

Evaluation of Training Program for Novice Nurses

Erika Jean T. Escamillas
Sacred Heart College of Lucena City Inc.
erikaescamillas1216@gmail.com

Date Submitted:
March 25, 2026

Date Accepted:
June 17, 2026

Date Published:
August 04, 2026

DOI:
10.5281/zenodo.21784487

ABSTRACT

This study evaluated the training program for novice nurses in three selected private hospitals in Cavite. A quantitative descriptive-evaluative and descriptive-comparative design was employed among 60 novice nurses selected through purposive sampling, including newly licensed nurses and nurses returning to bedside practice. Data were gathered using a validated, researcher-developed questionnaire, pre- and post-training knowledge tests, clinical competency checklists, and post-training self- and immediate-superior assessments. Frequency, percentage, percentage rating, weighted arithmetic mean, standard deviation, and appropriate parametric and nonparametric tests were computed using SPSS 25. Respondents strongly agreed that the program provided an effective learning environment (WAM = 3.55), relevant content (WAM = 3.52), effective delivery (WAM = 3.472), and overall effectiveness (WAM = 3.552). Knowledge increased from 88% (Knowledgeable) to 94% (Very Knowledgeable), and the pre-post difference was significant ($Z = 5.102, p < .01$). Overall clinical-skill ratings increased from 2.557 to 3.198, with meaningful gains across infection control, drug administration, airway management, nutrition, elimination, and admission-discharge competencies. Post-training self-assessment and immediate-superior assessment did not differ significantly ($Z = 1.716, p = .086$). The findings support a structured, competency-based enhanced training and competency development program emphasizing simulation, supervised practice, mentoring, and continuous evaluation to strengthen safe and patient-centered nursing care.

Keywords: *novice nurses, training program evaluation, clinical competence, Kirkpatrick model, nursing education, competency development*

INTRODUCTION

The transition from nursing education to professional clinical practice is a demanding stage in which newly hired nurses assume direct responsibility for patient care while consolidating theoretical knowledge, psychomotor skills, clinical judgment, and professional identity. Novice nurses may experience role ambiguity, stress, reduced confidence, and difficulty making independent decisions as they adjust to unfamiliar systems and expectations. These conditions are commonly described as transition or reality shock and can influence performance, retention, and patient safety during the first year of practice (Duchscher, 2021; Labrague & de los Santos, 2020).

Healthcare institutions commonly respond to these challenges through structured orientation and transition-to-practice programs. Effective programs combine organized instruction, guided clinical exposure, coaching, simulation, and performance feedback to help novice nurses progress from rule-dependent practice toward more confident and context-sensitive care. Benner's novice-to-expert perspective explains this development as a gradual process in which competence is strengthened through repeated clinical experience, mentorship, and reflection (Benner, 2020). Evidence likewise indicates that supportive transition programs can

improve clinical confidence, competence, and adjustment among newly employed nurses (Arroyo, 2024; Kaihlanen et al., 2020).

The value of a training program, however, cannot be assumed from its availability alone. Program effectiveness depends on whether the learning environment supports engagement, the content is relevant to actual clinical duties, instructors deliver the material clearly, and participants can transfer learning to practice. Evaluation should therefore examine immediate reactions, knowledge acquisition, skill development, and behavioral application. The Kirkpatrick model provides a practical structure for this purpose by assessing reaction, learning, behavior, and organizational results, although the present study focused on the first three levels (Alliger et al., 2021).

In the Philippine hospital context, novice nurses are expected to demonstrate safe performance in admission and discharge processes, infection control, medication administration, airway management, nutrition, and elimination care. Deficiencies in these competencies can affect continuity of care, medication safety, infection prevention, and patient outcomes. Competency-based evaluation is thus essential for identifying learning gaps, strengthening training content, and ensuring that improvements are reflected in actual workplace performance (Agency for Healthcare Research and Quality, 2020; Institute for Safe Medication Practices, 2021; World Health Organization, 2021).

