Leadership: an effective human factor during COVID-19
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ABSTRACT
Background A hybrid leader is an individual with a professional background who takes on managerial roles. For surgeons, leadership is a non-technical skill within a domain of a human factor and a diverse role that makes them an effective hybrid leader.

Objectives We hypothesised that a surgical leader acts as a link between different departments in an organisation to influence performance at the workplace to bring positive changes in healthcare and patient safety.

Methods We followed the nine-dimension Healthcare Leadership Model (HLM) and reflected on the leadership roles within our surgical department at the Princess Alexandra Hospital NHS Trust, United Kingdom.

Results Changes were quickly adopted and monitored while leadership learned adaptability to function quickly. Hierarchical decision making was removed while levelling up communication. Telemedicine was quickly adopted at both elective and ambulatory emergency settings. The local survey also showed trust and co-operation among team members.

Conclusions Hybrid surgical leadership is a complex but divergent role that acts as a bridge between the surgical team and others in administrative roles that promotes safer patient outcomes and better well-being for the organisations’ members.

INTRODUCTION
At the Princess Alexandra Hospital National Health Service (NHS) Trust Harlow, on London’s outskirts, the Surgical Department is flexible, resilient and compassionate with energetic and committed members. Here, many members have taken on managerial roles in addition to their professional background, thus acting as hybrid leaders. This complex responsibility does not make them immune from stress and fear, but understanding human factors helps manage surgical error.

Since the first reported case of COVID-19 in the UK, our surgical department acted as an interdepartmental bridge, to better understand the situation for effective response and to deliver the best possible uninterrupted service for safe patient outcomes, without compromising surgical services, especially emergencies. A similar response has also been observed in Singapore to preserve emergency surgical capabilities with a phased reduction in elective procedures and clinics.

As changes happened rapidly with the refinement of successive transformations, where possible, we used the dimensions of the Healthcare Leadership Model. The NHS Leadership Academy developed this model to help clinician become a transformational hybrid leader with effective teamwork for improved organisational development.

Engaging the team and leading with care
As we believe in effective communication and teamwork, we used social media’s power, following NHS and Public Health England guideline, to create a workgroup for better and quick communication, avoiding compromise in information governance. The workgroup participants included senior consultants, middle grades, core surgical and senior house officers, foundation doctors and managers. The team was also updated with the relevant guidelines and pathways, attempting not to overcrowd the communications. This, in turn, helped in continuing personal professional development with medical education.

David Archer, in his book on collaborative leadership, and others also confirm that building relationships skills have a direct impact on increasing the quality of the relationships among team members and ultimately the associated professional outcomes. Everyone was made aware of their value to the team, to recognise and understand the crisis level and way forward during this difficult time. We ensured early positive peer feedback was available all the time, to increase the morale, among team members. Mistakes within the team acknowledged positively as learning opportunities to build trust and maintain it. Juniors were also encouraged and supported to speak up, if they were worried and if they perceived that something was not happening as it should do. A local survey showed that trust and cooperation between surgical leaders and team members during a crisis were crucial in maintaining the best possible patient outcome.

Following meetings at various administrative levels, flexible and balanced plans were made to ensure the team was physically and emotionally supported. International studies have found that during disasters, interprofessional, non-technical skills are essential for clear and expert leadership. Although the arrangement of personal protective equipment (PPE) was a trust-wide issue, we made sure that we acted as a solid bridge to convey team members concerns to the stakeholders in a safe environment. Recent evidence suggests challenges existed in this area, when the world faced critical shortages of PPE. However, we made the appropriate arrangements to ensure the availability of safety equipment and coordinate Face fit testing for our staffs. Value, respect and equality of our team members had been our priority for the best patient outcomes.
**Brief report**

**Sharing the vision and connecting our services**
We continued to develop our network with other departments and with our patients, while identifying and creating opportunities with potential benefits. To collaborate leadership, we made sure to keep in touch with other departments of the Trust and our patients, to ensure robust and effective relationships between us. As there was a very high risk of patient-to-clinician transmission of COVID-19, we tabled a proposal to use virtual telemedicine, as a portal for future clinics at an organisational level. In the meantime, as not all patients were suitable for the virtual clinic, telephonic clinics were also arranged with occasional face-to-face appointment (mainly for ambulatory emergencies and selected urgent elective referrals). Also, in the intervening time, we also incorporated the virtual clinic principles into our surgical hot clinic services to safely provide flexible patient-focused acute surgical service.

