, you should never become a physician.'

This communitarian shift in thinking brings additional complexity into our discussion regarding responsibility. When, then, can an individual be held responsible for his actions, if at all? Furthermore, while the above approach may offer support to the doctors, it is unlikely to be of much value to patients. Between 44 000 and 98 000 unnecessary deaths are caused each year in the USA as a result of medical error. The families of these victims do not wish to be told that their loved one's death was the result of a 'systematic error' – they want more specific answers, they want to know who did it, and how it happened. An additional implicit risk in such an open-ended description of medical error is that it may, in some way, reduce accountability, as the boundaries of 'systematic error' and 'incompetence' are, unfortunately, not even on the same scale

Conclusion

The literature abounds with articles discussing the nature of medical error, how it can be prevented and what its significance is in terms of medical ethics. The goal of this article has not been to

simply restate these well-established views; rather, an attempt has been made to bring to mind certain considerations that are not often raised in this debate.

Too often, doctors are judged according to a standard of perfection, and no thought is given to their own situation. Perhaps a mistake resulted from limited resources? Perhaps the doctor just isn't at a point in his career where he knows everything yet? And yes, perhaps the doctor is trying to make money, like everybody else. If we are unrealistic in our expectations, we should not be surprised if the fear of litigation pushes doctors out of difficult careers where they are often most needed.

References

- Lester H, Tritter JQ. Medical error: a discussion of the medical construction of error and suggestions for reforms of medical education to decrease error. Med Educ 2001;35(9):855-861.
- Shehmar M, Haldane T, Price-Forbes A, Macdougall C, Fraser I, Peterson S, et al. Comparing the performance of graduate-entry and school-leaver medical students. Med Educ 2010;44(7):699-705.
- Dodds AE, Reid KJ, Conn JJ, Elliott SL, McColl GJ. Comparing the academic performance of graduate- and undergraduate-entry medical students. Med Educ 2010;44(2):197-204.
- Wilkinson TJ, Wells JE, Bushnell JA. Are differences between graduates and undergraduates in a medical course due to age or prior degree? Med Educ 2004;38(11):1141-1146.
- McCrorie P. Graduate students are more challenging, demanding, and questioning. BMJ (Clinical research ed.) 2002;325(7366):676.
- Relman AS. The allocation of medical resources by physicians. Acad Med 1980;55(2):99-104.
- Friedman M, Friedman RD. Capitalism and freedom. Chicago: University of Chicago Press, 2002.
- Falker ES. Medical malpractice crisis in obstetrics: a gestalt approach to reform. Cardozo Women's Law Journal 1997;4:1
- 9. Kumar P. The myth of inexpensive defensive medicine. Health affairs (Project Hope). 2010;29(11):2126.
- Keshavjee S. Medicine and money: the ethical transformation of medical practice. Med Educ 2004;38(3):271-275.
- Blackburn S. Think: a compelling introduction to philosophy. Oxford: Oxford University Press, 2001.
- Aase M, Nordrehaug JE, Malterud K. 'If you cannot tolerate that risk, you should never become a physician': a qualitative study about existential experiences among physicians. J Med Ethics 2008;34(11):767-771.
- Weingart SN, Wilson RM, Gibberd RW, Harrison B. Epidemiology of medical error. BMJ (Clinical research ed) 2000;320(7237):774-777.