Despite the widespread use of hospital orientation and training programs, limited institution-specific evidence describes how novice nurses react to these programs, how their knowledge and clinical skills change after participation, and whether their self-assessments correspond with the evaluations of their immediate superiors. This study therefore evaluated the training program for novice nurses in selected private hospitals in Cavite. It examined participants' demographic profile, reactions to the learning environment, relevance, delivery, and overall effectiveness, pre- and post-training knowledge and skills, differences across demographic groups, and the consistency between self- and supervisory ratings. The findings served as the basis for an enhanced training and competency development program.

Literature Review

Transition to Practice and Novice Nurse Development

Novice nurses enter clinical practice with foundational knowledge but limited experience in recognizing patterns, prioritizing care, responding to deterioration, and coordinating complex patient needs. Benner (2020) explained that beginners initially depend on rules and clearly defined procedures because they have not yet accumulated the clinical experiences needed for intuitive judgment. Structured transition programs provide guided exposure that helps novice nurses connect theoretical principles with real patient situations, gradually strengthening their independence and professional confidence.

Transition shock further explains why newly licensed nurses may feel overwhelmed by workload, accountability, unfamiliar routines, and the discrepancy between educational preparation and workplace demands. Duchscher (2021) and Labrague and de los Santos (2020) emphasized that transition support should address both clinical competence and emotional adjustment. A supportive clinical learning environment, accessible preceptors, realistic role expectations, and regular feedback can reduce stress and promote adaptation. Hussein et al. (2021) similarly found that new nurses benefit from learning environments that provide guidance, inclusion, and opportunities to develop confidence in practice.

Training is particularly important because competency gaps among new graduates may involve clinical reasoning as well as technical performance. Simulation, deliberate practice, and supervised return demonstrations permit learners to make decisions and perform procedures in controlled conditions before applying them to patients. Brown et al. (2020), Jeffries et al. (2021), and Shin et al. (2021) noted that simulation-based education can improve clinical performance, confidence, and the integration of knowledge and skills.

Training Evaluation and the Kirkpatrick Model

Training evaluation provides evidence on whether a program is accepted by learners, produces measurable learning, changes workplace behavior, and contributes to organizational outcomes. Kirkpatrick's model organizes evaluation into four levels: reaction, learning, behavior, and results. Reaction considers satisfaction, relevance, and the learning experience; learning measures changes in knowledge, skills, and attitudes; behavior examines transfer to work; and results address longer-term organizational or patient outcomes. The model is widely used because it links participant experience with increasingly observable levels of performance (Alliger et al., 2021).

The present study concentrated on reaction, learning, and behavior. Reaction was assessed through the learning environment, relevance, delivery, and overall effectiveness. Learning was examined through knowledge and competency assessments before and after training. Behavior was represented by the application of clinical skills as rated by the novice nurses and their immediate superiors. This multi-source approach reduced dependence on satisfaction ratings alone and allowed the evaluation to consider whether favorable reactions were accompanied by measurable learning and workplace application.

Comparing self-assessment with supervisor assessment is useful because the two perspectives capture different aspects of competence. Learners have direct awareness of uncertainty and difficulties, whereas supervisors observe task completion and clinical behavior. Gonsalvez et al. (2023) and Pearce et al. (2023) reported that self- and supervisor ratings may differ across developmental stages, but reasonable alignment can indicate that learners possess realistic insight into their competence. Combining both perspectives therefore supports more balanced training decisions.

Learning Environment, Relevance, and Delivery

The learning environment includes the physical and psychological conditions in which training occurs. Clear objectives, accessible materials, respectful trainer-learner relationships, sufficient resources, and opportunities to ask questions contribute to engagement and knowledge acquisition. Oducado et al. (2020) associated a positive nursing learning environment with lower stress and better learning experiences, while Li et al. (2022) highlighted the importance of access, instructor support, and adaptable learning arrangements. These conditions are particularly important for novice nurses who may hesitate to disclose uncertainty in high-stakes clinical settings.

Training relevance refers to the degree to which learning content corresponds with actual duties, competency requirements, and professional goals. Nurses are more likely to participate actively and apply learning when the program addresses routine clinical problems and patient-care responsibilities. Cant and Cooper (2020a) emphasized that clinically relevant content supports transfer to practice, while Kraiger and Ford (2021) described alignment among instructional design, learner needs, and work demands as a central condition for workplace learning.

