Lived Experiences of MRI Technologists Handling Pediatric Imaging with Contrast Medium

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Abstract

Pediatric patients present unique challenges based on the differing age, physiological differences, and emotional responses that require specialized skills, sensitivity, and a broad understanding of the technical and emotional aspects of care. The study used the hermeneutic phenomenology method of Van Manen, which emphasizes understanding and interpreting human experiences through reflection and thematic analysis. This study was conducted in a leading Level 2 tertiary hospital in Kalibo, Aklan, with seven MRI Technologists who had at least one year of experience in pediatric imaging. In-depth interviews were conducted, and the data were analyzed to identify common themes. Three relevant themes emerged from the analysis: Professional Competence and Attitude in Pediatric Imaging, Behavioral Experiences Regarding Professional Conduct, and Holistic Growth and Compassionate Engagement. The findings of the study identified MRI technologists face significant challenges including managing pediatric patients' anxiety, ensuring adherence and performing complex imaging techniques. The study highlighted that these problems nurture the professional identity of technologists, enhancing their skills in empathy, communication, and the delivery of compassionate care. The results reveal important aspects related to the need for a patient-centered approach, the need for good communication with the patients and their guardians, and the benefit of a multi-discipline teamwork approach in improving the results for pediatric imaging. The results of this study provide a basis for the development of training programs and best practices that could enhance the quality of care delivered to children receiving MRI procedures. Future research should explore the coping processes used by MRI technologists so they can share knowledge and techniques with others to improve their practice. In addition, applying this research to other contexts or areas of radiography, may increase understanding of the challenges and options in pediatric care benefiting healthcare providers and child patients.

Keywords: Pediatric Imaging, Radiologic Technologist, MRI technologist, Professional Competence and Attitude, Behavioral Experiences, and Holistic Growth and Compassionate Engagement

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In modern diagnostic techniques, pediatric imaging with contrast medium is vital, but MRI technologists' proficiency in managing pediatric patients is challenging. The growing need for high-quality diagnostics and the complexity and

difficulty of pediatric treatment underscore the MRI technologist training gap.

Globally, Lacono (2024) said that pediatric MRI operations have increasingly used contrast media, although patient physiological variances, emotional responses, and technical issues provide distinct challenges.

In United States, Cheeney (2023) stated that even if MRI technologists are well trained, the use of contrast medium among pediatric imaging is under constant scrutiny because it is not confined in technology, extending to the capacity in managing balance between contrast and discomfort.

To continue, emphasizing rural areas, in the Philippines, the problem has been more pronounced are pediatric MRI procedures are essential in diagnosing condition. However, such country with health infrastructure lacks resources not only to support the needs of the patient, but also to support the advanced need of MRI technologists, they are often underutilized (Garcia et al.,2021). The inadequacy of training programs for MRI technologists, highlights the lack of access to the latest training with outdated practices, compromising health and specific guidelines for pediatric imaging means that there is an increased risk of receiving improper or harmful procedures.

The study explored an important topic affecting rural communities such as Aklan where health workers, such as MRI technologists, often times have limited skillsets and are forced to use general techniques that may not be appropriate for pediatric patients. This is compounded by the absence of local information regarding the issues surrounding imaging of pediatrics using contrast media. In rural healthcare facilities, there will almost always be common resource shortfalls, and those working in these settings may not have current information regarding best practices or professional training reflecting specific

Methods

The study used hermeneutical phenomenology to examine MRI technologists' lived experiences with patient management in pediatric contrast imaging. The hermeneutic phenomenology' goal is to uncover the deep meaning experiences hold for people (Guillen, 2019).

challenges found in rural settings confronted with imaging pediatrics and contrast media. The absence of comprehensive studies on the unique compounded challenges held by MRI technologists working in rural settings hinder the understanding of some of the difficulties faced in pediatric imaging using contrast media, which further hampers the continuity of care or derivation of standardized protocols needed to establish practices meant to ameliorate the physical and psychological stress that could arise during pediatric imaging procedures.

