

How leadership support nurses in continuous professional development in municipal in-patient acute care: A qualitative study

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Abstract

Background

Effective leadership is crucial for advancing continuous professional development and addressing performance challenges faced by nurses in increasingly complex municipal healthcare services. As leadership development is increasingly recognised as a continuous, experiential, and practice-based process embedded within clinical and organisational settings, there is a growing need to understand how leadership is conceptualised and practised in healthcare contexts. However, little is known about how leadership supports and sustains nurses' professional development within municipal in-patient acute care services.

Objectives

To explore how leadership within municipal in-patient acute care services supports competence development and professional growth among nurses.

Setting

Municipal in-patient acute care services in Norway.

Methods

A qualitative design was employed using secondary analysis of baseline data collected to explore nursing competence within municipal in-patient acute care services. A purposive sample of eight nurses and two physicians participated in individual interviews. Data were analysed using an inductive content analysis approach. Reporting of the study was guided by the Consolidated Criteria for Reporting Qualitative Research checklist to enhance transparency and methodological rigour.

Findings

Three main themes emerged: (1) Organisational strategies supporting continuous professional development, (2) first-line managers and team leaders exhibiting a relationship-oriented leadership style, and (3) intra- and interprofessional leadership facilitating a culture of continuous professional development within and across professional groups.

Conclusions

Leadership plays a pivotal role in supporting nurses' competence development and professional growth in municipal in-patient acute care services. Both formal and informal leadership practices contribute to fostering a culture of continuous professional development and may support organisational adaptation in increasingly complex healthcare services.

Background

Continuous professional development (CPD) is essential to provide ethical, safe and effective nurse practice and patient outcomes [1, 2].

Its significance has increased in primary healthcare services due to the shift of responsibilities from hospitals to municipal services, which adds complexity and challenges nurses' performance [3]. As healthcare delivery evolves, CPD enables municipal healthcare professionals to maintain and improve their competence, thereby ensuring high-quality care. Professional competence is understood as a multidimensional and context-dependent combination of knowledge, skills, attitudes, and professional understanding required for effective work performance [4]. However, several barriers hinder the implementation of CPD, including lack of time, limited human resource, the quality of facilitators involved in training, course content, and opportunities for workplace learning [1, 4].

CPD encompasses how health practitioners maintain, enhance and expand their knowledge and expertise, while also developing the personal and professional qualities necessary for effective practice of patients with complex needs [5]. Many nurses strive for CPD to improve their skills and knowledge. However experienced nurses often have a greater sense of self-awareness regarding their knowledge gaps, which encourages them to adopt a more targeted approach to CPD compared to newly graduated nurses [6, 7]. Consequently, the level of competence that a nurse can achieve at any given time varies depending on their experience, ability to acquire knowledge, and self-awareness. Self-awareness is considered as essential nursing competency [7] and can be understood

as the deep understanding of one's internal states and their impact on behaviour and others. Self-awareness involves both intra- and interpersonal dimensions, developed through focus, evaluation, and feedback [8].

How leadership influence continuous professional development

Leadership in an increasing complex healthcare sector is of fundamental importance in fostering continuous learning and development, as it creates the environment necessary for such advancement [9]. Leadership impact is crucial at both policy and administrative levels, ensuring accountability for quality among leaders at all structural tiers [10]. The growing recognition of leadership development as a continuous, practice-based process situated within clinical and organisational settings [11] underscores the need for further research on how leadership is conceptualised and practised in clinical contexts.

In healthcare, the designation of leaders can differ. In this study, the term 'first-line manager' describes leaders who are closest to the staff group and have formalized personnel responsibilities, whereas 'team leaders' have clinical responsibilities and report to first-line managers. Effective leadership aligns CPD with clinical and organizational goals, supports personal development, encourages mentorship, and enables teams to enhance service quality ([2]. Due to the rapid changes in healthcare and education sectors, leadership is now expected to adapt and handle challenges in a new and different way than before [12]. Systematic and coordinated planning is essential for effective CPD practices, and leadership at all levels is crucial for its success [1, 13]. The leadership in healthcare integrates both administrative and clinical positions, guiding the staff toward a stable, well-trained workforce that are able to deliver person-centred and high-quality care [9, 14]. In a scoping review, Belrhiti et al. [9] examined how research approaches the concept of leadership from a complexity perspective within healthcare systems and settings. They identified three key themes: (1) Leadership is increasingly viewed as a process rather than being centered on individuals, (2) fostering interactions and creating conditions that enable creative behaviours to emerge, and (3) is associated with positive outcomes, such as enhanced learning within organizations, increased creativity, innovation, and adaptability [9].

