护理杂志
Journal of Nursing
Volume 72 Number 2
ISSN: 0047-262X

A Multifaceted Strategy to Improve the Hospice Care Completeness of Intensive Care Nurses

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Abstract

Background & problems: *In recent years, awareness of the need to facilitate death with dignity has advanced significantly in Taiwan. Critically ill patients admitted to intensive care units (ICUs) often endure the pain of medical interventions. Therefore, providing comprehensive end-of-life care that respects patient dignity is crucial. A situational analysis revealed that the ICUs in our hospital lacked standardized care procedures, that ICU staff were unclear about the role of the palliative care team, and that related educational training was deficient. Further investigation showed the completeness rate of ICU nurse implementation of end-of-life care to be 46.3%.*
Purpose: *This project was developed and executed to increase the end-of-life care completeness rate to 85.0%.*
Resolutions: *Establish end-of-life care standard operating procedures; design a small portable reminder card featuring the slogan "Physical, Mental, and Spiritual Care" to help prompt nurses while on duty; and plan educational training and cross-team workshops that utilize a simple tabletop game to support course teaching and increase engagement and interactivity.*
Results: *Result: After full project implementation, the rate of end-of-life care completion was 88.4%.*
Conclusions: *The developed project effectively improved the integrity of end-of-life care provided by ICU nurses, alleviating the suffering of terminally ill patients and enhancing their dignity. The project also helped families face the grieving process with greater composure, improving the overall quality of end-of-life care provided in our ICUs.*

Keywords: *and diverse strategies; end-of-life care; intensive care units.*

INTRODUCTION

At a time of global health challenges such as the nursing and midwifery staffing shortage and as we recover from the COVID-19 pandemic, there has never been a greater need for effective leadership across all tiers of the health and social care workforce (Abbas, 2021; Joseph-Richard and McCray, 2022; Messenger, 2021; Richard et al., 2021). Yet, despite a growing need for leadership development in nursing and midwifery, previous studies have argued there is limited scholarship in relation to how leadership capability might be achieved across wide- ranging and diverse contexts (Miles and Scott, 2019).

The Healthcare Leadership Model (HLM) (Boyatzis, 1982) has provided a basis for the UK's national strategy for leadership development (NHS England and Health Education England, 2018). HLM describes what leaders "do", including inspiring others; inspiring a shared purpose; and development of "the self" as role model who can naturally influence others to adopt a shared vision for health-care quality improvement. Arguably, the context of nursing and midwifery leadership can

be conceived as a social process in which individuals are considered social actors, engrained within interwoven social realities from which meaning is made and from which they base their perceptions and actions (Iwowo, 2016; Oates, 2012). Hence, it is important that, to develop as leaders, nurses and midwives gain insight into their existing values and personal qualities, regarding how the "self" might be experienced by other individuals with whom they work (Gilmartin and D'Aunno, 2007). This can be achieved through programmes which enable individuals to develop both professionally and personally, whilst building increased self-awareness (see Bond et al., 2022) and self-efficacy.

With regard to leadership theory, previous programmes have been established based on research that has expounded traditional leadership theories, for example, Transformational Leadership Theory [1] (Burns, 1978) is noted to have held prominence across the health-care leadership literature for the past few decades (Paton et al., 2021; Wong et al., 2013), specifically in relation to nursing leadership (Crowne et al., 2017). The programmes we report on here are underpinned by the principles of Transformative Learning Theory (Mezirow, 2000), which focuses on a process of continual critical reflection, through which there is a "dramatic, fundamental change in the way we see ourselves and the world in which we live" (Cranton, 2016, p. 318). Hence, it was anticipated that individuals embarking on one of The Florence Nightingale Foundation's programmes would be changed in profound and long-lasting ways through a process where they were encouraged to challenge existing and habitual psychological,sociocultural, and epistemic meaning perspectives about "the self", as well as exploring the individual differences in meaning perspectives of each other.

In the current study, we amalgamated feedback (in the form qualitative comments) from 690 participants from across a collection of 13 of "The Florence Nightingale Foundation's (FNF)" leadership development programmes. The aim was to evaluate the impact of FNF's approach to developing health-care leaders.

