Clinical Leadership During the Covid-19 Pandemic: A scoping review

Abstract

Purpose: Leadership was a critical component to managing the Covid-19 pandemic. A scoping review of clinical leadership investigates the leadership styles employed by clinicians during times of unprecedented crisis, with the Covid-19 pandemic as a focus.

Design/Methodology/Approach: The scoping review was designed based on a five-stage approach proposed by Arksey and O'Malley (2005). Three key databases were searched, Scopus, Cumulative Index for Nursing and Allied Health Literature (CINAHL), and ProQuest Healthcare Administration between 2020 and 2022.

Findings: Of the 23 papers included in the review the majority were based in developed countries. Seven leadership approaches were found to be useful in times of crises, with compassionate leadership being particularly effective. Seven key themes relating to the pandemic were also identified.

Originality: Various leadership styles were employed during the pandemic, but compassionate leadership which fosters a collaborative, caring, and kind environment, becomes a necessity when faced with uncertainty and adversity. This review identifies key factors that leaders needed to manage during the pandemic. Practically, it sheds light on leadership strategies that may be employed in future unprecedented crises.

Research limitations/implications: This review is limited by the search strategy employed and the possibility some publications could have been missed. However, it is clear from the results there is limited research on healthcare leadership outside of the acute setting and in developing countries. These are important areas of further research that need to be pursued to inform our learning for other times of unprecedented crisis.

Keywords: leadership, crisis, pandemic, compassionate, clinical

Introduction

The emergence of Covid-19, and its subsequent declaration as a pandemic, has been and continues to be one of the most significant global crises to occur in recent times. In July 2022 it is estimated there were over 6 million deaths worldwide (National Public Health Agencies, 2022). The excess strain on healthcare systems due to the onset of Covid-19 led to difficulties for patients, such as interruptions to healthcare services for ongoing illnesses and long-term conditions and de-prioritisation of several other illnesses (Filip et al., 2022; Isasi et al., 2021). A substantial rise in ICU admissions led to delays in non-essential surgeries, disruptions in the management of long-term conditions, and reduced availability of primary care, which worsened health outcomes for numerous patients (Isasi et al., 2021). The overwhelming number of ICU cases during the pandemic burdened and fatigued healthcare workers globally, leading to psychological distress (Koontalay et al., 2021; Filip et al., 2022). By May 2020, 1004 healthcare workers were reported to have lost their lives globally to the virus, underscoring the substantial risks encountered by frontline workers (Gouda et al., 2021). A study by Marvaldi et al., (2021) highlighted the heavy mental health burden among healthcare workers, with an estimated high prevalence of anxiety (24.94%), depression (24.83%), and sleep disorders (44.03%) (Marvaldi et al., 2021; Sahebi et al., 2021). Glaringly, the impact of the pandemic extended beyond the healthcare setting, affecting various aspects of daily life. It resulted in lockdowns and quarantines, leading to shop closures, limited access to food and resources, and closures of schools. It also caused physical isolation, restricted movement, and significant changes to daily routines, ultimately resulting in the loss of social and family interactions (Filip et al., 2022).

The Covid-19 pandemic has had devastating effects on every facet of life (Nicola et al., 2020), encompassing and transcending healthcare systems, economic systems, education systems, and the physical and psychological well-being of the population. This unprecedented and dynamic event was unarguably met with unpreparedness by several healthcare systems around the world, necessitating the development of 'best practice' models by global leaders, healthcare executives, and clinical leaders (Nicola et al., 2020). This could be described as a shift in the environment from complex to chaotic (Zimmerman et al., 2001). Consequently, the Covid-19 pandemic offered a unique opportunity for contemplation on effective ways to lead in the healthcare sector during a crisis, establish best practices, and

promulgate these leadership practices (Stoller, 2020), in particular exploring leadership styles and how these might relate to the different levels of complexity that leaders and managers needed to deal with (Glouberman & Zimmerman, 2002; Greenhalgh and Papoutsi, 2018).

It is the opinion of several authors including West et al., (2015) that the initiation and delivery of high-quality care by healthcare leaders often require the development and implementation of leadership strategies. Healthcare systems have been confronted with a plethora of challenges, brought on by the pandemic, and during chaotic periods of health crises, leaders are often the anchor points upon which people rely for encouragement and guidance, which in turn nurtures resilience and recuperation (Nicola et al., 2020).

