NURSES' ATTITUDES TOWARDS EFFECTIVE DELEGATION IN A PUBLIC HOSPITAL LAYYAH

Original Research

Rabia Karim[1]*, Rukhsana Perveen[1], Shabana Kousar[1], Iram Saleem[1], Fouzia Saleem[1], Muhammad Bilal[2]

[1]POST RN Student at Abbass Institute of Medical Sciences, Layyah, Pakistan.

[2]Principal, Abbas Institute of Medical Science/College of Nursing, Pakistan.

Corresponding Author: Rabia Karim, POST RN Student at Abbass Institute of Medical Sciences, Layyah, Pakistan, wafakarim777@gmail.com

Conflict of Interest: None	Grant Support & Financial Support: None

ABSTRACT

Background: Delegation is a critical component of effective nursing management, enabling nurse leaders to optimize care delivery by distributing tasks according to skill level and workload. Globally, effective delegation is recognized as a core nursing competency that enhances team performance, patient satisfaction, and organizational efficiency. In clinical settings with high patient turnover and limited staffing, such as public hospitals, understanding nurses' attitudes toward delegation becomes essential for ensuring safe and efficient care practices.

Objective: To determine nurses' attitudes towards effective delegation in a public hospital in Layyah, Pakistan.

Methods: A quantitative descriptive and correlational study was conducted over six months at DHQ Hospital Layyah. A total of 70 female nurses, including charge nurses and nurse managers aged 21–40 years, were selected using a convenience sampling technique. Data were collected using a structured questionnaire comprising three sections: demographic information, 11 attitude-related items, and 12 delegation practice-related items, all rated on a five-point Likert scale. Cronbach's alpha was calculated at 0.70, indicating good internal consistency. Statistical analysis was performed using SPSS v23.0, including frequencies, percentages, and Pearson correlation analysis.

Results: Among the 70 participants, 87.2% were aged 21–30 years, while 12.8% were aged 31–40 years. All respondents were female. Educational qualifications included 50% GNM, 29% Post-RN BScN, and 21% BSN. Most nurses (64%) had over 10 years of experience. Departmental representation was evenly split between medical (43%) and surgical (43%), with 14% from emergency. Overall, 93% of participants demonstrated a positive attitude toward delegation, while only 7% showed negative attitudes. However, no statistically significant correlation was found between attitude and actual delegation practices ($r = 0.065$, $p = 0.590$).

Conclusion: The study found a predominantly positive attitude among nurses towards delegation. Despite this, effective application remains inconsistent, highlighting the need for targeted training and institutional support to translate positive perception into practice.

Keywords: Attitude of Health Personnel, Delegation, Female Nurses, Hospital Administration, Nurse Managers, Nursing Staff, Public Hospital.

INTRODUCTION

The nursing profession is widely recognized as a dignified and dedicated field, encompassing multifaceted roles such as care providers, facilitators, educators, and advocates. Nurses operate under immense pressure due to their demanding routines and heavy workloads, especially those holding managerial or authoritative positions. In such roles, it becomes essential to delegate specific tasks to ensure efficient delivery of care and to meet organizational goals. Delegation in nursing is defined as the formal process of assigning responsibilities, duties, and associated authority to another individual to achieve specific outcomes (1). This act is not merely an operational necessity but a strategic function of nursing leadership, wherein the delegated individual acts on behalf of the primary nurse leader to carry out delegated responsibilities effectively. Within diverse clinical settings, nurses are consistently expected to supervise and delegate responsibilities to other healthcare personnel. The ability to delegate, prioritize, and oversee care is an essential competency that all nurses must develop to ensure effective practice (2). Globally, delegation is acknowledged as a core skill in professional nursing, and governing bodies such as the International Council of Nurses emphasize nurses' responsibility in delegating care and supervising assistive personnel (3). Ineffective delegation not only compromises patient safety but also exposes the delegator to potential legal and ethical repercussions. Each member of the healthcare team contributes to the quality and safety of patient care, making effective delegation a cornerstone of collaborative practice (4).

