



OPEN ACCESS

Attributes, skills and actions of clinical leadership in nursing as reported by hospital nurses: a cross-sectional study

Majd T Mrayyan ,¹ Abdullah Algunaimeyn ,² Hamzeh Y Abunab ,³ Ola A Kutah,² Imad Alfayoumi,³ Abdallah Abu Khait¹

¹Department of Community and Mental Health Nursing, Faculty of Nursing, The Hashemite University, Zarqa, Jordan

²Advanced Nursing Department, Faculty of Nursing, Isra University, Amman, Jordan

³Basic Nursing Department, Faculty of Nursing, Isra University, Amman, Jordan

Correspondence to

Dr Majd T Mrayyan, Department of Community and Mental Health Nursing, Faculty of Nursing, The Hashemite University, Zarqa 13133, Jordan; mmrayyan@hu.edu.jo

Received 8 August 2022

Accepted 17 January 2023

Published Online First

25 January 2023

ABSTRACT

Background Research shows a significant growth in clinical leadership from a nursing perspective; however, clinical leadership is still misunderstood in all clinical environments. Until now, clinical leaders were rarely seen in hospitals' top management and leadership roles.

Purpose This study surveyed the attributes and skills of clinical nursing leadership and the actions that effective clinical nursing leaders can do.

Methods In 2020, a cross-sectional design was used in the current study using an online survey, with a non-random purposive sample of 296 registered nurses from teaching, public and private hospitals and areas of work in Jordan, yielding a 66% response rate. Data were analysed using descriptive analysis of frequency and central tendency measures, and comparisons were performed using independent t-tests.

Results The sample consists mostly of junior nurses. The 'most common' attributes associated with clinical nursing leadership were effective communication, clinical competence, approachability, role model and support. The 'least common' attribute associated with clinical nursing leadership was 'controlling'. The top-rated skills of clinical leaders were having a strong moral character, knowing right and wrong and acting appropriately. Leading change and service improvement were clinical leaders' top-rated actions. An independent t-test on key variables revealed substantial differences between male and female nurses regarding the actions and skills of effective clinical nursing leadership.

Conclusions The current study looked at clinical leadership in Jordan's healthcare system, focusing on the role of gender in clinical nursing leadership. The findings advocate for clinical leadership by nurses as an essential element of value-based practice, and they influence innovation and change. As clinical leaders in various hospitals and healthcare settings, more empirical work is needed to build on clinical nursing in general and the attributes, skills and actions of clinical nursing leadership of nursing leaders and nurses.

INTRODUCTION

Clinical leadership is a matter of global importance. Currently, all clinicians are invited to participate in leadership practices.¹ This invitation is based on the fact that people deliver healthcare within complex systems. Effective clinicians must understand systems of care to function effectively.^{1,2} Engaging in clinical leadership is an obligation, not a choice, for all clinicians at all levels. This obligation is more

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Clinical leadership was limited to service managers; however, currently, all clinicians are invited to participate in leadership practices. Clinical leaders are needed in various healthcare settings to produce positive outcomes.

WHAT THIS STUDY ADDS

⇒ This study outlined clinical leadership attributes, skills and actions to understand clinical nursing leadership better. The current study highlighted the role of gender in clinical nursing leadership, and it asserts that effective clinical nursing leadership is warranted to improve the efficiency and effectiveness of care. The results call for nurses' clinical leadership as essential in today's turbulent work environment.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ Nurses and clinical leaders need additional attributes, skills and actions. Clinical nursing leaders should use innovative interventions and have skills or actions to manage current work environments. Further work is needed to build on clinical nursing in general and the attributes, skills and actions of clinical nursing leadership. Clinical leadership programmes must be integrated into the nursing curricula.

critical in nursing with many emerging global health issues,² such as the COVID-19 pandemic.

The systematic literature review of Cummings *et al*³ shows the differences in leadership literature. In early 2000, clinical leadership emerged in scientific literature.⁴ It is about having the knowledge, skills and competencies needed to effectively balance the needs of patients and team members within resource constraints.⁴ Clinical leadership is vital in nursing as nurses face complex challenges in clinical settings, especially in acute care settings.⁴ Although developed from the management domain, leadership and management are two concepts used interchangeably,⁵⁻⁹ leading to further misunderstanding of the relationship between clinical leadership and management. While different types of leadership have been evident in nursing and health industry literature, clinical leadership is still misunderstood in clinical environments.⁸ Clinical leadership is not fully understood among health professionals



© Author(s) (or their employer(s)) 2023. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

To cite: Mrayyan MT, Algunaimeyn A, Abunab HY, *et al.* *BMJ Leader* 2023;**7**:203–211.

trained to care for patients, as clinical leadership is a management concept, leaving the concept open to different interpretations.¹⁰ For example, Gauld¹⁰ reported that clinical leaders might be professionals (such as doctors and nurses) who are no longer clinically active, mandating that clinical leaders should also be involved in delivering care.¹⁰

There is no clear definition of 'clinical leadership'. However, effective clinical leadership involves individuals with the appropriate clinical leadership skills and attributes at different levels of an organisation, focusing on multidisciplinary and interdisciplinary work.¹⁰ The main skills associated with clinical leadership were having values and beliefs consistent with their actions and interventions, being supportive of colleagues, communicating effectively, serving as a role model and engaging in reflective practice.⁴⁻⁹ The main attributes associated with clinical leadership were using effective communication, clinical competence, being a role model, supportive and approachability.⁴⁻⁹ Stanley and colleagues reported that clinical leaders are found across health organisations and are presented in all clinical environments. Clinical leaders are often found at the highest level for clinical interaction but not commonly found at the highest management level in wards or units.⁴⁻⁹

With the increasing urgency to improve the efficiency and effectiveness of care, effective nursing leadership is warranted.^{4 11-17} Clinical leaders can be found in various healthcare settings,⁴ most often at the highest clinical level, but they are uncommon at the top executive level.^{6-9 18-24} In the UK, the National Health Service (NHS)²⁵ empowers clinicians and front-line staff to build their decision-making capabilities, which is required for clinical leadership. This empowerment encourages a broader practice of clinical leadership without being limited to top executives alone.^{25 26}

Purpose and significance

This study assesses clinical nursing leadership in Jordan. More specifically, it answers the following research questions: (1) What attributes are associated with clinical nursing leadership in Jordanian hospitals? (2) What skills are important for effective clinical nursing leadership? (3) What actions are important for effective clinical nursing leadership? (4) What are the differences in skills critical to effective clinical nursing leadership based on the sample's characteristics? (5) What are the differences in effective clinical nursing leaders' actions based on the sample's characteristics?