In hindsight the Covid-19 crisis has been seen as a powerful catalyst for change, with leaders needing to form innovative and adaptive new ideas, which is often referred to as entrepreneurial leadership (Bilal et al., 2021). Kalian (2020) detailed how the pandemic encouraged healthcare leaders to adopt greater levels of remote working, more acceptance of telemedicine, usage of more technological solutions, reduced usage of hospital spaces, and a lean approach to the utilization of resources. The change experienced in the healthcare system can be ascribed to the view of Kotter (2008), which emphasized that such a change tends to occur when there is a great sense of urgency and low levels of organization and individual complacency.

The Covid-19 pandemic presented an unparalleled opportunity for examining which leadership styles, including clinical leadership, were adopted and their effectiveness. A critical evaluation of the approaches to leadership used by clinical and non-clinical leaders during the pandemic will allow for in-depth reflection and dissemination of effective leadership strategies in healthcare institutions and systematise best practices for a future crisis.

This review article aimed to critically examine leadership styles employed by clinicians during times of unprecedented crisis, with the most recent Covid-19 pandemic as a focus.

Methods

Arksey and O'Malley's (2005) framework was employed to guide the review, which commences with the research question: *"What leadership styles were adopted by clinicians during in the healthcare sector during the Covid-19 pandemic?".* The second and third stages are

to identify and select eligible studies, for which PRISMA scoping review extension guidelines were followed (Tricco et al., 2018) and the databases, Scopus, Cumulative Index for Nursing and Allied Health Literature (CINAHL), and ProQuest Healthcare Administration were searched. Search terms were chosen through exploration of MeSH terms, consideration of keywords in current health sector leadership articles. Search terms included: ["Leadership AND (Covid-19 OR Pandemic) AND Healthcare"]. We limited our search to 2020 to 2022 in line with the peak outbreak of the pandemic. In addition, 'snowballing', scanning the reference lists of selected articles from electronic databases (Ridley, 2012), was employed; along with an internet search of the relevant grey literature, such as government reports and independent charitable organization reports. One reviewer (HC) analysed the titles and abstracts independently, applying inclusion and exclusion criteria (Table 1) and checked by a second reviewer (SW) before screening was concluded. Any discrepancies were resolved through discussion. A data extraction tool was developed *a priori* and used to record the papers included in the review (see supplementary file). A thematic analysis was conducted using the Braun and Clarke (2006) framework.

Insert table 1 about here

Results

The search yielded 2097 articles from three databases (Scopus = 704; CINAHL = 761 ProQuest = 632). From the screening of the titles 306 duplicates were removed, 1014 articles failed to meet the initial eligibility criteria, and 153 were removed due to irrelevance to the study. A closer examination of the abstracts of the remaining 624 papers, 597 were excluded from the study. The full text of the remaining 27 articles were retrieved, but 8 were excluded. A further 8 studies were discovered by hand-searching, but 4 of these studies were subsequently excluded. A total of 23 papers were included in this review (see figure 1). A summary of the papers is available in a supplementary file.

Insert figure 1 about here

Following Arksey and O'Malley's (2005) framework the fourth stage was to chart the results using a descriptive statistical analysis of the overall results. Of the 23 papers 34.78% (8/23) were undertaken in the USA, 21.74% (5/23) in the UK. 8.70% (2/23) in Canada, 8.70% (2/23) in Finland, 4.35% (1/23) in Switzerland, 4.35% (1/23) in Slovakia, 4.35% (1/23) in Singapore,

4.35% (1/23) UAE, 4.35% (1/23) Iran and 4.35% (1/23) Egypt. This implies that 86.96% (20/23) of the studies were undertaken in developed countries with little known about leadership in healthcare during the pandemic in developing countries.

Most of the papers emanated from peer-reviewed papers (52.17%; 12/23), of which 58.33% (7/12) were based on empirical studies and the remaining 41.67% (5/12), were literature reviews. Various study settings were used that depicted the circumstances and environment with some papers having multiple settings of the research. 86.96% (20/23) focused on hospital-based leadership and presented findings on physicians, nurses, caregivers, and telemedicine practitioners as leaders. Nearly half of the studies (47.83%; 11/23) focused on leadership in other healthcare settings, such as pharmaceutical companies, and other specialized healthcare facilities. Few studies (26.09%; 6/23) included settings such as government and private health research centres, universities, and colleges. Similarly, health regulatory institutions were included in a small number of studies (26.09%; 6/23). Fewer studies (21.74%; 5/23) investigated the roles of governments and core government institutions in healthcare delivery during the pandemic; and a few studies (13.04%; 3/23) used the media, both print and electronic, as well as social media, as part of their research setting.

