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Title : From a Crisis of Leadership to Leadership in a Crisis: leading sudden critical care teams in response to COVID-19

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Summary

We aim to understand how COVID-teams experienced leadership during long-term high stress situations by investigating how COVID-team leaders, senior clinicians and service leaders allocated personnel, established teamwork and cooperation during long-term high stress situations, and how frontline healthcare professionals deployed on COVID intensive and critical care wards experienced such leadership. We will present findings from the first qualitative phase of an online sequential mixed methods study involving semi-structured interviews of members of multidisciplinary NHS Covid teams. The interviews will build on our previous qualitative research on acute medical units, and on teamwork and leadership in cross-occupational military teams. Thematic data analysis will draw on extant leadership theory to allow new conceptual frameworks of experiences of leaders and leadership during the delivery of hospital based critical care to COVID affected patients.

Track

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From a Crisis of Leadership to Leadership in a Crisis: leading sudden critical care teams in response to COVID-19

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Leadership in the National Health Service (NHS) has long been highlighted as a major influence in the delivery of care. Pre-pandemic narratives depicted a crisis of health service leadership capability and leadership development has been identified as a key challenge to the NHS (Anandaciva, Ward, Randhawa, & Edge, 2018; NHS England, 2018; The Scottish Government, 2013) Failures in collaborative leadership have been cited as barriers to service reconfiguration, for example in the slow pace of integration between health and social care (Audit Scotland, 2019). More sinister failures of health service leadership have been identified in high profile reports and investigations. For example, The Sturrock Report (Sturrock, 2019) of damaging organisational culture that leadership failed to address and the shocking accounts of patient outcomes at Mid Staffordshire NHS Foundation Trust detailed in the Francis inquiry (Francis, 2013). Such regional narratives have been instrumental in depicting a national leadership crisis in healthcare.

The COVID-19 pandemic has moved the focus from a crisis of leadership to the necessity for leadership in a crisis. With thousands of nurses, doctors, medical students, and allied health professionals from different care pathways being deployed into intensive care and high dependency units (Forces.net, 2020; NHS England, 2020), and directors and managers being required to lead remotely, local leaders had to devise entirely new ways of allocating staff, as well as leading and guiding their staff. This was aggravated during the first wave by the fact that much of the tactical staffing and deployment during the pandemic was locally organised (e.g. by separate NHS trusts, hospital departments, or deaneries) (Macrae, 2017; Vincent, Oikonomou, Carthey, & Macrae, 2020), resulting in a myriad of different approaches to leadership and workforce allocation. For example, preliminary data from our research suggests that some trusts chose to disband pre-existing teams in favour of "new COVID wards"; in other cases personnel were attached to pre-existing ward teams. The ad-hoc and fluid nature of COVID wards are expected to increase the significance of many of the factors commonly associated with patient outcomes, delivery of care (Janss, Rispens, Segers, & Jehn, 2012; O'Leary, Sehgal, Terrell, & Williams, 2011; Pype, Mertens, Helewaut, & Krystallidou, 2018), individual resilience and staff mental-health as well as retention (Meterko, Mohr, & Young, 2004; Mohr, Burgess, & Young, 2008; Morley & Cashell, 2017; Wild et al., 2020). Moreover, different levels

of occupational experience and training, may have had enduring effects on staff members least prepared or experienced in emergency and critical care environments (Hoffmann, Battaglia, Perpetua, Wojtaszek, & Campbell, 2020; Shanafelt, Ripp, & Trockel, 2020; Soled et al., 2020), further emphasising the need for supportive leadership. During temporary reductions in hospitalisation rates, with reports that half of ICU personnel were exhibiting signs of probable PTSD and up to 80% struggling with stress, anxiety and exhaustion (Greenberg, Docherty, Gnanapragasam, & Wessely, 2020a; Greenberg et al., 2020b), leaders were required to address increasing rates of mental health problems in their staff, all while dealing with a backlog of routine procedures.

