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Collaborative Approach: Nurses And Radiologic Technologists Working Together In X-Ray Departments. A New Appraisal

Abdullah Falah Almutery,[1] Khalid Hussain Hamad Al Obaia,[2] Abdullah Ali Sultan Al Obyah,[3] Fawaz Lafa Awad Almutairi,[4] Nader Qidan Aqeel Almutairi,[5] Saeed Mosead Saeed Alyami,[6] Fahad Sakhani Kh Alrawaili,[7] Marzog Naif Aldajani,[8] Nayef Khalid M Alsubaiei,[9] Abdullah Mohammed Alharbi,[10] Abdulwahab Ali Abdullah Alyami,[11] Turki Ahmed Mohammed Moafa,[12] Abdullah Hassan Hadi Alzuraia,[13] Said Mohammed Shaya Al-Shahrani,[14] Safia Thapan Hamad Aldawi[15]

[1-]King Khaled Hospital, Majmaah, Moh, Kingdom Of Saudi Arabia.
[2-]Regional Laboratory Najran, Moh Kingdom Of Saudi Arabia.
[3-]Khobash General Hospital, Najran, Moh Kingdom Of Saudi Arabia.
[4]-Zulafi General Hospital Almajmah Moh Kingdom Of Saudi Arabia.
[5,6-]Eradah Hospital And Mental Health Alkharj, Moh, Kingdom Of Saudi Arabia.
[7-]Turaif General Hospital Turaif, Moh, Kingdom Of Saudi Arabia.
[8-]King Khalid Hospital Almajmmah, Moh Kingdom Of Saudi Arabia.
[9,10-]Alsulaimy General Hospital Hail, Moh Kingdom Of Saudi Arabia.
[11,12-]Prince Nasser Bin Saad Alsudairy Hospital, Alghat Moh, Kingdom Of Saudi Arabia.
[13]-Najran General Hospital, Najran, Moh Kingdom Of Saudi Arabia.
[14-]Al-Qabil Primary Health Care Centre Najran Moh Kingdom Of Saudi Arabia.
[15]-Al Shbhan Primary Health Care Center, Najran, Moh Kingdom Of Saudi Arabia.

Abstract:

Collaboration between nurses and radiologic technologists is indispensable for ensuring efficient and patient-centered care

within X-ray departments. This collaborative partnership encompasses various aspects of patient care, including assessment, preparation, imaging procedures, and post-procedural care. Nurses provide comprehensive patient assessment, emotional support, and radiation safety education, while radiologic technologists excel in technical proficiency, equipment operation, and radiation dose optimization. Together, they prioritize patient safety, streamline workflow processes, and enhance the overall patient experience. Effective communication and coordination between nurses and radiologic technologists facilitate timely and efficient service delivery, promoting patient satisfaction and well-being. This article explores the significance of collaboration between these professionals and its impact on optimizing patient care within X-ray departments.

Keywords: Collaboration, Nurses, Radiologic Technologists, X-ray Departments, Patient Safety, Workflow Efficiency, Patient Experience, Communication, Coordination.

Introduction:

In modern healthcare settings, collaboration among different healthcare professionals is crucial for providing efficient and effective patient care. One such collaborative relationship exists between nurses and radiologic technologists in X-ray departments. This article explores the significance of their collaboration, the nature of their roles, and how they work together to ensure optimal patient outcomes.[1]

In the realm of modern healthcare, collaboration among healthcare professionals is not just a best practice but a fundamental necessity. Nowhere is this collaboration more evident and crucial than in the dynamic environment of X-ray departments. At the heart of this collaboration are the dedicated efforts of nurses and radiologic technologists, who together form a synergistic partnership aimed at providing optimal care for patients undergoing diagnostic imaging procedures.

This article delves into the intricate relationship between nurses and radiologic technologists within X-ray departments, elucidating the significance of their collaboration, the multifaceted nature of

their roles, and the collective impact they have on patient outcomes. From patient assessment to radiation safety, from equipment operation to emotional support, the collaboration between these professionals underscores the holistic approach to patient care in the realm of diagnostic imaging.