**Developing capabilities and evaluating information**
Although a didactic leadership style can negatively affect the team, transformation and empowering the team members enhance teamwork and job satisfaction. As we continued to learn to support the team during this pandemic and as we were forced to adopt a traditional working method, such as face-to-face handover in a defined geographical space to using telemedicine to communicate, we ensured that communication and trust were maintained at a standard. We also moved away from a paper-based handover system to electronic and virtual handover at shift changes. We adopted the principles of the World Health Organisation (WHO) team brief to remove the hierarchical gradient.

As the world used surgical manpower in high-risk areas to efficiently combat the COVID-19 pandemic, we also planned to use our human resources effectively. First, we decided to change the running rota to a modified COVID-19 rota, thus, developing a whole new way of working. As we stopped elective activities to focus on emergency surgical work, we created a team of substitutes rather than conventional everybody, on site, all the time. This meant, team members were available but not necessarily working. The COVID-19 rota was reviewed regularly based on peer feedback. As with any change in an organisation, there are also negative influences. We found some of the more senior surgical trainees felt despondent because of decreased operative volumes. However, like the rest of the world, we were also learning and as hybrid managers, started to think outside the box. Obviously, as our priority shifted to ‘public health’, we ensured that the team was safe and our resources were used appropriately and effectively.

The authors supported the senior members of the staff by allowing them the freedom to attend management meetings and develop plans and pathways, focusing on restoring elective surgery on ‘green’ pathways, especially for patients with cancer. Two separate green sites, with deanery approved training opportunities, were chosen depending on the level of care required for the patient during the postoperative period, to continue safe patient services reducing delays.

a. Local independent sector provider being able to give us the capacity for level 1 or 2 care for the patients.

b. ‘The Hub’, part of London Cancer Network, being a venue for patients requiring level 3 care.

**Inspiring shared purpose and influencing for results**
The traditional beverage style of our centralised health system takes a long time to bring about changes because of its hierarchical system, with many committees to approve things.

COVID-19 crisis is fascinating in a way that the management structure became much less pointy, flatter with people talking sideways to each other, enabling us to introduce changes quickly and allowing things to happen in a much more fluid way. To sustain change in a more effective way, decision-making happened almost on the spot, with clinical ‘cells’ like strategy cell, small multidisciplinary groups of team members developing or ratifying strategy changes in one meeting.

**Holding to account**
We followed the national guidelines to bring changes within the department. As we continue to evolve and learn during the COVID-19 pandemic, we are still in the process of managing changes made within the department, not only to help our team members but also other departments of the Trust. The impact of these is unknown yet, as we continue to collect the data on their consequences. However, our surgical team members understood and followed the decisions made by surgical leaders in the department, to continue to provide good health services. This teamwork was at a high standard at all levels.

We do believe that self-evaluation at all levels within the department is the key to achieving the essence of sustainability. We were overwhelmed to see that our juniors regularly evaluate our decisions to maintain service improvements. Until we bring sustainable change, we aim to continue to evolve through our learning while patient safety and our team members’ well-being remains our top priority.

**Conclusion**
Leadership is about keeping pace with the system, moving forward with other departments and bringing about organisational change. The era of COVID-19 has brought rapid changes which are quickly adopted and monitored. Leadership during a crisis is about learning flexibility and adaptability because we have to change the way we function quickly. It is all about the levelling up of the communication field, which removes hierarchal decision-making, making it more horizontal rather than vertical change and happening more quickly, without the need of usual bureaucratic process that often delay change. To conclude, leadership is a colourfull rainbow that incorporates all the tones of the health system from clinical to administrative aspects, for better and safer outcome for patients, health professionals and the organisation. Our reflections above are unsupported by hard evidence. Hence, this reflection is our personal view of what happened in our organisation. To look more widely, we are surveying the teams involved in providing care during the COVID-19 crisis to take the pulse of workforce and see whether our views are more mirrored in a more scientific way.

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