The literature on healthcare leadership suggests that leaders on COVID wards may fulfil a range of functions. With leadership repeatedly found to have positive effects on the creation of shared mental models, psychological safety among team members and reduction of incivility and team conflict in acute healthcare teams (Aufegger, et al., 2019; Almost et al., 2016, Keller et al., 2020), leaders in COVID wards have a crucial role in establishing a common understanding of the tasks on the ward. Additionally, with leadership an important factor for team efficiency and performance, leaders on COVID-19 wards are crucial for decision and execution latency as well as protocol adherence (Courtenay, et al., 2013; Welp & Manser, 2016). Furthermore, while mono-professional leadership was associated with increased information exchange and clear shared mental models, inter-professional leadership and shared leadership has been linked to higher team performance and more positive team climate (Courtenay, et al., 2013; Aufegger, et al., 2019), Nevertheless, leadership across interprofessional boundaries has also been found to be subject to a range of problems associated with occupational demands and job expectations, which may involve 'slipping into hierarchies' (Petit dit Dariel & Cristofalo, 2018). However, it is important to note that leadership research in mono-professional, inter-diciplinary and interprofessional clinical teams is to date predominantly focused on stable teams, who will have received some training or preparation and tend to have been working together for longer periods of time (Aufegger, Shariq, Bicknell, Ashrafian, & Darzi, 2019; Husebø & Akerjordet, 2016; Janssens, Simon, Beckmann, & Marshall, 2018; Robinson, Shall, & Rakhit, 2016; Sims, Hewitt, & Harris, 2015). Whilst extant work focuses on leadership, teamwork and communication to enhance clinical outcomes in permanent or semi-permanent teams (Jessup, 2007; O'Leary et al., 2011; Singh, Küçükdeveci, Grabljevec, & Gray, 2018), little is known about the contribution of leadership to long-term psychological outcomes, resilience, and retention of ad-hoc created teams in the public sector, such as those currently working to deliver critical care for COVID affected patients. As such, clinical directors, senior managers and team leaders have little evidence-based guidance and some anecdotal reports as to how best to assemble, lead and run the

ad-hoc and fluid teams deployed during COVID-19 (Ellis, Hay-David, & Brennan, 2020; Institute of Healthcare Management, 2020; Thornton, 2020; Yano, 2020).

In this paper we aim to understand how COVID-teams experienced leadership during long-term and potentially high stress situations by investigating, (a) how COVID-team leaders, senior clinicians and service leaders allocated personnel, established teamwork and cooperation, and (b) how frontline personnel from different care pathways and professions (e.g., nurses, doctors, allied health professionals) deployed on COVID wards experienced such leadership. This paper will, therefore, present preliminary findings from the first phase of a wholly online sequential mixed methods study exploring elements of leadership, teamwork and social support in both the patient-facing frontline staff consisting of nurses, doctors, allied health professionals and nursing assistants (N=55-70) as well as hospital leaders, consisting of clinical directors, nursing directors and senior managers (N=14-20). The interviews draw on a combination of techniques building on our previous qualitative research on acute medical units (Adams, Cole, Brundage, Morrison, & Jansen, 2018; Reid, Lone, Morrison, Weir, & Jones, 2018), and on teamwork and leadership in cross-occupational military teams (Schilling, 2019). Identifying themes across different types of teams will result in a complex analytical matrix, which will be analysed using NVivo12 to support data handling, coding and retrieval of coded data.

Hereafter, this developmental paper will present some preliminary findings from the first 25 online interviews with members of NHS Covid teams, consisting of personnel from different occupational roles and care pathways. Deployed NHS COVID-teams appear to exhibit three characteristics across the observed trusts. First, personnel deployed to COVID wards were often from different interprofessional backgrounds with varying degrees of intensive or acute care experience and reduced shared mental models. Second, due to the high-risk environment and the resulting social distancing measures, remote leadership was put in place for ward and department management. Third, the requirement to rapidly deploy personnel, according to participants, reduced the ability to adequately prepare and train staff members for the particular deployment on COVID wards.