Enhancing nurse performance may require improving autonomy, fostering positive relationships, and ensuring access to necessary resources [15]. Therefore, nursing managers practises should emphasis these areas to effectively support performance [15, 16]. However, formal nurse leaders experienced overwhelming responsibilities to develop nursing competence in general wards but felt that their efforts were not adequately supported by hospital management. The lack of clear work instructions and limited opportunities for professional development hindered their ability to improve quality of care and patient safety, contributing to high turnover rates [17]. Every registered nurse has competence to perform leadership at clinical level. Research indicates that informal clinical leadership behaviours encourage and inspire staff nurses in their professional development [18]. These leaders support continuous learning by acting as role models, inspiring and sharing a vision, creating shared values, and critically evaluating the status quo. They also share knowledge and encourage others, which enables improved performance and, in turn, leads to better patient care and increased job satisfaction [19].

The context of municipal in-patient acute care

In Norway, municipal in-patient acute care (MIPAC) services were mandatorily implemented for all Norwegian municipalities between 2013 and 2017, as part of the Coordination Reform introduced in 2012 [10]. The services should provide care equal to or better than pre-reform standards for patients not needing hospitalization, including those previously hospitalized due to a lack of such municipal services [10]. Nevertheless, the services currently operating at less than half of its capacity due to insufficient trust in staff competency [20, 21]. The flexibility given to municipalities to tailor the services has led to significant variations in how MIPAC services are organized [20, 21]. Research underscores the crucial role of nurses in ensuring care quality and continuity in MIPAC [22, 23], and the flexible organization has led to variations in professional nursing competence across units [24]

The primary patient group served by nurses in MIPAC consisted of older adults and individuals with chronic diseases. Nurses often cared for patients with complex health care needs and unstable, potentially serious, and escalating medical conditions [23]. Consequently, these variations, along with increased patient complexity and acuity, underscore the need for CPD and emphasize the importance of leadership in service development [23, 25, 26]. Despite the importance of CPDs, a recent review found limited research on healthcare professionals' perspectives on CPD implementation [1]. To address this knowledge gap, the aim of this study was to explore how leadership within MIPAC supports nurses' continuous professional development and growth.

Materials and methods

Study design and data source

This study has a qualitative design using secondary analysis on original data [27], which involve re-use of self-collected data to investigate an additional research question [28]. The data for re-use was initially collected by the first author with the aim at gaining knowledge of the need for nursing competence in the context of MIPAC. The original study focused on identifying the competencies required in these newly established services, and the findings were published in 2019 [23]. In the present study, the dataset was re-used for secondary analysis. The inclusion of an additional research question was motivated by the prominent emphasis on leadership and professional development within the data, reflecting increasing responsibilities, greater task complexity, and limited advanced nursing competence. Given the relative stability of these challenges over time, the 2017 dataset remains relevant and appropriate for secondary analysis in the context of Norwegian municipal health services [29].

Setting and participants

Participants were registered Nurse (RN), and general practitioner (GP) recruited from MIPAC with varying organizational structures and geographic locations, encompassing both rural and urban areas. These facilities also differed in the number of MIPAC beds and physician staffing. Recognizing the importance of contextual knowledge, the first author conducted brief guided tours of the five MIPAC locations, offering valuable insights into the work environment and enriching the data analysis.