By exploring the roles, responsibilities, and collaborative practices of nurses and radiologic technologists, this article seeks to underscore the pivotal role they play in ensuring not only the technical accuracy of diagnostic imaging but also the compassionate and patient-centered care that lies at the core of healthcare excellence. Through effective communication, seamless teamwork, and a shared commitment to quality improvement, nurses and radiologic technologists epitomize the collaborative spirit that drives innovation and excellence in X-ray departments, ultimately enhancing the overall patient experience and outcomes.

Importance of Collaboration:

Collaboration between nurses and radiologic technologists is essential for several reasons. Firstly, both professions play integral roles in the patient's journey through the X-ray process. Nurses provide patient care, support, and education, while radiologic technologists operate imaging equipment and perform the actual X-ray procedures. Secondly, effective collaboration enhances workflow efficiency, reduces wait times, and improves overall patient satisfaction. Finally, by working together, nurses and radiologic technologists can ensure patient safety and adherence to best practices in radiation exposure.

Collaboration between nurses and radiologic technologists within X-ray departments is of paramount importance for several compelling reasons. This collaborative partnership not only enhances the efficiency of diagnostic imaging procedures but also ensures the delivery of high-quality patient care. The following points elucidate the significance of collaboration between these professionals:

Comprehensive Patient Care:

Nurses and radiologic technologists bring distinct yet complementary skill sets to the table. While nurses excel in patient

assessment, education, and emotional support, radiologic technologists possess expertise in operating imaging equipment and acquiring diagnostic images. By collaborating effectively, they provide comprehensive care that addresses both the technical and emotional aspects of the patient experience.

In the realm of X-ray departments, collaboration between nurses and radiologic technologists is pivotal in ensuring comprehensive patient care. This collaboration encompasses a wide array of aspects, each contributing to the holistic well-being of the patient. Here's how nurses and radiologic technologists work together to provide comprehensive care:[2,3]

Patient Assessment and Preparation:

Nurses conduct thorough patient assessments, gathering relevant medical history, assessing current conditions, and addressing any concerns or questions the patient may have. Based on the assessment, nurses prepare patients for X-ray examinations, explaining the procedure, obtaining consent, and ensuring that patients are comfortable and adequately prepared both physically and emotionally.

Radiologic technologists collaborate with nurses by providing input on patient positioning and preparation requirements to ensure optimal image acquisition.

Emotional Support and Education:

Patients undergoing X-ray procedures may experience anxiety or fear, particularly if they are unfamiliar with the process or have concerns about radiation exposure. Nurses offer emotional support, reassuring patients, and providing education about the procedure, potential risks, and safety measures.

Radiologic technologists also play a role in patient education, explaining the technical aspects of the imaging process and addressing any questions or concerns patients may have.

Radiation Safety and Protection:

Radiation safety is paramount in X-ray departments to minimize the risks associated with exposure.

Nurses educate patients about radiation safety measures, such as wearing lead aprons and thyroid shields, and ensure compliance

with safety protocols.

Radiologic technologists implement radiation protection measures during imaging procedures, such as collimation and shielding, to minimize radiation exposure to patients, themselves, and other staff members.

Post-Procedure Care and Follow-Up:

After the X-ray examination, nurses monitor patients for any adverse reactions and provide post-procedure care as needed. They ensure that patients receive appropriate instructions for post-procedure care and follow-up appointments. Radiologic technologists collaborate with nurses to provide information about the imaging results and assist in addressing any concerns or questions that may arise.

Coordination of Care:

Nurses and radiologic technologists work collaboratively to ensure smooth transitions between different stages of the imaging process. They communicate effectively to coordinate patient scheduling, procedural requirements, and post-procedure care, optimizing workflow efficiency and patient satisfaction. In essence, collaboration between nurses and radiologic technologists in X-ray departments enables the delivery of comprehensive patient care that addresses not only the technical aspects of diagnostic imaging but also the emotional and educational needs of patients. By working together seamlessly, these professionals ensure that patients receive the highest standard of care throughout their X-ray experience, promoting positive outcomes and enhancing overall well-being.