Nursing leadership studies are abundant; however, clinical leadership research is not well established.^{8 27} Until fairly recently, clinical leadership in nursing has tended to focus on nursing leaders in senior leadership positions, ignoring nurse managers in clinical positions.⁸ There has been significant growth in research exploring clinical leadership from a nursing perspective.^{4 8 9 14-17 24 26-32} A new leadership theory, 'congruent leadership', has emerged, claiming that clinical leaders acted on their values and beliefs about care and thus were followed.^{6-9 20} This study is the first in Jordan's nursing and health-related research about clinical leadership. Clarifying this concept from nurses' perspectives will support greater healthcare delivery efficiencies.

BACKGROUND

Search methods

The initial search was done using 'clinical nursing leadership' at the Clarivate database and Google Scholar database from 2017 to 2021, yielded 35 studies, of which, after abstracting, 14 studies were selected. However, Stanley's work (12 studies),

including those before 2017, was included because we followed the researcher's passion and methodology of studying clinical leadership; also, some classical models of clinical leadership because they were essential for the conceptualisation of the study as well as the discussion, such as the NHS Leadership Academy (three studies; ref^{25 33 34}).

Another search was run using the words 'attributes', 'skills' or 'actions' using the same time frame; most of the yielded studies were not relevant, this search year was expanded to 2013–2021 because the years 2013–2015 were the glorious time of studying these concepts. Using 'clinical leadership' rather than 'leadership studies', 15 studies were yielded; however, Stanley's above work was excluded to avoid repetition, resulting in using three studies (ref^{29 30 35}). A relevant reference of 2022 similar to our study (ref³⁶) was added at the stages of revisions. The remaining 16 of 49 references were related to the methodology and explanation of some results, such as those related to gender differences in leadership. The following limits were set: the language was English; and the year of publication was basically the last 5 years to ensure that the search was current.

Clinical leadership

Clinical leadership ensures quality patient care by providing safe and efficient care and creating a healthy clinical work environment.^{4 10-17 27 31 32} It also decreases the high costs of clinical litigation settlements and improves the safety of service delivery to consumers.^{4 11-17 32} For these reasons, healthcare organisations should initiate interventions to develop clinical leadership among front-line clinicians, including nurses.^{8 9}

Literature was scarce on clinical leadership in nursing.^{4 8-10 14-17 27 28 31} Stanley and Stanley⁸ defined clinical leadership as developing a culture and leading a set of tasks to improve the quality and safety of service delivery to consumers.

Clinical leadership is about focusing on direct patient care, delivering high-quality direct patient care, motivating members of the team to provide effective, safe and satisfying care, promoting staff retention, providing organisational support and improving patient outcomes.³¹ Clinical leadership roles include providing the vision, setting the direction, promoting professionalism, teamwork, interprofessional collaborations, good practice and continued medical education, contributing to patient care and performing tasks effectively.³¹ Moreover, the researchers added that clinical leadership is having the approachability and the ability to communicate effectively, the ability to gain support and influence others, role modelling, visibility and availability to support, the ability to promote change, advise and guide.³¹ Clinical leadership competencies include demonstrating clinical expertise, remaining clinically focused and engaged and comprehending clinical leadership roles and decision-making. In addition, clinical leadership was not associated with a position within the management and organisational structure, unlike health service management.^{31 33}

Clinical leadership is hindered by many barriers that include the lack of time and the high clinical/client demand on their time.^{8 9} Clinical leadership is limited because of the deficit in intrapersonal and interpersonal capabilities among team members and interdisciplinary and organisational factors, such as a lack of influence in interdisciplinary care planning and policy.³⁷ Other barriers include limited organisational leadership opportunities, the perceived need for leadership development before serving in leadership roles and a lack of funding for advancement.³⁸

This paper aligns with the theory of congruent leadership proposed by Stanley.¹⁹ This theory is best suited for

understanding clinical leadership because it defines leadership as a congruence between the activities and actions of the leader and the leader's values, beliefs and principles, and those of the organisation and team.

Attributes of clinical leadership

The clinical leadership attributes needed for nurses^{8 28} to perform their roles effectively are: (1) personal attributes: nurses are confident in their abilities to provide best practice, communicate effectively and have emotional intelligence; (2) team attributes: encouraging trust and commitment to others, team focus and valuing others' skills and expertise; and (3) capabilities: encouraging contribution from others, building and maintaining relationships, creating clear direction and being a role model.^{8 28} Clinical leadership attributes are linked to communicating effectively, role modelling, promoting change, providing advice and guidance, gaining support and influencing others.^{28–30} Other attributes to include are clinical leaders' engagement in reflective practice,²⁹ provision of the vision; setting direction, having the resources to perform tasks effectively and promoting professionalism, teamwork, interprofessional collaborations, effective practice and continued education.^{27 28 31}

Skills of clinical leadership

Clinical leadership skills include (1) a 'clinical focus': being expert knowledge, providing evidence-based rationale and systematic thinking, understanding clinical leadership, understanding clinical decision-making, being clinically focused, remaining clinically engaged and demonstrating clinical expertise; (2) a 'follower/team focus': being supportive of colleagues, effectively communicating communication skills, serving as a role model and empowering the team; and (3) a 'personal qualities focus': engaging in reflective practice, initiating change and challenging the status quo.^{17 30 32} Clinical leaders have advocacy skills, facilitate and maintain healthier workplaces by driving changes in cultural issues among all health professionals.^{17 29} Moreover, the overlap between the attributes and skills of clinical leaders includes being credible to colleagues because of clinical competence and the skills and capacity to support multidisciplinary teams effectively.^{17 29 32}

Actions of clinical leadership

A clinical leader is anyone in a clinical position exercising leadership.²⁶ The clinical leader's role is to continuously instil in clinicians the capability to improve healthcare on small and large scales.²⁶ Furthermore, Stanley *et al*⁹ demonstrated that clinical leaders are not always managers or higher-ups in organisations. Clinical leaders act following their values and beliefs, are approachable and provide superior service to their clients.⁹ Clinical leaders define and delegate safety and quality responsibilities and roles.^{14 32 39} They also ensure safety and quality of care, manage the operation of the clinical governance system, implement strategic plans and implement the organisation's safety culture.^{14 32 39} The Australian Commission on Safety and Quality in Health Care³⁹ also reported that clinical leaders might support other clinicians by reviewing safety and quality performance data, supervising the clinical workforce, conducting performance appraisals and ensuring that the team understands the clinical governance system.