Overview of The Florence Nightingale Foundation's programmes

FNF's programmes aim to enable nurses and midwives to develop personal confidence in their expertise and authority as health-care leaders. Each programme aims to equip them with the skills to generate and use evidence and articulate their knowledge in a manner that impacts policy, practice and to promote clinical excellence in their chosen field of practice. This is fulfilled through a comprehensive programme using a variety of experiential leadership development activities. Programmes are tailored to the experience and area of practice the nurses and midwives are working within. However, all programmes share the following learning objectives:

- Demonstrate enhanced awareness of how personality preferences influence personal effectiveness and performance in teams. Identify and critically appraise opportunities to influence through personal and collective authority.
- Develop strategies to express self in a manner which communicates presence, enables influence, and has impact.
- Explore personal courage and develop tools for staying effective under pressure.
- Formulate and put into practice plans which contribute to improved outcomes for patients and staff underpinned by evidence and quality improvement methodology.
- Programmes are typically 6 months in duration and throughout each programme, participants are encouraged to better understand "the self" (and others) through individual and group work where they engage in a process of introspection and critique of "the self".

FNF is a learning organisation, and, as such, it captures participants' feedback through questionnaires which are collected prior and after the delivery of leadership programme(s).

Information gathered from stakeholders and participants is used to inform further improvements and demonstrate the impact of the service offered by "FNF". Based on information gathered through pre-programme collaboration with providers and commissioners, course topics are carefully selected to meet the evolving learning needs of health-care organisations such that "FNF" can design and deliver programmes that address the most significant issues impacting on the progression of the nursing and midwifery professions. By evaluating the experiences and perspectives of individuals who have undertaken these programmes this paper will provide insight into the usefulness of employing transformational "learning" theory as an approach to developing future health- care leaders.

Ethical considerations

As part of the process of consenting to data administration, FNF's programme participants are informed that their names, contact details will be collected and that their de-identified feedback may be used in evaluation and for the improvement of future leadership programmes, as per the privacy policy and as a condition of their sponsorship. As such, implicit informed consent was obtained from all programme participants and no formal ethics committee approval was sought; only anonymised feedback data was collected. Once data was collected via FNF's website, it was stored on a secure cloud server which is only accessible to FNF's employees in accordance with European Union General Data Protection Regulations (UK Government, 2018).

Data collection

A total of 1,240 participants joined FNF's leaderships programmes between 2019 and 2021. Online surveys were used to capture participants' feedback during the programme and immediately following completion of the programme. All participants were provided with the same survey, which comprised questions about demographics; job role; Agenda for Change [2] banding; self-identified learning objectives; and self-reported scores in relation to individually perceived self-efficacy (Schwarzer and Jerusalem, 1995). Participants were also provided with space to provide qualitative feedback comments in response to the question: "Please tell us about the impact of your overall experience". Questionnaire data were organised into separate Excel workbooks and categorised into the individual leadership programmes. Qualitative data were then extracted from each participant's individual response and transferred to a single Microsoft Word document (corpus).

Data analysis

Due to the size of the corpus (75,053 words), some computational means were required to draw out key topics, frequently referred to within the qualitative data, and gain insight into the context of the comments. Natural Language Processing is a field in Computer Science which uses models and machine learning to make sense of large volumes of unstructured free text. The latter sought to determine the most frequently used words and their sentiment using corpus linguistics (Selvi, 2019) to identify topics and analyse themes. This study used AntConc 3.5.9 (Anthony, 2023) a freely accessible online corpus analysis toolkit for processing language. This toolkit can be used to scan a large volume of words to detect word and phrase patterns within them, and automatically cluster the words into groups and identify any collocated words.

RESULTS

Data in the form of naturally occurring language is valuable for obtaining contextual insight into participants' experiences and impact of "FNF's" programme (Selvi, 2019). This free text data was analysed with the view that an analysis of language offers a way of evaluating participants' experiences as well as providing insight into how participants reflected upon themselves as leaders

(during the process of learning and reflecting upon the developing "self"). Using AntConc 3.5.9 (Anthony, 2023) software, a collocation analysis was computed, which resulted in the following notable word types that were frequently located across the corpus: confidence; influence; self-awareness; insight; and impact.

