

Professional support as a facilitator to the development of Iranian nurses' clinical judgment: A content analysis

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ABSTRACT

Background: Nurses' clinical judgment development is essential for the professional nursing practice. The aim of this study was to explore the facilitators to the development of Iranian nurses' clinical judgment.

Materials and Methods: A qualitative design using conventional content analysis method was employed in the study. A purposive sample of 24 participants was recruited from three hospitals located at Sanandaj, Iran. Study data were collected in 2013 by using semi-structured individual interviews. A content analysis approach was used to analyze the study data and MAXQDA was used for coding and categorizing the data.

Results: The main theme of the study was "professional support as a facilitator to the development of nurse's clinical judgment." The sub-themes of this main theme included "provision of direct support to nurses" and "provision of clinical judgment resources." The first sub-theme consisted of different types of managerial, clinical, educational, and social supports. The two categories of the second sub-theme included the provision of necessary clinical evidence and the provision of medical equipments.

Conclusion: The study findings highlighted the importance of providing nurses with adequate professional support for facilitating the development of their clinical judgment.

Key words: Clinical, content analysis, Iran, judgment, nursing, professional, qualitative study, support

INTRODUCTION

Developing nurses' clinical judgment is a key characteristic of professional nursing practice.^[1,2] One of the most important factors contributing to nurses' ability to reflect on practice is the use of reflection-related theories^[3] such as Tanner's clinical judgment model (2006). According to Tanner, nurses consider context and background and communicate with patients to collect critical information concerning the patient and the environment. Then, they use reasoning and intuition to reflect-in-action and reflect-on-action and interpret the gathered information. In reflection-in-action, nurses make clinical judgments based on patients' responses to the immediate situation.^[4] On the other hand, in reflection-on-practice, nurses use their own knowledge and experience for the purpose of making

clinical judgment. However, the availability of a supportive context^[4] and adequate professional support for nurses^[5-7] are the basic requirements for the successful application of clinical judgment development theories.

There is a vast literature on the factors contributing to the development of nurses' clinical judgment. Broom *et al.* conducted a qualitative study on 25 Australian oncology consultants and nurses and found that the use of clinical evidence facilitated the maintenance of professional autonomy and helped nurses make accurate clinical judgments.^[7] Storm-Versloot *et al.* also found that adherence to postoperative body temperature measurement guideline significantly improved nurses' clinical judgment.^[8] Broom *et al.*^[7] and Stenner and Courtenay^[9] reported that providing nurses with clinical evidence and guidelines is a kind of clinical and educational support that helps improve nurses' clinical judgment.

Another factor contributing to the development of nurses' clinical judgment is having access to organizational and social support. According to Trybou *et al.*, organizational support can significantly improve nurses' professional performance.^[10] Kalicińska *et al.* found that social support provided by supervisors and nurse managers decreased hospice nurses' and midwives' professional burnout, increased their professional interest, and helped them maintain their professional autonomy.^[11] Alstveit *et al.* also

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Submitted: 06-May-14; Accepted: 03-Dec-14

reported social and professional supports as predictors of midwives' and female nurses' personal achievement and professional success.^[12] Thompson and Stapley reported that nurse preceptors' and mentors' educational support plays an important role in improving nurses' clinical judgment.^[13] Finally, according to Stenner and Courtenay, intra- and inter-professional supports provided by peers, physicians, and other healthcare professionals improves nurses' confidence in their ability to provide care in a professional environment.^[9]

In Iran, there is a lack of powerful supportive working condition for nurses.^[14-17] Mardani *et al.* conducted a qualitative study on a group of Iranian nurses and found that lack of peer support was a clinical challenge to them. Nurses participating in their study emphasized a great need for creating a nonjudgmental supportive working environment for nursing staffs.^[15] Adib-Hajbaghery and Aminoroayaei-Yamini found that professional support – including occupational, financial, spiritual, and legal supports – for nurses facilitated the process of clinical decision-making. On the other hand, they reported that lack of a supportive environment had resulted in unfair prejudices about nurses, decreased their self-confidence, and increased their passivity.^[16] Consequently, Iranian nurses face different professional challenges which weaken their perceived support.^[17] Nonetheless, previous studies conducted in Iran mainly dealt with the concepts related to clinical judgment and professional support. Accordingly, facilitators to the development of Iranian nurses' clinical judgment have still remained unknown.