In summary, clinical leadership attributes, skills and actions were outlined to understand clinical nursing leadership. The literature shows limited nursing research on clinical leadership,

calling for clinical leadership that paves the road for nurses in the current turbulent work environment.

METHODS

Study design

A descriptive quantitative analysis was developed to collect data about the attributes and skills of clinical nursing leadership and the actions that effective nursing clinical leaders can take. A cross-sectional design was employed to measure clinical leadership using an online survey in 2020. This design was appropriate for such a study as it allows the researchers to measure the outcome and the exposures of the study participants at the same time.⁴⁰

Sample and settings

The general population was registered nurses in medical centres in Jordan. The target population was registered nurses in teaching, public and private hospitals. Most nurses in Jordan are females working at different shifts on a full-time basis in different types of healthcare services. The baccalaureate degree is the minimum entry into the clinical practice of registered nurses. As previous nurses, we would like to attest that nurses in Jordanian hospitals commonly use team nursing care delivery models with different decision-making styles. The size of the sample was calculated by using Thorndike's rule as follows: $N \geq 10(k) + 50$ (where N was the sample size, k is the number of independent variables) (attributes, skills, actions), the minimum sample size should be 80 participants.⁴⁰ From experience, the researcher considers the sample's demographics and subscales as independent variables ($k=17$); the overall sample should not be less than 220.

Research participants were recruited through a 'direct recruitment strategy' from the hospitals where the nursing students were trained. A survey was used to collect data using non-random purposive sampling; of possible 450 Jordanian nurses, 296 were recruited from different types of hospitals: teaching (51 of possible 120 nurses), public (180 of possible 210 nurses) and private (65 of possible 120 nurses), with a response rate of 66%, which is adequate for an online survey. The inclusion criteria were that nurses should work in hospital settings, and any nurses who work in non-hospital settings were excluded. No incentives were applied.

Instrument

Using a direct measurement method, Stanley's Clinical Leadership Scale (online supplemental file 1) was used to collect the data using the English version of the scale because English is the official education language of nursing in Jordan.^{8 9} The original questionnaire consists of 24 questions: 12 quantitative and qualitative questions relevant to clinical leadership, and 12 related to the sample's demographics. Several studies about clinical leadership among nurses and paramedics in the UK and Australia used modified versions of a survey tool^{5 8 9 18–24}; construct validity was ensured using exploratory factor analysis or triangulation of validation. Cronbach's alpha measures the homogeneity in the survey, and it was reported to be 0.87^{8 9} and 0.88 in the current study.

Several questions were measured on a 5-point Likert scale in the original scale, and others were qualitative. The survey for the current study consists of 12 quantitative and qualitative questions related to clinical leadership and 14 questions related to the sample's demographics. However, the qualitative data obtained were scattered and incomplete; thus, only the quantitative questions were analysed and reported, and another qualitative study

about clinical leadership was planned. For the current study, three quantitative questions only focused on clinical leadership, leadership skills and the actions of clinical leaders, and 14 questions focused on the sample's characteristics relevant to the Jordanian healthcare system developed by the first author. The sample characteristics were gender, marital status, shift worked, time commitment, level of education, age, years of experience in nursing, years of experience in leadership and the number of employees directly supervised. Other characteristics include the type of unit/ward, model of nursing care, ward/unit's decision-making style, formal leadership-related education (yes/no) and formal management-related education (yes/no). Before data collection, permission to use the tool was granted.

Ethical considerations

Nurses were invited to answer the survey while assuring the voluntary nature of their participation. The participants were told that their participation in the survey was their consent form. Participants' anonymity and confidentiality of information were assured; all questionnaires were numerically coded, and the overall results were shared with nursing and hospital administrators.⁴⁰

Patient and public involvement

There was no patient or public involvement in this research's design, conduct, reporting or dissemination.

Data collection procedures

After a pilot study on 12 December 2020, which checked for the suitability of the questionnaire for the Jordanian healthcare settings, data were collected over a month on 23 December 2020. Data were collected through Google Forms; the survey was posted on various WhatsApp groups and Facebook pages. Using purposive snowball sampling, nurses were asked to invite their contacts and to submit the survey once. To assure one submission, the Google Forms was designed to allow for one submission only.

No problem was encountered during data collection. The two attrition prevention techniques used were effective communication and asserting to the participants that the study was relevant to them.

The researchers controlled for all possible extraneous and confounding variables by including them in the study. A possible non-accounted extraneous variable is the organisational structure; a centralised organisational structure may hinder the use of clinical nursing leadership.

Data analyses

After data cleaning and checking wild codes and outliers, all coded variables were entered into the Statistical Package for Social Sciences (SPSS) (V.25),³⁵ which was used to generate statistics according to the level of measurement. A descriptive analysis focused on frequency and central tendency measures.⁴⁰ Part 1 of the scale comprises 54 qualities or characteristics to answer the first research question. Responses related to skills were measured on a 1–5 Likert scale; thus, means and SDs were reported to answer the second research question. Eight actions were rated on a 1–5 Likert scale; thus, means and SDs were reported to answer the third research question. Independent t-tests using all sample characteristics were performed to answer the fourth and fifth research questions.

The preanalysis phase of data analysis was performed; data were eligible and complete as few missing data were found; thus,

they were left without intervention. The assumption of normality was met; both samples are approximately normally distributed, and there were no extreme differences in the sample's SDs.