This study is socially relevant in rural settings where health resources and access to training are limited more so than in urban settings. The absence of regionally based research pertaining to children in Aklan directly impacts how a local context is understood and dealt with by health service providers, and neglects to fulfill regional gaps in information as it relates to the impact on patient health outcomes. Considering the examination of the experience of MRI technologists in rural settings, the present study is an attempt to help ground the distinct needs of pediatric experiences in Aklan, and providing findings from the project will help influence the region for MRI technologists to better train, imaging technique, and resulting in improved health outcomes for children during procedures in a rural community. With findings from the present study, stress management involving children undergoing an MRI in a rural health setting may minimize healthcare inequities and improve practice throughout rural healthcare.

The study was conducted at a reputable medical institution in Kalibo, Aklan, the institution is a Level 2 tertiary hospital, meaning that it offers advanced diagnostic and therapeutic services, including highly specialized imaging procedures.

The study focused on MRI Radiologic Technologist performing pediatric imaging with contrast medium, particularly those with 1 year or more experience in the field of their study. the researcher used purposive sampling with all seven (7) MRI technologist

were in this study. This approach ensured that the sample strongly represented the total target population. The study employed indepth interviews with MRI Radiologic Technologists as the primary source of data.

Interviews were conducted face to face and lasted 25–40 minutes depending on how the participant answered questions. All data were de-identified, with access limited to the researcher and study advisor, to protect participant confidentiality.

The data derived from the MRI Technologists responses was analyzed using the Van Manen's hermeneutic phenomenology approach, which paralleled the aim of the investigation in disclosing the real-life experiences of the participants.

Using a qualitative data analysis, Van Manen's hermeneutic phenomenology method highlights a number of important stages to analyze the experiences of the lives of MRI technologists.

Hermeneutic phenomenology emphasizes interpreting lived experiences, enabling a thorough comprehension of MRI technologists' understandings of their role as

well as the difficulties they face, and the impact of their work, both personally and on their pediatric patients. This type of research shares focus and purpose with developmental of curricula, improved policies, and enhancements of technologies and training. This provides researchers the opportunity to reveal meaningful insights by understanding how healthcare practitioners, in a rural context, explain their meaningmaking in their experiences, which may not be shown in other studies. In this case, we want to look at these experiences to improve practices, training and policy related to pediatric imaging in the rural context.

The researcher then developed the basic structure of the phenomena, emphasizing the results into the themes of the lived experiences. This fostered participant(s) validation through member checking and allowed the researcher to report back to the participants, recreate the analysis with participant filters, and ensure the themes and interpretations of the analysis accurately represented their lived experiences

Results and Discussion

The lived experiences of MRI technologists using contrast media for pediatric imaging and identified three emergent themes and three grouped themes: Emergent theme 1 is Professional Competence and Attitude in Pediatric Imaging. Behavioral Experiences on

Professional Conduct (Work Ethics, Professionalism, and Genuine Service). Finally, Emergent theme3: Holistic Growth and Compassionate Engagement (Professional Growth and Nurturing Compassion).

Table 1. Profile of the Participants

Participant Number	Pseudonym	Length of Service	Study Group
1	Gadavist	36 months	IDI
2	Clariscan	15 months	IDI
3	Vueway	44 months	IDI
4	Multihance	15 months	IDI
5	Omniscan	13 months	IDI
6	Prohance	15 months	IDI
7	Eovist	15 months	IDI

Table 1 shows the study participants' pseudonyms, gender, length of service, and study group. To ensure secrecy, seven

participants were given MRI contrast medium brand pseudonyms for in-depth interviews.

The study examines Aklan, Philippines, MRI Radiologic Technologist's experiences

with pediatric imaging using contrast medium. Seven participants' interviews were carefully collected, evaluated, and analyzed, with key statements emphasized.