Workflow Efficiency:

Collaboration streamlines the workflow within X-ray departments, optimizing resource utilization and reducing wait times for patients. When nurses and radiologic technologists work together seamlessly, they can coordinate patient scheduling, ensure timely preparation for procedures, and facilitate smooth transitions between different stages of the imaging process. Efficient workflow within X-ray departments is essential for delivering timely and effective diagnostic imaging services to patients. Collaboration between nurses and radiologic technologists plays a pivotal role in optimizing workflow efficiency. Here's how their

collaboration contributes to streamlining processes and maximizing productivity:

Patient Scheduling and Preparation:

Nurses and radiologic technologists collaborate to ensure efficient patient scheduling, taking into account factors such as urgency, patient needs, and equipment availability. Nurses prepare patients for X-ray examinations by obtaining relevant medical history, explaining the procedure, and ensuring that patients are properly positioned and adequately prepared. Radiologic technologists coordinate with nurses to confirm patient readiness and address any special requirements or considerations before the imaging procedure.

Equipment Utilization and Maintenance:

Radiologic technologists are responsible for operating and maintaining X-ray equipment to ensure optimal performance and image quality. Nurses collaborate with radiologic technologists to coordinate equipment usage, schedule maintenance activities, and address any technical issues that may arise.

By working together, nurses and radiologic technologists minimize downtime and maximize the availability of imaging equipment, thereby optimizing workflow efficiency.

Patient Flow and Turnaround Time:

Collaboration between nurses and radiologic technologists facilitates smooth patient flow within the X-ray department, from check-in to discharge. They coordinate patient movements, ensuring timely transitions between waiting areas, examination rooms, and imaging equipment. By streamlining patient flow and minimizing wait times, nurses and radiologic technologists enhance the overall experience for patients while maximizing throughput and efficiency.

Communication and Coordination:

Effective communication is critical for maintaining workflow efficiency within X-ray departments.

Nurses and radiologic technologists communicate seamlessly to exchange information about patient status, procedural requirements, and scheduling considerations. They collaborate to

address any challenges or delays promptly, ensuring that workflow disruptions are minimized, and patient care is prioritized.

Task Delegation and Support:

Nurses and radiologic technologists work collaboratively to delegate tasks and provide mutual support as needed. Nurses may assist radiologic technologists with patient positioning, equipment setup, and post-procedure care, while radiologic technologists may provide technical assistance and expertise during imaging procedures. This collaborative approach allows for the efficient utilization of resources and ensures that all aspects of patient care are addressed promptly and effectively. In summary, collaboration between nurses and radiologic technologists is instrumental in optimizing workflow efficiency within X-ray departments. By coordinating patient scheduling, equipment utilization, patient flow, and communication efforts, they streamline processes, minimize delays, and enhance the overall quality of care provided to patients undergoing diagnostic imaging procedures.

Patient Safety:

Patient safety is a top priority in X-ray departments, given the potential risks associated with radiation exposure and procedural complications. Collaboration between nurses and radiologic technologists enhances safety protocols and promotes adherence to best practices. Nurses play a crucial role in educating patients about radiation safety measures, while radiologic technologists implement proper radiation shielding and exposure reduction techniques during imaging procedures. Ensuring the safety of patients undergoing X-ray procedures is a paramount concern within radiology departments. Collaboration between nurses and radiologic technologists is essential for implementing and maintaining rigorous safety protocols. Here's how their collaboration contributes to safeguarding patient well-being:

Radiation Safety Education:

Nurses play a vital role in educating patients about radiation risks and safety measures. They explain the purpose of the X-ray procedure, discuss potential risks and benefits, and provide instructions on protective measures such as wearing lead aprons and thyroid shields. Radiologic technologists reinforce these safety

messages by explaining how radiation exposure is minimized during imaging procedures, emphasizing the importance of collaboration in adhering to safety protocols.

Optimized Radiation Dose:

Radiologic technologists are responsible for optimizing radiation dose during X-ray examinations. They employ techniques such as collimation and exposure adjustment to ensure that diagnostic images are obtained with the lowest possible radiation exposure. Nurses collaborate with radiologic technologists to ensure that patients receive the appropriate imaging protocol based on their clinical needs, minimizing unnecessary radiation exposure while maximizing diagnostic accuracy.