Collocation analysis

The words "confidence" and "confident" were noted a total of 213 times across the corpus to be collocated with the words "developed", "increased", "built", "enabled", "boosted", "grown", "aided", "provided" and "gained". There was also a notable pattern of language in relation to the word "leadership" (and lexical lemmas of leadership, i.e. "leading", "lead", "leader"), which was collocated with the words "confidence" and "confident". The latter collocation(s) was observed a total of 29 times and outlines the way in which participants constructed their identity, as leaders, in relation to their overall leadership experience of the The Florence Nightingale's programme. Increased confidence was remarked upon in relation to feeling more "effective" in their existing role, as well as improving communication skills, motivation and individual agency within their role. These results illustrate the influence of FNF's leadership programme in relation to the way in which participants viewed "the self" after having completed and/or as they emerged from the programme. A distinct transformation of "self" in participants' use of language, in relation to themselves, is remarkable, specifically in relation to the growth and development of individual confidence as leader. This provides evidence to suggests that the FNF's programmes are effective in developing confident future health-care leaders.

The potential for wider impact, in relation to patient care was observed within participants' discourse, e.g. "It has also increased my confidence in speaking out and making changes to patient care" and "This course has given me the confidence of providing the best care for patients". FNF's underpinning rationale for using transformational learning theory (TLT) (Mezirow, 2000) as an educational approach to developing health-care leaders was the idea that reflection on the "self" might permeate more broadly, after having completed the programme, in terms of participants' perceived capability to view themselves as change agents. Along these lines, the key word "influence" was noted 43 times in the corpus. A total of 15 concordance lines illustrated participants' reflections both in terms the externalisation of "self-forming" activity and personal beliefs about their capacity for wider impact (through the use of phrases such as, "shape my", "transformed my perspective", "made me", "am able", "I can" and "able to").

Linguistic expression in relation to the "self" was also notable in a third pattern of language use, in which participants were observed to have referred to the development of awareness of "the self" as leader. A total of 28 concordance lines were retrieved from the corpus where the key word "awareness" was observed. A total of 15 of these concerned heightened self-awareness as a result of the FNF's programme.

The word "insight" was used 29 times, and in relation to what participants had achieved from taking part in the programme. This was collocated around the following lexical lemmas, "gained", "gain", "gave" "given", "get" 12 times, which demonstrated that participants believed they had received insight into various aspects of leadership in health care. This understanding included thinking about strategic elements of health-care environments, whilst also gaining a deeper understanding of the self as future leader.

Two final patterns of language, notable across the corpus was formed around the word "impact". This was observed to occur a total of 119. Participants' evaluations on their overall experience, after having undertaken the (FNF leadership) programme, clearly illustrated a profound sense of learning, and continued questioning, in relation to the self and impact of the self on others.

The word "impact" was closely collocated with the word "positive", in relation to the development of the self as "leader", and in the sense of the individual potential for wider impact as a result of the (FNF's) programmes.

This perceived outcome suggests participants recognised how the confidence, awareness and insights they have gained as a result of the programme goes beyond individual and relational impact and extends to the practice environment where they are impacting on patient care.

DISCUSSION

In an effort to assess the overall impact of FNF's programmes for developing health-care leaders, and the feasibility of this approach (using TLT), the current study examined survey data from 690 participants who undertook one of FNF's programmes in the past two years. As far as we know, this is the first paper to report on programmes designed to develop health-care leaders, where transformational "learning" has been used, using corpus linguists as a research method (Mezirow, 2000). Kirkpatrick's (1959) evaluation model has been used previously to measure the impact of the leadership development programmes (see Alsalamah and Callinan, 2021). However, the method applied here goes beyond reaction to demonstrate explicit accounts of learning, and descriptions of behaviour changes that are both unique to individuals and observable across participants' discourse.