RESULTS

Characteristics of the sample

There were 296 nurses in the current study from different types of hospitals: teaching (51 nurses), public (180 nurses) and private (65 nurses), with a response rate of 66%. Most nurses were females (209, 70.6%), single (87, 29.4%), working a day shift (143, 48.3%) or rotating shifts (92, 31.1%), on a full-time basis (218, 73.6%), with a baccalaureate degree (236, 79.7%), aged less than 25 years (229, 77.4%) and 25–34 years (45, 15.2%), respectively. Also, 65.1% (166) of nurses reported having less than 1 year of experience in nursing; thus, they have few nurses under them to supervise (145, 49% supervise one to two nurses), and 23.3% (69) of nurses reported having 1–9 years of experience in leadership. Nurses reported that their unit or ward has a primary (81, 27.4%) or team nursing care delivery model (162, 54.7%), with a mixed (94, 31.8%) or participatory decision-making style (113, 38.2%), and had formal leadership-related education (191, 64.5%), and had no formal management-related education (210, 70.9%) (table 1).

Attributes of clinical nursing leadership

Nurses were asked to think about the attributes and features of clinical leadership. Based on Stanley's Clinical Leadership Scale,^{8 9} nurses were given a list of 54 qualities and characteristics and asked to select the most strongly associated with clinical leadership, followed by those least strongly associated with clinical leadership. Table 2 shows the respondents' 'top ten' selected qualities in ranked order.

Skills of effective clinical nursing leaders

On a Likert scale of 1–5, respondents were asked to rank the skills of effective clinical leaders from 'not relevant' or 'not important' to 5='very relevant' or 'very important'. The top skills were having a strong moral character, knowing right and wrong and acting appropriately which received a high rating, with a mean of 4.17 out of 5 (0.92). Being in a management position to be effective was ranked as the least skill of an effective leader, with a mean value of 3.78 out of 5 (1.00). As indicated by respondents, other skills of effective clinical leaders are shown in table 3.

Actions of effective clinical nursing leaders

On a Likert scale of 1–5, respondents were asked to rank the actions of effective clinical leaders. Leading change and service management achieved a high rating of 4.07 out of 5 points (0.90). Influencing organisational policy was rated last, with a mean score of 3.95 out of 5 (1.01), which may reflect the very junior nature of the majority of the sample. As described by respondents, some of the other actions of effective leaders are shown in table 4.

Significant differences in skills of effective clinical nursing leaders based on gender

Independent t-tests using all sample's characteristics were performed to answer the fourth research question. Gender was the only characteristic variable that differentiated clinical leadership skills. An independent t-test demonstrates that males and females have distinct perspectives on 3 out of 10 items measuring clinical leadership skills. Female

Table 1 Sample's characteristics (N=296*)

Variables	N (%)*
Gender	
Male	87 (29.4)
Female	209 (70.6)
Marital status	
Single	236 (79.9)
Married	85 (19.6)
Separated/divorced	2 (0.5)
Shift worked	
Day (12 hours)	143 (48.3)
Evening (12 hours)	49 (16.5)
Night (8 hours)	12 (4.1)
Rotating (A, B, C)	92 (31.1)
Commitment to work	
Full-time worker	218 (73.6)
Part-time worker	78 (26.4)
Level of education	
Diploma	20 (6.8)
Baccalaureate	236 (79.7)
Master's	34 (11.5)
Doctorate	6 (2.0)
Age (years)	
Less than 25	229 (77.4)
25–34	45 (15.2)
35–44	19 (6.4)
45 and more	3 (1.0)
Years of experience in nursing	
Less than 1	166 (56.1)
1–2	51 (17.2)
3–4	44 (14.9)
5–9	16 (5.4)
10 or more	19 (6.4)
Years of experience in leadership	
Less than 1	221 (74.7)
1–2	43 (14.5)
3–4	18 (6.1)
5–9	8 (2.7)
10 or more	6 (2.0)
Number of employees under the direct supervision	
1–2	145 (49.0)
3–5	99 (33.4)
6–10	31 (10.5)
11–20	11 (3.7)
21 and more	10 (3.4)
Type of unit/ward	
Units	212 (71.6)
Wards	84 (28.4)
Model of nursing care	
Primary	81 (27.4)
Team	162 (54.7)
Functional	34 (11.5)
Unit/ward's decision-making style	
Authoritative—unilateral	65 (22.0)
Participating—bilateral	113 (38.2)
Mixed	94 (31.7)
Unclear	24 (8.1)
Have formal leadership-related education	

Continued

Table 1 Continued

Variables	N (%)*
Yes	191 (64.5)
No	105 (35.5)
Have formal management-related education	
Yes	86 (29.1)
No	210 (70.9)

*Some totals did not equal 296 because of missing values.

participants outperform male participants in terms of 'working within the team (p value=0.021)', 'being visible in the clinical environment (p value=0.004)' and 'recognizing optimal performance and expressing appreciation promptly (p value=0.042) (table 5)'.

Significant differences in actions of effective clinical nursing leaders based on gender

Independent t-tests using all sample's characteristics were performed to answer the fifth research question. Gender was the only characteristic variable that differentiated clinical leadership actions, and it was discovered that five of the eight propositions varied in their actions: the way clinical care is administered (p=0.010); participating in staff development education (p=0.006); providing valuable staff support (p=0.033); leading change and service improvement (p=0.014); and encouraging and leading service management (p=0.019). The independent t-test results revealed that female participants scored higher in those acts, corresponding to effective leaders' competencies. The mean values of participants' responses to the actions of effective clinical leaders are shown in table 5.