Delivery concerns the way content is organized and facilitated. Instructor credibility, clear explanations, interactive methods, hands-on activities, and appropriate scheduling influence engagement and retention. Salas et al. (2020) identified practice, feedback, and transfer support as important features of effective training, and Kim and Im (2024) showed that structured and accessible instructional design can enhance nursing learning. Training delivery should therefore combine concise theoretical instruction with guided demonstrations, simulation, discussion, and repeated clinical practice.

Clinical Competence and Patient Safety

Clinical competence involves the integrated application of knowledge, technical skill, judgment, communication, and ethical practice. Admission and discharge processes require accurate assessment, documentation, patient education, and coordination across disciplines. The Agency for Healthcare Research and Quality (2020) emphasized that structured discharge planning and clear patient education support safe transitions of care. These competencies may be difficult for novice nurses because they require simultaneous management of documentation, communication, and clinical decision-making.

Infection control and medication administration are foundational patient-safety domains. Hand hygiene, personal protective equipment, aseptic technique, isolation procedures, and environmental sanitation reduce healthcare-associated infections (Centers for Disease Control and Prevention, 2021). Safe medication practice requires correct preparation, verification, administration, monitoring, patient education, and documentation. The Institute for Safe Medication Practices (2021) stressed standardized safeguards and consistent adherence to medication-administration principles, particularly among clinicians who are still developing experience.

Airway management, nutrition, and elimination care likewise require both routine assessment and more complex psychomotor and communication skills. Nursing fundamentals emphasize correct preparation, procedural technique, monitoring, documentation, and patient teaching across these domains (Potter et al., 2021). Because advanced or less frequently performed procedures may be more difficult to master, continuous supervised practice and competency reassessment are necessary. Simulation and workplace coaching can strengthen retention and help ensure that learning is translated into safe patient care (Brown et al., 2020; World Health Organization, 2021).

Demographic Characteristics and Training Outcomes

Age, sex, and civil status can shape learning preferences, time availability, confidence, and engagement, although they do not necessarily determine competence. Younger nurses may be more familiar with technology-supported learning, while more experienced or returning nurses may draw on broader life and work experience. Effective programs accommodate these differences through flexible methods rather than assuming that one demographic group is inherently more capable. Kaihlanen et al. (2020) emphasized the importance of structured transition support across diverse novice-nurse backgrounds.

Family and personal responsibilities may also affect the time and attention available for training. Yildirim and Ayca (2020) reported that work-family demands can influence nurses' participation and professional experiences. Nevertheless, inclusive program design, supportive scheduling, mentoring, and repeated practice can reduce barriers. Demographic comparisons are therefore useful for identifying groups that may need additional support, but program decisions should remain grounded in demonstrated learning and performance outcomes rather than stereotypes.