Our findings suggest that those who participate in FNF's programmes experience growth in their perceived leadership capabilities and competencies. In relation to the way in which participants perceived a sense of themselves as leaders, the collocation analysis identified word types that were closely related to an increasing understanding of the of self as efficacious, e.g. confident, influential, self-aware, insightful, and considering "the-self" as able to have impact on others, their practice environment and ultimately patient care. This language is reflective of the components of self-efficacy which is defined as "an individual's belief in their ability to successfully perform a task or achieve a desired outcome" (Bandura, 1997). Bandura's four essential concepts in self-efficacy are mastery of experiences, social modelling, social persuasion and psychological responses (Bandura, 1977, 1986, 1997). Mastery of experiences is linked to description of impact in practice, social modelling to self-awareness, social persuasion to perceived influence and psychological responses to perceived confidence.

Increased self-efficacy has been shown to be a powerful predictor of leadership performance; nurses' belief in individual ability to influence professional practice; self- confidence in their own decision(s) relating to the professional practice environment (see Moran et al., 2021). Hence, our findings highlight the need for leaders to develop self-efficacy in the context of health-care delivery. Any future research relating to this particular programme must therefore be able to demonstrate a clear change in participants' self- efficacy, e.g. pre and post programme ratings accurately matched to individual participants.

The collocation analysis indicated that participants' self-forming perceptions of themselves as leaders had the potential for much wider impact of patient care and within the wider clinical context. However, without conducting further realist evaluation and longitudinal research, this is impossible to ascertain from this study. A realist approach would offer insight into both the individual and organisational mechanisms of change, as outlined by De Brún and McAuliffe (2022), and account for the complexity of diverse health-care environments. Nevertheless, the word-types used by participants in the current study, for example, the final two patterns of language use observed participants' expressing a high level of reflection, indicated "theoretically" the notion of transformation of the self in terms of individuals beginning to consider critically their own worldview and how this might impact leadership (Cranton, 2016). However, this must be interpreted with caution as it is unclear whether this transformation can be sustained over time, for example, when the participants had completed the programme and returned to clinical work. Furthermore, it is difficult to ascertain to what extent prevailing cultural values might also determine how leadership identity is developed and maintained over time (Joseph-Richard and McCray, 2022).

Regardless, participants clearly experienced growth in terms of increased confidence and a sense of having changed as a result of the programme. However, it would be beneficial to design future surveys using measures that can assess changes in self-confidence with greater accuracy, which may offer more credence to the results in terms of validating and triangulating the data presented here. An area, which The Florence Nightingale Foundation has already improved upon, and which will help future evaluations, is the inclusion of additional demographic information such as age, gender and ethnicity. This will enable more sophisticated analysis of the possible relationship between these factors and indicators such as satisfaction ratings, attainment of learning goals and job promotion and or career progression. Demographics may also facilitate targeted improvements in future programme design, content and delivery for specific groups.

Ultimately, this paper has captured the benefits of The Florence Nightingale Foundation's leaderships development programme. The insights gained from the collocation analysis illustrate the socially constructed nature of the concept of health-care leadership. This analysis has clearly highlighted the benefits of applying TLT (Mezirow, 2000) is an approach to developing highly effective future health-care leaders.

Strengths and limitations

The use of corpus assisted technology to analyse large amounts of qualitative data is easy to repeat and verify. This approach also mitigates "human" biases is the analysis of the textual comments from survey respondents. Although, human interaction and human interpretation with the data could be viewed as potentially introducing bias to the analytical process (Piepenbrink and Gaur, 2017). The size of the corpus (75,053 words) is significant as a larger corpus means that there is a greater chance of repetitions in language, i.e. lexical terms and lexical lemmas, for a pattern to occur and be notable in the language used. Hence, the results of the analysis can be considered as more reliable due to the fact that a large corpus of natural language has been appraised. However, some studies have commented that there is more notable homogeneity in a smaller corpus (see Adolphs 2006 as cited in Bond et al., 2018), which makes a smaller corpus more valid.

