

The Medical Student Response to the Covid-19 Pandemic

Introduction

As a first-year clinical student, I was excited to begin my hospital training. What I did not expect, however, was that my first clinical experience would be on a Covid-19 Intensive Care Unit (ICU). Facing an unprecedented strain on the NHS, medical students were drafted to help meet pandemic demands. The pedagogical benefits of this exposure are clear. Yet there is some uncertainty as to whether it was beneficial for both patients and the healthcare team. The BMA has expressed “significant concerns”, stating that there was “little clarity” regarding “the competency expected of medical students”.¹ Despite such concerns, medical students took on important roles in local hospitals. Here, I will explore the justifications for this decision and whether it adhered to guidelines, or whether additional safeguards should have been put in place to minimise ethical, legal and professional digressions.

What is the role of the medical student in acute medical contexts?

Medical students are a key part of the medical multi-disciplinary team. In hospital wards, we learn not only about pathology and patient care, but also about the day-to-day minutiae of public health, from writing up patient notes to assisting with basic clinical procedures. Our presence therefore serves two purposes: to advance our learning and to alleviate pressure on the healthcare system. Never was this more clear than during the unprecedented pressures of the Covid-19 pandemic. Thus, from a pedagogical and resource-management perspective, drawing on medical students seemed only natural. Yet, even in emergency contexts, it is critical that ethical and legal standards are adhered to² – standards that medical students might not be fully versed in. This begs the question, is the ‘Covid ICU’ an appropriate place to be learning on the job?

The pandemic demanded far more personnel than the NHS could muster. Nurses were often assigned to care for many more patients than they could manage, forcing them to neglect less urgent tasks like maintaining patient hygiene or updating relatives. My responsibilities therefore involved cleaning patients, aspirating naso-gastric tubes, and analysing arterial blood gas samples. Despite our lack of formal training, my peers and I were able – after some instruction by the nurses – to support hospital staff and help maintain standards of care. From a deontological perspective, where the morality of an action is determined by its nature, the role of medical students seems ethically sound.³

However, it is important to note that our work on Covid ICUs was paid. Under normal conditions, our presence on hospital wards is driven by educational rather than monetary motives. Payment introduces an element of personal gain that further complicates the matter of professional responsibility. The BMA stated that “under no circumstances” should students “feel obligated... to serve in order to meet medical school curricula.”¹ Yet normal medical training was postponed. As students, we therefore faced significant pressure to join wards to substitute lost learning, help alleviate the strain on the NHS, and respond to financial incentives. These pressures defined our experience on hospital wards. We often felt compelled to carry out tasks that we would not normally be asked to do and, as a paid member of staff during a pandemic, it was difficult to turn down requests. Thus when asked by a busy nurse to sit with a patient as their ventilator was switched off, I felt that I could not say “I’m sorry, I’m a fourth-year medical student” and politely refuse.

Who is liable for the risks that medical students pose?

When considering the contributions of medical students, it is also important to discuss risk liability. Mistakes are inevitable when receiving training ‘on the job’, and the pandemic forced us into new and often extreme situations. For instance, I was frequently asked to record vital signs of patients, despite my lack of formal training in this area. In situations such as these, it is difficult to know who is responsible for any mistakes that might impact patient care. In addition, working without a full medical qualification also introduces legal uncertainties regarding failures of patient care. Would the nurse in charge or the medical student be held accountable if a patient’s electrolyte abnormality was missed and their care compromised due to a medical student error?

Although medical students seek to learn on the job, the primary concern for hospitals should remain the quality of patient care. If students cannot maintain the required standards, their presence only undermines professional standards.⁴ Through the lens of deontology, then, professional and legal guidelines seem to have been violated. Yet locating the locus of responsibility for any shortcomings is difficult, precisely because medical students are not fully qualified professionals. Moreover, the competing theory of utilitarianism, where the outcomes determine the morality of the intervention, highlights the broader risk to society associated with relying on inexperienced medical students rather than more qualified personnel.³ What these ethical, legal, and professional considerations reveal is that to maximise the benefit-risk ratio, it would have been preferable to hire qualified nurses in place of students.

Did medical students receive adequate supervision?

Typically, students receive one-to-one supervision with new procedures. However, pandemic demands left nurses with little time to help students practise, debrief and reflect. Though we became more adept at these procedures over time, our presence on wards introduced extra risk in a sensitive context. Additionally, without formal training and improvement processes, we represented an extra burden for nursing teams who had to delegate and supervise our work during an already stressful time.

The suspension of normal supervision raises important ethical and professional concerns. One of my roles was making daily telephone calls to relatives of patients in ICU. Although this was my first time on a ward, within a week I was having to interpret clinical notes and relay these to families unsupervised. Ethically, I felt uneasy about this arrangement. Families did not know that this was my first time working in a clinical setting and that I had no experience interpreting case notes. Yet, given more pressing demands on professionals, and the relatively low-stakes of these phone calls, this arrangement seems ethically sound. While unsupervised ‘trial and error’ learning increased potential for mistakes that could be distressing for families and students alike, the phone calls themselves were ancillary: they did not impact the standard of care that the patient received. With the NHS stretched thin by pandemic demands, the alternative to student-led updates was leaving families in the dark for long stretches of time until more senior staff had time to make contact. Indeed, our involvement allowed resources to be allocated to more serious matters, where the potential for medical negligence was likely greater and held more severe consequences.