The American Nurses Association (ANA) further asserts that nurses must delegate in alignment with the welfare of patients, organizational policies, and state regulations while maintaining personal accountability for the outcomes (5). Delegation is not merely a task-sharing exercise but a vital management skill that supports the professional and clinical judgment of nurse managers. As the scope of nursing responsibilities continues to expand, delegation emerges as a non-negotiable function to manage workload efficiently and ensure timely patient care delivery (6). Empowering subordinates through delegation fosters self-confidence and promotes a culture of shared responsibility, which is instrumental in developing leadership and decision-making abilities among nursing staff (7). Despite its necessity, delegation remains a challenging process. Staff nurses, often overwhelmed by clinical and administrative responsibilities, must rely on delegation to function effectively. However, several barriers exist, such as subordinates' lack of motivation, fear of accountability, resistance to additional responsibilities, and limited organizational support. These challenges are compounded by head nurses' preference for completing tasks independently, lack of managerial experience, or fear of losing control (8). Insufficient confidence among assistants and the absence of a rewards system further discourages proactive participation in delegated responsibilities.

A body of international research has explored these complexities. A descriptive correlational study conducted in Minia Governorate, Egypt, identified a positive association between effective delegation and job engagement among nursing staff, despite generally modest levels of delegation and involvement (7). Another Egyptian study highlighted that excessive workload, fear of liability, inadequate incentives, and resource constraints were major impediments to successful delegation in a university hospital setting (6). Findings from Denmark demonstrated that primary care physicians could delegate complex tasks without compromising job satisfaction, provided the tasks were meaningful and varied (9). Studies have also indicated a neutral or uncertain attitude among nurse managers toward delegation. In one study, the overall mean score on attitudes toward delegation was 3.1 ± 0.99, reflecting a lack of clarity or confidence among nurse leaders in their delegation practices (10). Similarly, 74.1% of nurse managers reported a neutral stance on effective delegation (11). Factors such as low self-esteem, insufficient training, and ambiguous policies contribute to these attitudes. Additional findings revealed that many nurse managers remained unsure of their capacity to delegate and expressed frustration when delegated tasks were left incomplete, further underscoring the need for targeted interventions (12,13). Given this backdrop, it becomes critical to assess nurses' perceptions and attitudes towards delegation, particularly in public hospital settings where resource constraints and workforce shortages further complicate task distribution. Understanding these attitudes will not only illuminate current gaps in practice but also guide policy and training reforms to strengthen nursing leadership competencies. The objective of this study is to determine the attitudes of nurses toward effective delegation in a public hospital in Layyah, with the aim of identifying gaps, promoting skill development, and ultimately enhancing patient care outcomes.

Volume 3 Issue 3: Nurses' Attitudes Toward Delegation
Karim R et al.

INSIGHTS-JHR
INSIGHTS-JOURNAL OF HEALTH
AND REHABILITATION ■ ■ ■

METHODS

A quantitative descriptive study design was employed to assess nurses' attitudes toward effective delegation in a public hospital setting in Layyah, Pakistan. The study was conducted over a period of six months at District Headquarters (DHQ) Hospital Layyah, following ethical approval from the Institutional Review Board of AIMS College of Nursing, Layyah. All ethical protocols were strictly followed, ensuring confidentiality, anonymity, and voluntary participation. Informed consent was obtained in written form from all participants, and any personal identifiers were omitted in the reporting or publication of findings to protect participant privacy. Participants were informed of their right to withdraw at any point without penalty, and all known risks or benefits were disclosed prior to participation. The target population consisted of nurse managers and nursing officers aged between 25 to 65 years, working across various departments in DHQ Hospital. Nursing students were excluded to ensure the sample accurately reflected the perspectives of practicing professionals involved in delegation practices. A convenience sampling technique was utilized to select participants, and the sample size was calculated using Slovin's formula: $n = N / (1 + N * e^2)$, where $N = 88$ and $e = 0.05$ (margin of error), resulting in a final sample size of 70 respondents. While convenience sampling is practical in settings with limited accessibility to broader populations, it may limit generalizability; however, it was deemed suitable for the scope and setting of this study.

