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Legal Authority Awareness, Professional Competence, and Ethical Practice in Performing Venipuncture among Radiologic Technologists

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Abstract

Contemporary healthcare highlights the importance of legal compliance, professional competence, and ethical conduct in delivering quality patient care, particularly in procedures such as venipuncture in radiology. The practice of venipuncture is guided by laws and institutional policies that define the scope of practice for radiologic technologists, ensuring that procedures are performed within authorized limits and reducing risks of malpractice and liability. Effective patient care requires not only technical knowledge but also competence in applying clinical skills and sound judgment. Moreover, ethical practice, grounded in principles such as beneficence, nonmaleficence, autonomy, and confidentiality, ensures patient safety, dignity, and trust during invasive procedures. Given these considerations, it is essential to assess the level of legal awareness, professional competence, and ethical practice among radiologic technologists to support safe and effective clinical performance. This study aimed to evaluate radiologic technologists' legal authority awareness, professional competence, and ethical practice when performing venipuncture. A descriptive-correlational research design was employed. The study revealed that radiologic technologists demonstrated a high level of awareness of legal authority, strong professional competence, and consistent adherence to ethical standards in venipuncture practice. In general, the findings suggest that integrating legal knowledge, clinical competence, and ethical principles contributes to safe, efficient, and patient-centered care, reinforcing the importance of continuous education and policy awareness in clinical practice.

Keywords: Legal Authority Awareness, Professional Efficiency, Ethical Practice, Venipuncture

Introduction

One of the fundamental goals of health systems worldwide is to deliver quality healthcare services, as it directly influences patient safety, professional accountability, and ethical standards of practice. Contemporary healthcare emphasizes the importance of legal compliance, professional competence, and ethical conduct in ensuring high-quality services. (Young & Smith, 2022). These principles were particularly important in invasive clinical procedures, especially in medical imaging, such as venipuncture during contrast and radiopharmaceutical administration, where technical skill, adherence to the legal scope of

practice, and ethical decision-making were essential to prevent complications and safeguard patient rights.

Radiologic technologists are traditionally responsible for imaging and increasingly involved in performing venipuncture, particularly for contrast media administration in CT, MRI, and other imaging modalities that require intravenous access. Venipuncture performance in radiology was governed by legal and institutional regulations that defined the scope of practice for radiologic technologists. Legal authority awareness ensures that healthcare professionals perform procedures within professional boundaries, promoting professional accountability and reducing the risk of malpractice and legal liability. (RadTech Registry, 2025).

Delivering safe and effective healthcare requires more than knowledge; it also demands professional competency, which involves the skillful application of clinical techniques and critical thinking in real-world situations. This combination of technical proficiency and sound clinical judgment is essential to every procedure, ensuring accuracy, patient safety, and high-quality care. (José et al., 2022).

Providing patient care goes beyond technical competence, as ethical practice requires decisions grounded in integrity, accountability, and respect for patient rights. Adherence to ethical principles such as beneficence, nonmaleficence, autonomy, and confidentiality guides safe and responsible care, particularly during invasive procedures where patient safety, dignity, and trust are paramount (Olejarczyk & Young, 2024).

Given the growing role of radiologic technologists in performing venipuncture, existing studies have primarily focused on technical competence or patient outcomes. There was limited research on radiologic technologists' awareness of legal authority, professional competence, and ethical practice in performing venipuncture, especially in selected hospitals in Las Piñas. This gap, noted in both local and international literature, highlights the need to examine these factors and their relationships.

This study assessed the levels of legal authority awareness, professional competence, and ethical practice of radiologic technologists in performing venipuncture and examined the relationships among these variables. It also aimed to support their legal and professional rights within the authorized scope of practice and propose an intervention to enhance awareness, competence, and ethical, patient-centered care in medical imaging.

Methods

The study employed a quantitative, non-experimental research design using a descriptive-correlational approach to determine the levels of legal authority awareness, professional competence, and ethical practice in venipuncture among radiologic technologists in selected hospitals in Las Piñas. Likewise, it examined the relationships among these variables. The respondents of the study consisted of 67 licensed radiologic technologists selected from a total population of 80 using the Raosoft sample size calculator with a 5% margin of error and a 95% confidence level. To ensure appropriate representation across hospitals, proportional allocation was applied. Stratified random sampling was utilized to minimize selection bias and ensure that respondents met the study's inclusion criteria.

