



COMPREHENSIVE REVIEW ON IMPLEMENTING A HOSPITAL-BASED RADIOLOGY NURSING ORIENTATION PROGRAM FOR NEW GRADUATE PEDIATRIC NURSES

¹Faisal Hamedsoudalsharari, ²Hasan Musferabdullahalsaloom, ³Hadi Hassan Mana Almakael, ⁴Jaber Mana Jaberalmushyif, ⁵Mohammed Salemhamadalhabes, ⁶Ali Saleh Mohammed Al Alshahi, ⁷Ali Abdulrhman Abdu Sofyani, ⁸Majdi Mohammed Ibrahim Khawaji, ⁹Nawaf Mabrok Nami Almutairy, ¹⁰Rayan Khalid Ali Alzahrani, ¹¹Mahmoud Mohammed Alanazi, ¹²Abdulrahman Owaidh Atgan Alharbi

¹Ministry of Health, Saudi Arabia, FahaAlsharari@moh.gov.sa

²Ministry of Health, Saudi Arabia, hmalsaloom@moh.gov.sa

³Ministry of Health, Saudi Arabia, halmakayil@moh.gov.sa

⁴Ministry of Health, Saudi Arabia, jalmushyif@moh.gov.sa

⁵Ministry of Health, Saudi Arabia, msalhabes@moh.gov.sa

⁶Ministry of Health, Saudi Arabia, ASAlshahi@moh.gov.sa

⁷Ministry of Health, Saudi Arabia, AlSofyani@moh.gov.sa

⁸Ministry of Health, Saudi Arabia, mamkhawaji@moh.gov.sa

⁹Ministry of Health, Saudi Arabia, NamaAlmutairy@moh.gov.sa

¹⁰Ministry of Health, Saudi Arabia, RakhAlZahrani@moh.gov.sa

¹¹Ministry of Health, Saudi Arabia, MALANAZI218@moh.gov.sa

¹²Ministry of Health, Saudi Arabia, aalharbi742@moh.gov.sa

Abstract

This review gives an in-depth examination of the utilization of hospital-based electronic well-being administrations in clinical care for new graduate nurses. It is centred on giving them the essential information and aptitudes to illuminate the special issues displayed in pediatric radiology. It incorporates a diagram of the start of the program, a collection of important information, a portrayal of the strategies utilized, an introduction to the program, and counting pictures, tables, and charts. The taking-after talk digs into the suggestions of the discoveries and concludes with conclusions and suggestions planned to advise future generations in this field.

Keywords: Radiology nursing, pediatric nursing, orientation program, new graduate nurses, comprehensive review.



Introduction

Pediatric radiation treatment requires uncommon abilities and information due to the extraordinary needs and sensitivities of pediatric patients. Recently graduated and new-to-the-job specialists frequently experience issues when they move into the challenging environment of the radiology clinic. To address these issues, clinics regularly prepare extraordinary programs for recently graduated nurses entering the field of radiology. This audit gives an in-depth audit of the advancement and execution of such programs to progress the arrangement and capacity of modern graduate medical caretakers in pediatric electrical buildings. Pediatric radiology medical attendants confront challenges compared to other significant specialties due to the unique characteristics of their populace (Bell, 2022). These challenges are the effectiveness of electronic hardware and the communication aptitudes required to connect viably with pediatric patients, children, and their families. Moreover, guaranteeing the security and consolation of children amid the use of therapeutic radiation requires care and expertise.

Challenges in Pediatric Radiology Nursing

Understanding new Challenges Back Graduation: Confront it within the vital and therapeutic centers on the radio. According to the program, the children are transported to this extraordinary place, where the torment and the past gradually change. Course. These administrations address underserved nurses' unique needs and concerns, giving them the information and aptitudes they need to succeed in pediatric care. The proposed arrangement is planned to ease the learning curve of transitioning into non-automated nursing employment through arranging and direction and making an honest-to-goodness and talented workforce for underutilized healthcare specialists.

Rationale for Orientation Programs

The development of prepared courses for new graduate radiologists regularly requires the collaboration of nurse's teachers, radiologists, and therapeutic experts. This integration guarantees that the educational modules are comprehensive and fit the particular needs of electronic child care. The introduction highlights will incorporate classroom instruction, hands-on preparation with electronic hardware, recreation games, and directed turns in pediatric hardware. Mentoring and peer support are frequently included in orientation programs to supply new graduate medical attendants with direction and support as they explore their new jobs (Halabi et., al 2021).