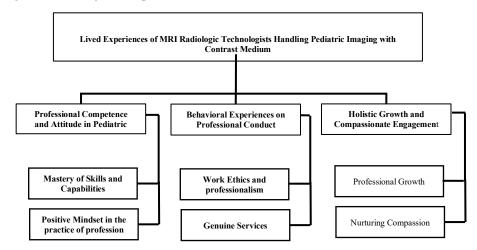


Figure 1. Thematic Map of the Lived Experiences of MRI Radiologic Technologists Handling Pediatric Imaging with Contrast Medium

Utilizing Van Manen's hermeneutic phenomenology, three themes emerged that characterized MRI Radiologic Technologists' lived experiences with contrast media in pediatric imaging. Emergent Theme 1 covers Professional Competence and Attitude in Pediatric Imaging, including Mastery of Skills and Capability and Positive Mindset in the Practice of Profession. Emergent Theme 2 covers Professional Conduct Behaviors, including Work Ethics,

Professionalism, and Genuine Service. Finally, Emergent Theme 3 combines Professional Growth with Nurturing Compassion to explore Holistic Growth and Compassionate Engagement. These themes underscore the study's main goal: to deeply investigate comprehend and MRI technicians' lived experiences, particularly in pediatric imaging with contrast medium, and

highlight critical aspects that impact their professional practice and patient care.

Emergent Theme 1. Professional Competence and Attitude in Pediatric Imaging

The question, "What are the lived experiences of the Radiologic Technologists handling pediatric patients with contrast medium?" yielded theme 1—professional competence and attitude in pediatric imaging.

This examines Radiologic Technologists' firsthand experiences with pediatric MRI patients using contrast media. It highlights Radiologic Technologists' subjective experiences, problems, accomplishments, and thoughts via their work. Appreciating the complexity of radiologic technology requires understanding radiologic technologists' lives.

Table 2. Professional Competence and Attitude in Pediatric Imaging

Formulated Meanings	Essential Themes	Emergent Themes
Ambivalence of feelings	Mastery of Skills and Capabilities	

Dealing with the pediatric patients' behavior

Establishing rapport and trust

Resiliency

Positive Mindset in the practice of profession

Professional Competence and Attitude in Pediatric Imaging

Motivation and attitude

Optimistic Approach

Essential Theme 1.1 Mastery of Skills and Capabilities

From the emergent theme 1 of the study emphasizing Professional Competence and Attitude in Pediatric Imaging, mastery of skills and capabilities emerged. This shows the entirety of ambivalence of feelings of the participants along with the attitude on dealing with the pediatric patients' behavior, eventually, able to establish rapport and trust.

Also, this can be fulfilling when the assigned task is accomplished. As such, training and support is emphasized in the literature. Researchers evaluating the quality of work-life, among MRI technologists found significant correlations between satisfaction and several variables such as working conditions and stress levels, and concluded that supportive work environments were essential (Steward et al.,2023).

"It has been interesting. Definitely a mix of ups and downs, but a valuable experience" – Vueway

"Having to complete the procedure and was able to deliver quality images to the Radiologist is fulfilling. I feel that I have contributed something to the treatment plan of the patient." – Eovist

"It's a rollercoaster of experiences, but each day brings a sense of accomplishment, especially when you know you've played a part in helping a child receive the care they need." – Omniscan

Studies have demonstrated that tailored interventions to prepare children for

MRI, and child focused approaches for the scan itself, are effective in reducing anxiety and improving the overall process. Evidence suggests that fear of, and satisfaction with, MR examinations in children are significantly reduced by clinical simulations and patient centered communication (Wynne et al., 2024).

"These experiences involve adapting to the unpredictability of working with the younger patients, effectively communicating with parents, managing patient anxiety, and providing precise imaging while reducing risks" – Vueway

"The key is in communicating well with the parents and the child—understanding their fears and making the experience less intimidating." – Clariscan

"It's definitely a test of patience—one minute you're frustrated, and the next, you're relieved knowing that the procedure is complete and the child is safe." — Multihance

As such, the participant also entailed establishing rapport and truest strengthened the MRI Radiologic Technologists' communication skills for both patients and parents, ensuring patients' safety

"Yes. Such difficulties have changed how I approach patient care. It developed my patience, adaptability, and empathy when working with pediatric patients. I have additionally strengthened my communication skills which have allowed me to establish rapport successfully with children and their

parents while ensuring their safety and comfort during the procedure." – Vueway

"The difficulties in keeping young children at ease, as well as their fear of the entire procedure, had major influence on my behavior. In addition, working with nervous parents has taught me the value of straightforward and reassuring communication in gaining their trust and cooperation." – Vueway