Data were collected using a structured, self-administered questionnaire comprising three sections. Part I captured demographic and professional characteristics, including age, gender, education level, department, years of experience, and designation. Part II included 11 items assessing nurses' attitudes toward delegation, while Part III consisted of 12 items measuring delegation practices. Both attitude and delegation sections were formatted on a five-point Likert scale ranging from Strongly Agree (1) to Strongly Disagree (5), allowing a standardized quantitative assessment of perceptions and behaviors. The reliability of the instrument was validated with a Cronbach's alpha of 0.70, indicating acceptable internal consistency for the study variables. The independent variable in this research was nurses' attitude, while the dependent variable was the effectiveness of delegation. Data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 23.0 along with Microsoft Excel for graphical representations. Descriptive statistics including frequency, percentages, means, and standard deviations were applied to summarize participant responses. Cross-tabulations were used to identify relationships between variables, and results were presented with appropriate visual aids such as graphs and tables for clarity and ease of interpretation.

RESULTS

A total of 70 participants were included in the study, all of whom were female nurse managers or charge nurses working in various departments of DHQ Hospital, Layyah. The majority of respondents (87.2%) were between the ages of 21 and 30 years, while the remaining 12.8% fell within the 31 to 40-year age group. No participants were below 20 years or above 40 years. In terms of educational qualifications, 50% held a General Nursing and Midwifery (GNM) diploma, 29% had completed Post-RN BSc Nursing, and 21% held a basic BSc Nursing degree. Regarding work experience, 64.3% had over 10 years of professional experience, while 35.7% reported 3 to 10 years of service. The departmental distribution included 43% each from the medical and surgical wards, and 14% from the emergency room. In terms of designation, 87% were charge nurses and 13% were nurse managers. Assessment of nurses' attitudes toward delegation revealed varied perspectives. When asked whether they would delegate more if tasks were performed as desired, 47% strongly agreed and 39% agreed. Approximately 60% strongly agreed and 35.7% agreed that nurses feel they lack the time to delegate effectively. Similarly, 48.6% agreed that they get upset when tasks are not completed according to instructions, while 15.7% strongly agreed. Regarding the belief that staff are not committed enough to complete delegated tasks, 24.3% strongly disagreed, 22.9% disagreed, and only 15.7% agreed. A high proportion (70%) strongly agreed with the concern of being criticized if delegation results in poor performance. However, 42.9% and 57.1% strongly disagreed and disagreed respectively with the notion that delegation fails to save time, indicating positive expectations of delegation efficacy. Confidence in delegating was evident, with 57.1% strongly agreeing and 42.9% agreeing that they would delegate more if they were more confident.

Delegation practices were positively perceived. For the statement regarding considering staff's individual skills before delegating, 42.8% strongly agreed and 21.4% agreed. A significant majority (85.7%) strongly agreed that they seek feedback to ensure tasks are clearly explained. Similarly, 78.5% strongly agreed that they provide feedback to staff following delegation. When asked if they make task expectations clear in terms of time, location, and purpose, responses were largely affirmative: 78.5% strongly agreed about making clear *when* the task should be done, 57.1% strongly agreed about *where* to perform the task, 50% each agreed and strongly agreed on clarifying *how* and *why* the task should be done. The overall attitude scores indicated that 93% of participants demonstrated a positive attitude

Volume 3 Issue 3: Nurses' Attitudes Toward Delegation
Karim R et al.

INSIGHTS-JHR
INSIGHTS-JOURNAL OF HEALTH
AND REHABILITATION ▪ ▪ ▪

toward delegation (score ≥ 35 out of 55), while only 7% exhibited a negative attitude. This suggests a generally constructive perception among nurses regarding the use of delegation as a managerial strategy. The inferential analysis revealed a weak positive correlation ($r = 0.065$) between nurses' attitude scores and their delegation behavior scores, with a p-value of 0.590, indicating that the relationship was not statistically significant. This suggests that although most participants expressed positive attitudes toward delegation, this did not translate into a proportional increase in effective delegation behaviors. The lack of a significant correlation underscores a disconnect between intention and practice, possibly influenced by external factors such as institutional constraints, role ambiguity, or personal confidence. These findings highlight the need for targeted training and structural support to bridge the gap between favorable attitudes and actual delegation practices.

