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REVIEW

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A scoping review exploring the impact and negotiation of hierarchy in healthcare organisations

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Abstract

Healthcare organisations are hierarchical; almost all are organised around the ranking of individuals by authority or status, whether this be based on profession, expertise, gender or ethnicity. Hierarchy is important for several reasons; it shapes the delivery of care, what is prioritised and who receives care. It also has an impact on healthcare workers and how they work and communicate together in organisations. The purpose of this scoping review is to explore the qualitative evidence related to hierarchy in healthcare organisations defined broadly, to address gaps in macro-level healthcare organisational research, specifically focusing on the (1) impact of hierarchy for healthcare workers and (2) how hierarchy is negotiated, sustained and challenged in healthcare organisations. After a search and screening, 32 papers were included in this review. The findings of this review detail the wide-reaching impacts that hierarchy has on healthcare delivery and health workers. The majority of studies spoke to hierarchy's impact on speaking up, that is, how it shaped communication between staff with differential status: not only what was said, but how it had an impact on what was acceptable to say, by whom and at what time. Hierarchy was also noted to have substantial personal costs, impacting on the well-being of those in less powerful positions. These findings also provide insight into the complex ways in which hierarchy was negotiated, challenged and reproduced. Studies not only detailed the way in which hierarchy was navigated day to day but also spoke to the reasons as to why hierarchy is often entrenched and difficult to shift. A number of studies spoke to the impact that hierarchy had in sustaining gender and ethnic inequalities, maintaining historically discriminatory practices. Importantly, hierarchy should not be reduced to differences between or within the professions in localised contexts but should be considered at a broad organisational level.

KEYWORDS

healthcare, hierarchy, leadership, management, nursing, power

1 | INTRODUCTION

Social hierarchies—the ranking of groups or individuals by some type of characteristic such as authority or status—are ubiquitous (Bunderson et al., 2016). Hierarchy exists throughout society, with people consciously and unconsciously aligning with patterns of dominance and deference (Bunderson, 2003). In organisations, hierarchy supports an efficient, stable social order (Magee & Galinsky, 2008), despite tensions between hierarchy and motivations towards equality (Kolodny, 2023). Hage (1995, p. 212) defines hierarchy in organisations, noting that the term normally refers to a 'hierarchy of authority' or 'chain of command'. Magee and Galinski (2008) further characterise hierarchy as a 'rank order' of status and power, while Kolodny (2023) describes it as a 'pecking order'. In consideration of the complexity, variability and fragmented multiprofessional nature of healthcare settings (Launer, 2022; Walston & Johnson, 2022), this review identifies a relative lack of research at the macro level of healthcare organisations (Bresnen at al., 2016; Chen et al., 2021; Johnson et al., 2020; Khayal, 2022; Øyri et al., 2020; Ramanujam & Rousseau, 2006; Vaughn et al., 2019) in leadership, management, organisational dynamics, complexity theory, quality improvement, innovation failure, resilience, regulation, disdain for business management, systems thinking, risk analysis and health expenditure, all of which relate to hierarchy. Hierarchy also exists at the meso and micro levels of healthcare organisations in teams, regardless of how broader societal relations or how a broader organisation is structured; competence and perceived expertise, amongst a range of other factors, are important in explaining how hierarchies are formed and are maintained amongst groups and teams (Bunderson, 2003; Magee & Galinsky, 2008). In addition to being pervasive, hierarchies vary substantially, from rigid to dynamic, steep to flat (Anderson & Brown, 2010), from hierarchy where leadership and decision-making is more concentrated, to more dispersed democratic leadership (Kolodny, 2023) in varying cultural interpretations of hierarchy (Bell & Pei, 2020).

Healthcare organisations, defined broadly, tend to operate a top-down structure of hierarchical management, where the chain of command and control extends pyramidally from the top to the bottom. The complexity of hierarchical management in modern organisations, notably in healthcare, has been analysed by systems management expert Drucker (2012, p. 89), who observed that 'the hospital [is] altogether the most complex human organization ever devised, but also, in the last thirty or forty years, the fastest-growing one in all developed countries'. To manage this degree of complexity within healthcare organisations (Bresnen et al., 2017), individuals often have relatively clear roles and responsibilities, frequently dictated by their differential access to training and subsequent expertise. Hierarchy is also embedded in healthcare culture, with acculturation starting in training (Colenbrander et al., 2020; Lempp & Seale, 2004), and is historically entrenched. As Johnson et al. (2020, p. 126) observe, 'Leaders within health organizations operate mostly in a hierarchal structure—what might be thought of as swim lanes at best and more often silos at worst'. Within this, certain professions have been regarded as having lower status and have been expected to submit to others, such as nurses acting subordinately in deference to doctors, as in the original historical 'doctor–nurse game' (Brown, 2019; Stein, 1967; Stein et al., 1990), while those in positions of power have actively excluded women, disabled people and those from ethnic minorities (Brathwaite, 2018; Colenbrander et al., 2020). Although progress towards greater equality in management has been attempted in many respects (Paton et al., 2020; Stein et al., 1990), hierarchy still pervades all areas of healthcare: a hierarchical culture has been identified as one of the key characteristics of struggling organisations (Vaughn et al., 2019). This form of social categorisation is also remarkably resistant to efforts that seek to change the status quo, which at least in part can be attributed to these historically entrenched power disparities (Battilana, 2011).

Hierarchy is important because it shapes the delivery of health services, how health services are structured, what is prioritised and who receives care, amongst other things. Hierarchy also influences how teams operate, shaping attitudes towards collaboration (Filizli & Önler, 2020), decision-making and communication (Green et al., 2017), facilitating or limiting contributions of different team members (Stocker et al., 2016). Within the significant prior literature on teams in healthcare, some components relate to hierarchy, notably regarding the management, structuring, communication, collaboration and performance of teams. A scoping review on interprofessional teamwork in trauma settings by Courtenay et al. (2013), for example, highlights the importance of good communication and collaborative team structures, finding that around '70% to 80% of healthcare errors are due to poor team communication and understanding' (p. 1), whereas 'cross-disciplinary leadership and collaborative decision-making had positive effects on overall team performance' (p. 3). The need to challenge steep hierarchical structures to achieve good team communication and performance in high-risk healthcare is also reported by Green et al. (2017). A more recent scoping review carried out by Raveendran et al. (2023, p. 511) on teamwork research in medical operating rooms observed that 'individual components of teamwork behaviors' predominated in the literature, 'rather than a holistic interpretation of teamwork based on multiple processes', calling for the importance of 'erties' and 'a framework to understand the nuanced nature of teamwork' in operating rooms; … 'to foster high functioning teams' (Raveendran et al., 2023, p. 511). The need for a holistic interpretation of healthcare organisations resonates with this finding, notably at a whole organisational level. While the above examples of teamwork research provide important findings for the effective functioning of complex differentiated meso and micro levels of healthcare, this scoping review aims to look beyond these levels to consider organisations holistically.