Despite the wealth of studies on professional support and clinical judgment, there is still a wide knowledge gap regarding factors that facilitate the development of nurses' clinical judgment. A large number of the studies conducted are quantitative ones which address only specific aspects of facilitators to clinical judgment development. We conducted this qualitative study to reduce this knowledge gap. The aim of this study was to explore the facilitators to the development of Iranian nurses' clinical judgment.

MATERIALS AND METHODS

The purpose of this study was to describe the facilitators of the Iranian nurses' clinical judgment development. With regard to the aim of this research, a qualitative research design with a conventional content analysis approach was used, which offers instruments for examining the experiences and results in the acquisition of valuable and in-depth data from the participants.^[18,19] Content analysis is a systematic coding and categorizing approach that can be used to explore large amount of textual information in

order to ascertain the trends and patterns of words used, their frequency, their relationships, and the structures and discourses of communication.^[20] In conventional content analysis, the coding categories are derived directly from the text data^[20] and this allows researchers to understand social reality in a subjective but scientific manner.^[20] The present study was conducted in 2012–2013.

We recruited a purposive sample of 14 staff nurses, 2 nurse managers, 2 nurse educators, 2 physicians, 2 fourth-year students, and 2 hospitalized patients and their family members. The study participants were selected from different hospital wards including medical-surgical, intensive care, emergency, psychiatric, dialysis, and post-delivery units and the operating rooms affiliated to three teaching hospitals located in Sanandaj, Iran. The first participant recruited to the study was a practicing nurse. The remaining 23 participants were selected based on the developing concepts and categories.

The study was approved by the ethics committee of Tarbiat Modares University, Tehran, Iran. We informed the study participants about the aim of the study and ensured them that both participation in and withdrawal from the study were voluntary. We also guaranteed the confidentiality of their personal information. Finally, we obtained a written informed consent from each participant immediately before starting data collection.

Data collection was performed by the semi-structured individual interview method. Initially, we conducted a literature review to develop a primary interview guide. Then, we revised the interview guide based on the comments provided by a panel of experts consisting of nursing faculties. Thereafter, we pilot-tested the interview guide by conducting two pilot interviews.

Accordingly, the final version of the interview guide was prepared for the main interviews. The interview guide consisted of both general and specific questions [Table 1]. Probing questions were also used to obtain in-depth

Table 1: The interview guide

How to develop clinical judgment	Facilitators to developing clinical judgment
What real clinical experiences do you remember when you hear the term clinical judgment?	What factors facilitate the development of nurses' clinical judgment?
Please explain about your patient assessment activities during a working day	Which behaviors affect the development of nurses' clinical judgment?
What measures have you taken to improve your colleagues' clinical judgment?	How is the condition for developing nurses' clinical judgment created and improved?

information regarding participants' experiences. Interviews were arranged according to the participants' preferences and lasted for 30–60 min. Five participants were interviewed twice. Accordingly, we performed 29 interviews in total. All the interviews were recorded by using a digital sound recorder. Data collection was continued until reaching data saturation. Data saturation is a state in which all the developed concepts and categories are fully developed and no new information is obtained from the data.^[21,22]

Study data were analyzed by using the conventional content analysis method.^[23,24] Interviews and field notes constituted the units of analysis. Immediately after each interview, we transcribed the interview content verbatim by using the Microsoft Office Word software. Each transcript was then read and reviewed many times to obtain a general understanding of the content. Accordingly, we identified, condensed, and coded the meaning units. We constantly compared and abstracted the generated codes and concepts and categorized them according to their similarities and differences. Sub-categories and categories were also compared constantly and categorized to constitute the sub-themes and main theme of the study. We used MAXQDA 10 for managing the study data.

Different forms of trustworthiness have been considered. We employed the constant comparison, active listening, prolonged engagement with data, immersion in data, as well as data source and investigator triangulation techniques for enhancing the credibility of the study findings. To ensure the dependability of the findings, we documented and kept

a record of our analytic activities for the purpose of audit trailing. The confirmability of the study findings was assured by using peer-checking and member-checking techniques. We also strived to recruit a sample with maximum variation to improve the transferability of the study findings.