Table 1: Demographic variables Data Presentation:

Sociodemographic variables	Frequency (N)	Percentage (%)
Age (years)		
< 20	0	0
21-30	61	87.2
31-40	9	12.8
Gender		
Male	0	0
Female	70	100
Educational status		
GNM	35	50
Basic B.Sc. Nursing (BSN)	15	21
Post-basic B.Sc. Nursing (POST RN)	20	29
Years of experience		
<3	0	0
3-10	25	36
> 10	45	64
Department		
Medical	30	43
Surgical	30	43
ER	10	14
Designation		
Nurse Managers	9	13
Charge Nurses	**61**	**87**

Table 2: Nurses Attitude related Questions

Sr. No.	Statement	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
		N	%	N	%	N	%	N	%	N	%
1.	I would delegate more, but the jobs I delegate never seem to get done the way I want them to be done.	2	3	5	7	3	4	27	39	33	47
2.	Nurses feel they have less time to delegate effectively.	0	0	0	0	3	4.2	25	35.7	42	60
3.	Nurse Managers get upset when the job is not done according to their instructions.	4	5.7	14	20	7	10	34	48.6	11	15.7
4.	Managers feel that staffs are not committed and the tasks delegated would not be completed.	17	24.3	16	22.9	11	15.7	15	21.4	11	15.7

Volume 3 Issue 3: Nurses' Attitudes Toward Delegation
Karim R et al.

INSIGHTS-JHR
INSIGHTS-JOURNAL OF HEALTH
AND REHABILITATION ▪ ▪ ▪

Sr. No.	Statement	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
5.	I would delegate more, but if the individual I delegate the task to does an incompetent job, I'll be severely criticized.	0	0	0	0	4	5.7	10	49	70	24.3
6.	When Nurse managers delegate, the managers usually find that often the outcome is not good enough and need to re-do it.	18	25.7	19	27.1	4	5.7	19	27.1	10	14.3
7.	Nurse managers mainly find that delegation is not saving their time.	30	42.9	40	57.1	0	0	0	0	0	0
8.	Due to lack of necessary experience, the Nurse managers cannot delegate as much they want.	0	0	0	0	0	0	30	42.9	40	57.1
9.	Nurse Manager delegate less because of they want perfection.	30	42.9	27	38.6	0	0	13	18.6	0	0
10.	Nurse Managers can give the routine tasks, but they feel they must keep the non-routine out.	0	0	0	0	0	0	46	65.7	24	34.3
11.	**Nurse manager would delegate more if they were more confident in delegating.**	**0**	**0**	**0**	**0**	**0**	**0**	**30**	**42.9**	**40**	**57.1**

Table 3: Delegation Questions

Sr. No.	Statement	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
		N	%	N	%	N	%	N	%	N	%
1.	I take into account staff's individual skills prior to delegation.	3	4.2	9	12.8	13	18.5	15	21.4	30	42.8
2.	I give staff feedback following delegation (e.g., praise).	0	0	0	0	3	4.2	12	17.1	55	78.5
3.	I seek feedback from staff on whether you have explained the task sufficiently.	0	0	0	0	0	0	10	14.28	60	85.7
4.	I seek feedback from staff to improve your delegation skills.	1	1.42	3	4.2	9	12.8	17	24.2	40	57.1
5.	I find you spend a lot of time on jobs others could do.	13	18.5	12	17.1	0	0	10	14.2	35	50
6.	I think you give up power or lose respect because of delegation.	15	21.4	10	14.28	5	7.14	9	12.8	31	44.8
7.	I concerned that staff finds me lazy for delegating tasks.	12	17.1	9	12.8	3	4.2	16	22.8	30	42.8
8.	In delegation, I make clear who is to do the task.	0	0	0	0	9	12.8	30	42.8	31	44.2
9.	In delegation, I make clear when to do the task.	1	1.42	3	4.2	6	8.57	55	78.5	15	21.4
10.	In delegation, I make clear where to do the task.	0	0	5	7.14	10	14.28	15	21.4	40	57.1
11.	In delegation, I make clear why to do the task.	0	0	0	0	15	21.4	20	28.5	35	50
12.	**In delegation, I make clear how to do the task.**	**0**	**0**	**9**	**12.8**	**1**	**1.42**	**25**	**35.7**	**35**	**50**

Volume 3 Issue 3: Nurses' Attitudes Toward Delegation
Karim R et al.