Beyond its impact on teams, hierarchy is also an important factor in explaining some of the most problematic elements of healthcare culture. Studies from around the world have revealed that humiliation and verbal abuse are all commonly experienced by medical students as part of an adverse, competitive 'hidden curriculum' of covert institutional discrimination perpetuated by senior staff, fellow students and even patients to reinforce the medical school hierarchy (e.g., Colenbrander et al., 2020;

Frank et al., 2006; Lempp & Seale, 2004; Wilkinson et al., 2006). In many respects, we cannot begin to understand the delivery of healthcare services and any related shortcomings without considering the impact of social and professional hierarchies. We also cannot begin to have a complete picture of how healthcare organisations deliver health services and the influence that hierarchy may have within this. The aims of this scoping review are to collate and analyse the available qualitative literature related to social and professional hierarchy in healthcare. More specifically, this review hopes to (1) explore the impact of hierarchy for healthcare workers and (2) examine how hierarchy is negotiated, sustained and challenged in healthcare settings. While there is substantial overlap between hierarchy as it exists within teams and broader hierarchies that exist within organisations, the focus of this review is on the latter.

2 | METHODS

2.1 | Design

Given the potential breadth of the literature on hierarchy and its potential impact on the delivery of healthcare, a scoping review was utilised to capture the extent of the available literature. We defined the broad scope of this review as 'hierarchy in healthcare organisations', including macro-organisational structures in addition to multiple meso and micro substructures, to gauge the strength of research interest and identify insights from the evidence in this field. Below, we follow the steps outlined in the updated Joanna Briggs Institute (JBI) guidance for conducting a scoping review (Peters et al., 2020), including the inclusion/exclusion criteria applied, search strategy and results, data extraction and analysis. Our search and reporting are also consistent with the preferred reporting items for systematic reviews and meta–analyses scoping review (PRISMA ScR) guidance (Tricco et al., 2018).

A more detailed description of our methodology is included as the Supporting Information (see Supporting Information 1), including details related to our search terms, data extraction and analysis. A search was carried out on 28 July 2022 utilising four search databases: Medline, PsycInfo, CINAHL and Scopus. The search returned 3141 results. Title and abstract screening 229 articles were left. After a full-text screen and searching the references lists of included papers, 32 papers were left in this review. Studies were included if they were mixed methods or qualitative and examined social or professional hierarchy as it existed within healthcare organisations and were carried out in clinical settings or the context of patient care. A summary of this process is outlined in a PRISMA flow diagram (see Supporting Information 2).

3 | RESULTS

The majority of studies included in this review were carried out in the United States (n = 13), the United Kingdom (n = 7), Sweden (n = 3) and Australia (n = 3). Studies used interdisciplinary samples (n = 17) or limited their samples to doctors (n = 5) or nurses (n = 5), and one study provided a case study of an allied health professional. Eighteen studies used interviews, focus groups or reported case studies, while 12 studies used ethnographic methods. Two studies were mixed methods (see Supporting Information 3). Below, we discuss the findings of this scoping study, with a focus on the research questions above, namely, (1) the impact of hierarchy in healthcare as it related to health workers and (2) how hierarchy is negotiated, sustained and challenged in healthcare settings.

3.1 | The impact of hierarchy

Hierarchy had wide-reaching impacts on healthcare workers and the delivery of health services. The vast majority of studies considered the impact that hierarchy had on communication and, in particular, to speaking up in situations that might challenge the power, status and professional expertise of the senior staff. In a study of Irish junior doctors in specialist training, hierarchy was an ever-present factor that shaped day-to-day practice (Crowe et al., 2017). Most participants spoke about obedience and the importance of hiding any frustration that they may have felt towards senior staff. Several spoke about their reluctance to speak up and voice their opinions. Despite these frustrations and the obvious impacts that hierarchy had, several participants saw this as a 'rite of passage', suggesting a tacit acceptance, having to prove that they had what it takes to be accepted in their speciality. While many of these issues could be put down to the structure and nature of the meso- and micro-environments, many of these impacts were explained by the organisation of training posts within hospitals, which, for many, felt like they were arranged in an instrumental fashion by hospital management, further embedding hierarchical culture and alienating junior doctors from their places of work. These findings are seen throughout the literature. Examining video recordings of 11 surgeries that involved senior consultant surgeons and those who were in training, Murtagh and Bezemer (2020) found that while the differential expertise between the senior and junior members of the team did not always determine actions and interactions, hierarchy shaped how actions and interactions were 'produced and organised'. That is, along with the distribution of expertise within these teams, broader cultural and organisational hierarchy dictated how communication was conducted between senior and junior members of the team, with an implicit understanding that 'the lead surgeon is the authoritative expert, the one with the requisite knowledge and expertise to assess a situation and lead decision making' (p. 29). Like many of the studies below, there was a reticence to speak up amongst junior team members, with the authors concluding that this was not 'a simple matter of the imposition of senior power and status, but may have more to do with the careful distribution of interactions rights and responsibilities that both trainees and consultant surgeons meticulously orient to' (p. 29).

In another study, amongst a sample of 23 Japanese nurses, Omura et al. (2018) found that hierarchy was a substantial factor in

explaining nurses' (un)willingness to speak up and challenge those in more senior positions. This study primarily focused on what were intraprofessional differences between nurses and doctors; however, it also described the consequences of this hierarchy. More than just restricting communication, this study details bullying, which had broader impacts beyond the individuals who were targeted, silencing others who were a witness to or who were aware of the bullying. What is noteworthy about this study is how broader Japanese culture impacted the reproduction hierarchy and its consequences within this organisation. Similarly, Eekholm et al. (2021) found that amongst nurses in Denmark, organisational structure was one factor impacting nursing care, with the authors noting that such care was devalued, with a biomedical approach dominating. This approach not only took time away from nurses being able to deliver services but also resulted in a loss of professional identity.