"Building trust with the parents and kids has made such a difference. I've learned that clear communication and empathy really help ease the process for both the child and the parent, making the whole experience less stressful." – Gadavist

Essential Theme 1.2 Positive Mindset in the Practice of Profession

The essential theme 1.2 emphasized the positive mindset in the practice of profession marking the resiliency with subsequent motivation and optimistic This attitude. perspective enabled technologists to confront the challenges of pediatric imaging with assurance, navigating stressful and demanding situations by emphasizing solutions over obstacles. Their optimistic perspective not only facilitated professional composure but also improved their relationships with pediatric patients, helpful and fostering a reassuring environment that contributed to the overall efficacy of the imaging process.

Additionally, permitting parental presence during the MRI can offer reassurance and alleviate anxiety for both the child and the parent. It has been indicated that parental attendance during scans aids in calming youngsters and enhancing collaboration, thereby enabling technologists to explore other solutions without compromising care (Makanjee,2023).

"Yes. There are distinctive challenges when doing contrast-enhanced MRI scans on young children. It can be laborious to keep young patients stationary, and dealing with parents' emotions adds complexity." – Vueway

"Brain scans. These kids get scared easily especially if they swoop in headfirst in the MRI bore. This results in anxiousness and motions. The most common challenge in MRI, above all of this is the IV insertion these kids would partake" – Omniscan

"Procedures that require the patient to be oriented headfirst. For example, spine and head. Because usually their whole body is inside the bore. Making them feel anxious and claustrophobic." – Multihance

"Brain. As I have observed, since this procedure orients the patient headfirst, as they advance inside the bore it gets dark, and the space gets tighter which make them feel afraid and anxious." – Clariscan

"Usually brain. Because kids get scared as the patient table moves forward and it gets darker, narrower, and noisier."—Prohance

To continue, the result shows that enhancing the capacity to deliver empathetic treatment while upholding technical skills, upskilling the capacity of the MRI RT to solve problems

According to research of Kelly et al.,(2024) communication and empathy are the top skills by which radiologists are judged based on the perspective of a patient. Indeed, MRI radiologic technologists frequently encounter situations that require quick decision-making and flexibility. Essential to be able to troubleshoot technical issues and to tailor procedures to individual patient needs. Hands-on training is vital for developing problem-solving skills, enabling technicians to know how to handle unexpected problems effectively.

"Since it has enhanced my capacity to deliver empathetic treatment while upholding technical skills, I view this as a positive development" – Vueway "My capacity to solve problems, be patient, and perform well under pressure has all improved as a result of the experience." – Vueway

"Use a friendly tone, child level language when talking to the patient, and one must the honest with the procedure. Never sugar coat." – Multihance

"This requires us to learn more and plan an approach to ensure the safety and comfort of the child while aiming for the image quality." – Prohance

Child life specialist (CLS) programs have been implemented to target patient and parent education about imaging procedures and have been shown to be effective in reducing anxiety and improving cooperation (Hermiller,2022).

While realistic optimism may enhance motivation and self-esteem, too much of it tends to make us ignore negative consequences, with implications for clinical judgment, research suggests (Jerlan et al.,2023).

"The challenges of doing MRI CE in pediatric patients have a considerable impact on MRI Radiologic Technologists' abilities and attitude. Young children require particular skills because their smaller veins, limited cooperation, and increased anxiety.

Therefore, technologists must develop a distinct blend of technical expertise, and patience, and communicating skills. – Vueway

"Staying positive and reassuring both the child and the parents helps reduce anxiety and makes the procedure smoother for everyone involved." – Gadavist

"Optimism is important, but I've learned that being realistic about the challenges allows me to handle unexpected situations more effectively." – Multihance

Emergent Theme 2. Behavioral Experiences on Professional Conduct

The emergent theme 2 shows the behavioral experiences on the professional conduct extracted from the question "How do these experiences shape the behavior of MRI Radiologic Technologists in handling pediatric imaging with contrast medium?".

This focuses on the behavior of MRI (Magnetic Resonance Imaging) Radiologic Technologists is influenced by a variety of experiences, including formal education, hands-on training, professional exposure, and the nature of the work environment. These experiences instill in them a strong sense of responsibility, empathy, technical skill, and professionalism that guide their everyday actions and decisions in their careers.