The inclusion criteria for RN participants, were a minimum of two years' experience with at least one year working in an MIPAC, and preferably postgraduate education in geriatrics or advanced nursing. Inclusion criteria for GP participants were to be employed in an MIPAC. To carry out the recruitment of participants, the leaders of five MIPACs were contacted and asked to identify and recommend eligible participants who met the inclusion criteria of the participants, and to facilitate the scheduling of interviews. Once participants were identified and approved, the interviews were scheduled at mutually convenient times. The sample included all participants from the original study and is therefore not a subsample.

Data Collection

The interviews were conducted using an open-ended approach without predefined questions, resulting in rich and in-depth data. This allowed for exploration of different analytical perspectives without requiring separate sets of questions. Participants were notified in advance that the interview would concentrate on their experiences with nursing competence at the MIPAC. The first author conducted ten interviews between May and June in 2017, of which eight interviews took place at the participants' workplaces, while two were conducted via telephone. The total duration of the interviews lasted a total of nine hours and eighteen minutes, with an average duration of approximately 55 minutes. All interviews were audio-recorded and subsequently transcribed verbatim for analysis.

Data analysis

The interview data originated from a broader study exploring nursing competence in the care of older patients in municipal in-patient acute care settings. The findings from the original analysis were published in an international peer-reviewed journal in 2019 [23]. The present study draws on the same interview dataset but addresses a different research question. Whereas the original analysis focused on critical aspects of nursing competence, the current analysis explored how leadership within MIPAC supported nurses' competence development and professional growth. To explore this new focus, the transcripts were read repeatedly to gain an overall understanding of how leadership within MIPAC supported nurses' competence development and professional growth. Both researchers independently imported the transcripts into NVivo14 to organize and structure the data. We utilized an inductive content analysis approach following Graneheim and Lundman's inductive content analysis method [30]. to identify and code data segments that encompassed meaningful units related to leadership's role in supporting professional development. Upon completing the initial individual coding, the authors compared and discussed similarities and differences in the coding until consensus was reached on the final subcategories and categories, reflecting Graneheim and Lundman's notion of manifest content [30].

Reflexivity and trustworthiness

The researchers maintained reflexive practice throughout the analysis and writing process by using NVivo14 software individually for a systematic data analysis, then comparing and discussing the developed codes and final findings. We conducted several meetings to reflect on findings, biases and interpretations.

Both authors work at a university where they are involved in educating nursing students at the master's level. Their extensive expertise in research, as professors, enhances the trustworthiness of the data interpretation. The first author has clinical experience from emergency units in central and rural areas. Both first and last author has experience in critical care units. Trustworthiness was also supported by attention to variation in participants' experiences and by grounding the analysis in rich, verbatim data.

Findings

The study's sample included eight RN and two GP, all actively engaged in clinical bedside practice within the MIPAC setting. Table 1 shows the years of professional experience and expertise.

Table 1
Participants professional experience and expertise

Participant number	Profession/ Years of experience	Expertise
1	RN /7	Advanced nursing
2	RN /2	Projects work
3	RN /6	Team-leader
4	RN /14	Master's in nursing science Professional development nurse
5	RN /11	Palliative care, Geriatric nursing
6	GP /21	Medical responsible
7	GP /20	Medical responsible
8	RN /23	Supervision, rehabilitation and palliation
9	RN /20	Human resource management and development, team-leader, professional development nurse
10	RN/27	Team-leader, professional development nurse

The participants unanimously acknowledged that providing care in MIPAC required a high level of competence and that CPD were emphasised and needed. Table 2 presents the overview of themes, categories and sub-categories that were exposed. The Fig. 1 visualise summary of the main findings..

Table 2
Themes, categories and subcategories reflecting how leadership supported the development of competence