INSIGHTS-JHR
INSIGHTS-JOURNAL OF HEALTH
AND REHABILITATION ▪ ▪ ▪

Table 4: Overall Attitude Score.

	Frequency	Percent	Valid Percent	Cumulative Percent
Negative attitude (Less than 35score/55)	5	7.14	7	7
Positive Attitude (35 or above score/55)	65	92.85	93	100.0
Total	**70**	**100.0**	**100.0**	

Table 5: Correlation Analysis

Variable 1	Variable 2	Correlation Coefficient (r)	p-value	Interpretation
Attitude Score	Delegation Score	0.065	0.5905	Not Significant

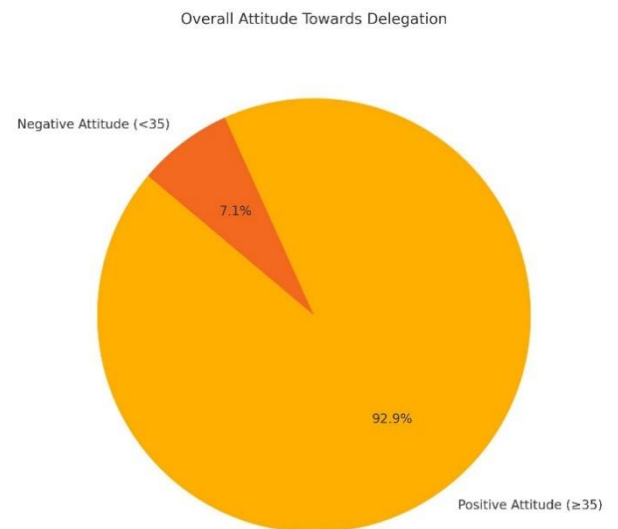*Figure 1 Strong Agreement with Delegation Practices*

Figure 2 Overall Attitude Towards Delegation

DISCUSSION

The findings of the present study highlighted a predominantly positive attitude among nurse managers and charge nurses toward delegation in a public hospital setting. The majority of respondents expressed favorable views on key aspects influencing effective delegation, with 93% scoring 35 or above on the attitude scale, indicating a strong inclination toward utilizing delegation as a managerial strategy. Most participants agreed that lack of time (96%) and fear of poor outcomes leading to criticism (94.3%) were significant barriers to delegation. Additionally, 100% of participants acknowledged that lack of necessary experience affected their ability to delegate effectively, reflecting an awareness of internal limitations that influence their decision-making in clinical settings. Interestingly, 81.5% of participants disagreed with the notion that striving for perfection prevents them from delegating, demonstrating a constructive outlook on collaborative work and trust in team dynamics. When compared with previous research, these findings contrast with studies that found a predominantly neutral or uncertain attitude among nurse managers regarding delegation, where overall mean scores hovered around neutrality (3.1 ± 0.99) and up to 74.1% of respondents reported ambivalence toward delegation practices (14-16). Other studies have reported more mixed attitudes, with some participants showing reluctance due to fear of reduced authority or being perceived as lazy when delegating tasks (17-19). While the present study aligned with prior findings indicating that younger or less experienced nurses often lack confidence in delegation, it extended this understanding by demonstrating unanimous recognition that experience is a key facilitator for effective delegation (20).

A key strength of this study was its structured approach in measuring both attitudes and actual delegation behaviors through a standardized Likert-scale instrument, which was internally validated with a satisfactory Cronbach's alpha value. The comprehensiveness of the questionnaire allowed for nuanced insights into specific fears, motivations, and behavioral tendencies related to delegation.

Volume 3 Issue 3: Nurses' Attitudes Toward Delegation
Karim R et al.