Table 3. Behavioral Experiences on Professional Conduct

Formulated Meanings	Essential Themes	Emergent Themes
Situational challenges in handling the patients	Work Ethics and professionalism	
Ethical challenges on MRI Radiologic Technologists		
Patient Centered Approach	Genuine Services	
Reflections on the challenges and the motivation		Behavioral Experiences on Professional Conduct

Essential Theme 2.1 Work Ethics and professionalism

From the emergent theme 2 of the study as to the behavioral experiences on professional conduct, work ethics and

professionalism evolved. This highlighted technologists' willingness to adhere to strict practice standards and their longing to deliver high-quality care in the face of challenges. Participants consistently displayed a strong sense of duty, ethics, and accountability in their work, which shaped their interactions with patients and colleagues alike.

This improved patient care and demonstrated adherence to ethical guidelines and professional conduct created an environment of trust and respect.

Whereas, Cheeny (2023) MRI scans have thousands of images that are the end product of the scanning process; therefore, as long as the subject is still for the duration of the scan, they do not have a critical role in it themselves. Behavioral interventions, such as providing developmentally appropriate information and teaching coping skills, have been shown to reduce distress and increase cooperation.

"When proceeding with IV insertion. Because the patients tend to fight back in response to pain. — Multihance

"In pediatric imaging, it's essential to follow the guidelines meticulously while ensuring the comfort and safety of the child. Our responsibility goes beyond the technical side; it's about making sure the child is at ease and the parents are informed and reassured." – Vueway

"It's not just about knowing how to operate the equipment; it's about making sure the child feels safe and that the parents feel their concerns are heard." – Omniscan

Additionally, Angkahan (2023)mentioned that working with pediatric patients requires respiratory therapist to develop patience, creativity and empathy. These skills are vital for building trust and ensuring patients are comfortable and free of anxiety when undergoing treatment. There is evidence that understanding child psychology and gaining trust are important components of successful pediatric imaging examinations and good patient experience. Each encounter with pediatric patients offers valuable learning experience for respiratory therapists, enhancing their ability to anticipate and address challenges effectively (Cerbito, 2020).

"Such difficulties have changed how I approach patient care. It developed my patience, adaptability, and empathy when working with pediatric patients. I have additionally strengthened my communication skills which have allowed me to establish rapport successfully with children and their parents while ensuring their safety and comfort during the procedure." – Vueway

"Because I am gaining experiences and learnings on what to do next time, I encounter these kind of challenges" – Multihance

"It made me more tolerant and even more attentive to the patient's needs for them to be able to feel safe and comfortable during the entire procedure" – Clariscan

Essential Theme 2.2 Genuine Service

The essential theme 2 focuses on the genuine services as part of the behavioral experiences as to establishing patient centered approach and reflection towards the challenges alongside with motivation. The technologists demonstrated a deep commitment to providing compassionate, person-centered care, ensuring that every pediatric patient felt seen and valued throughout the imaging process. Whenever they had to think about the challenges faced

As such, the core ideas draw shows that this can be realized by taking a patient-centered approach, effective communication and collaborative efforts with colleagues. Health care professionals including MRI technologists, radiologists, child-life specialists must work together to improve the pediatric MRI experience. They ensure that patient care methods are tailored to individual needs, resulting in a safer and more comfortable experience. Studies show that the most critical factor for obtaining good pediatric (Erundo,2022)

"It made me more tolerant and even more attentive to the patient's needs for them to be able to feel safe and comfortable during the entire procedure" – Vueway

"By taking the time to understand each child's specific needs, I was able to make them feel safe, which made the procedure much smoother and less stressful for everyone." – Eovist

"Working alongside child-life specialists and radiologists has made me realize that effective teamwork and clear communication are key to making the pediatric experience as stress-free as possible." – Multihance

Collaboration among health care providers promotes patient safety and quality of care, by exchange of information and coordination of care. In fact, studies show patient safety improves and rates of both hospitalization and complications fall from collaborative programs. In addition, building trust with patients and their families is also a key factor, as they develop confidence and trust in transparent communication and involvement in the treatment process (Castro, 2022).