Themes	Categories	Sub-categories
Organisational strategies supporting continuous professional development (CPD)	CPD facilitating establishments	· Plans for competence enhancement · Professional development nurse · Professional council · Training program for employees · Compulsory courses and seminar
	Arrange for the individual nurse's competence enhancement	· Financially support formal education · Arrange for to do an internship to enhance competence · Facilitate time and occasion for CPD (at least two RNs at all shifts, recruitment)
First-line manager and team-leaders exhibiting a relation-oriented leadership style	Reinforce the individual's commitment	· Encourage to enhance their competence according to preferences and professional goals to foster a sense of belonging. · Enhance the nurse's capability, - to feel competent and stay updated
	Emphasising nurses' clinical leadership	· Encourage engagement in development in topics of interest · Encourage to use competence in CPD · Strength team-leaders competence
	Approachable and reachable	· See and hear the individual nurse · To have an open door
Intra- and interprofessional leadership facilitating a CPD culture	Enhances knowledge translation	· Culture for knowledge sharing · Having someone to consult with · Supporting professional curiosity
	Building relationships	· Reduced traditional hierarchies · Creating opportunities for relationship building · Consensus on building relational work environment · Trust and mutual respect
	First-line manager engaged in clinical nursing	· Values the nurse professional highly · Engage in nursing practice

Theme 1 Organisational strategies supporting continuous professional development

The data identified a variety of strategies intended to enhance nursing competence, which were established across a diverse array of units.

Continuous professional development facilitating establishments

Participants expressed a clear need for both the development and enhancement of nursing competence, particularly in handling complex and acute patient situations. Acute care, geriatric care, and physical healthcare were identified as areas requiring significant focus. Additionally, some participants highlighted the importance of comprehensive *competence planning*. In this context, there was

an emphasis on the importance of leadership recognizing the need to formalize strategies for competence and competence enhancement to effectively address these emerging challenges. One participant noted: *"We have recently started with the competence planning, as the MIPAC here is quite new" (Participant 4)*. Although having plan for competence development was emphasised as important, it was not necessarily prioritised: *"I would have liked a plan for competence enhancement, but as far as I understand, it's very much about finances" (Participant 8)*.

An important leadership role to support CPD was to have the attendance a *professional development nurse (PDN)* employed, or that someone had a dedicated role with responsibilities related to professional development within the unit. Many participants emphasised that the role of the PDN involved a variety of diverse and multifaceted tasks, addressing both individual and systemic levels. This included personal and broader training initiatives, like supervision and skills training. Daily and weekly topics were addressed to facilitate effective management of adverse events and the implementation of necessary actions. One PDN participant noted that, as the services were new, a significant amount of time was spent writing routines and procedures. Additionally, participation in various projects was common, and there was often a need to perform maintenance-related tasks due to the novelty of the systems in place. This quote from a master's degree-educated PDN underscores the importance of having an accessible PDN available in daily practice when professional support and guidance are needed: *"I often find that many individuals are knocking on my door, which is great [to seek] guidance, or they have questions... they call or stop by. Fortunately, it's a short distance" (Participant 4)*.

The establishment of a *professional council* served as a strategy to support CPD and was recognized as a valuable resource. Composed of dedicated staff and subject matter experts in nursing within the unit, the council not only gathered experiences and knowledge from nurses who attended external courses and other professional development activities but also demonstrated significant leadership. These nurses took initiative in leading the council's efforts, planning professional development days for healthcare staff, and ensuring the effective dissemination of knowledge.

"I am allowed to attend courses and such things, [...] I bring that back to the professional council, and then we organize professional development days. It's us, the professional resources, who plan the professional development days for the rest" (Participant 5).

Various methods were used to organize CPD programs aimed at disseminating knowledge and training relevant skills. These included internally planned *training programs*, *compulsory courses*, and other initiatives designed to enhance and maintain relevant skills and knowledge. Several units organized day-long training programs for professional development, and many participants appreciated having dedicated workdays for professional development as part of their regular work schedule. For example, one participant mentioned having recurring professional development days every four months, while another stated that regular lunch *seminars* were held in their unit:

"We have introduced something very nice: we have implemented a lunch seminar first Friday of each month. It focuses [...] professional themes [...] allowing us to get to know each other better, build trust and relationships" (Participant 6).