RESULTS

The main theme of the study was “professional support as a facilitator to the development of nurses' clinical judgment.” The two sub-themes of the main theme included “provision of direct support to nurses” and “provision of clinical judgment resources.” These sub-themes and the related categories and sub-categories are shown in Table 2 and are explained below.

Providing direct support to nurses

The sub-theme “providing direct support to nurses” consisted of four main categories including “managerial support,” “clinical support,” “educational support,” and “social support.” The availability of these types of support facilitated the development of nurses' clinical judgment.

Hospital managers facilitated the development of nurses' clinical judgment by providing them with opportunities to engage in clinical judgment activities. A matron stated, “*We have developed the independent nursing interventions guideline to help nurses engage in clinical judgment activities.*”

Nurse managers also provided nurses with educational and research-related supports to enhance their self-confidence

Table 2: Main theme and the related sub-themes, categories, sub-categories, and coding samples

Main theme	Sub-theme	Main category	Sub-category	Coding samples
Professional support	Provision of direct support to nurses	Managerial support	Nursing managerial support	Approval of nursing law
			Clinical supervision	Clinical evaluation
			Organizational managerial support	
		Clinical support	Medical support	Enhancing nurses' self-confidence and motivation by mentors, peers, colleagues, physicians, and other healthcare professionals
			Colleagues support	
			Mentor support	
		Educational support	Educational nurses' support	Conducting self-learning programs
			Coach support	Continuing education programs
			Collaboration and practice	
			Social support	Patients' support
			Community support	Family interaction with nurses
			Family support	
	Provision of clinical judgment resources	Provision of necessary clinical evidence	Provision of guidelines	Updating the resuscitation and triage guidelines in emergency
Provision of internet data bases			Equipping hospital library with books and scientific papers	
Provision of scientific articles and books				
			Provision of clinical and paraclinical evidences	
			Opinion of expert	
		Provision of medical equipments	Provision of monitoring equipments	Equipping emergency ward with advanced monitoring
			Provision of diagnostic equipments	Equipping laboratories and radiologic wards with advanced equipments
			Provision of nursing and medical equipments	

in making accurate clinical judgments. A matron said,
“My educational support for nurses enhanced their clinical judgment skills.”

Moreover, hospital administrators and senior managers also supported nurses to facilitate the process of clinical judgment and help them maintain their professional autonomy in making judgments. A senior nurse manager mentioned,
“In the Iranian Nursing Organization, we are striving to attract legal support for nurses to empower them in making independent clinical judgments.”

Clinical support that was related to the support provided by mentors, peers, colleagues, physicians, and other healthcare professionals also helped in enhancing nurses' self-confidence and motivation for participating in clinical judgment activities. A practicing nurse said,
“When physicians and supervisors support and encourage us, we have stronger motivation for making accurate judgments.”

Educational support was related to the development and implementation of effective educational interventions aiming at enhancing nurses' clinical judgment. Nurse managers, supervisors, and staff nurses supported each other and facilitated the process of independent clinical judgment through making effective educational interventions and conducting continuing education programs. An educational supervisor mentioned,
“We supported nurses in conducting self-learning and continuing education programs in the area of clinical judgment.”

Nurse educators also supported nurses during their clinical education. A clinical instructor said,
“We are striving to develop joint clinical education programs involving both medical and nursing students.”

Mutual cooperation of clinical instructors and staff nurses also facilitated the process of clinical judgment. A staff nurse mentioned,
“To develop nurses' clinical judgment, clinical instructors and practicing nurses share their knowledge and expertise with each other.”

Social support refers to the cooperation of patients, their families, and other healthcare consumers with nurses in the process of making clinical judgment. When patients and their families recognized and respected nurses as independent healthcare professionals, nurses felt having considerable confidence in their own ability for making independent clinical judgment. A mother of a child patient stated,

“I believed in the diagnosis established by the nurse and

told the doctor that nurse's explanations exactly fit my problem. The doctor respected nurse's points of view. That nurse usually made accurate judgments.”