Patient Positioning and Immobilization:

Proper patient positioning is crucial for obtaining high-quality diagnostic images while minimizing the need for repeat exposures. Radiologic technologists collaborate with nurses to ensure that patients are positioned correctly and immobilized as needed to prevent motion artifacts. Nurses provide assistance and support to patients during positioning, helping to alleviate discomfort and ensure compliance with positioning instructions, thereby enhancing the efficiency and safety of the imaging procedure.

Emergency Response Preparedness:

In the event of an adverse reaction or emergency during an X-ray procedure, nurses and radiologic technologists collaborate to ensure a prompt and coordinated response. Nurses are trained to recognize signs of distress or adverse reactions and initiate appropriate interventions, while radiologic technologists provide assistance and support as needed to ensure patient safety and well-being.

Infection Control Practices:

Both nurses and radiologic technologists adhere to strict infection control practices to prevent the spread of infectious diseases within the radiology department. They collaborate to ensure that all equipment and surfaces are properly cleaned and disinfected between patient encounters, minimizing the risk of healthcare-associated infections.

Continual Monitoring and Quality Assurance:

Collaboration between nurses and radiologic technologists extends to the continual monitoring of safety practices and quality assurance initiatives within the radiology department. They work together to identify areas for improvement, implement corrective actions, and ensure compliance with regulatory requirements and industry best practices to maintain a culture of safety and excellence. In conclusion, collaboration between nurses and radiologic technologists is instrumental in promoting patient safety within X-ray departments. By combining their expertise, communication skills, and commitment to quality care, they create a safe and supportive environment for patients undergoing diagnostic imaging procedures, ultimately enhancing the overall quality and effectiveness of healthcare delivery.[4]

Enhanced Communication and Coordination:

Effective communication is the cornerstone of collaboration between nurses and radiologic technologists. By maintaining open lines of communication, they exchange vital information about patient history, procedural requirements, and post-procedure care. This facilitates smooth coordination and ensures that all members of the healthcare team are aligned in their efforts to meet the needs of the patient. Effective communication and coordination between nurses and radiologic technologists are fundamental to the smooth operation of X-ray departments and the delivery of quality patient care. Here's how their collaboration fosters enhanced communication and coordination:

Patient Information Exchange:

Nurses and radiologic technologists exchange pertinent patient information to ensure a comprehensive understanding of each patient's medical history, current condition, and specific imaging requirements.

Nurses provide radiologic technologists with relevant patient details, such as allergies, contraindications, and any special considerations that may impact the imaging procedure. Radiologic technologists communicate imaging findings and procedural updates back to nurses, enabling them to incorporate this information into the patient's care plan and provide appropriate

follow-up care.

Procedural Planning and Coordination:

Nurses and radiologic technologists collaborate to plan and coordinate imaging procedures, taking into account factors such as patient acuity, scheduling constraints, and equipment availability. They work together to ensure that patients are adequately prepared for imaging exams, coordinating tasks such as patient positioning, equipment setup, and procedural documentation. By aligning their efforts, nurses and radiologic technologists optimize workflow efficiency and minimize delays, enhancing the overall patient experience.

Real-Time Communication During Procedures:

During imaging procedures, nurses and radiologic technologists maintain open lines of communication to address any issues or concerns that may arise. Nurses provide support to patients, offering reassurance, comfort, and assistance as needed, while radiologic technologists focus on technical aspects of the procedure, such as image acquisition and equipment operation. Effective communication ensures that patient safety is prioritized, procedural requirements are met, and any unexpected challenges are promptly addressed.

Interdisciplinary Collaboration:

Collaboration between nurses and radiologic technologists extends beyond the confines of the radiology department, encompassing interdisciplinary communication with other healthcare team members.

Nurses and radiologic technologists liaise with physicians, specialists, and other allied healthcare professionals to coordinate patient care, share relevant imaging findings, and facilitate interdisciplinary consultations. This collaborative approach ensures that patient care is well-coordinated, multidisciplinary perspectives are considered, and optimal treatment decisions are made based on comprehensive clinical information.