"We must discuss the role of interdisciplinary teamwork to give importance to patient care, building trust with them is also crucial, and make your scan time as short as possible" – Multihance

"By being mindful of each child's specific needs and anxieties, I can better ensure their comfort and safety, which in turn makes the whole process less intimidating for them." – Prohance

"Working closely with other healthcare professionals really makes a difference. When we're all on the same page, it's easier to ensure the patient feels safe, and the procedure goes smoothly." – Eovist

Emergent Theme 3. Holistic Growth and Compassionate Engagement

The emergent theme 3 shows the holistic growth and compassionate engagement extracted from the question "3. What insights can the participants share among their colleagues and to the radiologic technology in general?". This focuses on sharing insights with colleagues, and the broader MRI profession is a vital way to improve standards, foster collaboration, and elevate patient care in the field of radiologic technology. By exchanging knowledge and experiences. MRI technologists continually enhance their skills, support each other's growth, and contribute to the ongoing development of the profession.

Table 4. Holistic Growth and Compassionate Engagement

Formulated Meanings	Essential Themes	Emergent Themes
Updating of technical skills	Professional Growth	
Collaborating with other health professionals		
Relationship and rapport-building	Nurturing Compassion	<u> </u>
Best practices for managing pediatric patients		Holistic Growth and Compassionate Engagement

Essential Theme 3.1 Professional Growth

Their commitment to staying updated on advancements in the field allows them to provide the highest level of care possible. Furthermore, all the specialists agreed that teamwork with other health

specialists, such as pediatricians and nurses, was a crucial aspect of their professional development. The effort toward improving patient outcomes, sharing knowledge and improving practices further evidenced development for MRI technologists in a

multidisciplinary team, establishing them as a knowledgeable and caring professional.

Pediatric patients provide distinct issues owing to their diminutive physical differing degrees and structures compliance. Radiologic technologists must modify their approaches to address these concerns. Utilizing suitable immobilization devices. implementing child-friendly communication, and modifying imaging techniques to align with the child's developmental stage are essential (Everts et al.,2022).

"They can improve pediatric imaging outcomes by discussing effective patient cooperation approach." – Prohance

"We must discuss the role of interdisciplinary teamwork to give importance to patient care, building trust with them is also crucial, and make your scan time as short as possible.." – Multihance

"By staying updated on the latest advancements and working closely with other healthcare professionals, we can significantly improve pediatric imaging outcomes and provide the best care possible for our young patients." – Eovist

Whereas, collaboration can be done through discussing effective cooperation approach with other health professionals, as well as they will be able to work with other health professionals that will complement each other's task to ensure the utmost safety of the patient. Optimizing patient care through a multidisciplinary team approach in pediatric MRI environments has proven to be an evolving process (Mcaaler, 2022). The collaboration resulted in less time taken for MRI scans and reduced need for sedation, enhancing the safety and comfort of patients, a study found. In addition, developing an MRI safe culture entails strict adherence to safety precautions and the instilling of alertness, cooperation, improvement in and continuous concerned parties.

"They can improve pediatric imaging outcomes by discussing effective patient cooperation approach." – Vueway

"We must discuss the role of interdisciplinary teamwork to give importance to patient care, building trust with them is also crucial, and make your scan time as short as possible.." – Multihance

"Through collaboration and open communication with the entire healthcare team, we can significantly improve pediatric imaging outcomes, ensuring both safety and comfort for the patients." – Gadavist

Essential Theme 3.2 Nurturing Compassion

The essential theme 3.2 shows the nurturing compassion with the emphasis of building rapport and best practices for managing the pediatric patient. Technologists recognized that having trust and a positive relationship between young patients and their doctors was key to providing effective care, they were able to decrease patient anxiety and help make patients feel more comfortable during procedures.

Additionally, parental attendance in the preparatory phase is crucial. Having a parent present can soothe the child, helping to alleviate anxiety. Studies show that parents appreciate being informed about the procedure and being able to stay with their children, resulting in improved child cooperation and reduced procedural anxiety. Transparent and compassionate communication is paramount between practitioners, healthcare patients families to establish trust and a sense of safety. Addressing concerns, supplying comprehensive information, and delivering emotional support are fundamental elements of compassionate care (Talevski, 2023).