Provision of clinical judgment resources

The second sub-theme of the study was “provision of clinical judgment resources.” This was a broad sub-theme consisting of two categories including “provision of necessary clinical evidence” and “provision of medical equipments.” Clinical evidence and medical equipments were the vital resources for making accurate clinical judgments.

Provision of necessary clinical evidence that included easy access to clinical guidelines, research papers, textbooks, clinical and laboratory findings, and experts' opinions facilitated the development of nurses' clinical judgment. Nurses believed that having clear evidence for making accurate clinical judgments provides them with strong legal and scientific support. A practicing nurse said,
“We asked our head nurse to provide us with internet services to be able to search for necessary clinical evidence.”

Easy access to clinical evidence helped nurses integrate and use their clinical judgment skills according to the immediate situation. The integration of clinical evidence with other clinical judgment resources such as knowledge, experience, and reasoning helped nurses interpret the gathered data and make accurate judgments. A nurse manager stated,
“We are currently trying to provide nurses with updated guidelines. Such guidelines can guide nurses' clinical judgment practice.”

Easy access to clinical evidence also facilitated nurses' engagement in clinical judgment activities. A head nurse said,
“I tried to equip the ward library with evidence such as books, research papers, and guidelines so that nurses could refer to them while caring for patients and participating in in-hospital educational programs.”

Provision of medical equipments included the modern medical equipments needed for clinical judgment (such as monitoring devices and diagnostic tools), which facilitated the process of judgment making. A practicing nurse mentioned,
“Equipping the emergency ward with hi-tech monitoring devices improved our ability to establish accurate nursing diagnoses. Consequently, we were able to cooperate with physicians in making joint clinical judgments.”

DISCUSSION

The aim of this study was to explore the facilitators to the development of Iranian nurses' clinical judgment. The

study findings demonstrated that professional support had a pivotal role in developing nurses' clinical judgment. The types of professional support differed according to the immediate situation and context. Benner (cited in Rodríguez-Maribona, 2010)^[25] reported that experienced nurses need to base their practice on patient's condition and the immediate situation. Rodríguez-Maribona^[25] reported that facilitating factors affect nurses' response to the ever-changing condition of patients and environment.

Providing direct support to nurses

Our findings revealed that managerial support helped facilitate the development of nurses' clinical judgment.^[25] Karanikola *et al.* found that improvement of nursing management as well as physicians' support for nurses greatly contributed to nurses' clinical judgment and professional autonomy.^[26] According to Gray-Stanley *et al.* and Hutchinson and Janiszewski Goodin,^[27] hospital managers can help nurses develop their clinical judgment by providing them with a safe and supportive working environment.

The study findings also revealed that clinical support provided by mentors, peers, colleagues, physicians, and other healthcare professionals enhanced nurses' self-confidence and motivation for participating in clinical judgment activities. Gillespie and Peterson found that experienced nurses' and mentors' support improved novice nurses' self-confidence and clinical decision-making ability.^[28] We also found that educational support – through making effective educational interventions and conducting continuing education programs – helped facilitate the development of nurses' clinical judgment. Boese *et al.* reported that when supported strongly by mentors and experienced healthcare professionals, educational interventions such as simulation can improve nurses' ability in making accurate clinical judgments.^[29] Boyd (2008) also found that supporting learners educationally by using the Kolb's theory of reflective practice significantly improved dental students' reflective judgment.^[30] Foster *et al.* reported that continuing education programs can improve nurses' ability in making accurate clinical judgments. Consequently, health and education authorities need to provide nursing students and practicing nurses with educational guidelines, as well as conduct a close clinical supervision to help them improve their own clinical judgment.^[31]

Provision of clinical judgment resources

We found that the provision of necessary clinical evidence was an important source of support for developing nurses' clinical judgment. Simpson and Courtney found that providing nursing students with evidence necessary for evidence-based practice improved their reasoning, critical thinking, and clinical judgment-making abilities.^[32] Wøien and Bjørk also found that nurses who referred

to clinical guidelines made clinical judgments that were more accurate.^[33] We also found that nurses used different types of evidence according to patients' condition and the immediate situation. Ease of access to the necessary evidence was a determining factor in deciding what types of evidence should be used. For example, if there were no clinical guidelines for guiding nurses' practice, they were compelled to refer to physicians' opinions. Vugt *et al.* reported that clinical and radiographic findings were among the evidence that the nurses used for diagnosing pneumonia and making clinical judgments.^[34] Dadgaran *et al.* also found that nurses used information acquired from the internet for expanding their knowledge and promoting their professional clinical practice.^[35]