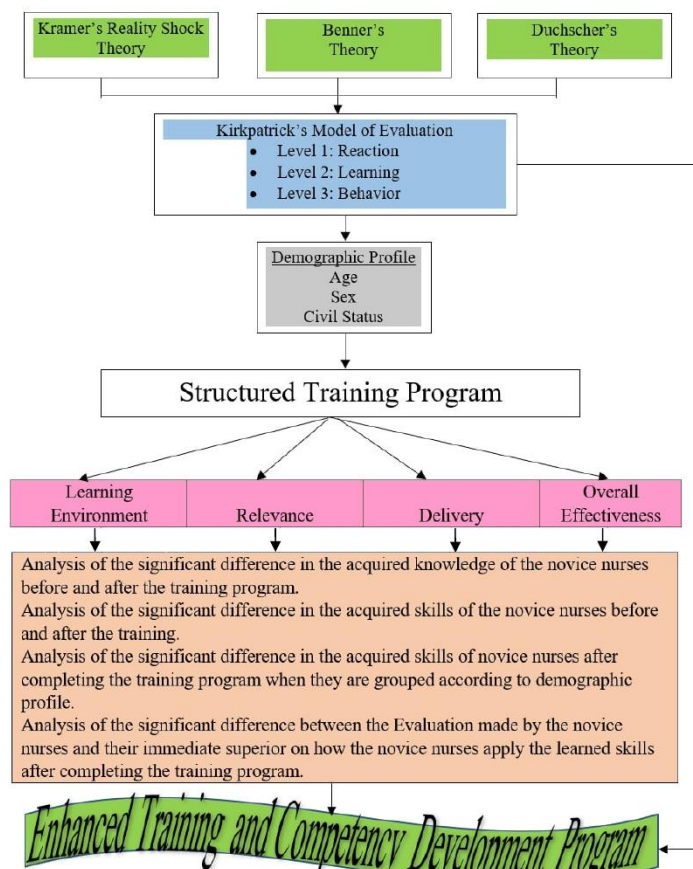


Figure 1. *Theoretical Paradigm for the Evaluation of the Training Program for Novice Nurses*

The paradigm integrates Kramer's Reality Shock Theory, Benner's Novice-to-Expert Theory, Duchscher's Transition Shock Theory, and the first three levels of Kirkpatrick's evaluation model. It positions the structured training program as the mechanism through which novice nurses react to the learning environment, relevance, delivery, and overall effectiveness; acquire knowledge and clinical skills; and apply these competencies in practice. Demographic variables were used for group comparisons, while the evaluation findings informed the enhanced training and competency development program.

METHODS

Research Design

The study employed a quantitative descriptive-evaluative and descriptive-comparative design. The descriptive component summarized the respondents' age, sex, and civil status and described their reactions, knowledge, and clinical competency ratings. The evaluative component examined the training program in terms of learning environment, relevance, delivery, and overall effectiveness, as well as knowledge and skills before and after training. The comparative component tested differences across demographic groups, changes between pre-and post-training assessments, and differences between novice-nurse and immediate-superior ratings. No variables were experimentally manipulated.

Research Locale

The study was conducted in three selected private hospitals in Cavite. The institutions had comparable patient-care standards, staffing structures, and organized orientation or training programs for newly hired nurses, although their internal policies and implementation practices varied. Their regular intake of novice nurses and willingness to support training enhancement made them appropriate settings for evaluating the program and developing context-sensitive recommendations.

Participants and Sampling Technique

The participants were 60 novice nurses selected through purposive sampling. They included 45 newly licensed nurses and 15 nurses returning to bedside practice after working outside direct clinical care. Eligibility required current registration, recent entry or re-entry into clinical practice, participation in the hospital training program, willingness to participate, and provision of informed consent. The study focused on nurses with less than one year of current clinical experience. Immediate-superior assessments were obtained to evaluate the application of learned skills after training.

Research Instrument

Data were gathered using a researcher-developed, four-part questionnaire. The first part obtained demographic information. The second measured knowledge through pre- and post-training assessments. The third assessed clinical competencies in admission and discharge, infection control, drug administration, airway management, nutrition, and elimination before and after training and included parallel post-training ratings by immediate superiors. The fourth measured reaction to the training program through learning environment, relevance, delivery, and overall effectiveness using a four-point scale.

The instrument was reviewed by a chief nursing officer, a nurse supervisor, and a nurse serving in an administrative role for clarity, relevance, construct alignment, and clinical appropriateness. It was pilot-tested among 30 novice nurses who were not part of the final sample. Cronbach's alpha coefficients for the subscales ranged from .715 to .981, exceeding the minimum acceptable value of .70. Revisions based on expert feedback, item analysis, and pilot results were incorporated before the instrument received final approval.

Data Gathering Procedure

Approval was secured from the graduate-school authorities and the administrators and nursing service offices of the participating hospitals. Eligible novice nurses received an orientation explaining the purpose, procedures, expected duration, voluntary nature, and confidentiality provisions of the study. After informed consent, the pre-training knowledge and competency assessments were administered under controlled conditions. Participants then completed the hospitals' structured training program. Post-training knowledge, competency, reaction, self-assessment, and immediate-superior assessment data were collected during the completion phase of the program. Retrieved instruments were checked for completeness, coded, and prepared for analysis.

