

What leadership skills and attributes will nurse, and midwife leaders need in 2030?

Abstract

Purpose - To identify what skills and knowledge future nurse and midwife leaders might be perceived to require in the next 6 years.

Design/methodology/approach - An online questionnaire was used to explore healthcare professionals' perspectives on the future requirements for nurse and midwife leaders. Qualitative data were generated in response to the question "*Imagine the health and care system in 2030, what different and additional leadership skills and attributes will nurses and midwives need?*". Data were extracted and analysed using a qualitative content analysis.

Findings - Four generic categories were abstracted from the core category of 'Nursing & Midwifery Leadership'; these were '*Values/Traits*', '*Creating Positive Healthcare Cultures*', '*Digital Capability/Competence*', and '*Systems Thinking*'.

Limitations/implications - This first stage evaluation has gained a wide variety of perspectives regarding the perceived skills and knowledge future nurse and midwife leaders might need. This is important so that those who deliver leadership development programmes can plan appropriately, to ensure their programmes are designed and adjusted to what is needed within the shifting health and care landscape. However, over 50% of respondents were White, which means the data is not necessarily representative of the wider diversity of registered nurses and midwives. Findings may not have direct relevance to the global context due to geographical limitations.

Keywords: Leadership Development; Digital; Nurses; Midwives; Safety Cultures

Key points

1. We explored perspectives on what different and additional leadership skills and attributes future nurses and midwives might need.
2. Digital competency was perceived to be important, however, this was not viewed as being able to replace humanistic approaches to nursing and midwifery leadership in the future.
3. Transformational and authentic leaders can positively influence healthcare cultures, which reduces adverse events and improves the standard of healthcare. This should be the focus of future leadership development programmes.

Reflective questions

1. Reflecting on your own leadership style, how do you think this has changed in the last four years?
2. How do you enable a culture of safety within your clinical team? Write a list and see if this matches any of the subcategories found from our content analysis.
3. What does it mean to have a strategic view of healthcare as a leader, and how would you explain this to newly qualified nurses to help them understand complexity and promote patient safety?
4. When reflecting on a time where you have felt 'psychologically safe' and where there was an 'open culture' of safety promoted within the workplace, who was leading the team and what skills and attributes did they possess?
5. What does it mean to have a professional voice in nursing and midwifery?

Background

Nurses and midwives in leadership positions have been recognised as essential for global health promotion, disease prevention, and achieving goals related to health and social care (Rumsey et al., 2022; Salvage and White, 2020; Klopfer et al., 2020). To achieve health for all, nurses and midwives need to be provided with leadership development opportunities so they can be strategically positioned to respond to reform and positively transform health care (Adcock et al., 2022; James and Bennett, 2022). We know that effective leadership is essential for building a sense of safety and improving performance and work productivity in healthcare teams (Labrague, 2023), particularly in times of crisis such as the Covid-19 pandemic (Ahern and Loh, 2021). Yet, mounting evidence has shown that health systems across the world, including in the UK, have grappled with the realities of post-Covid financial scarcity (Saghafian et al., 2022; Kentikelenis and Stubbs, 2022; Koumpias et al., 2022). This may affect long-standing health and care staff shortages (Hamouche, 2023), and the ability of systems to proactively invest in transformation and respond to increased population mental health needs (Wong et al. 2023; Toulany et al., 2022). Though, there are expectations that all healthcare professionals will continue to improve healthcare services, to provide high-quality care with a focus on patient safety (NHS, 2019). Therefore, investment in nurse and midwife leadership development is vital if we are to continue to expand capability and capacity to positively influence health within these challenging contexts (BLINDED et al., 2022).

Introduction

The Covid-19 pandemic exposed healthcare teams to new challenges, requiring rapid changes to their leadership and operational practices (Pandit, 2020). There has been an increased reliance on digital platforms for care delivery, increased diversity within the workforce due to international recruitment, and pressures on clinical staff such that more support is needed to retain the existing workforce (Naghavi et al., 2024; Junaid et al, 2022; McKee et al., 2021; Desveaux et al., 2019). These ongoing changes will increasingly impact on the fundamental ways health and care is delivered, and, given that workforce challenges are likely to continue, significant transformational change is needed in education, health, and care service delivery design, as well as models of care provision (Ustgorul, 2022). Therefore, there is a need to ensure effective nursing and midwifery leadership at executive levels and that a nursing presence is obvious within future policy agendas. As such, the development of effective nursing and midwifery leaders who are prepared and primed to respond to these challenges must continue.