Table 2 'Most' and 'Least' important attributes associated with clinical nursing leadership (N=296)

Rank No	'Most' important attributes	%
1	Consider relationship valuable.	90.2
2	Flexible.	90.2
3	Is caring/compassionate.	88.9
4	Is visible in practice.	88.5
5	Is an effective communicator.	88.5
6	Is courageous.	88.5
7	Deals with resource allocation.	88.2
8	Inspires confidence.	88.2
9	Is articulate.	88.2
10	Copes well with change.	87.8
11	Is approachable.	87.8
'Least' important attributes		
1	Is artistic/imaginative.	22.0
2	Aligns people.	21.6
3	Is a teacher.	20.9
4	Takes calculated risks.	20.9
5	Is a mentor.	20.3
6	Is a negotiator.	20.3
7	Is creative/innovative.	19.6
8	Is consistent.	19.6
9	Has management experience.	19.3
10	Is a coach.	19.3

Table 3 Skills of effective clinical nursing leaders (N=296)

Skills	Mean	SD
Have the skills and resources necessary to perform tasks effectively.	4.05	1.03
Be in a management position to be effective.	3.78	1.09
Be able to work within the team.	4.11	1.00
Be visible in the clinical environment.	3.96	0.99
Recognise optimal performance and express appreciation promptly.	4.07	0.97
Initiate interventions and lead actions and procedures.	4.06	0.92
Have high moral character, know what is right and wrong and act accordingly.	4.17	0.95
Be willing to take risks for something they believe in, whether for people or ideas.	3.95	0.96
Be able to communicate well, presenting ideas logically and effectively.	4.04	1.03
Be flexible, able to improvise and can respond to a variety of situations with appropriate skills and interventions	4.07	0.90

DISCUSSION

The characteristics of the current sample are similar to those of the structure of the task force in Jordan. The remaining question is how men in Jordan be supported in nursing to develop clinical leadership skills on par with females. Al-Motlaq *et al*⁴¹ proposed using a part-time nurses policy to address nurses' gender imbalances. Although this is necessary for both genders, we propose to develop a clinical leadership training package to promote working male nurses' clinical leadership. In Jordan, we apply the modern trend of using leadership in nursing rather than management. About 65% of the nurses reported having formal leadership-related education, while around 71% reported no formal management-related education.

Attributes of clinical nursing leadership

The findings clearly showed what nurses seek in a clinical leader. They appear to refer to a good communicator who values relationships and encouragement, is flexible, approachable and compassionate, can set goals and plans, resource allocation, is clinically competent and visible and has integrity. They necessitate clinical nursing leaders who can be role models for others in practice and deal with change. They should be supportive decision-makers, mentors and motivators. They should be emphatic; otherwise, they should not be in a position of control. These findings align with other research on clinical leadership.^{7-9 21} Clinical leaders should be visible and participate in team activities. They should be highly skilled clinicians who instil trust and set an example, and their values should guide them in providing excellent patient care.^{8 9}

Table 4 Actions effective clinical nursing leaders can do (N=296)

Actions	Mean	SD
Influence organisational policy.	3.95	1.01
Influence the way clinical care is delivered.	4.00	0.99
Participate in staff development education.	4.06	0.94
Provide valuable staff support.	4.05	0.90
Initiate innovations in practice.	4.00	0.99
Lead change and service improvement.	4.07	0.90
Encourage initiative, involvement and innovation from coworkers.	4.02	0.91
Encourage and lead service improvement.	3.97	1.00

Participants chose other terms or functions associated with leadership roles less frequently or perceived as unrelated to clinical leadership functions. Management, creativity and vision were among the terms and functions mentioned. The absence of the word 'visionary' from the list of the most important characteristics suggests that traditional leadership theories, as transformational leadership and situational leadership, do not provide a solid foundation for understanding clinical leadership approaches in the clinical setting. This result can also be influenced by the junior level of the majority of the sample.

Skills of clinical nursing leadership

Numerous studies have documented the characteristics and skills of clinical leaders.^{27 29 31} Clinical leaders' skills include advocacy, facilitation and healthier workplaces.^{27 29 31} Our participants were rated as having high morals (similar to other studies)^{27 29 31} and worked within teams.²⁹ In turn, they were flexible and expressed appreciation promptly.^{7-9 21} They were clinically competent; thus, they improvised and responded to various situations with appropriate skills and interventions. They recognised optimal performance, initiated interventions, led actions and procedures and had the skills and resources necessary to perform their tasks.

The lowest mean was '*being in a management position to be effective*'. This lowest meaning '*somehow*' makes sense; all nurses can be effective leaders rather than managers, assuming effective clinical leadership roles without having management positions.^{28 42}

Actions of clinical nursing leadership

Influential nursing leaders are clinically competent and can initiate interventions and lead actions; these skills translate to actions. Clinical leaders are qualified to lead and manage the service improvement change (similar to Major).⁴² This role will not suddenly happen; it requires clinical nursing leaders who encourage and participate in staff development education (consistent with Major).⁴² This is an essential milestone and an example of providing valuable staff support. As these were the lowest reported actions, clinical nursing leaders should initiate and lead improvement initiatives in their clinical settings,⁴² resulting in service improvement. They also have to influence evidence-based policies to improve work-life integration⁴³ and enhance patients, nurses and organisational outcomes. These outcomes include quality of care, nurses' empowerment, job satisfaction, quality of life and work engagement.^{4 11-17 32}

Significant differences in skills of effective clinical nursing leaders based on gender

Female nurses had more clinical leadership skills. Because the findings of this study have never been reported in the previous clinical leadership research literature, they are considered novel. This finding indicates that one possible explanation is that the overwhelming majority of respondents were females, with the proportion of females in favour (70.6%) exceeding that of males (29.4%). Furthermore, the current findings could be explained because the study was conducted in Jordan, a traditionally female-dominated gender nursing career.