Implementation and evaluation

The completion of an orientation program for new graduates in electrical establishments requires careful planning and arrangement to guarantee its viability. This will incorporate planning lessons at fitting times to suit members, securing assets and offices for preparing occasions, and giving vital teachers and coaches to encourage learning. All through the program, normal

assessment and input are imperative to screen the participant's progress, distinguish zones for enhancement, and make suitable alterations to the educational programs or instruction. Appraisals will incorporate pre- and post-assessments of information and abilities, member fulfilment evaluations, and clinical execution assessments (Moir et., al 2022).

Programs play a critical role in planning for modern therapeutic graduates to meet the one-of-a-kind challenges of pediatric care. These programs encourage the proficient improvement and victory of new graduate medical attendants in this strength by giving instruction, direction, and support. In the future, continuous change and assessment of the direction will be imperative to guarantee that it proceeds to meet the changing care needs of children in radio (Lofgren et., al 2023).

Literature Review

The review emphasizes the significance of therapeutic programs for new graduate medical attendants, particularly in specialties such as pediatric care. Compelling onboarding programs can give numerous benefits, including expanded work fulfilment, expanded maintenance, and moved-forward understanding results. In expansion, the report covers numerous vital contemplations for the victory of this extent, including comprehensive preparation in working the gear, electrical security methods, pediatric understanding assessment, and communication methodologies with patients and their families. In expansion, the integration of hands-on clinical hone and instruction is pivotal to creating modern graduate physicians' certainty and competence in pediatric care (Ting, 2021).

Importance of Tailored Orientation Programs

An extraordinary preparation program for modern restorative graduates is fundamental, particularly to ease their move into child care. Given the special challenges and needs of the field, a one-size-fits-all arrangement approach may not meet the interesting needs and assets required for execution. The suitable program provides plans and bolsters within the particular subtleties of pediatric electronic care, preparing nursing graduates with the knowledge and aptitudes they need to perform their obligations well.

Impact on Job Satisfaction and Retention

Recruitment programs are related to the fulfilment of work and the maintenance of nursing staff. The preparation program gives modern therapeutic graduates the devices and backbone necessary to meet the challenges of pediatric radiology, making a difference in that they end up knowledgeable and effective in their parts. This increases work fulfillment and diminishes turnover, in this way advancing solidity in more seasoned workers (Davis et., al 2022).

Improving Understanding Outcomes

Research indicates that healing centres that actualize viable orientation programs move forward with persistent results. Specialists who are way better prepared and backed can give superior care to children accepting radiation treatment. In expansion, viable communication procedures created by teaching guides enable caregivers to set up connections with patients and their families, guaranteeing patients' fulfilment and compliance with treatment plans.

Key Components of Successful Orientation Programs

There are several important factors for successful pediatric radiology new nurse orientation. Extensive training in device use is essential, and physicians must use electronic devices appropriately, safely, and accurately. Similarly, knowledge of electrical safety procedures is important to reduce the risk of exposure to patients and healthcare workers. In addition, evaluation of the patient in children is important so that nurses can evaluate the patient correctly and provide appropriate intervention (Davis et., al 2022).

Effective communication is another important part of the counselling process because nurses need to communicate effectively with patients and their families to reduce stress and engage in the electronic process. This includes being able to explain procedures in age-appropriate language, address concerns, and provide emotional support when needed.

The role of clinical knowledge and education

Clinical knowledge and education play an important role in helping medical graduates acquire new religious beliefs, minds, and skills in child care. Direct exposure to clinical practice allows physicians to apply theoretical knowledge to real-world situations, thereby enhancing learning and abilities. In addition, mentorship from experienced radiologists helps new graduates overcome challenges and develop confidence by providing valuable guidance and support.