In terms of developing effective healthcare leaders, there has been a longstanding fascination with the personality traits and behaviours associated with leadership (West et al., 2015), as well as the competencies that are specific to leadership such as technical, conceptual and interpersonal skills (Boyatzis, 1982). Transformational leadership theory (Bass, 1990; 1999) has dominated the research landscape. The goal of most leadership development programmes is to transform ‘followers to leaders’ and it is this idea that underpins the ‘Healthcare Leadership Model’ and provides the basis (in the UK) for the national strategy for leadership development (NHS Leadership Academy, 2023). However, the application of transformative ‘learning’ theory (Mezirow, 2000) has also proven effective in enabling nurses and midwives to develop increased self-efficacy in relation to perceptions of the self as a capable and competent leader (BLINDED, et al., 2023), with potential to have a much wider impact regarding improving patient care, and, by inference, perceptions of quality. However, given the rapidly evolving healthcare landscape, shifting demographic changes (Naghavi et al., 2024), and changes to leadership over time (Vasset et al., 2023), it is unclear what additional skills and attributes nurse and midwife leaders are likely to require in the future. This is important so that those who deliver leadership development programmes can plan appropriately, to ensure their programmes are designed and adjusted to what is needed within the complex health and care landscape that nurses and midwives are currently working in (Pandit, 2020). However, it is not understood what additional or different skills and attributes leaders might be considered to need to develop in the future. Given the rapidity of change in the UK, for example the NHS reform agenda and broader workforce plans, it is essential to gain insight into what the perceived need might be, in terms of leadership requirements in the future. Thus, we took an exploratory approach gain understanding from those working in the nursing and midwifery professions.

Ethical considerations

Formal ethical approval was not required as this represented the consultation phase of a wider service evaluation, which focused on the future of nursing and midwifery leadership. Data were collected using a questionnaire, which was advertised via The Florence Nightingale Foundation’s (FNF) website. The consenting process involved informing participants that names and contact details would be collected and that any feedback they provided would be anonymised in any data analysis and dissemination activities. As such, implicit informed consent was obtained from all participants. Data was stored on a secure cloud server, accessible only to FNF employees, and kept in accordance with European Union General Data Protection Regulations (UK Government, 2018).

Method

Purpose

To identify what skills and knowledge future nurse and midwife leaders might be perceived to require in the next 6 years.

Data Collection

An online semi-structured questionnaire was designed to explore perspectives on the future requirements for nurse and midwife leaders. The questionnaire was displayed on the Florence Nightingale Foundation's (FNF's) publicly facing website and was live between 27th September 2023 and 31 October 2023; both quantitative and qualitative data were collected. For the current paper, we explored participants' responses to the qualitative element of the questionnaire in which we asked them to reflect on the following question: *"Imagine the health and care system in 2030, what different and additional leadership skills and attributes will nurses and midwives need?"*.

One hundred and one (n = 101) people completed the questionnaire. Overall, most respondents were female (72.2%); registered healthcare professionals (86.1%); aged between 45-64 (57.3%). See Table 1 for an overview of demographical information.

Table 1 HERE

Qualitative data analysis

Data were extracted and transferred to a Microsoft Word document. In total, 5322 words were extracted to form a combined corpus of data. The corpus was then analysed using a content analysis approach, as described by (Elo and Kyngäs, 2008). This was carried out as follows. Firstly, data were checked to ensure that no individual and/or organisation had been referred to by name; no direct reference to any individual or organisation was noted. Whilst extracting the data, any recurring words, or segments of words, were noted. The analyst then familiarised themselves with the corpus of data, noting the frequency of any recurring words, and any collocated words or sentences that appeared around key words (key words were noted during the extraction phase, when lifting of raw data from the webform). The second stage of the analysis involved recording the various 'sub-categories' found within the data. Sub-categories were then grouped together to form generic categories. Finally, by working with

data in a systematic and iterative way (Merriam, 2015), the core category of ‘Nursing & Midwifery Leadership’ was formed (See findings from the abstraction process in Fig 1.).