This study discovered that there are gender differences in the characteristics of nurses and their clinical leadership skills, with female clinical nursing leaders scoring higher on the t-test than male clinical nursing leaders in the following areas: this is contrary to Masanotti *et al*,⁴³ who reported that male nurses have a greater sense of coherence and, in turn, more teamwork than female nurses, who commonly have job dissatisfaction and

Table 5 Significant differences in skills and actions of effective clinical nursing leaders based on gender (n=296)

Skills	Male nurses (n=87)	Female nurses (n=209)	T-test*	P value
	Mean (SD)	Mean (SD)		
Be able to work within the team.	3.90 (0.99)	4.20 (0.99)	-1.925	0.021
Be visible in the clinical environment.	3.70 (1.04)	4.07 (0.95)	-2.97	0.004
Recognise optimal performance and express appreciation promptly.	3.93 (0.92)	4.13 (0.98)	-1.60	0.042
Actions				
Influence the way clinical care is delivered.	3.78 (0.98)	4.09 (0.97)	-2.61	0.010
Participate in staff development education.	3.83 (1.00)	4.15 (0.89)	-2.75	0.006
Provide valuable staff support.	3.88 (0.89)	4.12 (0.89)	-2.14	0.033
Lead change and service improvement.	3.87 (1.05)	4.16 (0.83)	-2.24	0.014
Encourage and lead service improvement.	3.76 (1.06)	4.06 (0.96)	-2.36	0.019

*Equal variance is not assumed.

less teamwork. These could apply to female clinical nursing leaders. These female nurses had more ‘visibility in the clinical environment’, as expected in female-dominated gender nursing careers. As they were commonly dissatisfied as nurses,⁴³ clinical nursing leaders would be competent in caring for their nurses’ psychological status. These leaders know that even ‘thank you’ is the simplest way to show appreciation and recognition; however, this should be given promptly.

In Arab and developing countries, the perception that females have more skills with effective clinical leadership characteristics than males is consistent with Alghamdi *et al*⁴⁴ and Yaseen.⁴⁵ They found that females outperform males on leadership scales, which may also apply to clinical leadership. This study shows consistency between female and male clinical nursing leaders’ general perceptions of clinical leadership skills in female-dominated gender nursing careers but not in male-dominated, gender-segregated countries, including Jordan.

Significant differences in actions of effective clinical nursing leaders based on gender

Female nurses had more clinical leadership actions, which differed in five out of eight actions. Female clinical nursing leaders were better at impacting clinical care delivery, participating in staff development education, providing valuable staff support, leading change and improving service.

It is aware that the nursing profession has a difficult context in some Arab and developing countries. For example, a study conducted in Saudi Arabia could explain the current findings that male nurses face various challenges, including a lack of respect and discrimination, resulting in fewer opportunities for professional growth and development.⁴⁶ The researchers reported that female clinical nursing leaders are preferred over male nurses because nursing is a nurturing and caring profession; it has been dubbed a ‘female profession’.⁴⁶ Additionally, this study corroborates a study that found many males avoid the nursing profession entirely due to its negative connotations⁴⁷; the profession is geared towards females. These and other stereotypes have influenced male nurses to pursue masculine nursing roles.

The study’s findings are unique because they have never been published in the previous clinical leadership research literature. However, these results can be explained indirectly based on non-clinical leadership literature. Consistent with Khammar *et al*,⁴⁸ as it is a female-dominated profession, it is apparent that female clinical nursing leaders are better at delivering clinical care. This result could also be related to female clinical nursing leaders having a better attitude towards clinical conditions and

managing different conditions.⁴⁸ Female clinical nursing leaders, in turn, are better at influencing patient care and improving patient safety³⁶ and overall care and services. This improvement will not happen suddenly; it should be accompanied by paying more attention to providing continuous support, especially during induced change.

The current study reported that female clinical nursing leaders supported staff development and education because it is a female-oriented sample. Yet, Khammar *et al*⁴⁸ reported that men had more opportunities to educate themselves in nursing; this is true in a male-dominated country like Jordan. They also noted that males could communicate better during nursing duties. Regardless of gender, all of us should pay attention to our staff’s working environment and related issues, including promoting open communication, providing support, encouraging continuing education, managing change and improving the overall outcomes.

Limitations

Even though the study’s findings are intriguing, further investigation is needed to comprehend them. Because of the cross-sectional design used in the current study, we cannot establish causality. For this reason, the results should be interpreted with caution. Also, the purposive sample limits the generalisability; thus, this research should be carried out again with a broader selection of nursing candidates and clinical settings. Moreover, the sample consists mostly of nurses with minimal experience compared with nurses in other international countries such as Canada, the UK and the USA.⁵ The current study also included nurses in their 40s and above, with male nurses less represented, and this causes misunderstanding of the true clinical leadership in nursing.

Implications

For practice, our sample consists of nurses with minimal experience compared with nurses in other developed counties. Our sample reported ‘influencing organizational policy’ as the last clinical leadership skill, which reflects the very junior nature of the sample. Unlike our study, in their systematic review, Guibert-Lacasa and Vázquez-Calatayud³⁶ reported that the profiles of the care clinical nurses’ experience usually varied, ranging from recent graduates to senior nurses. If our nurses were more experienced, it might lead to different results. More nurses’ clinical experience would increase nurses’ abilities at the bedside, especially in areas related to reasoning and problem solving.³⁶

More experienced nurses tend to work collaboratively within the team with greater competency and autonomy.³⁶ More experienced nurses would provide high-quality care,³⁶ resulting in patient satisfaction. To generate positive outcomes of clinical nursing leadership, such early-career nurses should be qualified. Guibert-Lacasa and Vázquez-Calatayud³⁶ suggested using the nursing clinical leadership programme based on the American Organization for Nursing Leadership³⁴ competency model, pending the presence of organisational support for such an initiative.³⁶

'Most' important clinical nursing leadership attributes should be promoted at all organisational and clinical levels. Clinical nursing leadership's 'least' important attributes should be defeated to achieve better outcomes. Clinical nursing leaders should use innovative interventions and have skills or actions conducive to a healthy work environment. These interventions include being approachable to enable their staff to cope with change,²⁸ using open and consistent communication,^{28–30} being visible and consistently available as role models and mentors and taking risks.²⁸ Hospital administrators must help their clinical leaders, including nursing leaders, to effectively use their authority, responsibility and accountability; clinical leadership is not only about complying with the job description. A good intervention to start with to promote the culture of clinical leadership is setting an award for the 'ideal nursing leaders'. This award will bring innovative attributes, skills and actions.