Several limitations can be identified. Firstly, the long-term effect(s) of TLT as an approach, regarding participants' ability to sustain confidence and influence as leaders, cannot be fully determined from this evaluation study. Appraising leadership programmes is complex, in terms of individual influence, as the development process continues well beyond the learning experience. Second, while an increase in leadership capabilities at the individual level may be observable immediately after the programme, greater individual leadership growth and impact on the wider health-care system is likely to take place several years after completion of the leadership programme (see Brown et al., 2022). Therefore, to achieve a comprehensive understanding of the effect of leadership programmes, it is crucial to implement validated measures that can assess both short and long-term outcomes. Moreover, as the evaluation shifts from short-term to long term-outcomes, so does the socio-ecological level of measurement which will progress from the individual to organisational, community and eventually towards measuring impact at a societal level. We aim to address these shortfalls by undertaking a longitudinal study, using robust measures of self-efficacy, and asking specific questions to programme alumni relating to the wider impact of these programmes on participants' career status and quality improvements relating directly to patient care.

CONCLUSION

Applying the principles of TLT to the development of health-care leaders has the potential to create socially and strategically confident leaders who are influential in creating positive changes across a variety of clinical environments. Future evaluation will explore in depth the personal

transformational leadership journey over time, along with the implications of this on policy, practice and the promotion of clinical excellence.

Notes

1. The concept of transformational leadership was introduced by Burns in 1978 and is defined as a process whereby "leaders and followers help each other to advance to a higher level of morale and motivation". Ideally, the end goal is to develop followers into leaders.

2. Agenda for Change (AfC) is the current National Health Service (NHS) grading and pay system for NHS staff, except for doctors, dentists, apprentices and some senior managers. Whilst not universally used by all participants, e.g. participants from the Army, it represents the career pay grading scale used by most participants and was used in the questionnaire for this reason. Where a programme participant used a different pay system scale, they were asked to submit this so it could be matched to the AfC equivalent.

References

1) Abbas, J. (2021), "Crisis management, transnational healthcare challenges and opportunities: the intersection of COVID-19 pandemic and global mental health", Research in Globalization, Vol. 3, p. 100037, doi: 10.1016/j.resglo.2021.100037.
2) Alsalamah, A. and Callinan, C. (2021), "The Kirkpatrick model for training evaluation: bibliometric analysis after 60 years (1959–2020)", Industrial and Commercial Training, Vol. 54 No. 1, pp. 36-63.
3) Anthony, L. (2023), "AntConc (version 3.5.9) [computer software]", available at: www.laurenceanthony. net/software/antconc/ (accessed 27 January 2023).
4) Bandura, A. (1977), "Self-efficacy: toward a unifying theory of behavioral change", Psychological Review, Vol. 84 No. 2, pp. 191-215.
5) Bandura, A. (1986), "The explanatory and predictive scope of self-efficacy theory", Journal of Social and Clinical Psychology, Vol. 4 No. 3, pp. 359-373.
6) Bandura, A. (1997), Self-Efficacy: The Exercise of Control, Freeman, New York, NY.
7) Bond, C., Stacey, G., Charles, A., Westwood, G. and Hearn, D. (2022), "In Nightingale's footsteps: A qualitative analysis of the within the clinical learning environment", Journal of Nursing Management, doi: 10.1111/jonm.13732.
8) Bond, C., Stacey, G., Field-Richards, S., Callaghan, P., Keeley, P., Lymn, J., .. . and Spiby, H. (2018), "The concept of compassion within UK media-generated discourse: a corpus-informed analysis", Journal of Clinical Nursing, Vol. 27 Nos 15/16, pp. 3081-3090, doi: 10.1111/jocn.14496.
9) Boyatzis, R. (1982), The Competent Manager: A Model for Effective Performance, Wiley, New York, NY. Brown, M., Pullon, S., McKinlay, E., Gray, L. and Darlow, B. (2022), "Template analysis of a longitudinal interprofessional survey: making sense of free-text comments collected over time", Journal of Research in Interprofessional Practice and Education, Vol. 12 No. 1, pp. 1-16, doi: 10.22230/jripe.2022v12n1a337.
10) Burns, J.M. (1978), Leadership, Harper and Row, New York, NY.
11) Cranton, P. (2016), Understanding and Promoting Transformative Learning: A Guide to Theory and Practice, Stylus Publishing, LLC, Sterling, VA.
12) Crowne, K.A., Young, T.M., Goldman, B., Patterson, B., Krouse, A.M. and Proenca, J. (2017), "Leading nurses: emotional intelligence and leadership development effectiveness", Leadership in Health Services, Vol. 30 No. 3, pp. 217-232, doi: 10.1108/LHS-12-2015-0055.
13) De Brún, A. and McAuliffe, E. (2022), "'When there's collective leadership, there's the power to make changes': a realist evaluation of a collective leadership intervention (Co-Lead) in healthcare teams", Journal of Leadership and Organizational Studies, Vol. 30 No. 2, pp. 155-172.