Fig 1. HERE

Findings

Findings demonstrated that comments were made which simultaneously reflected respondents understanding of how they considered the nursing and midwifery professions now, and in relation to the question asked, *‘Imagine the healthcare system in 2030, what different and additional leadership skills and attributes will nurses and midwives need?’*. Four generic categories were noted, these were *‘Values/Traits’*, *‘Creating Positive Healthcare Cultures’*, *‘Digital Capability/Competence’*, and *‘Systems Thinking’*. Examples from the data have been presented to illustrate the type(s) of comments made by survey respondents. In places, there were notable links between generic categories. Where applicable, this has been signposted within the following narrative account.

Values/Traits

Firstly, respondents were noted to be commenting on the perceived values and traits that might be required or that will need to evolve, for example, continuing to uphold professionalism and the standards that are considered integral to nursing and midwifery. In terms of the future of the nursing and midwifery professions, comments suggested that nursing and midwifery needed to develop an active and participatory role in making and influencing decisions about the way in which these professions might continue to develop. This was referred to as having a professional voice.

“....enactment of professional values that we hold dear and underpin nurses and midwives' service to society”

“Professional voice”

“Stronger professional voice”

“Developing political voice - stop being ‘done to’”

Communication skills were considered important, and communication was commented on in relation to the ability to engage (patients and staff). Communication was also noted given the hybrid approaches to working that

developed following the Covid-19 pandemic, and the idea of technological advancement in the future. Clearly, this generic category (Communication) was linked with the generic category of ‘Digital Capability/Competency’ in terms of comments related to developing technological skills and using technology to communicate (see pages 8-10).

“As always, good communication is essential”

“Be a great communicator”

“They will need strong communication skills to engage with patients and their families in a rapidly changing healthcare landscape”

“Much more tech skills and attitude, working more remotely so clear leadership, communication and vision”

“Embracing new technology to communicate”

It was clear within the corpus that future nursing and midwifery leaders were being considered to need to have more of the values aligned with kindness, compassion, and empathy. Here, the language was superficial and there was little by way of attempting to elaborate on what these value/traits might look like in practice.

“Always considered as kind, compassionate”

“Compassion”

“Compassionate leadership”

“More compassion”

“Compassionate and inclusive leadership +++”

“All those who deliver services to provide high quality evidence-based care in a kind compassionate way”

The generic category of ‘Digital Capability/Competency’ was remarkable throughout the analysis. However, in relation to the perceived need to develop digital and/or technical skills, personal values, and humanistic approaches were considered to be an aspect of future nursing and midwifery leadership that would continue to be equally important.

“Leading with empathy”

“There needs to be better empathy or a different tone of empathy”

“Empathy will still be important as well as IT skills”

“Design thinking - human-centered approach to problem-solving that encourages empathy and collaboration”

“Nursing remains a core skill that cannot be fundamental delivered by technology alone”

Comments were made in relation to future leaders’ needing to have personal resilience to continue to address the challenges that might be faced in healthcare environments. These comments were noted to be in the context of previous challenges, such as the Covid-19 pandemic, as well as ongoing challenges such as staffing shortages and the impact of this on patient care. A minority of comments also noted that self-care would need to be considered to reduce burnout and improve wellbeing and/or resilience. However, these comments did not explain what was meant by the word ‘challenges’ in the context of nursing and midwifery leadership generally.

“Adaptive, resilient, intuitive, diverse and responsive to patient and staffing needs”

“Increasing staff morale with a positive attitude and encouraging emotional resilience”

“More resilience to be dealing with challenges”

“Nursing leaders should prioritize their own self-care and resilience to prevent burnout and maintain their well-being, which in turn allows them to lead effectively”

To have the ability to respond to said challenges in the future, comments were noted in relation to nursing and midwifery leaders’ ability to prepare and remain agile and adaptable within the working environment. However, these comments were few.

Creating Positive Healthcare Cultures

Respondents noted the need to address the changing landscape of healthcare in the future, and comments noted the need for leaders to create positive, psychologically safe, working environments. These comment types were made relative to the generic category of ‘values/traits’, for example, emotional intelligence was noted as a characteristic that would enable future leaders to effectively manage and support teams.

“Nursing leaders should possess strong emotional intelligence to foster a positive work environment, manage conflicts, and provide support to their teams during stressful situations”

“....how to work together and how to communicate to enable psychological safe working environments”

In the generic category of working environment, comments also stressed the idea that hierarchical structures should be reduced to enable future leaders to work in a collaborative way. One comment noted the need for future leadership development programmes to be multidisciplinary, as it was suggested that this would permit the benefits of collaborative leadership to be realised.