INSIGHTS-JHR
INSIGHTS-JOURNAL OF HEALTH
AND REHABILITATION ■ ■ ■

Furthermore, the analysis of item-level responses, along with an overall score, enabled a granular understanding of the factors shaping nurses' attitudes. However, the study faced limitations that must be acknowledged. The sample size of 70 participants limits the generalizability of the findings, particularly in diverse healthcare settings with differing workloads, team compositions, and institutional cultures. The use of a convenience sampling method, while practical, introduces potential sampling bias, reducing the representativeness of the sample. Additionally, the study employed a cross-sectional design, which does not capture changes in attitude or behavior over time, nor does it allow for causal inference. The short duration of the study further constrained the ability to observe longitudinal trends or training effects.

Despite the overwhelmingly positive attitude demonstrated, the inferential analysis revealed no statistically significant correlation between nurses' attitudes and actual delegation practices ($r = 0.065$, $p = 0.590$), suggesting that a favorable perception of delegation does not automatically translate into more frequent or more effective delegation. This finding underscores the need for targeted interventions that bridge the gap between intention and practice. Leadership training, mentorship, and systems-level support must be reinforced to empower nurse managers not only to value delegation but to act on it confidently. Future studies should address these limitations by adopting probability sampling techniques to enhance external validity (21). Incorporating qualitative methodologies may offer deeper insights into contextual and psychological barriers that prevent nurses from translating positive attitudes into practice. Additionally, longitudinal research could explore how delegation attitudes evolve with increased clinical experience or after targeted interventions. There is also a need to evaluate how organizational support structures, such as delegation protocols, workload distribution policies, and team communication training, influence the practical enactment of delegation across different healthcare tiers. In conclusion, while this study reaffirmed the positive disposition of nurses toward delegation, it revealed critical gaps between perceived value and applied behavior. Addressing these through evidence-based policies and institutional reforms will be essential for improving team efficiency, job satisfaction, and ultimately, patient care outcomes.

CONCLUSION

The present study concluded that nurse managers and nursing officers demonstrated a generally positive attitude toward effective delegation, emphasizing its vital role in enhancing patient care quality and organizational efficiency. The findings highlight the importance of equipping nurses with the necessary knowledge, communication skills, and confidence to delegate tasks effectively within clinical teams. Promoting staff development through ongoing education and targeted training in delegation practices is essential to foster competence, accountability, and trust within nursing teams. The study underscores the need for healthcare institutions and policymakers to integrate delegation training into continuous professional development programs for nursing leadership, ensuring that delegation is not only valued but consistently applied as a strategic tool for improving workforce performance and patient outcomes.

AUTHOR CONTRIBUTION

Author	Contribution
Rabia Karim*	Substantial Contribution to study design, analysis, acquisition of Data Manuscript Writing Has given Final Approval of the version to be published
Rukhsana Perveen	Substantial Contribution to study design, acquisition and interpretation of Data Critical Review and Manuscript Writing Has given Final Approval of the version to be published
Shabana Kousar	Substantial Contribution to acquisition and interpretation of Data Has given Final Approval of the version to be published
Iram Saleem	Contributed to Data Collection and Analysis Has given Final Approval of the version to be published
Fouzia Saleem	Contributed to Data Collection and Analysis Has given Final Approval of the version to be published

Volume 3 Issue 3: Nurses' Attitudes Toward Delegation
Karim R et al.

INSIGHTS-JHR
INSIGHTS-JOURNAL OF HEALTH
AND REHABILITATION ▪ ▪ ▪

REFERENCES

1.   Ugoani J. Effective Delegation and its impact on employee Performance. International Journal of Economics and Business Administration. 2020;6(3):78-87.

2.   Almutari MSW, Almutairi WSW. Nursing leadership and management: theory, practice, and future impact on healthcare: Mohammed Saad Waslallah Almutari; 2023.

3.   Crevacore C, Jacob E, Coventry LL, Duffield C. Integrative review: Factors impacting effective delegation practices by registered nurses to assistants in nursing. Journal of advanced nursing. 2023;79(3):885-95.