Moreover, as they are in the front line of communication, nurses and clinical nursing leaders should be involved in policy-related matters and committees.⁴⁹ An interventional programme that gives nurses more autonomy in making decisions is warranted. In turn, various patient, nurse and organisational outcomes will be improved.^{13–17 32}

The study's findings revealed statistically significant differences in the skills and actions of effective clinical leaders, with female nurses scoring higher in many skills and actions. Hence, healthcare organisations must re-evaluate current leadership and staff development policies and prioritise professional development for nurses while also introducing new modes of evaluation and assessment that are explicitly geared at improving clinical leadership among nurses, particularly males.

For education, this study outlined clinical leadership attributes, skills and actions to understand clinical nursing leadership in Jordan better. Nevertheless, nurses and clinical leaders need additional attributes, skills and actions. Consequently, undergraduate nursing students might benefit from clinical leadership programmes integrated into the academic curriculum to teach them the fundamentals of clinical leadership. A master's degree programme in 'Clinical Nursing Leadership' would prepare nurses for this pioneering role and today and tomorrow's clinical nursing leaders. However, all nurses are clinical leaders regardless of their degrees and experience. Conducting presentations, convening meetings, overseeing organisational transformation and settling disagreements are common ways to hone these abilities.

For research purposes, it is worth exploring the concept of clinical leadership from a practice nurse's perspective to provide insight into practice nurses' feelings and perceptions. Thus, a longitudinal quantitative design or a phenomenological qualitative design might be adopted to assess the subjective experience of the nurses involved. It is better in future research to focus on both young and veteran clinical leaders; some of our nurses were aged 45 years and above, and those nurses may not be clinically focused.

SUMMARY AND CONCLUSION

The current study put clinical leadership into the context of the healthcare system in Jordan. This study highlighted the role of gender in clinical nursing leadership. Nurses' clinical leadership is a milestone for influencing innovation and change. The current study identified the 'most' and 'least' important attributes, skills and actions associated with clinical leadership. However, the male and female nurses found substantial differences in effective clinical nursing leadership skills and actions. This study is unique; little is known about the collective concepts of attributes, skills and actions necessary for clinical nursing leadership.

Nurses need leadership attributes, skills and actions to influence policy development and change in their work environments. Leadership attributes can help develop programmes that give nurses more autonomy in making decisions. As a result, nurses will be more active as clinical leaders.

Acknowledgements The researchers thank the subjects who participated in the study, and Mrs Othman and Mr Sayaaheen who collected the data.

Contributors MTM developed the study conception, abstract, introduction, literature review and methods; collected the data and wrote the first draft of this research paper and the final proofreading. HAN analysed the data and wrote the results. AA wrote the discussion and updated the literature review. OK wrote the limitations, implications, and summary and conclusion. IAF and AAK did the critical revisions and the final proofreading. All authors contributed to the current work.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not applicable.

Ethics approval This study involves human participants and was approved by The Hashemite University, Jordan (IRB number: 1/1/2020/2021) on 18 October 2020. Participants gave informed consent to participate in the study before taking part.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data are available on request due to privacy/ethical restrictions. <https://authorservices.taylorandfrancis.com/data-sharing/share-your-data/data-availability-statements/>

Supplemental material This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

ORCID iDs

Majd T Mrayyan <http://orcid.org/0000-0001-8401-4976>
Abdullah Algunmeeyn <http://orcid.org/0000-0002-6393-3022>
Hamzeh Y Abunab <http://orcid.org/0000-0002-2639-9991>

REFERENCES

- 1 True MW, Folaron I, Colburn JA, *et al.* Leadership training in graduate medical education: time for a requirement? *Mil Med* 2020;185:e11–6.
- 2 Edmonson C, McCarthy C, Trent-Adams S, *et al.* Emerging global health issues: a nurse's role. *Online J Issues Nurs* 2017;22:2.
- 3 Cummings GG, Lee S, Tate K, *et al.* The essentials of nursing leadership: a systematic review of factors and educational interventions influencing nursing leadership. *Int J Nurs Stud* 2021;115:S0020-7489(20)30333-3:103842..
- 4 Connolly M, Jacobs S, Scott K. Clinical leadership, structural empowerment and psychological empowerment of registered nurses working in an emergency department. *J Nurs Manag* 2018;26:881–7.
- 5 Stanley D. Recognizing and defining clinical nurse leaders. *Br J Nurs* 2006;15:108–11.