Data Analysis

Frequency and percentage were used for demographic data. Percentage ratings described knowledge performance, while weighted arithmetic means and standard deviations summarized reaction and clinical competency ratings. Knowledge scores were interpreted as Very Knowledgeable (90%-100%), Knowledgeable (80%-89%), Less Knowledgeable (75%-79%), or Least Knowledgeable (below 75%). Reaction scores were interpreted from Strongly Disagree to Strongly Agree, and competency scores from Least Competent to Highly Competent.

Shapiro-Wilk and Levene tests guided the selection of parametric or nonparametric procedures. Depending on the distribution and number of groups, one-way analysis of variance, independent-samples t tests, Kruskal-Wallis H tests, Mann-Whitney U tests, Wilcoxon signed-rank tests, and Friedman tests were used at the .05 level of significance. SPSS version 25 was used for statistical processing.

Ethical Consideration

The study observed informed consent, voluntary participation, confidentiality, anonymity, beneficence, non-maleficence, justice, and transparency. Participation or refusal did not affect employment or professional standing. Instruments were coded rather than named, physical records were secured, and electronic data were password-protected and accessible only to the researcher. Data handling followed the Philippine Data Privacy Act of 2012. The findings were reported in aggregate form and were used for academic and training-development purposes rather than individual personnel evaluation.

RESULTS AND DISCUSSION

Profile of the Novice Nurses

Table 1. *Demographic Profile of the Respondents (N = 60)*

Variable	Category	f	%
Age	20-28 years	24	40.0
	29-44 years	33	55.0
	45-60 years	3	5.0
Sex	Male	23	38.0
	Female	37	62.0
Civil status	Single	37	62.0
	Married	23	38.0

Most participants were 29-44 years old (55%), while 40% were 20-28 years old and 5% were 45-60 years old. Female nurses constituted 62% of the sample, and 62% were single. The distribution indicates that the program served both newly licensed younger adults and nurses in the consolidating stage of professional or personal development. The predominance of women is consistent with the broader nursing workforce described by the World Health Organization (2020). Because the participants represented different life stages, the analysis examined whether reactions and skill development varied according to age, sex, and civil status.

Reaction to the Training Program

Table 2. *Evaluation of the Training Program*

Dimension	WAM	Interpretation	Highest-Rated Indicator
Learning environment	3.550	Strongly Agree	Supportive and respectful atmosphere (3.72)
Relevance	3.520	Strongly Agree	Relevant to current nursing role (3.72)
Delivery	3.472	Strongly Agree	Instructor knowledgeable about topics (3.67)
Overall effectiveness	3.552	Strongly Agree	Enhanced knowledge and skills (3.68)

Respondents strongly agreed with all four reaction dimensions. The learning environment received a WAM of 3.55, supported by the high rating for a respectful and supportive atmosphere. Relevance obtained a WAM of 3.52, with direct alignment to the current nursing role rated highest. Delivery was also strongly endorsed (WAM = 3.472), particularly the instructor's command of the subject. Overall effectiveness received the highest dimension mean (WAM = 3.552), and participants strongly agreed that the program enhanced their knowledge and skills.

These findings indicate that the program met important conditions for learner engagement. Supportive relationships and clear learning conditions help novice nurses participate without fear of judgment, while clinically relevant content strengthens perceived usefulness and transfer. The results are consistent with Oducado et al. (2020), Cant and Cooper (2020a), and Salas et al. (2020), who emphasized learning climate, relevance, active methods, and instructor capability as central features of effective professional development.

Knowledge Acquired Before and After Training

Table 3. *Knowledge Performance Before and After Training*

Assessment	Correct Responses	Percentage Rating	Interpretation	Test Result
Pre-test	1,433 of 1,800	88%	Knowledgeable	
Post-test	1,630 of 1,800	94%	Very Knowledgeable	
Pre-test vs. post-test				$Z = 5.102, p < .01$, Significant

Knowledge improved from an overall percentage rating of 88% before training to 94% after training. The gain moved participants from the Knowledgeable to the Very Knowledgeable category. The Wilcoxon signed-rank test confirmed a significant pre-post difference ($Z = 5.102, p < .01$). Large improvements were observed in several items that initially reflected lower knowledge, although the correct sequence for removing personal protective equipment remained a persistent gap at 68% after training.