Most of the studies (78.26%; 18/23) focused on leadership models and approaches used in hospitals and other healthcare settings during and after the pandemic and are thus referred to as 'clinical leadership' (Swanwick and McKimm, 2011). Others (17.39%; 4/23) are based on non-clinical leadership, which occurs outside of the clinical setting but significantly impacts healthcare delivery, while one study (4.35%; 1/23) analysed both clinical and non-clinical leadership.

52.17% (12/23) of relevant studies is managing the restructuring of clinical operations (Hofmann, 2020; Ikram et al., 2020; Ball, 2020; Santosa et al., 2020; Biley and West, 2020; Rosa et al., 2020; Keselman and Saxa-Braithwaite, 2021; Jankelova et al., 2021; Graham and Woodhead, 2021; Nazir, 2021; Crain et al., 2021; Alvarez et al., 2022). This emanates from the fact that healthcare institutions made several significant and timely adjustments to clinical operations throughout the period of the pandemic in an effort to meet the demands of both personnel and patients and ultimately to maintain optimal services to patients. Some of these

decisions were made in haste, often with insufficient knowledge, resulting in the intended outcomes faltering.

The various approaches to leadership were the central theme of most of the studies (78.26%; 18/23). The papers exemplified leadership, particularly clinical leadership, in the context of leadership styles and approaches adopted by healthcare leaders during the pandemic period. 43.48% (10/23) of the studies conceptualized leadership as either authentic or ethical (Keselman and Saxe-Braithwaite, 2021; Sanders and Balcom, 2021); relational (Sihvola et al., 2022); compassionate (Bailey and West, 2020; Graham and Woodhead, 2021; Evans, 2022); inclusive and consensus (Kalina, 2020; Graham and Woodhead, 2021); effective (Graham and Woodhead, 2021); empathic (Santosa et al., 2020); collective (Evans, 2022), creative (Hofmann, 2020); exceptional (Ball, 2020); and transformational (Evans, 2022).

34.78% (8/23) of the selected papers described and modelled what leadership in a crisis, such as the Covid-19 pandemic, should look like. These include resource organisation, planning, and coordination (Nicola et al., 2020; Abdi et al., 2021); proactivity (Hofmann, 2020); quick decision-making (Christian et al., 2021; Jankelova et al., 2021; Alvarez et al., 2022); motivation (Abdi et al., 2021); crisis management (Jankelova et al., 2021); and problem-solving (Kalina, 2020).

Discussion

It is evident from this review that leaders in various healthcare institutions managed to meet the challenging event of the pandemic through various leadership styles such as authentic, ethical, empathic, compassionate, and inclusive leadership styles (see table 2). Alongside the blending of various leadership styles, other key areas were identified as being critical to leading during the pandemic, which included restructuring of clinical operations, wellbeing of colleagues, communication and fostering good teamwork. The role of external stakeholders (e.g. Government) was also notable during the pandemic. Although it is challenging to pinpoint which healthcare organization or facility has been most successful in handling the crises, it is evident that there were adjustments, some of which are major in the known practice or procedures of care for patients. The final stage of the Arksey and O'Malley is to summarise and discuss the results. The key themes that emerged from the analysis of the 23

papers are used to frame this section of the paper, which are linked to the appropriate leadership style where possible.

Insert table 2 about here

Restructuring of clinical operations and situational awareness

The restructuring of clinical operations can be associated with medical care for high need patients (Alvarez et al., 2022); authentic clinical leadership (Keselman and Saxa-Braithwaite, 2021); organizational transformation (Ikram et al., 2020; Santosa et al., 2020; Keselman and Saxe-Braithwaite, 2021; GLL, 2022); quick decision making and implementation (Hofmann, 2020; Nazir, 2021; Jankelova et al., 2021); workflow revisions or directional change (Santosa et al., 2020; Nazir, 2021); palliative care (Rosa et al., 2020); adoption of telemedicine (Ikram et al., 2020); person-centred health services (Graham and Woodhead, 2021); and breaking down hierarchical barriers (Santosa et al., 2020). The pandemic required leaders to quickly orchestrate and manage the rapid restructuring of clinical operations, which included redeploying existing staff to other areas and inducting new staff. The separation of critical areas for Covid patients needed to be identified and, in some cases, new facilities (e.g. temporary sites, field hospitals, vaccination centres) to be acquired and operationalized within weeks. To successfully and quickly embed new ways of working requires good relational leadership. To function well in such critical circumstances, healthcare executives must recognise that there is a mutual interaction between executives and employees, and, more importantly, must absorb relational leadership ideals and active engagement with staff members (Spiva et al., 2020; Sihvola et al., 2022).