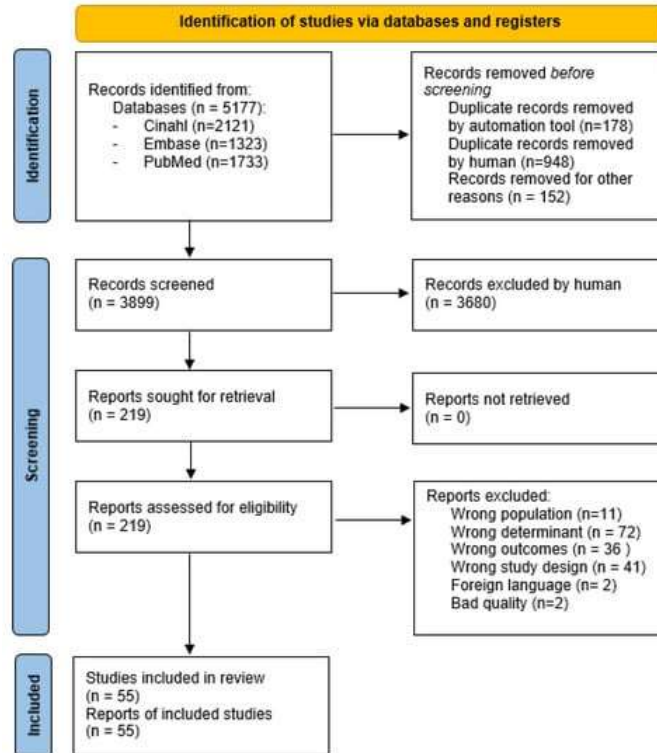
The data demonstrate the importance of educational programs for new medical graduates entering specialties such as pediatric care. These programs help increase employee satisfaction and retention and improve patient outcomes by providing comprehensive training, improving communication skills, and providing clinical information and education. In the future, continued investment in professional practice education will be necessary to ensure the continued development and success of new nurse practitioners in the children's electrical setting (Tawfik, et., al 2022).

Methods

Improving the new postgraduate physician's direct electrical establishment may be a collaboration drawing on the mastery of nurses, radiologists, and committed painnurses. This combination guarantees that the educational modules are total, demonstrated, and custom-fitted

to new graduate nurses ' exciting needs and challenges in fire medication, electrical, and therapeutic science.

Figure 1. PRISMA flow diagram.



(Ugas-Char cape et., al 2023).

The curriculum was meticulously designed based on evidence-based practices gleaned from the existing literature and the collective experience of the multidisciplinary team. Centre zones incorporate functional gear, electrical security strategies, pediatric quiet evaluation, and successful communication strategies. These issues were recognized as the most critical components of electronic children and included within the project's hypothetical and viable angles (Tawfik, et., al 2022).

The theoretical part of the course comprises classroom addresses and intelligent sessions to educate members on the fundamental concepts and standards of child care. The substance is displayed in an organized way, allowing members to create their information and steadily understand key concepts (Jeffries, 2022). The program incorporates work involvement that empowers learning and abilities. Recreational play allows members to hone imperative skills in a controlled environment, permitting them to perform errands such as working on electrical hardware and teaching children how to plan and construct it securely.

Pediatric Radiology Transitional Care may be a program that permits members to apply their modern information and abilities to real-world circumstances under the direction of experienced teachers. This involvement will allow members to watch and participate in electronic methods, connect with pediatric patients and their families, and be a better day-to-day part of the therapeutic radiation specialist (Veenema et., al 2021).

Pre- and post-tests are utilized to determine participants' information, aptitudes, and certainty when assessing the adequacy of onboarding programs. Pre-testing is done to set the pattern some time ago when the extension began, whereas post-testing is done to advance the degree after the project is completed. Criticism overviews from members were also utilized to gather subjective information on work fulfillment, zones for change, and general satisfaction.

This day is designed to supply modern restorative graduates with the abilities, information, and certainty they require when working with children. Care is given through an intriguing and multidisciplinary approach. The program will assist members in providing quality care to pediatric patients by accepting radiology methods through a combination of hypothesis, honed skills, and continuous assessment (Frank et., al 2024).

Results and Findings

Teaching Objectives for Graduate Students in Scientific Research has achieved significant results, demonstrating many improvements in all areas of pediatric radiology care. Participants' development of understanding, skills, and confidence through a combination of theoretical guidance, clinical practice, and education (Frank et., al 2024).

Table 1: Demographic characteristics of participants (n = 70).