Arrange for individual competence enhancement

Several participants emphasized the appeal of offering opportunities to pursue university-level programs to enhance their ability to handle complex tasks. However, the municipality's *financial* constraints were recognized as a significant obstacle in *supporting the nurses' further education*. Another way to enhance a nurse's competence in managing patients with acute and unfamiliar conditions was through *internships* in hospitals, primarily within the emergency department. These internships were also intended to improve specific skills, such as training for specialized procedures. Participants stressed the importance of *allocating time and creating opportunities* for CPD. This included making room in daily activities to occasionally allow nurses to step away for learning opportunities, as well as facilitating ongoing exchange and learning on a daily basis. The issue of having only one nurse on duty, particularly during night shifts, was raised by several participants as a common concern in the MIPAC service. This situation posed challenges not only in distributing tasks and responsibilities but also seemed to limit opportunities for bedside learning and the exchange of experiences and assessments during complex patient encounters.

Theme 2 First-line manager and team-leaders exhibiting a relation- oriented leadership style.

The impact of this relation-oriented leadership style was emphasised as important for CPD, which increased trust between the leaders and nurses and reduced barriers to CPD, improved team dynamics, problem-solving and decision-making in staff.

Reinforce the individual's commitment

Leadership that reinforced each nurse's commitment emerged as a key factor. It involved *encouraging nurses to update and enhance their competencies in alignment with their individual preferences and professional goals*. This approach not only supported their personal and career development but also fostered a sense of ownership and motivation within the team. According to one nurse: *"[...] being able to work with the profession, to deepen one's knowledge, to implement things and have responsibility for things, it gives a sense of belonging"* (Participant 5). The data revealed that nurses experienced enthusiasm and inspired when taking responsibility for the initiation and development of this new service. While successfully mastering these new challenges depended on *achieving a strong sense of competence*. The data also underscored the importance of leadership that supported ongoing learning to sustain nurses' commitment. In particular, the opportunity to be *competent and staying updated* and with handling technology and acute- and deteriorating patient situation, was identified as crucial.

Emphasising nurses' clinical leadership

The first-line managers' emphasis on encouraging staff nurses' clinical leadership was identified as a strategic element of CPD within the units. This strategy focused not only on engaging in the development of *topics of interest* and disseminating knowledge within the team, but also on *utilising their expertise and competence* more broadly. By recognizing and valuing the nurses' skills, this approach aimed to support and empower them, enabling them to strengthen their peers. Additionally, *Strengthen the team leaders' competence* was seen as important. One team-leader emphasized the importance of seeing, hearing, and providing feedback to those they lead, and noted the importance of receiving feedback from own leader: *"[...] I am heard and seen by my leader [first-line manger], it has been very clear from the start"* (Participant 3).

Approachable and reachable

Leaders who were *approachable and accessible* seemed to foster an atmosphere where nurses felt recognized and heard as individuals, not just as team-members. This was achieved through active engagement with their nursing staff, genuinely acknowledging their concerns, ideas and feedback, and encouraging open communication through an *open-door policy*. Nurses felt empowered to express their concerns or share innovative ideas, knowing their input was valued and appreciated. Ultimately, this approach fostered a positive work environment enhanced job satisfaction and contributed to improved patient care outcomes. One team-leader said: *"Feedback is given if there is a need for it. I mean that everyone should be seen, heard, and taken care of"* (Participant 3).

Theme 3 Intra- and interprofessional leadership facilitating a continuing professional development culture

Our data clearly emphasised the development of a professional organizational culture, with leadership taking primary responsibility. At the same time, it was recognized as a collective duty. This positive culture was characterized by openness and collaboration, where leaders played a crucial role in fostering an environment of clear communication and seamless task transitions a supportive atmosphere, enhancing overall well-being and satisfaction. Central to this culture was the value of interdisciplinary cooperation, mutual respect, and shared responsibilities among all staff members, including doctors, nurses, and other caregiver. Such an inclusive and supportive culture fosters trust and reliability, essential for adaptability and the ability to independently manage responsibilities. This approach not only promotes teamwork but also facilitates continuous development within the organization as one nurse remarked:

"The culture must be built. The primary responsibility is a leadership responsibility. As a team-leader, I also feel that it's my responsibility to contribute to that aspect. It's actually a shared responsibility" (participant 3).