In a study that used a comparative design, researchers observed and carried out a survey with nursing staff across four wards, two of which had adopted a 'lateral management structure', while the other two had more hierarchical management structures in place (McMahon, 1990). Offering further insight into how hierarchy shapes communication, this study found that on hierarchical wards, communication was far more concentrated, with the designated leader often the centre of this, whereas communication was more dispersed on laterally managed wards. Other differences were also noted, namely, that problems related to patients or nursing prompted far more discussion in wards that were managed laterally, while on hierarchical wards, similar issues were often not discussed, and instead, they were referred to other health workers. Finally, nurses on the laterally managed wards reported communication with their colleagues to be far more collaborative compared with those on the hierarchical wards. Notably, it was not only communication from which staff were excluded. At least one study provided some insight into how this manifested physically, showing how, in morning interdisciplinary rounds, nursing and allied health staff often took positions outside of the core circle, where discussions were dominated by doctors. Some described a 'fight to get in', while others reported having given up on attempting to participate in morning rounds (Paradis et al., 2016).

One study offered a different perspective: instead of focusing on those who were in lower hierarchical positions, this study focused on health workers who were middle managers and their role in communicating information to stakeholders delivering care and to those in management. Currie et al. (2015) found that amongst a sample of doctors and nurses, their ability to broker knowledge related to quality improvement and patient safety was limited, resulting in a broken chain of knowledge between and within these professions. Differences were again noted between nurses and doctors: nurses, for example, found it easier to broker their understandings down the hierarchy, but because their status differed from that of doctors, it was often difficult to share this knowledge inter-professionally, creating what the authors labelled knowledge 'fault lines'. As a whole, these results show how complex inter- and intraprofessional hierarchy that exists within health organisations may restrict vertical and horizontal communication. Studies that have examined how hierarchy is negotiated (which will be discussed below) have reached similar conclusions, not only showing that hierarchy limits the extent to which health workers are willing to speak up but also that a broader culture shapes how communication occurs (Kim & Oh, 2016; Tarrant et al., 2017).

Amongst the studies that explored the impact that hierarchy had on communication, several explored more specific outcomes, like the reporting of child abuse and communication about medication safety. Amongst a sample of 21 Australian nurses, hierarchy was one of the salient factors in explaining why nurses experience challenges in reporting child abuse (Lines et al., 2020). This study found that a fear of making mistakes, coupled with formal structures and procedures that were inflexible and inadequate (with nurses having to navigate complex legislation and clinical guidance), caused hesitation or confusion when it came to reporting possible occurrences of abuse. Other studies have reached similar conclusions. Amongst a sample of 17 junior doctors working in intensive care, while many initiated supervision or consultation in relation to medication safety, still reservations were still expressed about asking questions (Tamuz et al., 2011). Interestingly, who from and how information was sought differed between professions. That is, nurses and pharmacists assisted with decision-making related to medication and were also sought for advice. In many cases, this led to ambiguity as it related to hierarchy, in that doctors traditionally are seen as having higher status than other health professionals; however, in this case, nurses and pharmacists had more expertise when it came to medication safety and administration. This resulted in junior doctors using different communication strategies. For example, they used deferential and indirect language when seeking assistance from other professions. In another study carried out in a surgical setting, communication was explored as it related to surgical site infection amongst interdisciplinary surgical teams (Troughton et al., 2019). Again, a number of participants were apprehensive to speak up. As in the above study, the reasons why participants were apprehensive to challenge senior colleagues varied by profession. For junior doctors, this was usually because there was an assumption that more senior surgeons had superior knowledge and experience, while for other professional groups, many feared offending or provoking a negative reaction from senior colleagues. While the results of this study largely speak to the impact and reproduction of hierarchy within a team environment, it notes the larger culture of hierarchy that exists within healthcare organisations and between healthcare professions as a key contributor to these results.

A number of studies detailed the impact that hierarchy had on individuals, perceptions, attitudes and well-being. Position within an organisational hierarchy dictated participants' views and perceptions of complex organisational change that involved workforce restructuring and a move to a new hospital, for example (Jones et al., 2008). While there were shared concerns between supervisory and nonsupervisory staff, concerns and views about the change differed. For example, those more senior in the hierarchy were likely to be less impacted by the change, while those in nonsupervisory roles

expressed greater concerns about the impact that the change was likely to have on their day-to-day activities and routine. Other studies examined other personal impacts of hierarchy as they related to well-being in the workplace. Junior doctors in Ireland in specialist training spoke about fear related to speaking up and challenging more senior doctors, risking repercussions or poor treatment or simply being seen as inadequate. A number expressed the desire not to be seen as 'troublesome' by more senior staff. The fear of alienation also impacted help-seeking behaviour, with several participants noting that they were reluctant to seek help for these reasons. This relative sense of powerlessness for many resulted in anger, resentment and disillusionment, with participants detailing intimidation, bullying and humiliation from senior staff that largely went unchallenged and unquestioned (Crowe et al., 2017). Similarly, in a study carried out with nurses, support workers and healthcare aides in Canada, Syed et al. (2016) found a link between the stress experienced at work and 'care work hierarchies, task orientation, and strict divisions of labour' (p. 41) between and within these groups. This study also detailed experiences of bullying, with staff feeling undervalued, overwhelmed and stressed, which was, in part, attributed to the hierarchy found within this workplace. Importantly, two studies explored the ways in which ethnicity and gender intersected with hierarchy, speaking to how hierarchy reproduces ethnic and gender inequalities in the health workforce (Hinze, 1999; Iheduru-Anderson, 2021).

While all of the above studies suggest that in some way hierarchy was conflictual or restrained communication or action in some way, at least two studies noted the potential security and certainty that hierarchy offered (DiPalma, 2004; Klein et al., 2006). For example, amongst an emergency team who dealt with 'unpredictable, inter-dependent, and highly consequential tasks', hierarchy was an important factor that contributed to team members knowing who to defer to in moments of uncertainty (Klein et al., 2006, p. 590). In the discussion below, we comment on the ways in which hierarchical processes that operate in small specialist healthcare teams may relate to the overall organisation.