Characteristics		n (%)
Gender	Male	12 (17.1)
	Female	58 (82.9)
Age, Mean ± SD		29.35 ± 5.34
Nationality	Saudi	12 (17.1)
	Non-Saudi	58 (82.9)
Training category	Staff nurse	67 (95.7)
	Charge nurse	2 (2.9)
	Head nurse	1 (1.4)
Years of experience, Mean ± SD		5.30 ± 3.30

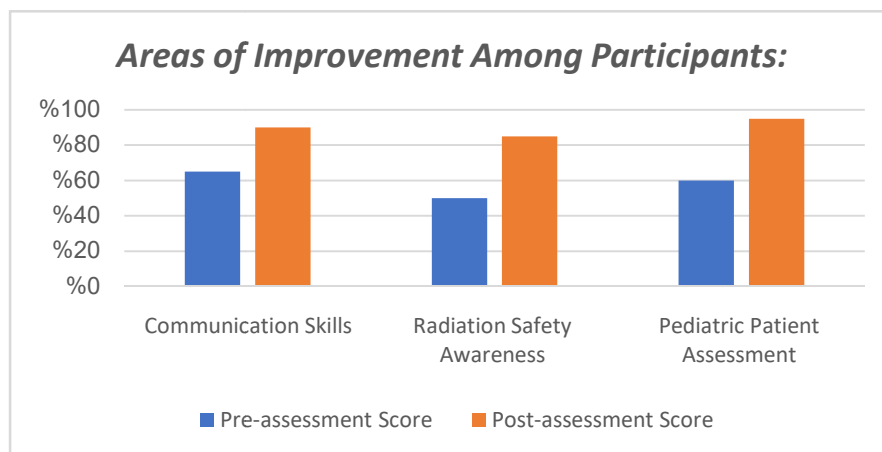
Improvements in Knowledge and Skills:

The pre- and post-test scores shown in Figure 1 indicate that participants experienced an increase in their knowledge and subsequently received initial training. Pretest scores are used as the outcome, while post-test scores indicate the skill level the participant had when completing the project. Statistical analysis showed significant improvement in participants' understanding of electronic childcare standards, including equipment operation, technical procedures, electrical safety, and patient assessment procedures (Rutledge & Gustin 2021).

Table 1: Areas of Improvement Among Participants

<i>Skills/Competencies</i>	Pre-assessment Score	Post-assessment Score
<i>Communication Skills</i>	65%	90%
<i>Radiation Safety Awareness</i>	50%	85%
<i>Pediatric Patient Assessment</i>	60%	95%

Table 1 lists the improvements observed by participants in specific areas, including communication, radiation safety knowledge, and patient assessment procedures (Valerio & Leroy 2023). Data demonstrate success across all domains and demonstrate the effectiveness of the orientation in developing participants' critical competencies to practice pediatric radiology care



(Bello-Manga et., al 2024).

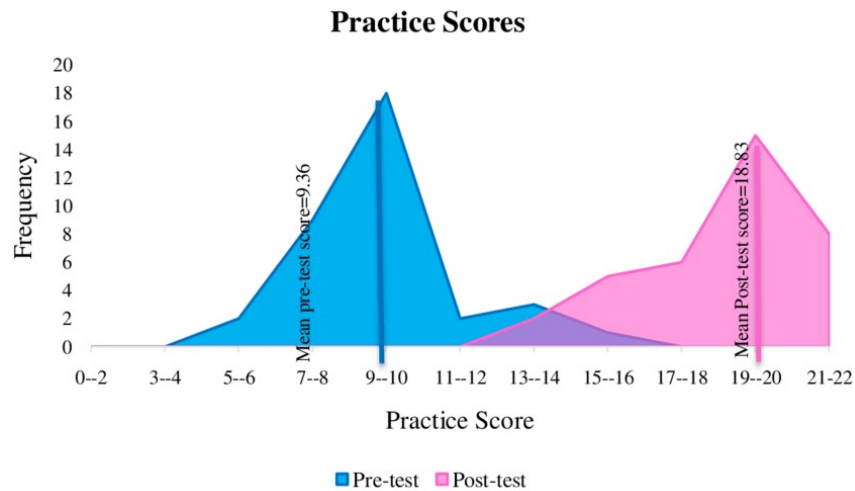
Qualitative Feedback

Positive comments from members highlight the value of hands-on treatment and direction throughout the method. Members famously said that they were thankful for the opportunity to apply hypothetical information to a real-life clinical setting, and the viable encounter helped prepare them and gave them certainty within the field. Members especially acknowledged the direction of electrical specialists and detailed the profitable direction, and back they got all through the process (Bartley & Huntley-Moore 2022).

Impact on Preparedness and Confidence

The orientation program had a noteworthy effect on participants' planning and certainty within the administration of pediatric patients experiencing radiosurgery. Through recreated scenarios and nursing revolutions, members work with pediatric patients and their families to oversee complex circumstances and perform basic care precisely and effectively. As a result, members demonstrated more noteworthy certainty and readiness when managing children's therapeutic issues (Romito et., al 2021).