Another source of support for developing nurses' clinical judgment was the availability and accessibility of modern medical equipments. Burritt and Steckel noted that creating a safe clinical environment and providing necessary equipments help facilitate nurses' professional development.^[1]

The study findings suggest that professional support – consisting of managerial, clinical, educational, social, and evidence-related supports – provided for nurses facilitates the development of their clinical judgment. Given the diversity of the facilitators, nurse managers need to develop and implement comprehensive strategies for developing nurses' ability in making accurate and independent clinical judgments. Moreover, nurses need to be informed about different types of support that facilitate the development of their clinical judgment. This study provided primary evidence concerning the facilitators to the development of Iranian nurses' clinical judgment. Further studies are needed for producing ample conclusive evidence.

ACKNOWLEDGMENTS

The authors thank the participants for taking part in this study. This article was By all authors and based on the first investigator's PhD dissertation; therefore, financial support from the Faculty of Medical Sciences, Tarbiat Modares University is also acknowledged (No.: 52/112071).

REFERENCES

1. Burritt J, Steckel C. Supporting the learning curve for contemporary nursing practice. *J Nurs Adm* 2009;39:479-84.
2. Lockwood C. Clinical judgement and decision-making in nursing and interprofessional healthcare. *Int J Evid Based Healthc* 2011;9:69-70.
3. Guzys D, Kenny A, Bish M. Sustaining secondary school nursing practice in Australia: A qualitative study. *Nurs Health Sci* 2013;15:353-9.

