Medical students learning on the COVID-19 frontline

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Abstract

This is a personal view about our perspectives, as medical students at Imperial College London, on our experiences during our infectious diseases placement at Northwick Park Hospital, touching upon other students' experiences at other sites. These highlight some of the main drivers and barriers that motivate or dissuade medical students from seeing COVID-19 positive patients.

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Northwick Park Hospital, situated in North West London, was one of the hardest affected centres when the COVID-19 lockdown was introduced in the UK in March 2020. The hospital was severely affected by the COVID-19 pandemic [1], and its surrounding borough of Harrow and Brent have seen high infection rates from as early as March. The site has both a tertiary infectious disease centre and a large Accident and Emergency department and were therefore designated as an additional high consequence infectious disease intensive care unit (ICU) [2]. The end of 2020 and the beginning of 2021 was marked by a surge in COVID-19 admissions putting an unprecedented strain on the healthcare system [3]. However, not as publicised has been the impact of this on medical students' learning and helping on COVID wards amid the pandemic. This opinion piece reflects on our personal experiences of Infectious Diseases Placement at Northwick Park Hospital during this time and compares them to those of our peers at other sites.

During the first lockdown from March to July, the COVID-19 pandemic was at one of its worst stages and the global picture was unclear. As Imperial College medical students, along with many others across the country, we were sent home and our clinical placements were suspended to reduce any exposure from COVID-19 during this time. All our teaching was moved online, with lectures delivered over Zoom and Microsoft Teams [4]. However, from July onwards more sustainable and effective plans for medical education were identified, which led to medical students being classified as key workers and were therefore allowed to continue with clinical placements.

One of these placements is Infectious Diseases (ID) which occurs as part of a 3-week block including aspects of Genitourinary Medicine and HIV. Conditions typically seen on these wards largely comprise tropical diseases such as typhoid and malaria. However, due to the increase in COVID-19 cases and subsequent travel restrictions, the incidence of such diseases, which are not endemic in Europe, has decreased [5].

Prior to our ID placement at Northwick Park Hospital, our exposure to COVID-19 positive patients had been limited. However, with this placement coinciding with the second wave of the pandemic and with multiple suspected and confirmed cases on the ID ward, we were strongly encouraged to engage with such patients. This ranged from relaying necessary observations in the ward rounds to taking histories in order to help understand the various clinical manifestations of COVID-19, thus supporting our learning.

A key factor driving our motivation to engage with COVID-19 positive patients was that as our contact hours at previous placements had been reduced as part of social distancing measures, we were more determined to maximise our learning experience. Furthermore, infection with COVID-19 can be an isolating experience for patients, as they are often not allowed visits from friends and family. As students, having more time than the already busy medical team, we were able to spend more time with them which was greatly appreciated by patients and highly rewarding for us.

The national lack of personal protective equipment (PPE) available was something we were highly aware of due to large coverage by the news, especially at the start of the pandemic. On starting our placements, we were provided with gloves, surgical masks and aprons (standard PPE) to see patients; nevertheless, our views were mixed on whether this was enough. This was largely due to experience in previous placements; some of us had attended Intensive Care Units (ICU) where more significant PPE levels such as eyewear and scrub caps, were readily available despite not being directly exposed to COVID-19 positive patients. However, some aerosol generating procedures, including ventilators, were used in the ICU area, which accounted for this heightened level of PPE. These worries were

relieved for us through the team's consensus that this was adequate protection, and clear posters on the wards to reinforce this message.

Speaking with our colleagues on ID placements at different hospitals in North West London, including St Mary's, Hammersmith, Ealing, Charing Cross and Chelsea and Westminster Hospitals, we discovered their experiences and level of engagement with COVID-19 positive patients varied. To understand this further, we disseminated a small survey - completed by 28 students, to assess their experiences.

Student experiences varied across the different sites ranging from being encouraged to see COVID-19 positive patients regularly, to being discouraged or choosing to opt out due to concerns about putting themselves or their loved ones at risk. Some students decided against contact because they felt it was an unnecessary risk as they were not contributing to patient care directly, and the experience was not aiding their learning. On the other hand, we found this experience to be an insightful learning experience as we were greatly encouraged to play an active role within ward rounds. In addition, the ID team at Northwick Park Hospital generally encouraged engagement and followed up our encounters on the ward with case-based discussions, multidisciplinary team and X-ray meetings we partook in.

The students that were exposed to COVID-19 positive patients largely felt they had adequate PPE, stating that "consultants assured us it was okay", "the whole team was wearing the same PPE", and emphasising that standing at clear distance, as well as good hand hygiene contributed to the comfort. However, other students felt the standard PPE was inadequate, as similar to our experience, they received greater coverage whilst on prior placements. This highlights there is room for further, detailed communication and discussions with students on levels of PPE required in different areas of the hospital as this may encourage participation.

Students felt their comfort levels improved with exposure to patients over the course of the placement, but they felt it did not bear a significant impact on their 5th year learning experience. The former is something we can relate to ourselves as we felt that seeing COVID-19 cases reduced our fear of being around these patients during the pandemic, as long as we were wearing adequate PPE.

In terms of education, the COVID-19 pandemic resulted in many clinical and non-clinical tutors being redirected to their healthcare roles and a subsequent reduction of teaching on the wards. Since this placement was our first contact with COVID-19 positive patients, the support of the medical team was crucial in guiding and encouraging our decisions to engage with the management of COVID-19 patients, and alleviating any underlying worries. As we have become more involved in the 'frontline' experience, we have found we can still get the necessary clinical exposure, alleviating uncertainty and equipping us with the required skills to manage similar situations when we qualify as doctors. Overall, we can all agree that our experiences made a placement that appeared daunting and concerning in light of the current pandemic, an extremely interesting and enjoyable one.

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