Most participants deployed during the first wave of COVID-19 described the difficulty of leading wards and teams in an atmosphere of ‘chaos’, characterised by an unclear pathology of COVID, constantly changing guidance, the multi-disciplinary character of teams, and the lack of familiarity with particular equipment (e.g., continuous positive airway pressure (CPAP) or haemofiltration devices). As such, many of the leadership tasks described during the first wave required the development of new standard operating procedures and clinical checklists, different forms of workload distribution and interprofessional workforce allocation. For example, given the lack of intensive care experience of many of the Day Surgery Nurses, Physiotherapists or Occupational

therapists, Health Care Assistants and Junior Doctors redeployed into COVID wards, team leaders were required to partner them with experienced personnel. Consequently, many of the lessons learned by individual trusts during the first wave, were co-opted and built on during the second wave, increasing the patchwork character of trust-specific localised solutions to issues around COVID-19 deployment.

The common characteristics of COVID wards included requirements to socially distancs, lack of shared break rooms, PPE requirements, and loss of formal handovers. Many participants reported that leadership was crucial for them in establishing effective teamwork, creating new communication models and building a supportive team climate.However, with social distancing rules reducing the ability of senior leaders to visit wards, and the loss of in person team meetings, leadership predominantly fell to staff deployed on the wards (e.g., senior nurses, registrars or consultants). Leadership was therefore almost universally reported by the participants deployed in the first and second wave to be reliant on presence on the wards, experience in direct patient contact and being seen to support staff by checking up on people, listening to staff concerns and solving problems. One interviewee summed this up by arguing that good leadership was exemplified by 'presence and not presents' (RES020). Interviewees with those in leadership roles on the wards, reported that increasingly throughout the second wave their leadership would also incorporate mental health support on the ward in order to deal with the increasing levels of exhaustion, frustration and anxiety of healthcare staff.

In light of the distribution of responsibility to lower hierarchical levels, interviewees often described the occurrence of 'emergent leaders' and 'flat hierarchies', where personnel with lower hierarchical roles but particular skill-sets, often stepped up to take on specific leadership roles, by developing particular work processes or difficult tasks such as taking over overseeing end of life support for grieving family members. For example, junior (Band 5) intensive care nurses were often reported to be seen as such emergent leaders, as during shifts they were required to guide or train redeployed support staff. Simultaneously, participants with leadership roles in their own discipline (e.g., band 6 or 7) who were deployed to COVID-intensive care environments as support staff, often reported they were relieved to give up formal leadership, but nevertheless took on supporting functions, such as speaking on behalf of the team to trust management or providing mental health support to team-members.

Interestingly, while in normal situations, different clinical professions on a ward have their own distinct hierarchy and leadership channels, some participants argued that in some cases leaders were recognised across professional boundaries, i.e., nurses recognising registrars as leaders and junior doctors recognising a senior sister as leader. This, however appears to date, most pronounced with

participants who reported a concurrent devolution of tasks across professional boundaries (e.g., junior doctors or physiotherapists doing nursing tasks). This suggests that the risk of 'slipping into hierarchies' (Petit dit Dariel & Cristofalo, 2018) may be in some cases be curtailed by the oft-repeated sentiments of 'being in the same situation' and recognising each other as 'humans'.

This preliminary analysis of the interviews with staff deployed on COVID wards would indicate that these ad hoc teams in a constrained physical environment looked to leadership based predominantly on proximity, with those present on the ward being recognised as leaders, while formal leaders not on the wards were disregarded. Interviewed personnel highlighted the occurrence of emergent leaders, who due to particular skill-sets or knowledge took on leadership roles in teams where more nominally senior personnel lacked professional experience. In contrast, senior organisational leadership does not feature in participant experiential accounts, suggesting a lack of visibility of strategic leadership at the organisational level and highlighting the localised and exigent nature of leadership in these teams. Compassionate leadership came to the fore with good leaders perceived to be looking after the emotional needs of staff. Interestingly, our preliminary data suggests that some COVID-teams appear to have coped better with less workforce outflow as such there may be a number of lessons to be drawn from the experience of *ad-hoc* COVID NHS teams that can inform practice as well as theory relevant for future responses to pandemics as well as localised emergency and disaster relief efforts requiring rapid interprofessional fluid teamwork.

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