The significant increase shows that structured training strengthened cognitive outcomes across essential nursing topics. The result supports the value of clearly organized, role-specific instruction and repeated assessment. Kraiger and Ford (2021) and Kim and Im (2024) emphasized that workplace learning improves when content, practice, and assessment are closely aligned. The remaining weakness in PPE removal also demonstrates why overall improvement should not obscure item-specific risks that require targeted retraining and demonstration.

Clinical Skills Before and After Training

Table 4. *Summary of Clinical Competency Ratings Before and After Training*

Clinical Competency	Before WAM	Before Level	After WAM	After Level
Admission and discharge process	2.466	Less Competent	3.134	Competent
Infection control	2.530	Competent	3.224	Competent
Drug administration	2.512	Competent	3.246	Competent
Airway management	2.582	Competent	3.168	Competent
Nutrition	2.684	Competent	3.204	Competent
Elimination	2.568	Competent	3.214	Competent
Overall	2.557	Competent	3.198	Competent

The overall clinical competency rating increased from 2.557 before training to 3.198 after training. Admission and discharge improved from Less Competent to Competent, while all other domains remained within the Competent category but recorded higher post-training means. Drug administration received the highest post-training WAM (3.246), followed by infection control (3.224), elimination (3.214), nutrition (3.204), airway management (3.168), and admission-discharge processes (3.134).

The gains indicate that the training supported the development of both routine and more complex clinical tasks. Higher ratings for medication and infection-control competencies are important because these domains directly affect patient safety. The findings support the use of competency-based practice, simulation, and repeated return demonstrations described by the Institute for Safe Medication Practices (2021), the Centers for Disease Control and Prevention (2021), and Shin et al. (2021). Admission and discharge remained the lowest domain, suggesting that integrative responsibilities involving assessment, coordination, patient education, and documentation require additional guided practice.

Application of Learned Skills: Self and Immediate-Superior Assessment

Table 5. *Post-Training Clinical Competency as Assessed by Novice Nurses and Immediate Superiors*

Clinical Competency	Novice Nurse WAM	Level	Immediate Superior WAM	Level
Admission and discharge process	3.134	Competent	3.198	Competent
Infection control	3.224	Competent	3.358	Highly Competent
Drug administration	3.246	Competent	3.306	Highly Competent
Airway management	3.168	Competent	3.196	Competent
Nutrition	3.204	Competent	3.200	Competent
Elimination	3.214	Competent	3.186	Competent
Overall	3.198	Competent	3.240	Competent

Immediate-superior ratings were slightly higher overall (WAM = 3.240) than novice-nurse self-ratings (WAM = 3.198). Supervisors rated infection control and drug administration as Highly Competent, whereas the novice nurses rated all six domains as Competent. The closest ratings occurred in nutrition and elimination, while the largest difference appeared in infection control. Nevertheless, the overall difference between self- and supervisor assessments was not statistically significant ($Z = 1.716$, $p = .086$).

The absence of a significant difference suggests reasonable agreement between perceived and observed competence. This alignment supports the use of self-assessment for reflective practice while retaining supervisory assessment for patient-safety oversight. Gonsalvez et al. (2023) and Pearce et al. (2023) noted that self-ratings can be more cautious than supervisor ratings because learners remain aware of uncertainty and ideal performance standards. Structured feedback should therefore help novice nurses interpret ratings, identify specific gaps, and translate reflection into action.