Documentation and Reporting:

Nurses and radiologic technologists collaborate on documentation and reporting tasks, ensuring that accurate and timely records are

maintained throughout the imaging process. They communicate effectively to document procedural details, patient responses, and any pertinent observations or concerns, facilitating continuity of care and information sharing among healthcare providers. In summary, enhanced communication and coordination between nurses and radiologic technologists are essential for delivering high-quality patient care in X-ray departments. By fostering collaboration, sharing information, and aligning their efforts, these professionals ensure that imaging procedures are conducted safely, efficiently, and in accordance with the highest standards of care.

Improved Patient Experience:

Collaboration between nurses and radiologic technologists contributes to a positive patient experience during X-ray procedures. Nurses provide empathetic support, address patient concerns, and alleviate anxiety, while radiologic technologists focus on technical proficiency and image quality. Together, they create a supportive environment that fosters patient comfort, confidence, and satisfaction. Collaboration between nurses and radiologic technologists within X-ray departments plays a significant role in enhancing the overall patient experience. By working together seamlessly, these professionals create a supportive and patient-centered environment that promotes comfort, confidence, and satisfaction. Here's how their collaboration contributes to an improved patient experience:

Compassionate Care and Emotional Support:

Nurses and radiologic technologists collaborate to provide compassionate care and emotional support to patients undergoing X-ray procedures. Nurses offer reassurance, empathy, and personalized attention, addressing patients' concerns, alleviating anxiety, and ensuring that they feel valued and respected throughout the imaging process. Radiologic technologists contribute to the patient experience by demonstrating empathy, professionalism, and patience, fostering a sense of trust and confidence in the care provided.

Clear Communication and Education:

Effective communication between nurses and radiologic

technologists ensures that patients are well-informed and educated about the imaging procedure, its purpose, and what to expect. Nurses explain the procedure in layman's terms, answer questions, and provide instructions, while radiologic technologists offer technical explanations and clarify any misconceptions or concerns. Clear communication helps to alleviate patient anxiety, enhance understanding, and empower patients to actively participate in their care, leading to a more positive experience.

Patient-Centered Care Planning:

Nurses and radiologic technologists collaborate to develop individualized care plans that prioritize the unique needs and preferences of each patient. They assess patients' physical, emotional, and psychological well-being, tailoring care strategies and interventions to promote comfort, dignity, and autonomy. Patient-centered care planning fosters a sense of partnership between patients and healthcare providers, ensuring that care is personalized, responsive, and aligned with patients' values and goals.

Efficient and Timely Service Delivery:

Collaboration between nurses and radiologic technologists optimizes workflow efficiency and minimizes wait times for patients. By coordinating scheduling, preparation, and procedural logistics, they ensure that patients receive prompt and timely service, reducing unnecessary delays and enhancing the overall efficiency of the imaging process. Efficient service delivery contributes to a positive patient experience by demonstrating respect for patients' time and minimizing the inconvenience associated with medical appointments.

Continuous Monitoring and Support:

Throughout the imaging process, nurses and radiologic technologists monitor patients' well-being and provide ongoing support and assistance as needed. They remain attentive to patients' comfort, safety, and satisfaction, addressing any discomfort, concerns, or adverse reactions promptly and effectively.

Continuous monitoring and support reassure patients, instill confidence in the care provided, and contribute to a sense of

security and trust in the healthcare team. In conclusion, collaboration between nurses and radiologic technologists enhances the patient experience in X-ray departments by fostering compassionate care, clear communication, personalized care planning, efficient service delivery, and continuous support. By working together to prioritize patients' needs and preferences, these professionals create a positive and patient-centered environment that promotes well-being and enhances overall satisfaction with the care received.

Professional Development:

Collaboration offers valuable opportunities for professional growth and skill enhancement. Nurses and radiologic technologists learn from each other's expertise, share best practices, and engage in interdisciplinary training initiatives. This collaborative learning environment fosters continuous improvement and ensures that both professions remain abreast of advancements in diagnostic imaging technology and patient care practices. In conclusion, collaboration between nurses and radiologic technologists is indispensable for optimizing the delivery of care in X-ray departments. By leveraging their respective strengths, fostering effective communication, and prioritizing patient safety and satisfaction, these professionals exemplify the collaborative spirit that drives excellence in healthcare.