3.2 | Negotiating hierarchy

Several studies provided insight into how hierarchy was negotiated, how it was reproduced and how it was challenged. Kim and Oh (2016) explored how 15 nurses assimilated to a hierarchical culture within a hospital in South Korea. This process started with learning 'unspoken rules', what was and was not acceptable behaviour and communication in this setting. Nurses then went on to negotiate the culture by using several strategies, remaining silent and generally behaving and communicating in ways that were seen as acceptable. This study provides insight not only into the adjustment into hierarchical culture but also how it is maintained; its findings are reflected in several other studies. Graham (2009, p. 27), for example, detailed how nurses and other nonmedical health workers negotiated discharge rounds, utilising polite and nonconfrontational language. While there was no overt tension, and the atmosphere was generally collegial, there was 'a clear institutional hierarchical structure that govern[ed] how caregivers interact[ed] with one another'. A study by Tarrant et al. (2017) provides further insight here, finding that hierarchy dictated how communication was negotiated by all health workers, regardless of their status. While those lower in the hierarchy tended to use more polite language, several other strategies were used, from humour to more openly confrontational language, which was often dependent on a person's position in the hierarchy and to whom they were communicating. Similarly, Apker et al. (2005) suggested that experienced nurses had developed a repertoire of communication strategies which they utilised depending on who they are communicating with. Importantly, how hierarchy was negotiated was dictated by a range of factors, not just profession-related. Three studies provided evidence about the impact of gender and ethnicity in negotiating hierarchy. Amongst a sample of 18 US doctors, it was found that while the majority of participants endorsed some type of 'prestige' hierarchy, female doctors were far less likely to resist the idea of a 'prestige' hierarchy within the medical specialities (Hinze, 1999). Reasons given in support of this hierarchy were pervaded by perceptions of toughness and masculinity. Importantly, this study shows that we cannot begin to understand the hierarchy and its negotiation in healthcare organisations without considering gender differences. As Hinze (1999, p. 233) concludes, hierarchy 'is not a gender-neutral concept … it is infused with gender'. We can see similar themes emerge in Omura et al.'s (2018) study with Japanese nurses, not only showing how hierarchy is gendered but also showing how broader societal traditions shape expectation and modesty, which only further complicate the negotiation of hierarchy. Like gender, it is also likely that the intersection of ethnicity only further complicates this picture, with health workers from ethnic minority backgrounds having to further negotiate hierarchies, where power has historically been held by those who are white and male (Iheduru-Anderson, 2021).

Several studies spoke to the difficulties in attempting to shift hierarchy. Spyridonidis and Currie (2016) examined how nurse middle managers negotiated hierarchy. The findings of this study suggested that nurses acted as 'translators' between implementing policy-driven guidelines as they related to the delivery of care and those in upper management. This role as a translator, however, was not always smooth, with this translation work difficult to manage over the longer term, 'as professional and managerial hierarchies reassert themselves' (p. 760). A Swedish study that sampled 'process managers' in three hospitals (Nilsson & Sandoff, 2015) provides further insight here. Process managers were health workers who were charged with leading and influencing processes related to treatment. Process managers spoke about occupying a position within the hospital hierarchy that did not provide them with an adequate mandate to make changes to treatment processes, while others felt that their mandate was too ambiguous to make substantive change. To negotiate this ambiguity and the barriers experienced, process managers used a range of strategies, including emphasising the importance of any change for all staff, 'anchoring' ideas or proposed changes and involving other staff in the development of new

processes. In negotiating a new organisational plan, Sebrant (2014) suggests that within an aged care clinic, a range of individual factors contributed to change being resisted between doctors and nurses, who had opposing views about clinical restructuring. A series of power struggles to achieve dominance in the organisational hierarchy ensued, complicated by strong emotions of envy, rivalry and feelings of victimisation. This resulted in a shift from a flat decentralised structure in which head nurses had taken on powerful positions to a conventional medical hierarchy in which senior physicians once again took up their traditional leading roles.

Several other studies suggest that hierarchy can be negotiated and that it can indeed shift with time. In a study in a US-based health organisation, Satterstrom (2016) collected data for over 31 months, examining how change within hierarchies occurred. These findings suggested that while difficult to change, hierarchies are not static. A range of factors are influential in shifting hierarchy, such as a 'micro wedge,' a behaviour that undermines the status quo. A number of further studies detail the way in which hierarchy was negotiated and challenged. In a study that was carried out in two phases, Nugus et al. (2019) showed how providing feedback about workplace communication and hierarchy shifted health worker's perceptions. While nursing and allied health staff were initially marginalised in decision-making, highlighting this fact after phase 1 of the study prompted changes that generated greater participation and resulted in health workers reflecting on their positions and relative power. Several other studies also spoke to how hierarchy was challenged or shifted. Eekholm et al. (2021) suggested that assertive nursing leadership helped to put nursing care on the agenda, making it visible and taking time away from other activities that support the work of doctors, reclaiming time and professional identity. In a study that examined the implementation of a clinical pathway on hierarchical structures within a German surgical department (Ronellenfitsch et al. 2019), participants felt that it had impacted hierarchical structures, giving staff in lower hierarchical positions more autonomy by providing detailed instructions in relation to care, for example. Another study spoke to how hierarchy may be shifted or challenged. Yuter (2012) describes the relationship between a self-organising 'community of practice' that existed within a hierarchical health organisation in the United States. This study speaks to the dynamic and shifting relationship between this nonhierarchical group and the broader organisation, but also shows how such groups can begin to undermine hierarchy, describing how this group 'evolved from a small group dealing with basic equity issues to a large body spearheading a major labour organizing effort' (p. 117). Finally, Nuttall (2017) provides a case study of one allied health professional's adjustment to working in a dental hospital. Drawing on the concept of relational agency, this study suggests that rather than remaining silent, the participant in question negotiated hierarchical relationships by reading the culture and identifying 'what mattered' for those at the top of the hierarchy. In doing this, they focused on two features of this culture, namely the 'respect for data and the power of the regular departmental meeting' (p. 51). This study speaks to how, with time and tenacity, change can follow.