During a health crisis, healthcare leaders must be fully aware of the situation (Jeffs et al., 2020), as well as fully comprehend the psychological capital of their staff, which includes varying degrees of hope, usefulness, endurance, and enthusiasm (Dimino et al., 2020). Improving relationship management skills by means of effective communication helps promote a healthy work environment and increase employee commitment (Spiva et al., 2020). Leaders need to be able to motivate, inspire, and encourage their staff to work toward common goals, as well as guide and advise them, which requires making time for personal interactions (Cummings et al., 2018).

Gabriel (2015) and Ali and Terry (2017) emphasised the importance of looking at the big picture, especially when rapidly restructuring operations and investigating how compassionate leadership methods are spread and implemented within a complex healthcare system that has evolved over time. Without looking at the entire system there is a risk of encouraging 'flimsy acts of compassion' that endanger the larger system (and its established structures and norms), which could lead to conventional systemic concerns being ignored (Tierney et al, 2019).

Whilst restructuring operations healthcare leaders also have several ethical obligations they must be aware of and uphold in their daily actions because they are required to provide consistent and logical leadership, which necessitates carefully laid-out procedures and plans (WHA, 2020). Likewise, they have a time-bound duty to provide care for the increasing number of patients, anchored on prompt action and quick decision-making (Keselman and Saxe-Braithwaite, 2021). Rethinking the most effective leadership approach is required for success; it urged health executives to strike a balance between providing timely patient care and upholding ethical standards (Bamford et al., 2013). To do so, health leaders must be emotionally intelligent enough to lead ethically and authentically (Avolio and Gardner, 2005; Corrigan and McNeil, 2009). However, these approaches take time to build which is not always available in chaotic scenarios.

Managing wellbeing of staff

Management of stress and the well-being of frontline workers (Ikram et al., 2020; Rosa et al., 2020; Sihvola et al., 2022; Alvarez et al., 2022) were heavily explored by some of the studies. These studies examined the enormous workload that physicians, nurses, caregivers, and other healthcare workers faced during the pandemic, despite unpreparedness, insufficient equipment and personal protective equipment, fear of infection, and a labour shortage, as well as how healthcare leadership handled the situation. This theme is founded based on the unprecedented level of disruption and uncertainty brought about by the pandemic, as well as the profound impact it had on healthcare workers. It also recognises and acknowledges the personal and emotional concerns of frontline workers and how their priorities may have naturally shifted away from work and toward their families.

The pandemic situation therefore demanded healthcare leaders mobilise all available resources, most notably their staff and promote a compassionate organisational culture by involving them in decision-making, utilizing collective knowledge and insight, and supporting and enabling productive capacity employees (Bailey and West, 2020).

Authors such as Rosa et al., (2020), Alvarez et al., (2022), and Sihvola et al., (2022) did not downplay the importance of commitment by government officials and private citizens to dismantle the systemic factors that have created the conditions for moral distress and heal the effects of the pandemic. In the scoping review by Sihvola et al., (2022), a special emphasis was made on nurses and nurse leaders, emphasizing the fact that these professionals require a healthy work environment, as well as the necessary training and readiness to function well in such critical circumstances created by the pandemic. In their qualitative descriptive study conducted in the USA using semi-structured interviews, Alvarez et al. (2022) demonstrated the importance of appointing someone within the hospital to manage employee well-being, strategize, and engage with staff to handle practical tactics and resources. They also emphasized the importance of better planning, future attention, and increased resource allocation to support healthcare workers prior to crisis events. They also make policy recommendations to support a healthy workforce, such as making staff satisfaction ratings publicly available for health organisations and developing workforce measures to assess staff well-being. Rosa et al., (2020) also advocated for legislation such as the proposed Essential Workers Bill of Rights, which advocates for higher wages, universal paid sick leave, and corporate accountability for meeting employee responsibilities (Elizabeth, 2020), which is commendable because they not only identified a problem, but also proposed a solution in the same breath.