4.   Salem OA, Al-Maater S, Al-Awam H, Al—Zahrani Z. Attitudes of Nurse Managers' Toward Effective Delegation: A Systematic. 2021.

5.   Driscoll K, Masters K. Nursing Practice. Role Development in Professional Nursing Practice. 2024:441.

6.   Bilgen Ozluk PhD R. Assessment of Delegation of Authority Levels of Nurse Managers: A Descriptive Cross-Sectional Study. International Journal of Caring Sciences. 2022;15(2):1283-92.

7.   Mohamed A, Abdel-Ghani A, Kassem A. The Relationship between Leadership Styles, Delegation and Self-Confidence among Head Nurses at El Senbellawein General Hospital. Mansoura Nursing Journal. 2022;9(2):481-92.

8.   Salama SH, Abdeen MA, Mohamed WM. Head Nurses' Attitude Regarding Delegation and Its Relation to Their Competency at Abu Kabir Central Hospital. Zagazig Nursing Journal. 2022;18(2):291-301.

9.   Salem OA, Al-Maater S, Al-Awam H, Al—Zahrani Z. Attitudes of Nurse Managers' Toward Effective Delegation: A Systematic review. South Asian Research Journal of Nursing and Healthcare. 2021;3(3):51-6.

10.   Crevacore C, Coventry L, Duffield C, Jacob E. Factors impacting delegation decision making by registered nurses to assistants in nursing in the acute care setting: a mixed method study. International Journal of Nursing Studies. 2022;136:104366.

11.   Senek M, Robertson S, Ryan T, King R, Wood E, Taylor B, et al. Determinants of nurse job dissatisfaction-findings from a cross-sectional survey analysis in the UK. BMC nursing. 2020;19:1-10.

12.   Moradi T, Rezaei M, Alavi NM. Delegating care as a double-edged sword for quality of nursing care: a qualitative study. BMC Health Services Research. 2024;24(1):592.

13.   Kleinke F, Michalowsky B, Rädke A, Platen M, Mühlichen F, Scharf A, et al. Advanced nursing practice and interprofessional dementia care (InDePendent): study protocol for a multi-center, cluster-randomized, controlled, interventional trial. Trials. 2022;23(1):290.

14.   Michalowsky B, Henning E, Rädke A, Dreier-Wolfgramm A, Altiner A, Wollny A, et al. Attitudes towards advanced nursing roles in primary dementia care - Results of an observational study in Germany. J Adv Nurs. 2021;77(4):1800-12.

15.   Clarke J, Davis K, Douglas J, Peters MDJ. Defining nurse-led models of care: Contemporary approaches to nursing. Int Nurs Rev. 2025;72(1):e13076.

16.   Moradi T, Rezaei M, Alavi NM. Delegating care as a double-edged sword for quality of nursing care: a qualitative study. BMC Health Serv Res. 2024;24(1):592.

17.   Van Hecke A, Decoene E, Embo M, Beeckman D, Bergs J, Courtens A, et al. Development of a competency framework for advanced practice nurses: A co-design process. J Adv Nurs. 2025;81(1):353-65.

18.   Karnehed S, Pejner MN, Erlandsson LK, Petersson L. Electronic medication administration record (eMAR) in Swedish home healthcare-Implications for Nurses' and nurse Assistants' Work environment: A qualitative study. Scand J Caring Sci. 2024;38(2):347-57.

19.   Cherba M, Grosjean S, Bonneville L, Nahon-Serfaty I, Boileau J, Waldolf R. The essential role of nurses in supporting physical examination in telemedicine: Insights from an interaction analysis of postsurgical consultations in orthopedics. Nurs Inq. 2022;29(2):e12452.

20.   Crevacore C, Coventry L, Duffield C, Jacob E. Factors impacting nursing assistants to accept a delegation in the acute care settings: A mixed method study. J Clin Nurs. 2024;33(6):2153-64.

21.   Segev R, Suliman M, Gorodetzer R, Zukin L, Spitz A. Nursing roles in disaster zones: Experiences and lessons from Turkey's 2023 earthquakes. Int Nurs Rev. 2025;72(1):e12964.