Several other studies discussed the complexities in navigating hierarchies, not just in their maintenance or how they were challenged. In a study with US health workers, hierarchy was sustained and negotiated through everyday communication and actions. Noyes (2022) suggested that the negotiation of hierarchy is complex. The findings of this study suggest that while some groups more consistently used texts that re-enforced hierarchy, others used texts that both re-enforced hierarchy and challenged it. Context was important here: the makeup of the group where conversations occurred often dictated whether hierarchy was reinforced or challenged and how conversation was used to negotiate a balance of power within these groups. The idea of balancing the hierarchical and nonhierarchical interactions is also present in a UK study that interviewed stakeholders in relation to leadership on quality and safety (McKee et al., 2013). While the majority of participants saw a need to shift to 'new' and more distributed leadership, this was seen to need to be 'balanced and complemented by direction-setting at a national and unit level; hierarchical approaches most commonly characterised as "old" leadership are thus seen as having an enduring and useful role' (p. 17). Similarly, after shadowing health workers in a US hospital, DiPalma (2004) found that hierarchy also played a positive and productive role, namely, that at times, it provided 'a degree of stability and set a tone of general respect for others' (p. 299). Challenging the position that hierarchy was always negative and that it was either re-enforced or opposed, this study concluded that 'the labyrinthine working relationship between physicians and nurses is not a simple two-point hierarchical discourse—a game where one player is all powerful and the other entirely submissive' (p. 297). This relationship is complicated by a range of factors, including context, institutional expectations and culture, expertise and gender, to name a few interactive factors. Starting from a similar position, that hierarchy is not just 'a matter of subjugation' (p. 2) but something that is complex, dynamic and ambiguous, Hindhede and Andersen (2019) suggest that in a Danish hospital, this was achieved both through containing and cultivating ambiguity in relation to professional hierarchies. Together, these studies speak to the resilience of hierarchy being difficult to untangle and shift and how bureaucracy resists change and self-corrects with time.

4 | DISCUSSION

Hierarchy had wide-reaching impacts on the delivery of health services and health workers, with substantial effort utilised in navigating and negotiating it on a day-to-day basis. One particularly pervasive impact that was widely documented related to hierarchies' impact on communication.

While many studies spoke about how hierarchy limited the incentive of low-powered healthcare workers to voice their opinions, its impact on communication was far more complicated. Hierarchy not only shaped action and communication, it also dictated and shaped what was acceptable to say, by whom and at what time. That is, hierarchy was not only a process but also a structure

(Ferguson, 1984), and rigid hierarchical structures foster 'the particular styles of thinking and knowing' as they 'expedite certain kinds of activities, possibilities and inspirations and dissuade and divert others' (DiPalma, 2004, p. 299). A further thing that stands out from the above studies is that hierarchy created fault lines when it came to communication, whether between or within professions, from those who held power to those with relatively little power. Several studies discussed how healthcare workers tailored their communication according to their own and others' position in the hierarchy. There were also broader and perhaps more pervasive impacts, such as the loss of professional identity (Eekholm et al., 2021). Importantly, these findings speak to the influence of broader cultural and organisational factors in reproducing hierarchy and to how hierarchy had pervasive effects across not only teams but also organisations. For example, hierarchy did not only impact communication in what is said or how this was negotiated, it also shaped assumptions related to action and communications, often implicitly. Also present within our findings is the broader influence of professional, organisational and even societal culture in shaping organisational hierarchy and how it was negotiated. These findings are consistent and have parallels with the broader literature that speaks to how health and medical students are subtly socialised to conform to hierarchical norms, beginning in training (Colenbrander et al., 2020; Lempp & Seale, 2004). While a number of studies indirectly mentioned the aversive by-products of hierarchy, such as bullying, it is clear from the above results how certain hierarchies could enable such behaviour. Another outcome that was present in the literature related to the personal costs of hierarchy, with studies reporting fear, envy, rivalry and anxiety amongst a range of other impacts that could be, at least partially, attributed to hierarchy.

The above findings also detail the complex ways in which hierarchy was negotiated, challenged and reproduced. A range of communication strategies and interventions were detailed. As a whole, while these results further speak to the observation that the negotiation of hierarchy was dynamic, it was also relational and on the whole, notoriously difficult to shift. In saying this, however, several studies provided examples of how organisational hierarchy was challenged and in some cases shifted over time. Importantly, in considering the relational and dynamic nature of hierarchy, these results spotlight the importance of taking an intersectional approach, namely, that hierarchy should not be reduced to differences between or within the professions. A number of studies spoke to the impact that hierarchy had in sustaining gender and ethnic inequalities, maintaining historically discriminatory practices.

Importantly, it should not be assumed that hierarchy is solely restrictive or negative. A small number of studies reported on the more positive impacts that hierarchy had. This has been noted in the literature previously; for example, Bunderson et al. (2016) distinguish between contrasting forms of hierarchical vertical differentiation, including centralised or steep hierarchies characterised by 'inequality' and hierarchies involving 'acyclicity', an open chain cascade of top-down influence between successive pairs of individuals. This work highlights the functional benefits of relational connectedness within 'hierarchy-as-acyclicity' in comparison to the dysfunctional conflict and demotivation associated with 'hierarchy-as-inequality'. These acyclical hierarchical processes are reflected in the study by Klein et al. (2006, p. 590) speaking to the vital importance of a 'hierarchical, deindividualized system of shared leadership' for complex, highly challenging situations such as teams in emergency trauma care. A number of other studies spoke to how participants recognised the negative impact of hierarchy; however, they continued to tacitly accept it in their actions and language. Within the broader level of healthcare organisations, specialist substructures such as high-risk rapid response emergency teams may need to develop dynamically adaptive forms of hierarchy that may operate like silos (or 'swim lanes') within the wider organisation. These can be both vital and highly successful in meeting important patient-centred operating targets, as in the example provided by Klein et al. (2006). However, at the broader healthcare organisational level, as Walston and Johnson (2022, p. 381) observe: 'Traditional functional structures that cluster like professions in departments often block … information flows and create "silos" that can impede good decision-making. Silos separating people and work areas increase the risk of errors and harmful choices. The viability and strength of a healthcare organization depends on the confluence of culture, behaviors, practices, and a supporting organizational structure that provides excellent governance, decision-making, and direction'. As Launer (2022, p. 58) comments from his extensive experience in reflective medical practice and multiprofessional healthcare, 'the whole is more than the sum of its parts', in terms of the overall healthcare organisation.

While this review identified 32 studies, there is substantial scope for further research exploring hierarchy, both within healthcare organisations at a macro level and at meso/micro levels. The picture at present paints a somewhat fragmented, complex and variegated picture, requiring more holistic approaches that engage with broader organisational and cultural factors that shape hierarchy within healthcare settings. There also appears to be a need to engage with the more positive or at least necessary aspects of hierarchy, squaring these with its more negative aspects, along with how these could be minimised. Finally, there also appears to be scope to learn from healthcare organisations where hierarchy is deliberately minimised. Such case studies could provide important insights for more orthodox healthcare settings, along with how hierarchy and its more pervasive negative influences could be minimised.