It is vital to understand that the studies reviewed in line with this theme are based on experiences and information obtained from medical practitioners from USA (Alvarez et al., 2022; Rosa et al., 2020), United Kingdom (Ikram et al., 2020), Finland (Sihvola et al., 2022), China (Ikram et al., 2020) and Norway (Ikram et al., 2020). This implies that the bulk of the information available emanated from North America and Europe (western countries), and as a result, the mental well-being and psychological experiences of healthcare practitioners from Asia (except China), Africa, South America, the Middle East and Australia are not represented. However, it is also important to note that the authors, despite the small number of countries

studied, highlighted problems while also discussing ways to mitigate the circumstances surrounding stress among frontline workers.

Level of responsibility and sustained effort

The analysis of the studies being reviewed reveals that the main points revolve around the level of responsibility placed on healthcare leaders to devise approaches that best address the clinical needs of patients and the safety needs of healthcare workers, in the face of limited resources and other uncertainties caused by the pandemic. For instance, Hofmann (2020) demonstrated the pandemic imposed unexpected responsibilities on healthcare leaders; they were expected to demonstrate creative approaches that helped patients in the communities served by hospitals, as well as healthcare employees who were not afraid for their personal health, while the government expected delivery of care to affected patients. The Covid-19 pandemic, according to the brief report presented by Ikram et al. (2020), undertaken in China, Norway and the United Kingdom, created leadership challenges that fueled organisational change and necessitated new approaches to healthcare delivery; as a result, care practices required balancing the provision of healthcare for both Covid-19 and non-covid-19 patients, while also expanding virtual care strategies in preparation for the subsequent waves of the pandemic.

Since the pandemic evolved over a long period of time, an empathic leadership style became essential. For the majority of Europe, the successive initial, peak, and declining phases took more than a year. The prolonged burden of the pandemic, as well as the repressed need to continue treating patients who did not have Covid-19, presented additional issues that took the form of growing strains on the healthcare system. This necessitated empathic leadership that acknowledged fears and questions and transforms them into collective knowledge; calmed scepticism; validated efforts and acknowledged hardship; and, most importantly, broke down hierarchical barriers while motivating healthcare workers (Santosa et al., 2020).

Responding to rapid and evolving knowledge

Crain et al., (2021) and Alvarez et al., (2022) posited healthcare leaders in the USA had to adapt to constantly evolving medical knowledge of Covid-19, leading to a variety of modifications in safety protocols (including PPE, social distancing, and contact tracing), surgical intubation, labour and delivery, intensive care unit guidelines, and increased adoption

of telemedicine. As a result, many hospitals around the world established executive teams within their organisations to plan and implement changes to clinical operations, such as allowing some staff members to work from home, discontinuing non-essential clinic services, and moving certain services outdoors or to modified environments.

The rapid development of knowledge required at time quick decision-making and innovative solutions, which could be linked to creative leadership that is discussed at length by Hofmann (2020). A creative leader faces a challenge by finding solutions to all crises, encouraging others to provide solutions, and using creativity in finding solutions (Daaboul, 2021). This leadership style found its basis in the understanding that Covid-19 was novel. There was no exact approach to dealing with the raging pandemic. Navigating through such unprecedented and disruptive occurrence require more than following the norm (Agee, 2020; Patel, 2020). Hence, healthcare executives were given unexpected chances and responsibilities by the global pandemic to show off creative approaches. These approaches aimed to help patients in the communities served by hospitals, support physicians, nurses, caregivers and other healthcare employees in carrying out their duties without fear for their personal health and meet the government's expectation of delivery of care for its people (Hofmann, 2020), even as the pandemic continued to stress resources to the extreme (Reed, 2020).

Another study examining the profound changes in medical practices that resulted from the pandemic indicated that exceptional leadership was required to support the exceptional outcomes that were required during this time (Ball, 2020). Exceptional leaders secure their employees relentlessly, foster connection, cooperation, and collective ownership, and so foster a safe atmosphere of trust, esteem, and community (Kerr, 2015).

Hierarchical structures – Command and Control-

When a major incident or disaster occurs, the National Health Service (NHS) in the United Kingdom, in collaboration with other healthcare providers, has a tradition of immediately implementing a new command and control structure known as the Major Incident Medical Management and Support (MIMMS) structure (Hodgets et al., 1994; Hutchings et al., 2022). It is a three-level command and control structure that is based on the military command and control concept adaptation, as the military was one of the pioneers of command-and-control

systems (Pigeau & McCann, 2000, Hutchings et al., 2022). The structure ranges from a gold strategic level to an operational bronze level (Hodgets et al., 1994) (see table 3).