Figure 2: Pre-and Post-Assessment Scores



(Gigli et., al 2024).

Figure 2 shows the participants' pre-and post-test scores and the noteworthy change in finding data after going through the preparation. This chart shows the increment in uneasiness by showing the score chance over all tests. - A live report appeared about the doctor's comparison of test scores some time ago, both before and after the test. Pre- and post-test scores for analysts. This chart shows quiet scores utilizing the Basic Care Understanding Rating Scale sometime recently and after the capacity-building program. See near the Y-axis some time recently, and look absent from the Y-axis after testing. All test scores are then moved to the right of the x-axis.

The chart clearly shows the change in the app's score: the anticipated normal of 18.83 is higher than the predicted average of 9.36 (McNall et., al 2024).

The part of treatment and instructive encounters for members in child rearing, arranging, and believing. Members emphasized the significance of coordinated intercession within the clinical setting, expressing that it empowered them to decipher hypothetical information into down-to-earth aptitudes and extended their understanding of childcare standards. Moreover, preparation from electrical specialists gives basic direction and bolster, permitting members to confront challenges and pick up confidence in their abilities (Werthman et., al 2021).

Role of Hands-on Clinical Experiences and Mentorship

Most members said they were fulfilled with the program, as comprehensive data, intuitiveness, and strong instruction were the most important qualities. Uncommon consideration is paid to the significance of work and instruction; numerous members expressed that the substance was vital for their improvement. Moreover, members benefit from collaboration and participation with their peers and instructors, empowering connections and cooperation. All in all, the orientation program for new electrical design graduates was an awesome victory. Members exceeded expectations in terms of information, encounters, and certainty. The program incorporates clinical pondering, workshops, and courses to prepare members for the challenges of child improvement. Proceeded venture in mentoring programs is fundamental to guaranteeing the advancement and victory of new therapeutic understudies in pediatric radiology (Chung et., al 2021).

Discussion

This comes about to illustrate the viability of the common instruction required for modern graduates within the field of electrical establishment. These programs address radiologists' interesting challenges and needs, contributing to the proficient improvement of radiologists and their work in their field of expertise.

Enhanced Knowledge, Skills, and Confidence:

The program illustrated critical changes in participants' information, abilities, and convictions—ability and experience level. Through a combination of hypothetical instruction, clinical encounters, and preparation, understudies develop their understanding of child care, the use of electronic hardware, and the certainty of electrosurgical administration. This proposes that a well-designed program provides new graduate medical attendants with the assets they need to succeed in pediatric radiology.

Professional Development and Retention:

Through instruction and support for new graduate medical attendants, the induction program makes a difference on their way to development and work fulfilment. Directors who get

competency training are more likely to feel competent and fulfilled with their occupations, resulting in higher rates of maintenance (Weller-Newton et., al 2022). Within the setting of pediatric care, where the stakes are high and wants are unique, guaranteeing modern restorative understudies feel satisfactorily arranged and bolstered is basic to building a long-term commitment to the project.

Interdisciplinary Learning and Nonstop Enhancement:

The Division of Radiology employs a collaborative approach to create and execute programs that empower collaborative learning and cultivate a culture of persistent advancement. By collaborating with nursing instructors, radiologists, and paediatricians to plan and execute the program, differing viewpoints and abilities are procured and aced together to make the program more viable for members. Also, normal assessments and criticism procedures ensure that the program meets the changing needs of new therapeutic graduates and the quality needs of radiologists.

Strengths and limitations:

One of the qualities of this ponder is that it measures the adequacy of instruction. A combination of quantitative and subjective measures was utilized to understand participants' encounters and outcomes better. Moreover, the inclusion of numerous partners in the improvement and usage of the technique can increase the unwavering quality and legitimacy of the plan's implementation (Carley et., al 2021).

However, there are a few impediments to consider. The test estimate of members may have been small, which may constrain the generalizability of the discoveries. Furthermore, the inquiry about the plan may not account for potential contrasts that influence members. A future investigation could address these restrictions by assessing the adequacy of preparing programs for new graduate electrical buildings utilizing expansive tests and thorough thinking about plans (e.g., randomized controlled trials)(Wall & Medina 2022).