4.1 | Limitations

There are several limitations worth noting as they related to this article. This article did not include students. There are studies that detail the particularly alarming influence of hierarchy on issues such as bullying and humiliation of medical and nursing students. Further insights about hierarchy could be gained by reviewing this literature. While there is inevitably some overlap in the studies included above, this review primarily focuses on hierarchy from a macro-organisational perspective, and therefore, a vast amount of work

on healthcare teams and teamwork was not included for this reason. The search that was conducted also had several limitations. While this article is comprehensive and is consistent with widely utilised guidance, it can only account for papers that explicitly examined hierarchy. That is, we did not search for terms like bullying, status, teamwork or leadership, nor would it be possible to include this broader literature in this review. For this reason, caution should be exercised in interpreting the findings of this review: there is likely to be far more evidence available that speaks to the impact of hierarchy in healthcare, albeit indirectly.

5 | CONCLUSIONS

This article carried out a scoping review to collate and analyse the qualitative literature on hierarchy in healthcare organisations with a focus on macro-level perspectives, to explore its impact for healthcare workers and examine how it is negotiated, sustained and challenged. Hierarchies are pervasive across human organisations: their structures vary from centralised to dispersed, steep to flat and rigid to dynamic. Hierarchical management structures are present within almost all highly complex healthcare organisations. The functional benefits of hierarchies for effective performance and decision-making in complex organisations can, however, be outweighed by the high cost of inequalities of status, authority and power, and their resultant negative effects relating to bullying, discrimination, conflict and demotivation. There is, therefore, a need to investigate hierarchy in healthcare at macro, meso and micro levels to form a complete picture of how healthcare organisations deliver health services.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

This study did not generate any new data.

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REFERENCES

Anderson, C., & Brown, C. E. (2010). The functions and dysfunctions of hierarchy. *Research in Organizational Behavior*, *30*, 55–89. https://doi.org/10.1016/j.riob.2010.08.002

Apker, J., Propp, K. M., & Zabava Ford, W. S. (2005). Negotiating status and identity tensions in healthcare team interactions: An exploration of nurse role dialectics. *Journal of Applied Communication Research*, *33*(2), 93–115. https://doi.org/10.1080/00909880500044620

Battilana, J. (2011). The enabling role of social position in diverging from the institutional status quo: Evidence from the UK National Health Service. *Organization Science*, *22*(4), 817–834. https://doi.org/10.1287/orsc.1100.0574

Bell, D. A., & Pei, W. (2020). *Just hierarchy: Why social hierarchies matter in China and the rest of the world*. Princeton University Press.

Brathwaite, B. (2018). Black, Asian and minority ethnic female nurses: Colonialism, power and racism. *British Journal of Nursing*, *27*(5), 254–258. https://doi.org/10.12968/bjon.2018.27.5.254

Bresnen, M., Hodgson, D. E., Bailey, S., Hyde, P., & Hassard, J. (2016). Management knowledge and learning in the UK healthcare context: change and continuity. In *Academy of Management Proceedings* (Vol. 2016, No. 1, p. 13733). Academy of Management.

Bresnen, M., Hodgson, D., Bailey, S., Hyde, P., & Hassard, J. (2017). *Managing modern healthcare: Knowledge, networks and practice*. Taylor & Francis.

Brown, J. S. (2019). Ending the doctor-nurse game by enhancing the role of the ward nurse. *BMJ*, *364*, l698. https://doi.org/10.1136/bmj.l698

Bunderson, J. S. (2003). Recognizing and utilizing expertise in work groups: A status characteristics perspective. *Administrative Science Quarterly*, *48*(4), 557–591. https://doi.org/10.2307/3556637

Bunderson, J. S., Van Der Vegt, G. S., Cantimur, Y., & Rink, F. (2016). Different views of hierarchy and why they matter: Hierarchy as inequality or as cascading influence. *Academy of Management Journal*, *59*(4), 1265–1289. https://doi.org/10.5465/amj.2014.0601

Chen, S., Kuhn, M., Prettner, K., Bloom, D. E., & Wang, C. (2021). Macro-level efficiency of health expenditure: Estimates for 15 major economies. *Social Science & Medicine*, *287*, 114270. https://doi.org/10.1016/j.socscimed.2021.114270

Colenbrander, L., Causer, L., & Haire, B. (2020). 'If you can't make it, you're not tough enough to do Medicine': A qualitative study of Sydney-based medical students' experiences of bullying and harassment in clinical settings. *BMC Medical Education*, *20*, 86. https://doi.org/10.1186/s12909-020-02001-y

Courtenay, M., Nancarrow, S., & Dawson, D. (2013). Interprofessional teamwork in the trauma setting: A scoping review. *Human Resources for Health*, *11*, 57. https://doi.org/10.1186/1478-4491-11-57

Crowe, S., Clarke, N., & Brugha, R. (2017). 'You do not cross them': Hierarchy and emotion in doctors' narratives of power relations in specialist training. *Social Science & Medicine*, *186*, 70–77. https://doi.org/10.1016/j.socscimed.2017.05.048

Currie, G., Burgess, N., & Hayton, J. C. (2015). HR practices and knowledge brokering by hybrid middle managers in hospital settings: The influence of professional hierarchy. *Human Resource Management*, *54*(5), 793–812. https://doi.org/10.1002/hrm.21709

DiPalma, C. (2004). Power at work: Navigating hierarchies, teamwork and webs. *Journal of Medical Humanities*, *25*(4), 291–308. https://doi.org/10.1007/s10912-004-4834-y

Drucker, P. (2012). *Managing in the next society*. Routledge.

Eekholm, S., Samuelson, K., Ahlström, G., & Lindhardt, T. (2021). 'Stolen time'-delivering nursing at the bottom of a hierarchy: An ethnographic study of barriers and facilitators for evidence-based nursing for patients with community-acquired pneumonia. *Healthcare*, *9*(11), 1524. https://doi.org/10.21203/rs.3.rs-148408/v1

Ferguson, K. E. (1984). *The feminist case against bureaucracy*. Temple University Press.