14) Gilmartin, M.J. and D'Aunno, T.A. (2007), "Leadership research in healthcare: a review and roadmap", Academy of Management Annals, Vol. 1 No. 1, pp. 387-438, doi: 10.5465/078559813.
15) Iwowo, V. (2016), "Leadership development: one size does not fit all", Management with Impact, available at: https://eprints.lse.ac.uk/83465/1/Leadership%20development_%20one%20size%20does%20not%20fit%20all%20_%20LSE%20Management.pdf (accessed 20 March 2022).
16) Joseph-Richard, P. and McCray, J. (2022), "Evaluating leadership development in a changing world?Alternative models and approaches for healthcare organisations", Human Resource Development International, Vol. 26 No. 2, pp. 1-37.
17) Kirkpatrick, D. (1959), "Techniques for evaluation training programs", Journal of the American Society of Training Directors, Vol. 13, pp. 21-26.
18) Moran, V., Israel, H. and Sebelski, C. (2021), "Leadership development of nursing professionals:education and influences of self-efficacy", Nursing Outlook, Vol. 69 No. 4, pp. 589-597.
19) Messenger, G. (2021), "Leadership for a collaborative and inclusive future", available at: www.gov.uk/ government/publications/health-and-social-care-review-leadership-for-a-collaborative-and-inclusive- future/leadership-for-a-collaborative-and-inclusive-future#recommendations (accessed 20 April 2022).
20) Mezirow, J. (2000), Learning as Transformation: critical Perspectives on a Theory in Progress, Jossey- Bass, San Francisco, CA.
21) Miles, J.M. and Scott, E.S. (2019), "A new leadership development model for nursing education", Journal of Professional Nursing, Vol. 35 No. 1, pp. 5-11.
22) NHS England and Health Education England (2018), "Leadership development", available at: www. england.nhs.uk/wp-content/uploads/2018/03/leadership-development.pdf (accessed 20 May 2022).
23) Oates, K. (2012), "The new clinical leader", Journal of Paediatrics and Child Health, Vol. 48 No. 6, pp. 472-475. Paton, M., Kuper, A., Paradis, E., Feilchenfeld, Z. and Whitehead, C.R. (2021), "Tackling the void: the importance of addressing absences in the field of health professions education research",
24) Advances in Health Sciences Education, Vol. 26 No. 1, pp. 5-18, doi: 10.1007/s10459-020-09966-x.
25) Piepenbrink, A. and Gaur, A.S. (2017), "Topic models as a novel approach to identify themes in content analysis", Academy of Management Proceedings, Academy of Management, Briarcliff Manor, NY, Vol. 2017 No. 1, p. 11335.
26) Richard, W., Steven, H., John, H., Marcella, M. and Sue, W. (2021), "Reassessing the social benefits of lifelong learning in light of the COVID pandemic", International Journal of Lifelong Education, Vol. 40 No. 5, pp. 435-438, doi: 10.1080/02601370.2021.2017219.
27) Schwarzer, R. and Jerusalem, M. (1995), General Self-Efficacy Scale (GSE) [Database Record], APA PsycTests. Selvi, A.F. (2019), "Qualitative content analysis", The Routledge Handbook of Research Methods in Applied Linguistics, Routledge, pp. 440-452.
28) UK Government (2018), "General data protection regulation (GDPR)", available at: https://eur-lex. europa.eu/eli/reg/2016/679/oj/eng (accessed 20 February 2023).
29) Wong, C.A., Cummings, G.G. and Ducharme, L. (2013), "The relationship between nursing leadership and patient outcomes: a systematic review update", Journal of Nursing Management, Vol. 21No. 5, pp. 709-724, doi: 10.1111/jonm.12116.