Should medical students be encouraged to work beyond their abilities?

The BMA states that students should not work beyond their competencies during training. While simple on paper, the nature of learning challenges this precept. Most would agree that, in order to improve, students must sometimes work beyond their comfort zone. Yet, when faced with the imperative to maximise patient care, a utilitarian logic seems apt: challenging students in clinical settings is safe only when the stakes are not too high, as with the aforementioned phoning of relatives. This was manifestly not the case on Covid ICUs, particularly given the lack of student supervision. Although many of these tasks might not have been done had students not substituted nurses, this role transfer nonetheless undermined standards of care.

To illustrate, I found myself in a team of two nurses responsible for five patients. The three of us would work together during 12-hour shifts, with breaks throughout the day. As a medical student, I naturally could not provide the same level of support as a trained nurse, so it was unsettling to be given the same shift rotations. From a resource management perspective, I was able to substitute a salaried nurse. Yet, from the perspective of patient care, staffing was inadequate and nurses had to dedicate time to monitoring an inexperienced student⁴. This was not time-invariant, however. As I and other students came to better grasp our roles, we became more adept and were able to relieve nurses of basic tasks. It is therefore important to recognise the shifting balance of benefit to risk as the pandemic drew on.

Indeed, my understanding of extreme medical contexts developed greatly during this period. For instance, I learnt how to discuss sensitive topics with the families of patients, informing relatives of medical errors that had occurred during the care of their loved ones and counselling them when they were distraught. I also frequently returned to the ward to find that patients I had cared for during the previous shift had died. To date, we have received no guidance on dealing with the emotional strain of these situations. With little training, I found learning what to do and say ‘on the job’ intensely psychologically and emotionally challenging. Yet, although the experience was at times traumatic, it ultimately allowed nurses to prioritise more pressing elements of patient care. Although medical schools aim to avoid putting students in situations they are not trained to deal with, this is an unavoidable part of clinical experience. A more reflective program would therefore accept this reality and introduce guidance on how to deal with these situations, practically and emotionally.⁵ Moreover, given the low-stakes tasks assigned to students, it seems that mistakes were never fatal and the experience gained in maintaining care standards invaluable.

Conclusion

If, on balance, the role of medical students introduced marginally greater risk in exchange for far greater healthcare capacity, perhaps the end justified the means. The key question is this: had we not been on wards, would the situation have been better or worse? Faced with the unprecedented demands of the Covid-19 pandemic, the NHS was vastly overburdened and understaffed. At the cost of strict adherence to ethical and professional guidelines, medical students were able to alleviate some of those demands, freeing up resources to address the most serious matters. The result was doubtless better for patient care and healthcare outcomes. Yet this does not override the ethical, legal and professional concerns raised throughout this essay. The pandemic has revealed the need for changes to better address these concerns when faced with crises requiring the use of medical students. In future, besides better guidance and support when dealing with matters beyond our abilities, we should consider the matters of inadequate

supervision of medical students, the unforeseen risks we ourselves introduce, and the definition of what the medical student's role should be in these contexts.

(1,748 words)

References

1. British Medical Association. COVID-19: Medical Students Requested to Work in the NHS [online]. BMA: Advice and Support, COVID-19, Returning to the NHS or Starting a New Role; 2021 [Accessed 3 July 2021]. Available from: <https://www.bma.org.uk/advice-and-support/covid-19/returning-to-the-nhs-or-starting-a-new-role/covid-19-medical-students-requested-to-work-in-the-nhs>
2. British Medical Association. Doctors Working in Conflicts and Emergencies – An Ethical Toolkit [online]. 2017 [Accessed 3 July 2021]. Available from: [bma-doctors-working-in-conflicts-and-emergencies-2017.pdf](https://www.bma.org.uk/advice-and-support/covid-19/returning-to-the-nhs-or-starting-a-new-role/covid-19-medical-students-requested-to-work-in-the-nhs)
3. Mandal J, Ponnambath DK, Parija SC. Utilitarian and deontological ethics in medicine. Trop Parasitol. 2016;6(1):5-7.
4. Kirkpatrick JN, Hull SC, Fedson S, Mullen B, Goodlin SJ. Scarce-Resource Allocation and Patient Triage During the COVID-19 Pandemic: JACC Review Topic of the Week. J Am Coll Cardiol. 2020 Jul;76(1):85-92.
5. Choi B, Jegatheeswaran L, Minocha A, Alhilani M, Nakhoul M, Mutengesa E. The impact of the COVID-19 pandemic on final year medical students in the United Kingdom: a national survey. BMC Med Educ. 2020 Jun 29;20(1):206.