Filizli, G., & Önler, E. (2020). Nurse-physician collaboration in surgical units: A questionnaire study. *Journal of Interprofessional Education & Practice*, *21*, 100386. https://doi.org/10.1016/j.xjep.2020.100386

Frank, E., Carrera, J. S., Stratton, T., Bickel, J., & Nora, L. M. (2006). Experiences of belittlement and harassment and their correlates among medical students in the United States: Longitudinal survey. *BMJ*, *333*(7570), 682. https://doi.org/10.1136/bmj.38924.722037.7c.

Graham, S. L. (2009). Hospitalk: Politeness and hierarchical structures in interdisciplinary discharge rounds. *Journal of Politeness Research. Language, Behaviour, Culture*, *5*(1), 11–31. https://doi.org/10.1515/jplr.2009.002

Green, B., Oeppen, R. S., Smith, D. W., & Brennan, P. A. (2017). Challenging hierarchy in healthcare teams—ways to flatten gradients to improve teamwork and patient care. *British Journal of Oral and Maxillofacial Surgery*, *55*(5), 449–453. https://doi.org/10.1016/j.bjoms.2017.02.010

Hage, J. (1995). Hierarchy. In N. Nicholson (Ed.), *The Blackwell encyclopedic dictionary of organizational behavior* (p. 212). Blackwell Publishing Ltd.

Hindhede, A. L., & Andersen, V. (2019). Interdisciplinary promises and hierarchical ambiguities in a Danish hospital context. *Professions and Professionalism*, *9*(1), e2862. https://doi.org/10.7577/pp.2862

Hinze, S. W. (1999). Gender and the body of medicine or at least some body parts: (Re)Constructing the prestige hierarchy of medical specialties. *The Sociological Quarterly*, *40*(2), 217–239. https://doi.org/10.1111/j.1533-8525.1999.tb00546.x

Iheduru-Anderson, K. C. (2021). The White/Black hierarchy institutionalizes White supremacy in nursing and nursing leadership in the United States. *Journal of Professional Nursing*, *37*(2), 411–421. https://doi.org/10.1016/j.profnurs.2020.05.005

Johnson, J. A., Anderson, D. E., & Rossow, C. C. (2020). *Health systems thinking: A primer*. Jones & Bartlett Learning.

Jones, L., Watson, B., Hobman, E., Bordia, P., Gallois, C., & Callan, V. J. (2008). Employee perceptions of organizational change: Impact of hierarchical level. *Leadership & Organization Development Journal*, *29*(4), 294–316. https://doi.org/10.1108/01437730810876122

Khayal, I. S. (2022). Healthcare quality improvement: The need for a macro-systems approach, *IEEE International Systems Conference (SysCon)*, Montreal, QC, Canada, 2022, pp. 1–8. https://doi.org/10.1109/SysCon53536.2022.9773793.

Kim, M., & Oh, S. (2016). Assimilating to hierarchical culture: A grounded theory study on communication among clinical nurses. *PLoS One*, *11*(6), e0156305. https://doi.org/10.1371/journal.pone.0156305

Klein, K. J., Ziegert, J. C., Knight, A. P., & Xiao, Y. (2006). Dynamic delegation: Shared, hierarchical, and deindividualized leadership in extreme action teams. *Administrative Science Quarterly*, *51*(4), 590–621. https://doi.org/10.2189/asqu.51.4.590

Kolodny, N. (2023). *The pecking order: Social hierarchy as a philosophical problem*. Harvard University Press.

Launer, J. (2022). *Reflective practice in medicine and multi-professional healthcare*. CRC Press.

Lempp, H., & Seale, C. (2004). The hidden curriculum in undergraduate medical education: Qualitative study of medical students' perceptions of teaching. *BMJ*, *329*(7469), 770–773. https://doi.org/10.1136/bmj.329.7469.770

Lines, L. E., Grant, J. M., & Hutton, A. (2020). Nurses' perceptions of systems and hierarchies shaping their responses to child abuse and neglect. *Nursing Inquiry*, *27*(2), 12342. https://doi.org/10.1111/nin.12342

Magee, J. C., & Galinsky, A. D. (2008). 8 Social hierarchy: The self-reinforcing nature of power and status. *Academy of Management Annals*, *2*(1), 351–398. https://doi.org/10.2139/ssrn.1298493

McKee, L., Charles, K., Dixon-Woods, M., Willars, J., & Martin, G. (2013). 'New' and distributed leadership in quality and safety in health care, or 'old' and hierarchical? An interview study with strategic stakeholders. *Journal of Health Services Research & Policy*, *18*(2), 11–19. https://doi.org/10.1177/1355819613484460

McMahon, R. (1990). Power and collegial relations among nurses on wards adopting primary nursing and hierarchical ward management structures. *Journal of Advanced Nursing*, *15*(2), 232–239. https://doi.org/10.1111/j.1365-2648.1990.tb01807.x

Murtagh, G. M., & Bezemer, J. (2020). 'Hm no-one says anything, did you notice?': Communication in the operating theatre amidst a hierarchy of expertise. *Communication & Medicine*, *17*(1), 17–31. https://doi.org/10.1558/cam.15138

Nilsson, K., & Sandoff, M. (2015). Leading processes of patient care and treatment in hierarchical healthcare organizations in Sweden—process managers' experiences. *Leadership in Health Services*, *28*(2), 135–148. https://doi.org/10.1108/lhs-04-2014-0043

Noyes, A. L. (2022). Navigating the hierarchy: Communicating power relationships in collaborative health care groups. *Management Communication Quarterly*, *36*(1), 62–91. https://doi.org/10.1177/08933189211025737

Nugus, P., Ranmuthugala, G., Travaglia, J., Greenfield, D., Lamothe, J., Hogden, A., Kolne, K., & Braithwaite, J. (2019). Advancing interprofessional theory: Deliberative democracy as a participatory research antidote to power differentials in aged care. *Journal of Interprofessional Education & Practice*, *15*, 100–111. https://doi.org/10.1016/j.xjep.2018.09.005

Nuttall, J. (2017). Learning and deploying relational agency in the negotiation of interprofessional hierarchies in a UK hospital. In A. Edwards (Ed.), *Working relationally in and across practices: A cultural-historical approach to collaboration* (pp. 43–57). Cambridge University Press.