“Stepping away from authority figures and making sure those in charge approach leadership collaboratively”

“human-centered approach to problem-solving that encourages empathy and collaboration”

“Awareness of hierarchy but the ability to treat all as equal”

The idea of working collaboratively, in partnership with various other professionals was something that was commented upon as synonymous with nursing and midwifery practice and noted as an important aspect of the working environment in 2030.

“Work collaboratively across organisations”

“We are known for our collaborative working and this will be at the forefront of working in 2030”

“Collaboration with various healthcare professionals, such as physicians, pharmacists, and therapists, is essential for holistic patient care. Future nursing leaders should excel in teamwork and interdisciplinary communication”

In the future working environment, the idea of leaders working collaboratively extended from the immediate team to the wider multidisciplinary network. However, comments were also made regarding the need for future leaders to create a positive working environment both within the team, as well as across various organisations. The content of these comments was focussed on *support* and *supporting* team members in various ways, creating positive working environments. Support was commented on in terms of backing other people’s ideas, enabling career development, and staff wellbeing. Consideration was given, within the comments, to staff at all levels.

“Supporting people in the pursuit of common goals”

“Leaders will need to find and encourage and support the innovators within their teams and champion ideas”

“Open to new ideas, empower others, see opportunities, value and embrace difference be open to new idea and spot and support talent”

“Leaders need support in the moral injury that inevitably comes from working in the NHS”

“Leadership needs to value and support talent at the bottom”

“Career development and support for the midwives, maternity support workers and all those who deliver services to provide high quality evidence-based care in a kind compassionate way”

In relation to the working environments of the future, it was clear that comments were focussed on the need for leaders to be nurturing and empowering; drawing upon their underpinning values and traits in order to deliver high-quality patient care (see pages 2-4). Another sub-category within this generic category was reflective of leaders growing talent within the immediate working environment, for example, the content of several short/segments mentioned the words ‘plan ahead’ and/or ‘succession planning’.

Comments were made in relation to patient safety, linked to the type of milieus that will enable safe environments in the future. Equally, establishing conditions whereby staff will feel psychologically safe to escalate concerns relating to patient care was also noted in the content.

“Culturally safe places”

“...enable psychological safe working environments...”

“Creating spaces for psychological safety, if nurses fear to escalate concerns due to judgement, that impacts patient care”

“Be able to stand up and say no, if they feel the route is unsafe for their staff and/or the people in their care”

In this generic category, the idea of safety cultures was connected to comments about co-production and the idea that future leaders will create environments whereby care will be considered collaboratively and be inclusive of patient voice, both in relation to the notion of co-production and/or advocacy.

“Ability to influence safety cultures. Ability to truest co-produce care with people receiving it”

“Ensure the patient voice is brought into the solution thinking”

“Advocating for patients' rights, safety, and well-being remains a core nursing skill. Future leaders should be strong patient advocates, working to ensure the best care possible”

“Leadership that drives and takes the safety of patients in the NHS into the future”

Comments in this generic category noted the need for diversity and were related to the provision of care for diverse populations, as well as the requirement that leaders be equipped to recognise and respond to diversity.

“Should be able to lead within different and diverse communities; should be able to connect with diverse communities”

“Cultural competence for diverse patient populations, and the ability to lead interdisciplinary teams to provide holistic care”

“...diverse and responsive to patient and staffing needs”

“...requiring a diverse skill set to navigate the evolving healthcare landscape successfully”

The final set of sub-categories within this generic category were focussed on the idea of leaders as role models, and to coach and mentor others. On the other hand, it was remarked that those leaders who might be new to the role might also need coaching.

“Leaders need to get coaching/mentoring during the first six months of their new role”

“Nurses need to be excellent role models and good communicators”

“Leaders need to have time to be able to work on the wards to provide that role modelling opportunity”

“Coaching, mentoring and succession planning/professional development”

“Coaching skills will be required by leaders to empower teams to reach their potential”

Overall, many of the comments in this sub-category were noted to be short segments and were not fully elaborated upon. However, these segments were considered ‘interpretatively’ to fit with the generic category of ‘developing positive healthcare cultures’ as the concepts of role modelling, coaching, and mentoring, were understood to be related to, the less visible aspects of health service organisations. The content here (role

modelling/mentoring/coaching) might (in the future) become manifest in patterns of care and healthcare improvement, specifically in relation to healthcare organisational cultures.