Insert table 3 about here

The Gold-Silver-Bronze working hierarchy was implemented across healthcare institutions in the country to reduce Covid-19 infections and support health and social care (Bell et al., 2022). Every day, NHS England and Public Health England issued "command and control" central guidelines, ensuring that national leadership of the situation by the central government was matched, as NHS instruction takes precedence over all other considerations and is what was implemented (Mackway-Jones and Carley, 2019). However, the instructions were frequently out of date because local remedies to an emerging disease had already been implemented (Graham and Woodhead, 2021). This resulted in some inefficiencies and, to some extent, extra work because new national instructions required that previously implemented local approaches be modified (Graham and Woodhead, 2021), suggesting the MIMMS is not fit for purpose in chaotic scenarios.

The results of national investigations looking at Covid-19 show significant excess fatalities and disparities in deaths and morbidity rates, with worse outcomes for individuals with disabilities, residents of nursing homes, and inhabitants of culturally diverse and socially disadvantaged neighbourhoods (Suleiman et al., 2021). These have been partly attributed to some of the decisions taken at the three tiers of command-and-control structures, and their inefficiencies (Warren and Murray, 2021). The MIMMS framework is intended for extremely brief medical catastrophes and purposefully concentrates on mass casualty and catastrophic injury situations (Hutchings et al., 2022). It may not be ideal for a prolonged or developing medical emergency that necessitates lengthy workforce planning and logistical concerns, as demonstrated by Covid-19 (Hutchings et al., 2022). In an examination of this, Bell et al., (2022) suggested that there is a need for a long-term focus, a fully comprehensive coordinated structure, continuous evaluation, greater collaboration, and fewer boundaries between healthcare institutions in the United Kingdom.

During a crisis, the principles of command, control, and coordination, as well as the requirement for clear procedures and instructions, provide the foundation for handling emergencies, recovery, and response (Evans, 2022). As a result, there is a danger of alienating

the very employees who need to be motivated. This requires an intuitive fallback to a form of management or leadership style that goes beyond what would be essential. Healthcare leaders had to narrow their attention to addressing the fundamental requirements of the workforce, guaranteeing their wellness, and maintaining employee motivation, to assist their team cope with this quickly changing environment. Therefore, the idea of compassionate leadership could be regarded as a strategy by leaders in healthcare settings to encourage frontline health workers to accept the COVID-19 circumstances and give their best to save the lives of infected and uninfected patients (Graham and Woodhead, 2021).

Whilst the command-and-control structure was viewed by some as an autocratic process for decision-making and communication (Sanders and Balcom, 2021), the incident command approach was viewed to play a valuable role in managing the pandemic. However, the importance of ensuring staff feel listened to and included in developing solutions should not be overlooked.

Nurturing of relationships

It was evident there was a need for leaders to nurture relations with and among their teams. With relational leadership stemming from the healthcare leader's accountability for high-quality service, active problem-solving, and maintaining trust, as the Covid-19 pandemic tested healthcare systems (Sihvola et al., 2022). According to previous research, one of the most difficult challenges for healthcare leaders is to begin making individuals and organisations pliable and adaptive in the face of increasingly dynamic and demanding situations, such as major bio-events, market unpredictability, or sudden changes in work situations (Lichtenstein et al., 2006). The Covid-19 pandemic, for example, has had a significant impact on the healthcare industry (Liu et al., 2022). To rapidly adapt in the workplace, healthcare leaders needed to view their daily interactions with the people who comprise social capital, through the lens of relational leadership principles (Uhl-Bien, 2006).

Impact of leadership on outcomes

Unfortunately, few studies made the link between the leadership style and staff or patient outcomes. However, Keselman and Saxe-Braithwaite (2021) asserted in light of the pandemic that a shift toward human caring values and ethics and ethical behaviour is required. Noting the key characteristics of an ethical leader as being honest, truthful, trustworthy, reliable and

authentic, the authors report where leaders behave unethically this can cause disappointment, distrust, unmotivated and decrease of loyalty and commitment to the organization, which in turn can lead to a negative impact on patient outcomes. In contrast, servant leadership, a style identified as being employed during the pandemic is reported to support professional growth and development and team performance, along with key attributes such as shared responsibility, active listening and coaching for success (Sanders and Balcom, 2021). Transformational leadership was also reported as having the potential to mitigate the risks of burnout and improve satisfaction during an unforeseen event, such as a pandemic (Boamah, 2022).