Omura, M., Stone, T. E., & Levett-Jones, T. (2018). Cultural factors influencing Japanese nurses' assertive communication: Part 2–hierarchy and power. *Nursing & Health Sciences*, *20*(3), 289–295. https://doi.org/10.1111/nhs.12418

Paradis, E., Leslie, M., & Gropper, M. A. (2016). Interprofessional rhetoric and operational realities: An ethnographic study of rounds in four intensive care units. *Advances in Health Sciences Education*, *21*, 735–748. https://doi.org/10.1007/s10459-015-9662-5

Paton, M., Naidu, T., Wyatt, T. R., Oni, O., Lorello, G. R., Najeeb, U., Feilchenfeld, Z., Waterman, S. J., Whitehead, C. R., & Kuper, A. (2020). Dismantling the master's house: New ways of knowing for equity and social justice in health professions education. *Advances in Health Sciences Education*, *25*, 1107–1126. https://doi.org/10.1007/s10459-020-10006-x

Peters, M. D. J., Marnie, C., Tricco, A. C., Pollock, D., Munn, Z., Alexander, L., McInerney, P., Godfrey, C. M., & Khalil, H. (2020). Updated methodological guidance for the conduct of scoping reviews. *JBI Evidence Synthesis*, *18*(10), 2119–2126. https://doi.org/10.1097/xeb.0000000000000277

Ramanujam, R., & Rousseau, D. M. (2006). The challenges are organizational not just clinical. *Journal of Organizational Behavior*, *27*(7), 811–827. https://doi.org/10.1002/job.412

Raveendran, L., McGuire, C. S., Gazmin, S., Beiko, D., & Martin, L. J. (2023). The who, what, and how of teamwork research in medical operating rooms: A scoping review. *Journal of Interprofessional Care*, *37*(3), 504–514. https://doi.org/10.1080/13561820.2022.2058917

Ronellenfitsch, U., Loerbroks, A., & Schwarzbach, M. (2019). Does the implementation of clinical pathways affect hierarchical structures within a surgical department? A qualitative study. *International Surgery*, *103*(1), 48–55. https://doi.org/10.9738/intsurg-d-17-00028.1

Satterstrom, P. (2016). *How micro-processes change social hierarchies in teams* [Doctoral dissertation, Harvard Business School]. https://dash.harvard.edu/handle/1/32744408

Sebrant, U. (2014). Emotion, power and identity. Emotional display of envy when taking on management roles in a professional hierarchy. *Journal of Health Organization and Management*, *28*(4), 548–561. https://doi.org/10.1108/jhom-11-2012-0220

Spyridonidis, D., & Currie, G. (2016). The translational role of hybrid nurse middle managers in implementing clinical guidelines: Effect of, and upon, professional and managerial hierarchies. *British Journal of Management*, *27*(4), 760–777. https://doi.org/10.1111/1467-8551.12164

Stein, L. I. (1967). The doctor-nurse game. *Archives of General Psychiatry*, *16*(6), 699–703. https://doi.org/10.1001/archpsyc.1967.01730240055009

Stein, L. I., Watts, D. T., & Howell, T. (1990). The doctor–nurse game revisited. *New England Journal of Medicine*, *322*, 546–549. https://doi.org/10.1056/nejm199002223220810

Stocker, M., Pilgrim, S., Burmester, M., Allen, M., & Gijselaers, W. (2016). Interprofessional team management in pediatric critical care: Some challenges and possible solutions. *Journal of Multidisciplinary Healthcare*, *9*, 47–58. https://doi.org/10.2147/jmdh.s76773

Syed, I., Daly, T., Armstrong, P., Lowndes, R., Chadoin, M., & Naidoo, V. (2016). How do work hierarchies and strict divisions of labour impact care workers' experiences of health and safety? Case studies of long term care in Toronto. *The Journal of Nursing Home Research Sciences*, *2*(1), 41–49. https://doi.org/10.14283/jnhrs.2016.6

Tamuz, M., Giardina, T. D., Thomas, E. J., Menon, S., & Singh, H. (2011). Rethinking resident supervision to improve safety: From hierarchical to interprofessional models. *Journal of Hospital Medicine*, *6*(8), 445–452. https://doi.org/10.1002/jhm.919

Tarrant, C., Leslie, M., Bion, J., & Dixon-Woods, M. (2017). A qualitative study of speaking out about patient safety concerns in intensive care units. *Social Science & Medicine*, *193*, 8–15. https://doi.org/10.1016/j.socscimed.2017.09.036

Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., Moher, D., Peters, M. D. J., Horsley, T., Weeks, L., Hempel, S., Akl, E. A., Chang, C., McGowan, J., Stewart, L., Hartling, L., Aldcroft, A., Wilson, M. G., Garritty, C., … Straus, S. E. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. *Annals of Internal Medicine*, *169*(7), 467–473. https://doi.org/10.7326/m18-0850

Troughton, R., Mariano, V., Campbell, A., Hettiaratchy, S., Holmes, A., & Birgand, G. (2019). Understanding determinants of infection control practices in surgery: The role of shared ownership and team hierarchy. *Antimicrobial Resistance & Infection Control*, *8*, 116. https://doi.org/10.1186/s13756-019-0565-8

Vaughn, V. M., Saint, S., Krein, S. L., Forman, J. H., Meddings, J., Ameling, J., Winter, S., Townsend, W., & Chopra, V. (2019). Characteristics of healthcare organisations struggling to improve quality: Results from a systematic review of qualitative studies. *BMJ Quality & Safety*, *28*(1), 74–84. https://doi.org/10.1136/bmjqs-2017-007573

Walston, S. L., & Johnson, K. L. (2022). *Organizational behavior and theory in healthcare: Leadership perspectives and management applications* (2nd ed.). Health Administration Press.

Wilkinson, T. J., Gill, D. J., Fitzjohn, J., Palmer, C. L., & Mulder, R. T. (2006). The impact on students of adverse experiences during medical school. *Medical Teacher*, *28*(2), 129–135. https://doi.org/10.1080/01421590600607195

Yuter, S. (2012). *A self-organizing group within a hierarchical organization* [Doctoral dissertation, University of San Francisco]. https://repository.usfca.edu/cgi/viewcontent.cgi?article=1000&context=diss

Øyri, S. F., Braut, G. S., Macrae, C., & Wiig, S. (2020). Exploring links between resilience and the macro-level development of healthcare regulation: A Norwegian case study. *BMC Health Services Research*, *20*, 762. https://doi.org/10.1186/s12913-020-05513-x

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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