Digital Capability/Competence

A wide variety of comments were made throughout the data in relation to future leaders and digital capability/competence. Although nursing was considered as a core skill, despite technology (see pages 3 & 4), nursing and midwifery practice was noted to be (and to become) increasingly informed and driven by technology and technological advancement; leaders will therefore need to be competent in this area.

“Technology will also play a part in consultations with more online appointments, maybe to triage face-to-face work, so IT facility will be needed there too”

“...technology including AI, open to new ideas”

“In 2030, nurses and midwives will require advanced leadership skills such as digital literacy for managing health technology, adaptability to evolving healthcare models”

“Technology is likely to be playing an ever-increasing part in healthcare so we need to ensure our leaders are equipped for this.”

New technology was commented on in relation to ways of communicating with patients. However, these comments were fragmented and difficult to interpret, e.g. “New IT solutions”.

“Embracing new technology to communicate”

“New IT solutions”

“Using new technology to interact with patients”

Other comments noted the need for nurse and midwife leaders to understand that Artificial Intelligence (AI) would become a facet of their role in the future. Some of these comments were fragments, whereas others described the need for AI to be utilised to enable the nursing role to evolve alongside developments in technology.

“Working alongside AI”

“To work with AI”

“Leadership development for technology, innovation, AI”

The need for future leaders to keep up with technological developments was notable across this category.

“I imagine that AI will play a much more prominent role so CPD will be even more necessary to keep up with developments”

“A good level of digital skills and understanding of AI/ML technology will be required with an openness to work outside of traditional roles of nursing but instead at the intersection of different industries in order to raise the profile of nursing to help improve health and preventing illness”

“There needs to be a far higher level of digital and data literacy....We need to understand that virtual nursing is a reality”

As previously stated, some comments were short and fragmented whereas other comments were more effusive and noted the need for leadership to encompass AI, the use of technology, and enable healthcare staff to develop digital capability to improve patient care and/or outcomes.

“Nursing leaders should be comfortable with healthcare information systems, electronic health records (EHRs), and telemedicine technologies. Understanding data analytics and utilizing technology to improve patient care and outcomes will be crucial”

“Data analytics, data science skills, understanding of technology impacts of care”

“Nursing leaders should have skills in data analysis, interpretation, and using data to improve patient care and resource allocation”

Across the corpus of data, comments in the generic category of ‘Digital Capability/Competence’ were much more expansive, and the occurrence of these comments was more than the other generic categories.

Systems Thinking

In the final generic category, comments were noted that related to the idea that future leaders would take an approach which accounts for the overall system as well as its individual parts. Moreover, comments reflected the wider landscape, within which healthcare takes place, e.g., policy and the political drivers and regulate and govern healthcare practice. Comments were made in relation to complexity and decision making regarding patient care, as well as planning for the future of the profession.

“Complex decision making with a good background on policy and regulation”

“Awareness of government policy and plan ahead of time”

“Understanding healthcare policy and advocating for changes that benefit patients and the nursing profession”

“Political acumen to articulate the impact of nursing and midwifery and ensuring that we are represented”

Multidisciplinary working was noted, and comments were made in relation to interdisciplinary care and the structure of care systems, this included digital systems and technology as part of the wider structure that will benefit service improvements. Likewise, digital literacy was noted as important for enabling a systems thinking approach to healthcare in the future.

“...an understanding of the organisational structure of the NHS (e.g. ICS/ ICB etc) systems working and a focus on population health”

“...ability to lead interdisciplinary teams to provide holistic care”

“A system led approach to support reporting, data and service improvement”

“To be leaders of the future nurses and midwives need exposure to the wider systems of our NHS, University's, ICB's, AHSN's”

“Digital proficiency, inclusivity, systems thinking, research aware and enabling”

Ultimately, the need to understand complexity was noted as key to the future of nursing and midwifery leadership. The comment below is representative of this and is the final sub-category in the last generic category of systems thinking.

“The World seems to be ever more complex, and the pace of change is accelerating. Although it is hard to accurately forecast the state of the World in a decade, there are forces which will likely shape our World, as well as health and care, in 2030: Science and technology, Sustainable environment, and Socio-political changes”

Again, as noted within previous generic categories, the idea of technology and technological advancements was remarkable in this category of ‘Systems Thinking’.