Leading during the Covid-19 Pandemic – what have we learnt about clinical leadership?

It is evident from this review effective clinical leadership during a pandemic or crisis situation is dependent on a blended approach of styles and approaches. In this review 7 styles were identified (see figure 2) with compassionate leadership being reported as a necessity at a time of crisis. Discussions emphasized that hospitals had to adapt their operational processes to maintain regular service provision and meet the growing volume of infected patients in a short period during the pandemic. Consequently, healthcare leaders shifted priorities and functions in a rapidly changing environment, often reacting or responding to the crisis (Keselman and Saxe-Braithwaite, 2021). This had far-reaching consequences for how healthcare leaders managed and navigated the situation.

Insert figure 2 about here

Having to rapidly restructure operations called upon exceptional, innovative and creative leadership to identify new solutions such as implementing virtual/online clinics. To ensure resources and skills were aligned to the new structures relational leadership was required to ensure teams were open to new ways of working. Such discussions should also be underpinned by authentic and ethical leadership. Interestingly, during this review there was contention about these two leadership styles (Keselman and Saxe-Braithwaite, 2021; Sanders and Balcom, 2021). This stemmed from the notion that the healthcare environment was complicated by the Covid-19 pandemic, as well as challenged by a slew of issues necessitating a shift toward prompt human caring values (Keselman and Saxe-Braithwaite, 2021). While ethical leadership fosters a healthcare environment and culture that supports ethical practice

(DiLiello and Houghton, 2006; Garger, 2008), authentic leadership emphasizes the need for senior health leaders to be outcome-focused (Khan, 2010; Latham, 2017).

The uncertainty and chaos that the pandemic brought to healthcare, also emphasized the need for compassionate and empathic leadership. Emphasizing the importance of staff wellbeing was paramount during this period along with the appropriate support for staff to deal with stressful situations. Inclusive and consensus leadership was also emphasized (Kalina 2020; Graham and Woodhead, 2021) for when people are subjected to unprecedented levels of upheaval and uncertainty as a result of 'black Swan' events such as Covid-19 (Kalina, 2020); hence, they want to understand how, and especially why, a decision is made. Since there is no single roadmap for how to be an efficient and inclusive leader in such unusual times, healthcare leaders paid attention to a variety of sources, encouraged diverse ideas, needed to confer with stakeholders and adapted to other tenets of the consensus leadership model within the Covid-19 period (O'Donovan and McAuliffe, 2020; Lee and Dahinten, 2020; Kalina, 2020). The consensus leadership approach improves stakeholder engagement in healthcare organizations and may be the preferred alternative for businesses that prioritise inclusion. Consensus leadership allows people to be heard, provide feedback, and present their arguments before making a decision, policy, or plan that directly affects them (Northhouse, 2016). Consensus leadership is dependent on time and the opportunity to be able to access all relevant stakeholders which may be difficult during a crisis situation.

In all, the leadership styles identified within this review characterized and modelled what leadership during the pandemic should resemble. Theoretically, these points of view are consistent with the concepts of contingency (Fiedler, 1964) and situational leadership (Hersey and Blanchard, 1972). Contingency leadership, as presented by Fielder (1964), emanates from the notion that every leader or manager has a unique and preferred style of leading while approaching similar tasks with others. In relation to contingency leadership, situational leadership as proposed by Hersey and Blanchard (1972) emphasizes that there is no universalistic 'best leadership' approach, and effective leaders adapt their leadership style to the nature of the task, the capacity and experience of the staff with the task, and the environment. Given that some leadership styles are better suited to certain situations than others, it is prudent to state that some leaders are more effective in certain situations than others.