Enhances knowledge translation

Creating a culture of openness and trust, encouraging a strong desire for *knowledge sharing*, and having someone readily available to *consult with* were essential factors in fostering professional growth and development among nurses. When nurses felt comfortable in seeking input and guidance from their colleagues, both within their own profession and across professions, it fostered a collaborative environment that benefited both individual practitioners and patients. One of the participants who felt inexperienced in the MIPAC context said:

"I'm newly qualified, as I've been working for less than two years now since I graduated. I notice my own sense of security when I'm working with someone who has maybe worked for ten, fifteen years, or even longer. Working with someone, I find it educational"

(Participant 2).

Supporting professional curiosity encouraged continuous learning and exploration, which not only enhanced the clinical skills of nurses but also helped them remain current with the latest innovations in their field. The participants expressed their excitement about engaging with this new service, acknowledging the fresh inspiration and valuable learning experiences it has provided. This quote from an experienced nurse demonstrates the enthusiasm and learning involved in facing challenges: *"It's incredibly exciting, I believe I'm learning something new almost every single day, [...] you have to be fully engaged constantly"* (Participant 9).

Building relationships

To successfully support CPD among nurses, it was considered crucial to have leaders who could *reduce the traditional hierarchies* that serve as barriers to professional growth. Both nurses and physicians highlighted the importance to encourage participation and open dialogue. A team-leader expressed: *"it about to create a good culture where everyone can express themselves"* (Participant 3). One of the participating nurses stated that there was a limited opportunity for discussion at the startup of the new service the impression was that physicians held the power: *"There was little room for discussion to begin with, [it was like] - I am the doctor, and it will be as I decide"* (Participant 3). However, by strategically addressing this challenge, effective leadership, both the physician and nursing sides, had significantly improved the situation, facilitated dialogue and increased openness to diverse perspectives.

"Fortunately, things have loosened up a lot now, [...] there has been a lot of focus on communication and collaboration [...] the medical leadership has also realized that they [the physicians] must be able to discuss with the nurses [...]. If the nurse questions a treatment that has been prescribed, [the physician] must be able to answer and give a professional reasoning" (Participant 3).

In the data, both nurse and physicians emphasised that providing *opportunities for relationship building* established a foundation for a culture of open communication and feedback exchange. One of the participating physicians expressed the idea as follows:

"It's incredibly enjoyable to work here because you work with different professional groups, and we work side by side... we've been fortunate to have such good synergy and relationship with the nurses, that's incredibly important" (Participant 6)

Building consensus on the importance of a *relational work environment* strengthened team dynamics and fostered a sense of shared responsibility and commitment to delivering high-quality patient care. *Trust and mutual respect* were recognized as key components in empowering nurses to support a fulfilling work environment and promote personal and professional growth and contribute to better patient outcomes.

First-line manager engaged in clinical nursing

Participants expressed their appreciation for having a supportive and *value-driven leader* who recognizes the importance of their professional role. One participant remarked:

"We have a leader [first-line manager], and she values the nurse profession highly. That is important. That's also one of the main reasons why I work here, that we have a good leader who recognizes this as important [the professional values]" (Participant 5).

The data also revealed an appreciation for first-line managers' leadership when they *engaged in nursing practice* within the unit. These leaders actively sought feedback and demonstrated a genuine interest in the staff's daily experiences and challenges. First-line managers who were engaged and showed interest in nursing practice were seen as strengthening their connection with the nursing staff and deepening their understanding of the challenges and responsibilities faced by the team. The importance of first-line managers' engagement in clinical practice was also highlighted as valuable for enhancing team dynamics and support.

Discussion

The aim of this study was to explore how leadership within MIPAC supports nurses' continuous professional development and growth. The key findings highlight the importance of organizational strategies, relations-oriented leadership, and the facilitation of a culture of CPD both within and among professional groups. Consistent with previous research, our findings highlight the importance of understanding leadership to support CPD as a dynamic process, involving continuous interaction between individuals, leadership, and the organisational context, rather than considering it solely an individual responsibility [9].