Discussion

This first stage service evaluation has gained a wide variety of perspectives regarding the perceived skills and knowledge that future nurse and midwife leaders might need. From our questionnaire, we generated both qualitative and quantitative data. In the current paper we have chosen to focus on the qualitative data analysis. This supports the responses we received regarding the open question “*Imagine the health and care system in 2030, what different and additional leadership skills and attributes will nurses and midwives need?*” This finding supports contemporary research which has confirmed that transformational and authentic leaders can positively influence healthcare cultures, which in turn reduces adverse events and improves the standard of healthcare (Labrague, 2023). This stresses the need for leadership development programmes to focus on transformational styles of leadership and evaluate this in relation to patient safety and healthcare outcomes. This is important because, authentic leaders are known to be critical to the development of psychologically safe organisational cultures, which are antecedents to enhancing patient safety (Grailey et al., 2021; Wang et al, 2021; O’Donovan and McAuliffe, 2020).

Data analysis for the current study highlighted comments in the generic category of ‘Digital Capability/Competence’. Across the data, digital technologies, and the idea that future leaders will be digitally capable was clearly a focus of the comments, which were made specifically in relation to communication and patient care. This is consistent with the findings of Desveaux et al. (2019) and the importance of leadership in digital innovations and the successful implementation of digital healthcare systems. However, respondents also made clear that this increase in digital technology would need to be balanced with the underpinning values/traits that could not be replaced with technology, such as the delivery of compassionate, humanistic, holistic care. This resonates with the idea that the development of compassionate healthcare cultures facilitates positive patient experiences and enhances health outcomes; noted across a variety of contexts, (see BLINDED et al., 2024; Malenfant et al., 2022; West, 2020).

The values and traits described across the data were also notable in relation to the capacity of future leaders to create positive healthcare cultures, for example, emotional intelligence, working collaboratively and in a supportive way was considered important for staff to have positive working environments (as well as enabling patients to have a voice). Likewise, the professional voice was considered to encourage strong leadership. However, the comment types made in this category were short segments and not fully explained, which made the meaning of ‘professional

voice' unclear. On the other hand, this may indicate individual feelings relating to agency, or respondents may be unable to elaborate on how this might be achieved in the future. Finally, the analysis revealed comments relating to the complexity of healthcare systems. Future leaders will need to understand this complexity, as well as how to function effectively within complex healthcare environments, to realise positive outcomes for patients in the future.

Study limitations

This evaluation has several limitations. Firstly, in terms of geographical area, most responses were noted to be from participants working in England, with 98 people stating their work country as the United Kingdom ($n = 98$). This makes it difficult to comment on the relevance of the findings to the global context. Second, with respect to the ethnicity of respondents, the majority (59.4% - $n = 60$) were White. Therefore, the data is not necessarily representative of the full diversity of the healthcare workforce. This is greater than the proportion of registered nurses, midwives and nursing associates from Black, Asian and minority ethnic backgrounds, which was 26.6% as of March 2023 (NMC, 2018). However, the number of NMC registered nurses and midwives will change daily, therefore, whether the composition of our sample is representative is difficult to accurately determine. It is therefore difficult to ascertain the direct transferability of our findings to contemporary healthcare contexts. Although, with respect to leadership, the majority of healthcare leaders in the UK are thought to be White (see Gov. U.K. 2018; and, NHS Workforce Race Equality Standard, 2021). Also, a large proportion (86.1%) of respondents were registered nurses and midwives, which represents a wealth of professional knowledge and experience. This enhances credibility in terms of the study's findings and the reality of those who responded.

Most respondents stated they were either Alumni of the Florence Nightingale Foundation ($n = 46$), or supporters of the Florence Nightingale Foundation ($n = 18$). These viewpoints maybe biased by social desirability or responses may have been biased due to a perceived conflict of interest. The co-authors of the current study are also employees of the organisation who disseminated the questionnaire among their professional networks. However, the analysis was undertaken by a researcher, external to the organisation being discussed in this manuscript, which attempts to reduce bias and mitigate conflicts of interest.

12 of the 101 respondents did not provide an open response/comment. Also, some participants provided a very short response with a few words, for example “Increased use in technology”. In some cases, a one-word answer was provided, e.g., “Compassion”. This reduced the amount of qualitative data received. Therefore, the meanings within the data may be limited by these shorter response types. However, regardless of these limitations, participants were all nurses and midwives; 87 of those were registered professionals. This is a clearly defined and highly representative sample of participants, which strengthens the relevance and significance of the findings (Cho and Trent, 2006; Morse, 1999).