Differences Across Groups and Basis for Program Enhancement

Table 6. *Summary of Inferential Findings*

Comparison	Statistic	p-value	Decision / Interpretation
Reaction across age groups	Overall $F = 2.244$	.115	Not significant
Reaction by sex	Overall $t = 0.214$	.832	Not significant
Reaction by civil status	Overall $t = 1.112$	.271	Not significant
Knowledge: pre-test vs. post-test	$Z = 5.102$	< .01	Significant improvement
Skills: pre-post across age groupings	$\chi^2 = 35.526$	< .01	Significant improvement
Skills: pre-post by sex	$Z = 5.725$	< .01	Significant improvement
Skills: pre-post by civil status	$Z = 5.725$	< .01	Significant improvement
Self vs. immediate-superior rating	$Z = 1.716$	.086	Not significant

Reaction to the training program did not differ significantly according to age, sex, or civil status. This indicates that the learning environment, relevance, delivery, and overall effectiveness were perceived consistently across demographic groups. Knowledge improved significantly after training, and pre-post skill differences were significant when examined across age, sex, and civil-status groupings. These results show broad program benefit while also indicating that the magnitude of skill development may vary among participants with different learning pace, experience, or personal circumstances.

The findings served as the basis for an enhanced training and competency development program. The proposed output retains the effective features of the existing program while strengthening areas that require additional practice. It includes structured orientation on hospital policies and patient safety; simulation and return demonstration for admission-discharge, infection control, drug administration, airway management, nutrition, and elimination; a formal mentorship or preceptorship system; standardized self- and supervisor-assessment checklists; pre- and post-tests; individualized feedback; and follow-up competency evaluation. The enhanced program is intended to support sustained competence, confidence, professional adjustment, and safe patient-centered care.

CONCLUSION

The training program was positively received by novice nurses and was evaluated as supportive, relevant, effectively delivered, and highly useful in strengthening knowledge and clinical performance. Participants demonstrated a significant increase in knowledge and an overall improvement in competency ratings after training. The gains extended across the six clinical domains, although admission and discharge processes and selected complex tasks involving documentation, patient education, sterile technique, and equipment-related procedures require continued reinforcement. Post-training self-assessments were generally consistent with immediate-superior evaluations, indicating that novice nurses possessed a reasonable awareness of their clinical competence.

The findings further show that the program was perceived consistently across age, sex, and civil-status groups, while skill development remained responsive to individual and demographic circumstances. The study contributes an evidence-based basis for strengthening novice-nurse transition programs through simulation, deliberate practice, mentorship, standardized competency assessment, and continuing feedback. The proposed enhanced training and competency development program can support a safer transition to professional practice and promote competent, confident, and patient-centered nursing care.

Recommendation

Nursing service administrators and hospital leaders should institutionalize a structured competency-based program that combines orientation, simulation, return demonstration, guided clinical practice, mentoring, and periodic reassessment. Greater emphasis should be placed on admission and discharge coordination, PPE removal, sterile procedures, documentation, patient education, and other complex or less frequently performed tasks. Adequate training time, materials, equipment, and protected opportunities for supervised practice should be provided.

Immediate superiors and senior nurses should use standardized competency checklists and constructive feedback conferences to align self-assessment with observed performance. Novice nurses should actively seek mentoring, participate in reflective practice, and maintain continuous professional learning. Nurse educators and professional nursing organizations should support evidence-based transition programs and continuing education. Future studies should employ longitudinal designs, include Kirkpatrick's fourth-level outcomes, and examine whether training gains are sustained and associated with patient-safety, quality-of-care, retention, and organizational outcomes.