Organizational strategies

The focus on plans and programs aimed at enhancing competence which emerged as a critical need and resource for CPD in this study, requiring proactive leadership at all levels to establish and facilitate them effectively. Given the varying levels of competence within MIPAC with acute care expertise and the high proportion of less educated staff [24], the current study indicates a lack of sufficient experience in the nursing staff. Lack of experience may lead to lower self-awareness regarding knowledge gaps [6, 7]. Therefore, implementing documented standards, strategic plans, mandatory programs, and diverse CPD initiatives may be essential to enhance competence in the services. As demonstrated in our study, successful implementation of these initiatives may depend on the involvement of a PDN dedicated to advancing professional competence and development within the services. The value of a PDN as a crucial resource for CPD within the MIPAC context is supported by previous research, which demonstrates that integrating a PDN into the unit substantially enhanced competence planning and other developmental outcomes [31]. The current findings suggest that the role of a PDN serving as both a support and complement to the first-line manager's role. While first-line managers are responsible for ensuring the delivery of safe and competent nursing services, the demands of daily operations can be time-consuming and often limit their ability to focus on staff development and growth. Nevertheless, it is important for a PDN to be actively involved in the activities, ideally allowing them to take on a formal leadership role within the team and participate in leadership discussions. Providing the PDN with sufficient time and resources can greatly enhance support for learning and growth. Consistent with previous studies [31, 32, 33], collaboration between first-line managers and a PDN become a crucial factor in enhancing outcomes in competence development. Still, our findings indicate an urgent need for a sufficiently higher-educated nursing staff to enable collaborative work across all shifts, ensuring patient safety and employing the potential for learning in complex patient scenarios. Our findings also indicate that leaders at the municipal and institutional levels should develop and finance strategic initiatives to encourage nurses to pursue master's programs in advanced nursing. Master's-level capabilities include navigating complex primary health care systems and promoting CPD, support skill development and professional growth among nurses [34, 35]. Prioritising these efforts aligns with governmental strategies [36].

Relation-oriented leadership style

Consistent with previous research, our findings demonstrate that nurses' informal leadership plays a crucial role in promoting an engaging, supportive environment and developing a professionally oriented culture [19, 37]. The findings also show that the success of CPD initiatives depends on the relations-oriented leadership style of first-line manager and team-leaders who encouraging staff nurses to engage in CPD. Relation-oriented leadership emphasizes individual well-being and self-confidence within work groups and is widely recognized for enhancing team dynamics, empowerment, development and commitment [16, 31]. Empowered nurses, in turn, demonstrate higher levels of commitment [38]. Another key aspect of empowerment is having the chance to acquire new skills and advance professionally [39], thus providing staff nurses, team-leaders, and first-line managers with access to learning opportunities, essential resources, information, and support appears to be crucial for the success of CPD in these services. Although informal leadership needs support to be enhanced, the current study also highlighted the importance of support from superiors in helping formal leaders enhance their competencies and develop their leadership capabilities. Being part of a supportive leadership community can reinforce team-leaders' self-confidence as visionary leaders. Empowered leaders are more likely to adopt a participatory style, actively listen to others, and accomplish tasks effectively [26, 32, 39].

Leadership facilitates a culture of continuous professional development

The essential impact of a positive workplace culture, including interprofessional knowledge translation and collaboration, as exposed in our study, is emphasized in the literature [2]. A workplace culture that encourages respectful relationships and promotes the creation and transformation of knowledge, both individual and collective, as well as inter- and intraprofessional empowers healthcare professionals and enhances their competence, [2, 39]. Our findings emphasize the vital role of nursing and physician leadership in fostering a professional culture and positive work environment at MIPAC, essential for building a healthy foundation that supports effective intra- and interprofessional collaboration and cooperation. The importance of a constructive nurse-physician relationship was particularly highlighted. Complementing our findings, a systematic review by Labrague (2025)[40] underscores the impact of a beneficial nurse-physician collaboration. It highlights improvements in nursing performance, job satisfaction, team engagement, professional growth, and commitment, while also creating a favourable ethical climate [2, 40] emphasise that by moving away from traditional hierarchies, nurse leaders can empower staff to identify their learning needs. This empowerment boosts self-motivation and fosters a culture of lifelong learning. The crucial role of strong first-line managers who emphasize