Roles and Responsibilities:

Nurses:

Patient Assessment: Nurses are responsible for assessing patients before and after X-ray procedures. They gather relevant medical history, assess the patient's condition, and address any concerns or questions.

Patient Preparation: Nurses prepare patients for X-ray examinations, explaining the procedure, obtaining consent, and ensuring patient comfort and safety.

Emotional Support: Patients undergoing X-ray procedures may experience anxiety or discomfort. Nurses provide emotional support, reassuring patients and addressing their concerns.

Radiation Safety: Nurses educate patients about radiation safety measures and ensure compliance with safety protocols, such as

wearing lead aprons and thyroid shields.

Post-Procedure Care: After the X-ray, nurses monitor patients for any adverse reactions, provide post-procedure instructions, and document relevant information in the patient's medical record.

Radiologic Technologists:

Equipment Operation: Radiologic technologists operate X-ray machines and other imaging equipment, ensuring proper positioning and image quality.

Patient Positioning: They position patients correctly for X-ray examinations, following physician orders and imaging protocols to obtain accurate diagnostic images.

Radiation Protection: Radiologic technologists implement radiation protection measures, such as collimation and shielding, to minimize radiation exposure to patients, themselves, and other staff members.

Image Acquisition: They acquire diagnostic images, ensuring optimal image quality while minimizing radiation dose to the patient.

Collaboration with Nurses: Radiologic technologists collaborate with nurses by communicating effectively, addressing patient needs and concerns, and working together to ensure a smooth and efficient workflow.

Collaborative Practices:

Communication: Effective communication between nurses and radiologic technologists is essential for coordinating patient care. They share relevant patient information, discuss procedural details, and collaborate on patient management.

Teamwork: Collaboration involves mutual respect, trust, and teamwork. Nurses and radiologic technologists work together seamlessly, supporting each other to provide the best possible care for patients.

Cross-Training: Some healthcare facilities offer cross-training opportunities for nurses and radiologic technologists, enabling them to understand each other's roles better and collaborate more effectively.

Quality Improvement: Collaborative efforts between nurses and

radiologic technologists contribute to quality improvement initiatives within the X-ray department. They identify areas for improvement, implement changes, and evaluate outcomes to enhance patient care and workflow efficiency.[5]

Conclusion:

In X-ray departments, collaboration between nurses and radiologic technologists is essential for delivering high-quality patient care. By understanding and respecting each other's roles, communicating effectively, and working together as a cohesive team, nurses and radiologic technologists ensure optimal outcomes for patients undergoing X-ray procedures. This collaborative approach not only enhances patient safety and satisfaction but also contributes to the overall efficiency and effectiveness of the healthcare delivery system.

The collaboration between nurses and radiologic technologists within X-ray departments is not merely a matter of convenience but a critical component of delivering high-quality patient care. Through their combined efforts, these professionals create a synergistic partnership that enhances every aspect of the patient experience, from emotional support to technical proficiency. By leveraging their respective expertise and working together seamlessly, nurses and radiologic technologists ensure that patients receive comprehensive, safe, and efficient care throughout the imaging process.

This collaborative approach is essential for optimizing patient outcomes and satisfaction. Nurses play a pivotal role in assessing patient needs, providing emotional support, and coordinating care, while radiologic technologists excel in technical proficiency, radiation safety, and image acquisition. Together, they form a cohesive team that prioritizes patient well-being and ensures that each individual receives personalized, compassionate care tailored to their unique needs and preferences.

Furthermore, effective communication and coordination between nurses and radiologic technologists are essential for streamlining workflow processes, minimizing delays, and maximizing the efficiency of X-ray departments. By maintaining open lines of communication, sharing relevant information, and coordinating

efforts seamlessly, these professionals ensure that patients receive timely and appropriate care, thereby enhancing overall satisfaction and improving outcomes.

In conclusion, collaboration between nurses and radiologic technologists is not only beneficial for patients but also essential for the success of X-ray departments. By working together harmoniously, these professionals exemplify the collaborative spirit that underpins excellence in healthcare delivery. Through their dedication, compassion, and teamwork, they ensure that patients receive the highest standard of care, promoting well-being and instilling confidence in the healthcare system as a whole.

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