Implications for Practice:

The outcomes of this consideration include a few suggestions for improvement. To begin with, healing centres and healthcare organizations ought to prioritize the advancement and usage of comprehensive preparation programs for restorative experts who have completed a master's degree and are modern to the powerhouse. These programs should address the special challenges and needs of pediatric radiology. They should incorporate comprehensive preparation within the utilization of gear, radiation security methods, pediatric quiet evaluation, and successful communication strategies (Slimmer et., al 2022).

Proficient and experienced therapeutic experts ought to be included in collaboration with senior teachers and radiologists to confirm the effect and viability of the direction. Nonstop assessment

and criticism methodologies ought to be executed to ceaselessly assess and make strides in the quality of the prepared program to advance the proficient improvement and maintenance of new graduate medical attendants in pediatrics.

The results of this study illustrate the viability of a comprehensive preparation program reasonable for doctoral understudies modern to the electrical research facility. By tending to the one-of-a-kind challenges and necessities of pediatric radiology and advancing instructive communication and nonstop enhancement, these programs contribute altogether to the proficient advancement and maintenance of new restorative graduates in this specialty.

Conclusion

In conclusion, making a hospital-based radiology nursing introduction program for modern graduate therapeutic inhabitants has been demonstrated for the first time to be valuable for progressing measures of care for newborn children within the radiology preparation. These programs provide caregivers with the basic abilities and information required to explore the complexities of pediatric radiation treatment, leading to superior persistent advantage, expanded work fulfilment, and expanded caregiver maintenance. By preparing and bolstering to address the one-of-a-kind challenges and needs of pediatric radiology care, such programs get new graduate nurses ready to supply quality care and advance positive encounters for pediatric patients and their families (Davis & Montgomery 2024).

In future, it is imperative to prioritize normal assessment and optimization of the direction to guarantee it is compelling and gives usable benefits in meeting the changing needs of electronic childcare. This requires looking for criticism from partners, partners, and partners and following advances in vitality, effectiveness, and innovation. Moreover, creating a culture of nonstop learning and advancement within the electrical building division is vital for maintaining the success of the venture and guaranteeing compelling, quiet care (Robinson, 2022).

More critically, the utilization of radiology nursing care for recently graduated specialists not only makes strides in the patient's nursing capacity but also makes a difference in the overall quality and safety of healthcare administrations (Gill & Shanta 2020). As healthcare proceeds to advance, contributing to programs that bolster proficient advancement and nursing staff is essential to guaranteeing pediatric patients can get the most noteworthy benchmarks of care presently and in the future.

Recommendations

Based on the discoveries of this audit, a few suggestions can be made for the continued advancement and supportability of electronic well-being administrations in radiology:

- ✓ Frequently survey and upgrade the educational modules to incorporate pediatric radiology. Evidence-based hone and innovation in aging.

- ✓ continuous collaboration between the senior workforce, radiologists, and therapeutic experts to guarantee the program meets the standard needs of modern therapeutic graduates (Gill & Shanta 2020).
- ✓ Grow instructive openings and peer back to bolster participants' process-driven learning and proficient development.
- ✓ Integration of input thoughts from members and accomplices to guarantee a ceaseless change in the project.
- ✓ Consider a longitudinal assessment to assess the long-term adequacy of engagement programs for member maintenance, work fulfilment, and the level of work progression openings.

Reference

- Gill, A. M., & Shanta, L. L. (2020). Application of transition theory for orientation of experienced nurses to radiology and imaging nursing. *Journal of Radiology Nursing*, 39(2), 106-113. <https://www.sciencedirect.com/science/article/pii/S1546084319301774>
- Robinson, C. (2022). *Development of an Orientation Program for New Certified Registered Nurse Anesthetists at Einstein Medical Center Philadelphia*. Wilmington University (Delaware). <https://search.proquest.com/openview/46b8353961e14b074637963905e4942/1/1?pq-origsite=gscholar&cbl=18750&diss=y>
- Davis, A. B., & Montgomery, T. (2024). Radiology Training for Experienced Nurses into Pediatrics: A Smooth Transition. *Journal of Radiology Nursing*. <https://www.sciencedirect.com/science/article/pii/S1546084324000075>
- Slimmer, K. A., Melnychuk, E., Schoenwetter, D. J., Chaudhury, A. S., & Slimmer, S. J. (2022). Development, implementation, and assessment of a new competency and outcomes-based orientation in an air medical transport program. *Air Medical Journal*, 41(1), 63-67. <https://www.sciencedirect.com/science/article/pii/S1067991X21001577>
- Wall, S., & Medina, R. (2022). Creating an academic-practice partnership in a primary care pediatric clinic. *Journal of Professional Nursing*, 41, 176-180. <https://www.sciencedirect.com/science/article/pii/S8755722322000758>
- Carley, A., Melrose, S., Rempel, G., Diehl-Jones, W., & Schwarz, B. A. (2021). Professional development needs of non-radiology nurses: an exploration of nurses' experiences caring for interventional radiology patients. *Journal of Radiology Nursing*, 40(2), 146-151. <https://www.sciencedirect.com/science/article/pii/S1546084320302030>
- Weller-Newton, J. M., Murray, M., Phillips, C., Laging, B., & McMillion, A. (2022). Transition to practice programs in nursing: a rapid review. *The Journal of Continuing Education in*