4. Tanner CA. Thinking like a nurse: A research-based model of clinical judgment in nursing. *J Nurs Educ* 2006;45:204-11.
5. Pongmarutai T. Application of a judgment model toward measurement of clinical judgment in senior nursing students. Las Vegas: University of Nevada; 2010.
6. Bunkenborg G, Samuelson K, Åkeson J, Poulsen I. Impact of professionalism in nursing on in-hospital bedside monitoring practice. *J Adv Nurs* 2013;69:1466-77.
7. Broom A, Adams J, Tovey P. Evidence-based healthcare in practice: A study of clinician resistance, professional de-skilling, and inter-specialty differentiation in oncology. *Soc Sci Med* 2009;68:192-200.
8. Storm-Versloot MN, Knops AM, Ubbink DT, Goossens A, Legemate DA, Vermeulen H. Long-term adherence to a local guideline on postoperative body temperature measurement: Mixed methods analysis. *J Eval Clin Pract* 2012;18:841-7.
9. Stenner K, Courtenay M. The role of inter-professional relationships and support for nurse prescribing in acute and chronic pain. *J Adv Nurs* 2008;63:276-83.
10. Trybou J, Gemmel P, Pauwels Y, Henninck C, Clays E. The impact of organizational support and leader-member exchange on the work-related behaviour of nursing professionals: The moderating effect of professional and organizational identification. *J Adv Nurs* 2014;70:373-82.
11. Kalicińska M, Chylińska J, Wilczek-Rózyńska E. Professional burnout and social support in the workplace among hospice nurses and midwives in Poland. *Int J Nurs Pract* 2012;18:595-603.
12. Alstveit M, Severinsson E, Karlsen B. Maternity care professionals' perceptions of supporting employed women in Norway. *Nurs Health Sci* 2011;13:316-22.
13. Thompson C, Stapley S. Do educational interventions improve nurses' clinical decision making and judgement? A systematic review. *Int J Nurs Stud* 2011;48:881-93.
14. Zarea K, Negarandeh R, Dehghan-Nayeri N, Rezaei-Adaryani M. Nursing staff shortages and job satisfaction in Iran: Issues and challenges. *Nurs Health Sci* 2009;11:326-31.
15. Mardani HM, Shahraky VA, Askari F. Nurses' Experiences From Clinical Challenges: A Qualitative Study. *J Nurs Midwifery Urmia Univ Med Sci* 2009;7:4.
16. Adib-Hajbaghery M, Aminoroayaei Yamini E. Nurses perception of professional support. *Feyz. J Kashan Univ Med Sci* 2010;14:140-53.
17. Esmaeili M, Dehghan-Nayeri N, Negarandeh R. A review of the opportunities and challenges facing the nursing associations in Iran. *Int Nurs Rev* 2012;59:168-74.
18. Holloway I, Wheeler S. *Qualitative research in Nursing and Healthcare*. Oxford: Wiley-Blackwell; 2010.
19. Streubert-Speziale HJ, Carpenter DR. *Qualitative research in nursing: Advancing the humanistic imperative*. Philadelphia: Lippincott Williams and Wilkins; 2007.
20. Grbich C. *Qualitative data analysis: An introduction*. London; Thousand Oaks; New Delhi: Sage Publication; 2007.
21. Elahi N, Alhani F, Ahmadi F. Iranian Nursing Instructors' Perceived Experiences of Challenges of Effective Education: A Qualitative Content Analysis. *Journal of Qualitative Research in Health Sciences* 2012;1:229-39.
22. Tavangar H, Alhani F, Vanaki Z. Coping with Work-Family Conflict in Nurses: A Qualitative Study. *Sci J Hamadan Nurs Midwifery Fac* 2011;1:14-24.
23. Elo S, Kyngns H. The qualitative content analysis process. *J Adv Nurs* 2008;62:107-15.
24. Graneheim UH, Lundman B. Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Educ Today* 2004;24:105-12.
25. Rodríguez-Maribona HB. Professional practice in critical care nurses from the analysis of an interview under benner's perspective 2010;19:1-10.
26. Karanikola MN, Albarran JW, Drigo E, Giannakopoulou M, Kalafati M, Mpouzika M, *et al.* Moral distress, autonomy and nurse-physician collaboration among intensive care unit nurses in Italy. *J Nurs Manag* 2014;22:472-84.
27. Hutchinson TL, Janiszewski Goodin H. Nursing Student Anxiety as a Context for Teaching/Learning. *J Holist Nurs* 2013;31:19-24.
28. Gillespie M, Peterson BL. Helping novice nurses make effective clinical decisions: The situated clinical decision-making framework. *Nurs Educ Perspect* 2009;30:164-70.
29. Boese T, Cato M, Gonzalez L, Jones A, Kennedy K, Reese C, *et al.* Standards of Best Practice: Simulation Standard V: Facilitator. *Clin Simul Nurs* 2013;9(Suppl 6):S22-5.
30. Boyd LD. Development of reflective judgement in the pre-doctoral dental clinical curriculum. *Eur J Dent Educ* 2008;12:149-58.
31. Foster KN, Lewis M, Marshall A, Lewis P. Educating Australian registered nurses in comprehensive health assessment: A pilot study *J Contin Educ Nurs* 2013;44:155-62.
32. Simpson E, Courtney M. Implementation and evaluation of critical thinking strategies to enhance critical thinking skills in Middle Eastern nurses. *Int J Nurs Pract* 2008;14:449-54.
33. Wøien H, Bjørk IT. Intensive care pain treatment and sedation: Nurses' experiences of the conflict between clinical judgement and standardised care: An explorative study. *Intensive Crit Care Nurs* 2013;29:128-36.
34. Vugt SF, Verheij T, Jong PD, Butler C, Hood K, Coenen S, *et al.* Diagnosing pneumonia in patients with acute cough: Clinical judgment compared to chest radiography. *Eur Respir J Eur Respir J* 2013;42:1076-82.
35. Dadgaran SA, Parvizy S, Peyrovi H. Passing through a rocky way to reach the pick of clinical competency: A grounded theory study on nursing students' clinical learning. *Iran J Nurs Midwifery Res* 2012;17:330-7.

How to site: Seidi J, Alhani F, Salsali M. Professional support as a facilitator to the development of Iranian nurses' clinical judgment: A content analysis. *Journal of Nursing and Midwifery Research* 2014;19:S13-8.

Source of Support: This article was written based on the first investigator's PhD dissertation; therefore, this research received grant (No.: 52/112071) from the Department of Nursing, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran. **Conflict of Interest:** No conflict of interest has been declared by the authors.