These leadership styles invariably emphasize organizing, planning and coordination of all of the financial, infrastructural and human resources (Nicola et al., 2020; Abdi et al., 2021), proactivity (Hofmann, 2020), quick decision-making (Christian et al., 2021; Jankelova et al., 2021; Alvarez et al., 2022), motivation of frontline workers (Abdi et al., 2021), crisis management (Jankelova et al., 2021), solving problems (Abdi et al., 2021), competence (Bailey and West, 2020) and courage (Kalina, 2020). With this understanding, it is also important to recognize that the Covid-19 pandemic posed a significant challenge to clinical leadership and provided an opportunity to reconsider how clinical leaders are educated, tested, and evaluated, as traditional training programmes are ineffective in providing them with the managerial skills required to deal with such outbreaks (Abdi et al., 2021). There was no mention of transformational leadership or transactional leadership, two of the oldest and most common leadership styles in healthcare (Burns, 1978; Mah'd Alloubani et al., 2014), which also proved helpful during the pandemic (Boamah, 2022). There was also no mention of complexity leadership, which is an important leadership approach given the complexity of the Covid-19 pandemic and the fact that adaptation and self-organization were also critical requirements for dealing with Covid-19 in complex adaptive systems like healthcare systems (Carroll et al., 2021; Plsek & Wilson, 2001).

Implications of the review

Theoretically, this review adds to existing research by critically evaluating different clinical leadership approaches observed during the pandemic and identifying current research gaps. A follow-up review to compare leadership styles pre- and post-pandemic would help us understand whether any of the themes reported in this study have continued. In addition, it will be useful to compare the response of healthcare leadership to other pandemics such as SARS to the response of healthcare leadership to the Covid-19 pandemic, to ascertain what learnings were transferred from previous pandemics. Further study will enable deeper reflection, the dissemination of effective leadership strategies, and the identification of new research areas. Figure 2 depicts key themes and leadership theories that were identified from this review. Further study would help to establish which individual or combination of styles are better suited to dealing with the different factors (themes) identified from this review.

Practically, this study highlights leadership strategies that may be employed in future unprecedented crises. In any disaster or crisis, effective leadership is often the defining factor in determining how well individuals and organisations respond. During the COVID-19 pandemic, healthcare leaders adopted and blended various approaches and models to manage care delivery, situation management, and resource allocation. However, the practicality of these approaches raised several ethical questions. Moving forward, effective crisis management will likely rely on a deeper understanding of accepted leadership theories and the intentional application of redefined best practices.

To achieve this ambition, there is a need for healthcare leaders and practitioners to collaborate through conferences, meetings, and workshops to consolidate leadership approaches that proved effective during the pandemic and establish unified actions for future events. The pandemic also exposed weaknesses in traditional emergency procedures, which were often ineffective due to the prolonged and unique nature of the crisis. Therefore, proactive measures, such as ongoing learning and retraining on emergency plans, are essential for future preparedness.

Additionally, the pandemic placed clinical leaders in a unique position, requiring them to manage the health of both infected and uninfected patients and ensure the welfare of frontline workers amidst limited resources. Beyond addressing immediate post-pandemic challenges, there is a need for more documentation and publication of these experiences to facilitate global knowledge exchange.

Conclusion

This review paper aimed to identify the forms of leadership employed during the pandemic, because leadership (or lack of) in a crisis like the pandemic is the differentiator in how groups and entities fared (Sanders and Balcom, 2021). Clinical leadership was exemplified with some of the discourse relating to authentic and ethical leadership styles. It was evident that compassionate leadership becomes a necessity when faced with uncertainty and adversity. The pandemic demanded healthcare leaders mobilise all available resources, most notably healthcare workers (physicians, nurses, and caregivers, among others) and promote a compassionate organisational culture by supporting the employees.

Much of the research focuses on developed countries, very little is known about leadership in healthcare during the pandemic in developing countries. The focus of this paper has largely been on clinical leadership, leadership styles of other key decision makers during the pandemic such as policymakers need to be examined. As with any review, this study is limited by the keywords and databases selected. It is possible that some key papers have been missed. However, the review was undertaken in a systematic way following an established framework. A follow up review which captures more recent publications would provide further insight as healthcare continues to deal with the aftermath of the pandemic. Further study to compare leadership styles pre- and post- the pandemic would help us understand whether any of the themes reported in this study have continued. More research is also needed to understand the impact of different leadership styles during periods of chaos on staff and patient outcomes. Here we have tried to categorise those leadership styles most prevalent during a crisis like a pandemic. It would seem from this review that a blend of leadership styles has been employed but to truly understand what works and when during a pandemic, further research is needed. While there is not one 'right' style or approach to leading through a pandemic, it is important for us to continue to learn lessons ahead of future global healthcare crises. Here we have focused on clinical leadership which largely focused on the acute sector, further research could examine the approaches employed by clinical leaders in other healthcare settings and other key decision makers during crisis situations.

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