- 6 Stanley D. Clinical leadership: innovation into action. *Palgrave Macmillan* 2011.
- 7 Stanley D. *Clinical leadership in nursing and healthcare*. Chichester, UK, 20 January 2017.
- 8 Stanley D, Stanley K. Clinical leadership and nursing explored: a literature search. *J Clin Nurs* 2018;27:1730–43.
- 9 Stanley D, Blanchard D, Hohol A, *et al*. Health professionals' perceptions of clinical leadership. A pilot study. *Cogent Medicine* 2017;4:1321193.
- 10 Gauld R. Clinical leadership: what is it and how do we facilitate it? *J Prim Health Care* 2017;9:5–8.
- 11 Boamah SA. Emergence of informal clinical leadership as a catalyst for improving patient care quality and job satisfaction. *J Adv Nurs* 2019;75:1000–9.
- 12 Boamah S. Linking nurses' clinical leadership to patient care quality: the role of transformational leadership and workplace empowerment. *Can J Nurs Res* 2018;50:9–19.
- 13 Cai Y, Li Q, Cao T, *et al*. Nurses' work engagement: the influences of ambidextrous leadership, clinical nurse leadership and workload. *J Adv Nurs* 2021;00:1–10.
- 14 Cordeiro R, Rengel-Diaz C, Harvey C. Good management and clinical leadership: supporting quality patient care. In: *Impacts of rationing and missed nursing care: challenges and solutions*. Springer, Cham, 2021: 173–83.
- 15 Danquah E. The influence of emotional intelligence on the work engagement of clinical leadership: resilience as a moderator. *Hosp Top* 2022;100:55–61.
- 16 Duignan M, Drennan J, McCarthy VJC. Impact of clinical leadership in advanced practice roles on outcomes in health care: a scoping review. *J Nurs Manag* 2021;29:613–22.
- 17 Li H, Chang H, Tao Z, *et al*. Mediating effect of coping style on the relationship between clinical leadership and quality of work life among nurses in tertiary-level hospitals in China: a cross-sectional study. *BMJ Open* 2021;11:e041862.
- 18 Stanley D. In command of care: clinical nurse leadership explored. *Journal of Research in Nursing* 2006;11:20–39.
- 19 Stanley D. In command of care: toward the theory of congruent leadership. *Journal of Research in Nursing* 2006;11:132–44.
- 20 Stanley D. Congruent leadership: values in action. *J Nurs Manag* 2008;16:519–24.
- 21 Stanley D. Clinical leadership characteristics confirmed. *Journal of Research in Nursing* 2014;19:118–28.
- 22 Stanley D, Cuthbertson J, Latimer K. Perceptions of clinical leadership in the st. john ambulance service in WA. *Response* 2012;39:31–7.
- 23 Stanley D, Cuthbertson J, Metcalfe H, *et al*. Volunteer ambulance officer's perceptions of clinical leadership in the st. john ambulance service. *Report* 2013. Available: https://researchoutput.csu.edu.au/ws/portalfiles/portal/19725731/1000000764_published_report.pdf
- 24 Stanley D, Latimer K, Atkinson J. Perceptions of clinical leadership in an aged care residential facility in perth, western australia. *Health Care: Current Reviews* 2014;02:1–8.
- 25 NHS Leadership Academy. The healthcare leadership model, version 1.0. 2013. Available: <https://www.leadershipacademy.nhs.uk/wp-content/uploads/2013/10/NHSLeadership-LeadershipModel-10-Print.pdf>
- 26 West M, Armit K, Loewenthal L, *et al*. *Leadership and leadership development in healthcare: the evidence base*. The Kings Fund, 2015. Available: https://www.kingsfund.org.uk/sites/default/files/field/field_publication_summary/leadership-in-health-care-apr15.pdf
- 27 Mianda S, Voce A. Developing and evaluating clinical leadership interventions for frontline healthcare providers: a review of the literature. *BMC Health Serv Res* 2018;18:747:747..
- 28 Booher L, Yates E, Claus S, *et al*. Leadership self-perception of clinical nurses at the bedside: a qualitative descriptive study. *J Clin Nurs* 2021;30:1573–83.
- 29 Daly J, Jackson D, Mannix J, *et al*. The importance of clinical leadership in the hospital setting. *JHL* 2014;6:75.
- 30 Mannix J, Wilkes L, Daly J. Attributes of clinical leadership in contemporary nursing: an integrative review. *Contemp Nurse* 2013;45:10–21.
- 31 Mianda S, Voce AS. Conceptualizations of clinical leadership: a review of the literature. *J Healthc Leadersh* 2017;9:79–87.
- 32 Siegel EO, Young HM. Assuring quality in nursing homes: the black box of administrative and clinical leadership-A scoping review. *Gerontologist* 2021;61:e147–62.
- 33 NHS Leadership Academy. *Clinical leadership competency framework: NHS institute for innovation and improvement*. Coventry: Coventry House University of Warwick campus, 2011.
- 34 American Organization for Nursing Leadership. *Nurse manager competencies*. American Organization of Nurse Executives and American Organization for Nursing Leadership, 2015. Available: <https://www.aonl.org/system/files/media/file/2019/06/nurse-manager-competencies.pdf>
- 35 IBM. *SPSS statistics for windows, version 25.0*. IBM Corp, 2017.
- 36 Guilbert-Lacasa C, Vázquez-Calatayud M. Nurses' clinical leadership in the hospital setting: a systematic review. *J Nurs Manag* 2022;30:913–25.
- 37 Fealy GM, McNamara MS, Casey M, *et al*. Barriers to clinical leadership development: findings from a national survey. *J Clin Nurs* 2011;20:2023–32.
- 38 Peltzer JN, Ford DJ, Shen Q, *et al*. Exploring leadership roles, goals, and barriers among kansas registered nurses: a descriptive cross-sectional study. *Nurs Outlook* 2015;63:117–23.
- 39 Australian Commission on Safety and Quality in Health Care. *Action 1.06 clinical leadership*. 2019. Available: <https://www.safetyandquality.gov.au/standards/nsqhs-standards/clinical-governance-standard/governance-leadership-and-culture/action-106#:~:text=Clinical%20leaders%20support%20clinicians%20to%3A%20Understand%20and%20perform,safety%20and%20quality%20of%20health%20care%20for%20patient>
- 40 Polit DF, Beck CT. *Nursing research: generating and assessing evidence for nursing practice*. 11th edn. Lippincott Williams and Wilkins, 2019.
- 41 Al-Motlaq M, Azar N, Squires A. Part-Time employment in Jordan as a nursing policy solution. *Int Nurs Rev* 2017;64:69–76.
- 42 Major D. Developing effective nurse leadership skills. *Nurs Stand* 2019;34:61–6.
- 43 Masanotti GM, Paolucci S, Abbafati E, *et al*. Sense of coherence in nurses: a systematic review. *Int J Environ Res Public Health* 2020;17:1861.
- 44 Alghamdi MG, Topp R, AlYami MS. The effect of gender on transformational leadership and job satisfaction among Saudi nurses. *J Adv Nurs* 2018;74:119–27.
- 45 Yaseen Z. Leadership styles of men and women in the Arab world. *Education, Business and Society* 2010;3:63–70.
- 46 Abdelkader MA, Abdelrahman S. Attitudes of both male and female nurses toward men in nursing in minia university hospital. *IOSR Journal of Research & Method in Education* 2016;6:46–55.
- 47 Abushaikh L, Mahadeen A, Abdelkader R, *et al*. Academic challenges and positive aspects: perceptions of male nursing students. *Int Nurs Rev* 2014;61:263–9.
- 48 Khammar A, Poursadeghiyan M, Marioryad H, *et al*. Patient safety climate and its affecting factors among rehabilitation health care staff of hospitals and rehabilitation centers in iran-tehran. *Iran Rehabil J* 2019:39–48.
- 49 Kitson AL, Harvey G, Gifford W, *et al*. How nursing leaders promote evidence-based practice implementation at point-of-care: a four-country exploratory study. *J Adv Nurs* 2021;77:2447–57.