nursing, as identified in this current study, aligns with previous research showing that effective leaders influence staff by modelling clear guiding principles. They earn respect through direct involvement and goal setting, which facilitates continuous CPD. The first-line managers inspire a shared vision by understanding and aligning with staff values and aspirations and challenge existing practice by seeking opportunities for improvement and innovation [15]. The importance of leadership in fostering a professional culture and supporting continuous professional development, as highlighted in this study, is particularly relevant given the increasing demands and resource constraints in municipal health services, where leaders must balance complex patient needs with limited workforce capacity [29]. These findings may have implications beyond the Norwegian context. Taken together, the results highlight the importance of strengthening leadership capacity and facilitating structured CPD initiatives, which may also be relevant for comparable healthcare settings.

Limitation

Utilizing secondary data presents certain challenges, such as aligning it with the new research question and potential gaps in relevant aspects. It offers a cost-effective exploration of fresh insights. Despite the initial purpose of the data not perfectly matching our specific needs, the leadership focus emphasized by the original researchers highlights the importance of examining leadership dynamics. Although the original context might limit broader applicability, it provides a rich foundation for understanding key phenomena. The dataset includes ten participants with extensive professional experience and diverse expertise, which contributed to variation and depth in the data. Embracing qualitative interpretation, our study maximizes existing data's potential, offering valuable insights and guiding future in-depth research.

Conclusion

The study underscores the importance of leadership in supporting nurses' continuous professional development and growth within Norway's municipal in-patient acute care services. The findings highlight the crucial role of leadership, both as a process and an individual responsibility, in fostering a supportive learning culture characterized by collaboration, trust, and shared responsibility. Such leadership may be particularly important in municipal acute care services, where nurses are increasingly expected to care for patients with complex healthcare needs. Based on these findings, leadership strategies that promote continuous learning, collaboration, and knowledge sharing may support nurses' continuous professional development and strengthen the sustainability and quality of care.

Declarations

Ethics approval and consent to participate

The study followed the guidelines outlined in the Declaration of Helsinki (1964) and was approved by the Norwegian Social Science Data Services (ref. 2017/53126) and by the ethical committee of Faculty of Health and Sport Science, University of Agder. Permission to conduct interviews was obtained from the municipal health authorities and from the leaders of the MIPAC units. Prior to each interview, participants were provided with written informed consent and assurance of their legal rights and confidentiality. They were given information about that the purpose of data collection was to increase knowledge about nursing competence in the MIPAC and which nursing competences are important for maintaining service quality in this setting. Participants were also informed about the characteristics of the interviewer, as outlined in the section on Reflexivity and Trustworthiness.

Using secondary analysis on original data raises ethical concerns about whether participants' informed consent and data use align with the original purpose. This assessment was made by the research team, based on the scope of the original approval from the Norwegian Social Science Data Services (ref. 2017/53126) and the informed consent obtained from participants. As the current study remains within the same overall research context, the use of data was considered to be in line with participants' consent. Secondary data analysis of qualitative research advances the goal of creating new knowledge while reducing the burden on participants and maximizing the contribution of their valuable time spent in interviews [27].

The manuscript was prepared in accordance with the 32-item checklist for interviews and focus groups on the Criteria for reporting qualitative research (COREQ) [41].

Consent for publication

Not applicable, as no individual person's identifiable data are contained within this manuscript.

Data availability

The interview data were de-identified prior to analysis. However, the transcripts are not publicly available due to ethical and confidentiality considerations, as participants may be identifiable through contextual information.

Conflict of Interest statement

The authors declare no conflicts of interest

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Authors' contributions

The first author recruited participants, collected and transcribed the data. Both authors contributed to the design and planning of the study, participated in data analysis and interpretation, discussed the findings, and contributed to writing and revising the manuscript. Both authors read and approved the final version of the manuscript.

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Information about the authors is provided in the section *Reflexivity and Trustworthiness*. Both authors are female registered nurses (RNs), hold PhD degrees, and are clinical specialists in critical care nursing. They currently work as professors involved in master's nursing education.

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Figures

**Leadership supporting continuous
Professional Development
in Nursing Practice**



Figure 1

Visual summary of the main findings