Conclusions and recommendations

Leadership development for future nurse and midwife leaders should place emphasis transformational and transformative leadership. There needs to be more research with a focus on identifying the underpinning mechanisms of change and ‘how’ transformational leadership styles might be linked to safety cultures, improvements in health outcomes and better patient care.

References

- Adcock, J. E., Sidebotham, M., & Gamble, J. (2022). What do midwifery leaders need in order to be effective in contributing to the reform of maternity services?. *Women and Birth*, 35(2), e142-e152.
- Ahern, S., & Loh, E. (2021). Leadership during the COVID-19 pandemic: building and sustaining trust in times of uncertainty. *BMJ leader*, 5(4).
- Bass, B.M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational dynamics*, 18(3), pp.19-31.
- Bass, B. M. (1999). Two decades of research and development in transformational leadership. *European journal of work and organizational psychology*, 8(1), 9-32.
- Bennett, N. & Lemoine, G.J. (2014). What a difference a Word Makes: Understanding Threats to Performance in a VUCA World. *Business Horizons*, 57, 311-317.
- BLINDED (2022).
- BLINDED (2023).
- BLINDED (2024).
- Cho J, Trent A. (2006). Validity in qualitative research revisited. *Qual Res*;6(3):319–340.
- Desveaux, L., Soobiah, C., Bhatia, R. S., & Shaw, J. (2019). Identifying and overcoming policy-level barriers to the implementation of digital health innovation: Qualitative study. *Journal of medical Internet research*, 21(12), e14994. doi:10.2196/14994
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of advanced nursing*, 62(1), 107-115.
- Gov. U.K. (2018) ethnicity facts and figures, NHS staff experiencing discrimination at work. Retrieved from: <https://www.ethnicity-facts-figures.service.gov.uk/workforce-and-business/nhs-staff-experience/nhs-staff-experiencing-discrimination-at-work/latest>
- Hamouche, S. (2023). Human resource management and the COVID-19 crisis: Implications, challenges, opportunities, and future organizational directions. *Journal of Management & Organization*, 29(5), 799-814.
- James, A.H. and Bennett, C.L. (2022). Effective nurse leadership in times of crisis, *Nursing Management*, Vol. 27 No. 4, pp. 32-40
- Junaid, S. B., Imam, A. A., Balogun, A. O., De Silva, L. C., Surakat, Y. A., Kumar, G., ... & Mahamad, S. (2022). Recent advancements in emerging technologies for healthcare management systems: a survey. In *Healthcare* (Vol. 10, No. 10, p. 1940). MDPI.
- Kentikelenis, A., & Stubbs, T. (2022). Austerity Redux: The post-pandemic wave of budget cuts and the future of global public health. *Global Policy*, 13(1), 5-17.
- Klopper, H. C., Madigan, E., Vlasich, C., Albien, A., Ricciardi, R., Catrambone, C., & Tigges, E. (2020). Advancement of global health: Recommendations from the Global Advisory Panel on the Future of Nursing & Midwifery (GAPFON®). *Journal of Advanced Nursing*, 76(2), 741-748.