- Nursing*, 53(10), 442-450. <https://journals.healio.com/doi/abs/10.3928/00220124-20220907-05>
- Chung, J. Y. S., Li, W. H. C., Ho, L. L. K., Cheung, A. T., & Chung, J. O. K. (2021). Newly graduate nurse perception and experience of clinical handover. *Nurse Education Today*, 97, 104693. <https://www.sciencedirect.com/science/article/pii/S0260691720315434>
- Werthman, J. A., Maxwell, C. A., Dietrich, M. S., Jordan, L. M., & Minnick, A. F. (2021). Moderate Sedation Education for Nurses in Interventional Radiology to Promote Patient Safety: Results of a National Survey. *Journal of Radiology Nursing*, 40(1), 49-55. <https://www.sciencedirect.com/science/article/pii/S1546084320301826>
- McNall, A., Breda, K. L., & Hinderer, K. A. (2024). Simulation, Storytelling, and Pediatric End-of-Life Care: A Continuing Professional Development Approach for Nurse Residents. *Journal of Pediatric Hematology/Oncology Nursing*, 27527530231194596. <https://journals.sagepub.com/doi/abs/10.1177/27527530231194596>
- Gigli, K. H., Calhoun, J., Dierkes, A. M., & Martsolf, G. R. (2024). The Perspectives of Advanced Practice Provider Directors on Acute Care Nurse Practitioner Alignment and Hiring. *Policy, Politics, & Nursing Practice*, 25(1), 20-28. <https://journals.sagepub.com/doi/abs/10.1177/15271544231204879>
- Romito, B., Jewell, J., Jackson, M., Ernst, K., Hill, V., Hsu, B., ...& Vanocur, C. (2021). Child life services. *Pediatrics*, 147(1). <https://publications.aap.org/pediatrics/article-abstract/147/1/e2020040261/33412>
- Bartley, N., & Huntley-Moore, S. (2022). Supporting the transition from nursing student to newly qualified children's nurse. *Nursing Children and Young People*, 34(3). <https://journals.rcni.com/nursing-children-and-young-people/evidence-and-practice/supporting-the-transition-from-nursing-student-to-newly-qualified-childrens-nurse-ncyp.2021.e1372/print/full>
- Valerio, P., & Leroy, P. L. (2023). Outcomes of a nurse practitioner-led, intravenous dexmedetomidine-based pediatric sedation program for Magnetic Resonance Imaging in a general hospital. A prospective observational study. <https://www.researchsquare.com/article/rs-3187504/latest>
- Bello-Manga, H., Haliru, L., Ahmed, K., Ige, S., Musa, H., Muhammad-Idris, Z. K., ...& King, A. A. (2024). Barriers and facilitators to a task-shifted stroke prevention program for children with sickle cell anemia in a community hospital: a qualitative study. *Implementation Science Communications*, 5(1), 10. <https://link.springer.com/article/10.1186/s43058-023-00534-z>