"Familiarize and educate young children on the procedure and scan room with simulated MRI session." – Vueway "By explaining to both parents and patients on the flow of the procedure and by answering their queries so that they will feel reassured.." – Multihance

"Educating the parent about the procedure and creating a sense of reassurance is key to building trust and ensuring the child feels comfortable during the scan." – Omniscan

Moreover, according to the participants, the best practices for managing their pediatric patients is to have effective communication with parents and pediatric, empathy and patience, calm and encouraging demeanor to assist in easing their worries, using simple, such as using age-appropriate language, engaging in playful interactions, and involving parents to create a trusting environment for pediatric patients (Smith & Johnson, 2021) and reward after the completion of the procedure. A review of the impact of parental presence on pediatric patients' distress and cooperation during MRIs with practical suggestions technologists to entice parents into participation (Martinez& Nguyen, 2023).

"Explain the procedure clearly first to the guardians and then let them help you communicate with their kid" – Omniscan

"And sometimes I would suggest the "the rewards system". Reward after the completion of the procedure." – Omniscan

"Suggest a price reward to parents for this accomplishment" – Gadavist

Implication to Practice and Recommendation

For MRI Technologists. This qualitative investigation revealed obstacles faced by MRI technologists during contrast medium procedures for pediatric patients. Knowing the life experiences of MRI technologists can help them overcome particular challenges with pediatric patients, such as reducing

patient apprehension, promoting cooperation, and managing bodily structure.

MRI technologists will learn to assess common and complicated obstacles in pediatric imaging and develop solutions to address them. The guidance will improve technician skills and emotional intelligence, enabling them to respond appropriately to various situations and ensure the safety and health of young patients. MRI Technologists can improve their skills to provide empathic, high-quality care, leading to greater patient outcomes and job satisfaction.

For the Patient. This study's findings will benefit pediatric patients and their parents during assessment. Through sharing experiences, behaviors, and reflections, MRI Technologists impart valuable lessons to help colleagues overcome pediatric imaging problems.

By applying best practices and approaches from peers, technologists can eliminate conflicts, miscommunication, and complications, simplifying the process for patients and their families. The study emphasizes the significance of fostering trust and a welcoming environment for children undergoing medical imaging procedures, enhancing their experience.

For the Future Researcher. The findings of this study will help pediatric patients and parents appraise. MRI **Technologists** help colleagues pediatric imaging issues by sharing their experiences, actions, and reflections. Technologists simplify the procedure for patients and their families by using peerreviewed best practices to avoid conflicts, miscommunication, and problems. study underlines the importance of trust and a welcoming environment for children undergoing medical imaging procedures to improve their experience.

The following recommendations were established in line with the study's aim.

 Improving Patient Management and Reducing Anxiety in Pediatric MRI: Future research should explore how MRI technologists can enhance their management of pediatric patients, specifically to help alleviate anxiety. Employing child-friendly methods of communication, calming and supporting the patient, and creatively distracting the child during the MRI may be helpful. Exploring the use of virtual reality or audiovisual distraction for minimizing a child's distress during the MRI may be fruitful. Also, supporting some level of parental involvement during the imagery may reduce anxiety for the child and the parents.

- 2. Future research should examine the way that MRI technologists cope with situations they encounter when performing a pediatric MRI.
- Examining the mechanism employed to cope with stress and maintain concentration and cater to the needs of the pediatric patients will be helpful. This information might provide a framework for establishing resilience training or educational sessions with peer-support for MRI technologists in terms of coping actions to undertake in these circumstances. Sharing effective coping strategies between colleagues will build a more accepted and cooperative workplace and assist MRI technologists in job satisfaction.

Transferability of the Findings

The implications of this study may extend to other healthcare contexts in rural communities, particularly those unable to provide their staff with advanced training and resources. The MRI experiences of technologists in Aklan may provide a helpful reference point for other regions with similar healthcare issues. However, it must be noted that the specific context of any region, because each region has different groups of patients, resources, and access to technology. Although the results of this study apply to other rural contexts, any further research must be done with the understanding of local differences in healthcare practice and resource availability.

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