- Koumpias, A. M., Schwartzman, D., & Fleming, O. (2022). Long-haul COVID: healthcare utilization and medical expenditures 6 months post-diagnosis. *BMC Health Services Research*, 22(1), 1010. <https://doi.org/10.1186/s12913-022-08387-3>
- Labrague, L. J. (2023). Toxic leadership and its relationship with outcomes on the nursing workforce and patient safety: a systematic review. *Leadership in Health Services*. Vol. 37 No. 2, pp. 192-214. <https://doi.org/10.1108/LHS-06-2023-0047>
- Malenfant, S., Jaggi, P., Hayden, K. A., & Sinclair, S. (2022). Compassion in healthcare: an updated scoping review of the literature. *BMC palliative care*, 21(1), 80.
- Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative research: A guide to design and implementation*. John Wiley & Sons.
- Mezirow, J. 2000. Learning as Transformation: critical Perspectives on a Theory in Progress, Jossey-Bass, San Francisco, CA.
- McKee, M., Dunnell, K., Anderson, M., Brayne, C., Charlesworth, A., Johnston-Webber, C., ... & Watt, R. G. (2021). The changing health needs of the UK population. *The Lancet*, 397(10288), 1979-1991.
- Morse, J. M. (1999). Myth# 93: Reliability and validity are not relevant to qualitative inquiry. *Qualitative health research*, 9(6), 717-718.
- Naghavi, M., Mestrovic, T., Gray, A., Hayoon, A. G., Swetschinski, L. R., Aguilar, G. R., ... & Murray, C. J. (2024). Global burden associated with 85 pathogens in 2019: a systematic analysis for the Global Burden of Disease Study 2019. *The Lancet Infectious Diseases*.
- NHS Workforce Race Equality Standard. (2021). Data analysis report for NHS trusts. Retrieved from: <https://www.england.nhs.uk/wp-content/uploads/2022/04/Workforce-Race-Equality-Standard-report-2021-.pdf>.
- NHS Leadership Academy. (2023). Healthcare leadership model. The nine dimensions of leadership behaviour”, available at: www.leadershipacademy.nhs.uk/wp-content/uploads/dlm_uploads/2014/10/NHSLeadership-LeadershipModel-colour.Pdf.Version1.0,2013
- NHS England (2019). The NHS Long Term Plan. Retrieved from: <https://www.longtermplan.nhs.uk/wp-content/uploads/2019/08/nhs-long-term-plan-version-1.2.pdf>
- NMC. (2023). The NMC Register 1st April 2022 – 31st March 2023. Retrieved from: <https://www.nmc.org.uk/globalassets/sitedocuments/data-reports/may-2023/0110a-annual-data-report-full-uk-web.pdf>
- O'Donovan, R., & McAuliffe, E. (2020). A systematic review exploring the content and outcomes of interventions to improve psychological safety, speaking up and voice behaviour. *BMC health services research*, 20, 1-11.
- Pandit, M. (2020). Critical factors for successful management of VUCA times. *Bmj Leader*, leader-2020.
- Rumsey, M., Leong, M., Brown, D., Larui, M., Capelle, M., & Rodrigues, N. (2022). Achieving Universal Health Care in the Pacific: The need for nursing and midwifery leadership. *The Lancet Regional Health–Western Pacific*, 19: 100340. doi.org/10.1016/j.lanwpc.2021.100340
- Salvage, J., & White, J. (2020). Our future is global: nursing leadership and global health. *Revista latino-americana de enfermagem*, 28, e3339. doi: 10.1590/1518-8345.4542.3339

Saghafian, S., Song, L. D., & Raja, A. S. (2022). Towards a more efficient healthcare system: Opportunities and challenges caused by hospital closures amid the COVID-19 pandemic. *Health Care Management Science*, 25(2), 187-190.

Toulany, A., Kurdyak, P., Guttman, A., Stukel, T.A., Fu, L., Strauss, R., Fiksenbaum, L. and Saunders, N.R. (2022). Acute care visits for eating disorders among children and adolescents after the onset of the COVID-19 pandemic. *Journal of Adolescent Health*, 70(1), pp.42-47.

Ustgorul, S. (2022). Why Healthcare Managers Should Understand and Apply the World of VUCA?. In *Agile Management and VUCA-RR: Opportunities and Threats in Industry 4.0 towards Society 5.0* (pp. 115-127). Emerald Publishing Limited. doi.org/10.1108/978-1-80262-325-320220008

Wang, H. F., Chen, Y. C., Yang, F. H., & Juan, C. W. (2021). Relationship between transformational leadership and nurses' job performance: The mediating effect of psychological safety. *Social Behavior and Personality: an international journal*, 49(5), 1-12.

West, M., Armit, K., Loewenthal, L., Eckert, R., West, T. and Lee, A. (2015). Leadership and Leadership Development in Healthcare: The Evidence Base. The King's Fund. Retrieved from: https://assets.kingsfund.org.uk/f/256914/x/6577e5c839/leadership_in_health_care_report_february_2015.pdf

West, M. A. (2020). Compassionate and collective leadership for cultures of high-quality care. Connecting healthcare worker well-being, patient safety and organisational change: the triple challenge, 207-225.

Wong, J.W., Skeldon, S., Gill, E., Taylor, E., Billingham, W., Stevenson, P.G., Shipton, N., Ferguson, G., Collins, R., Newton, R. and Newell, A., 2023. The increase in medical admissions with anorexia nervosa during the COVID-19 pandemic in Western Australia. *International Journal of Eating Disorders*, 56(8), pp.1661-1666.

Vasset, F., Fagerstrøm, L., & Frilund, M. L. (2023). Nurse leaders' changing roles over 25 years: A qualitative study. *Leadership in Health Services*, 36(1), 125-139.