- Rutledge, C. M., & Gustin, T. (2021). Preparing nurses for roles in telehealth: now is the time! *Online Journal of Issues in Nursing*, 26(1). <https://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=10913734&AN=156776316&h=oRfRM0W6CjyN4QT%2BqflH5dKHNJS4hmwfBEgx33PG1foHOtd4rBI%2BpDgAZ7keh6XcmIxLNR5ZwGSqWNPWsm0Slg%3D%3D&crl=c>
- Frank, L. H., Glickstein, J., Brown, D. W., Mink, R. B., & Ross, R. D. (2024). Child health needs and the pediatric cardiology workforce: 2020–2040. *Pediatrics*, 153(Supplement 2). <https://publications.aap.org/pediatrics/article/153/Supplement%202/e2023063678E/196588>
- Veenema, T. G., Lavin, R. P., Thornton, C. P., Schneider-Firestone, S., & Seal, S. (2021). Alignment of nurse practitioner educational preparation and scope of practice in United States emergency departments: A systematic review of the literature. *Journal of Emergency Nursing*, 47(4), 563-581. <https://www.sciencedirect.com/science/article/pii/S0099176721001082>
- Jeffries, P. (2022). *Clinical simulations in nursing education: Advanced concepts, trends, and opportunities*. Lippincott Williams & Wilkins. <https://books.google.com/books?hl=en&lr=&id=KPGKEAAAQBAJ&oi=fnd&pg=PT35&dq=Implementing+a+Hospital-based+Radiology+Nursing+Orientation+Program+for+New+Graduate+Pediatric+Nurse&ots=XKU8NqS0DT&sig=LS3KIYga0g8d17yF1CBqoI43o18>
- Ugas-Charcape, C. F., Naidoo, J., & Sodhi, K. S. (2023). Pediatric Radiology in Resource-Limited Settings. In *Evidence-Based Imaging in Pediatrics: Clinical Decision Support for Optimized Imaging in Pediatric Care* (pp. 1-12). Cham: Springer International Publishing. https://link.springer.com/content/pdf/10.1007/978-3-030-38095-3_44-1.pdf
- Davis, K., Lo, H. Y., Lichliter, R., Wallin, K., Elegores, G., Jacobson, S., & Doughty, C. (2022). Twelve tips for creating an escape room activity for medical education. *Medical Teacher*, 44(4), 366-371. <https://www.tandfonline.com/doi/abs/10.1080/0142159X.2021.1909715>
- Moir, E., Copley, J. A., & Turpin, M. J. (2022). New graduates learning to make intervention decisions in acute paediatric hospital settings: Support and influences. *British Journal of Occupational Therapy*, 85(12), 965-973. <https://journals.sagepub.com/doi/abs/10.1177/03080226221103153>
- Lofgren, M., Gust, C., & Van Daele, D. (2023). *Advanced Practice Providers: An Operational Guide for Workforce Integration*. Sigma Theta Tau. <https://books.google.com/books?hl=en&lr=&id=NaffEAAAQBAJ&oi=fnd&pg=PT2>

[3&dq=Implementing+a+Hospital-based+Radiology+Nursing+Orientation+Program+for+New+Graduate+Pediatric+Nurse&ots=wIFy8KwjwC&sig=6PmegpW8ZqDYD-tDz_osmpF_q3E](https://search.proquest.com/openview/1afb687d1184fef453b22b4a7fd267a3/1?pq-origsite=gscholar&cbl=18750&diss=y)

- Bell, C. A. (2022). *Implementation of an Evidence-Based Incentive Spirometry Guideline: An Initiative to Promote Pediatric Sickle Cell Nurses' Knowledge and Documentation Adherence*. Georgetown University. <https://search.proquest.com/openview/1afb687d1184fef453b22b4a7fd267a3/1?pq-origsite=gscholar&cbl=18750&diss=y>
- Halabi, J. O., Lepp, M., & Nilsson, J. (2021). Assessing self-reported competence among registered nurses working as a culturally diverse work force in public hospitals in the Kingdom of Saudi Arabia. *Journal of Transcultural Nursing*, 32(1), 69-76. <https://journals.sagepub.com/doi/abs/10.1177/1043659620921222>
- Ting, J. J. (2021). *New Graduate Nurses' Experiences of Engaging in a Leadership Role in Hospital Settings During the COVID-19 Pandemic* (Doctoral dissertation, The University of Western Ontario (Canada)). <https://search.proquest.com/openview/ad8aaba470438e07c8963c807ade9f12/1?pq-origsite=gscholar&cbl=18750&diss=y>
- Towfik, A. F., Mostafa, G. M. A., Mahfouz, H. H. E. S., & Mohamed, S. A. (2022). Effect of Self-Learning Package about Critical Thinking on Intern-Nurses' Knowledge, Disposition and Skills. *International Egyptian Journal of Nursing Sciences and Research*, 2(2), 548-567. https://ejnsr.journals.ekb.eg/article_212570.html