References

- Agency for Healthcare Research and Quality. (2020). Care transitions from hospital to home: IDEAL discharge planning.
- Alliger, G. M., Tannenbaum, S. I., Bennett, W., & Traver, H. (2021). Evaluating training programs: The role of the Kirkpatrick model in healthcare education. *Human Resource Development Review*, 20(2), 123-145.
- Arroyo, E. (2024). Evaluation of a new graduate nursing orientation program. *Open Journal of Nursing*, 14, 433-446. <https://doi.org/10.4236/ojn.2024.148030>
- Benner, P. (2020). From novice to expert: Excellence and power in clinical nursing practice (Commemorative ed.). Prentice Hall. (Original work published 1984)
- Brown, T., Williams, B., & Lynch, M. (2020). The impact of simulation on clinical skill performance among novice nurses. *Nurse Education Today*, 85, 104295.
- Cant, R. P., & Cooper, S. J. (2020a). The importance of relevance in nursing training: Evidence for curriculum design. *Nurse Education in Practice*, 44, 102712.
- Cant, R. P., & Cooper, S. J. (2020b). Simulation-based learning in nurse education: A systematic review. *Nurse Education Today*, 49, 63-71.
- Centers for Disease Control and Prevention. (2021). Infection control guidance for healthcare professionals.
- Duchscher, J. E. B. (2021). Transition shock: The initial stage of role adaptation for newly graduated registered nurses. *Canadian Journal of Nursing Research*, 53(2), 82-93. (Original work published 2009)
- Gonsalvez, C. J., Riebel, T., Nolan, L. J., Pohlman, S., & Bartik, W. (2023). Supervisor versus self-assessment of trainee competence: Differences across developmental stages and competency domains. *Journal of Clinical Psychology*.

- Hussein, R., Everett, B., Ramjan, L. M., Hu, W., & Salamonson, Y. (2021). New graduate nurses' experiences in a clinical learning environment. *Journal of Clinical Nursing*, 30(1-2), 161-172.
- Institute for Safe Medication Practices. (2021). Guidelines for safe medication administration in healthcare settings.
- Jeffries, P. R., Rodgers, B., & Adamson, K. (2021). NLN Jeffries simulation theory: Brief narrative description. *Nursing Education Perspectives*, 42(5), 292-293.
- Kaihlanen, A. M., Elovainio, M., Haavisto, E., Salminen, L., & Sinervo, T. (2020). Final clinical practicum, transition experience, and turnover intentions among newly graduated nurses. *Nurse Education Today*, 84, 104245.
- Kim, S., & Im, M. (2024). Development and evaluation of nursing clinical practice education using m-learning. *Healthcare*, 12(2), 206. <https://doi.org/10.3390/healthcare12020206>
- Kraiger, K., & Ford, J. K. (2021). The science of workplace instruction: Learning and development applied to work. *Annual Review of Organizational Psychology and Organizational Behavior*, 8, 45-72.
- Labrague, L. J., & de los Santos, J. A. A. (2020). Transition shock and professional adjustment among newly graduated nurses: A systematic review. *Journal of Nursing Scholarship*, 52(4), 356-364.
- Li, W., Gillies, R., He, M., Wu, C., Liu, S., Gong, Z., & Sun, H. (2022). Barriers and facilitators to online medical and nursing education. *Medical Education Online*, 27(1), 2065936.
- Oducado, R. M. F., Rabacal, J., Moralista, R., & Tamdang, K. (2020). Perceived stress and learning environment among nursing students. *Nurse Media Journal of Nursing*, 10(1), 1-12.
- Pearce, M., et al. (2023). Comparison between surgical trainee self-assessment and supervisor scores in technical and nontechnical skills to identify underperforming trainees. *Journal of Surgical Education*.
- Potter, P. A., Perry, A. G., Stockert, P., & Hall, A. (2021). *Fundamentals of nursing* (10th ed.). Elsevier.
- Salas, E., Tannenbaum, S. I., Kraiger, K., & Smith-Jentsch, K. A. (2020). The science of training and development in organizations: What matters in practice. *Psychological Science in the Public Interest*, 21(2), 74-101.
- Shen, M., & Feng, Z. (2024). Continuing nursing education: An action research study on the implementation of a nursing training program using the Holton Learning Transfer System Inventory. *BMC Medical Education*, 24, 610. <https://doi.org/10.1186/s12909-024-05552-6>
- Shin, S., Park, J. H., & Kim, J. H. (2021). Effectiveness of simulation-based education in nursing: A meta-analysis. *Nurse Education Today*, 87, 104345.
- World Health Organization. (2020). *State of the world's nursing 2020: Investing in education, jobs and leadership*.
- World Health Organization. (2021). *Global patient safety action plan 2021-2030*.
- Yildirim, D., & Aycan, Z. (2020). Nurses' work demands and work-family conflict: A cross-sectional study. *Journal of Nursing Management*, 28(5), 1081-1089.