The study utilized a self-developed questionnaire as the primary data collection instrument, consisting of three parts: legal authority awareness, professional competence, and ethical practice. The instrument underwent content validation by field and research experts, and reliability testing through pilot testing yielded Cronbach's alpha coefficients of 0.895, 0.968, and 0.987, respectively, indicating high internal consistency. Data were gathered through online and in-person survey distribution upon approval from hospital authorities, with informed consent secured from all respondents and confidentiality strictly maintained. A four-point Likert scale was used to measure the variables. Weighted mean was applied to determine the levels of each variable, while Pearson's r correlation coefficient was used to examine the relationships among legal authority awareness, professional competence, and ethical practice in venipuncture.

Results and Discussion

The discussion of the respondents' legal authority awareness, professional competence, and ethical practice in performing venipuncture is presented in the succeeding tables and textual presentations:

Table 1
The Level of Legal Authority Awareness of the Respondents in Performing Venipuncture: Scope of Practice

	Indicator	Weighted Mean	Verbal Interpretation	Rank
1.	1. Understands the clinical procedures that a radiologic technologist is legally allowed to perform.	3.09	High	8
1.	Consider professional boundaries before performing venipuncture.	3.36	Very High	4.5
2.	Ensures compliance with institutional policies and professional regulations during procedures.	3.21	High	6.5
3.	Recognizes tasks beyond legal authorization.	3.21	High	6.5
4.	Evaluates knowledge to perform only legally permitted tasks.	3.39	Very High	3
5.	Confirms authority before performing venipuncture in non-routine procedures.	2.51	High	10
6.	Identifies situations requiring another qualified healthcare professional to perform the procedure.	3.61	Very High	**1**
7.	Keeps updated on institutional policies defining venipuncture authority.	3.45	Very High	2
8.	Differentiates between tasks that can be assisted with and those performed independently.	3.36	Very High	4.5
9.	Reviews credentials and training before performing venipuncture in specialized imaging settings.	3.07	High	9
	Average	**3.23**	High	

Legend: (Strongly Agree/ Very High – 4, Agree/ High – 3, Disagree/ Low – 2, Strongly Disagree/ Very Low – 1)

As shown in Table 1, the respondents' level of legal authority awareness regarding venipuncture scope of practice is presented as a weighted mean and its corresponding interpretation. The highest-ranked indicator was identifying situations requiring another qualified healthcare professional, with a weighted mean of 3.61 and an interpretation of very high. This was followed by keeping up to date on institutional policies defining venipuncture authority (weighted mean of 3.45) and evaluating knowledge to perform only legally permitted tasks (weighted mean of 3.39), which ranked second and third, respectively.

Indicators such as considering professional boundaries before performing venipuncture and differentiating tasks that can be assisted with and those performed independently both obtained a weighted mean of 3.36. Meanwhile, ensuring compliance with institutional policies and recognizing tasks beyond legal authorization both yielded a weighted mean of 3.21, interpreted as high. Lower-ranked indicators included understanding legally authorized procedures (weighted mean 3.09) and reviewing credentials and training in specialized imaging settings (weighted mean 3.07). The lowest-ranked indicator was confirming authority before performing venipuncture during non-routine procedures, with a weighted mean of 2.51, indicating a high level.

To sum up, the average weighted mean of 3.23 indicated that respondents demonstrated a high level of awareness of the scope of practice. This indicates that radiologic technologists are generally aware of their professional boundaries and the procedures they are authorized to perform, particularly in recognizing situations that require referral to a more qualified healthcare professional.

The study's findings support Wong et al. (2024), who emphasized that recognizing limitations in one's competence and appropriately seeking assistance ensures patient safety and adherence to professional and legal standards.

Table 2
The Level of Legal Authority Awareness of the Respondents in Performing Venipuncture: Professional Accountability

	Indicator	Weighted Mean	Verbal Interpretation	Rank
1.	Take responsibility for the outcomes of the venipuncture procedures I perform.	3.42	Very High	5.5
2.	Consider the long-term effects of my professional conduct on patient trust and the quality of care.	3.42	Very High	5.5
3.	Take the initiative to follow up on any mistakes or complications to prevent recurrence.	3.25	Very High	9
4.	Ensures that my practice complies with hospital policies, professional regulations, and ethical guidelines.	3.37	Very High	7
5.	Ensure that I perform only procedures for which I am legally authorized.	3.45	Very High	4

6.	In situations involving an error or unexpected outcome during venipuncture, I take appropriate steps to address it and prevent similar incidents.	3.03	High	10
7.	When faced with uncertainty about performing venipuncture, I seek guidance or clarification rather than proceeding beyond my authority.	3.67	Very High	1
8.	In venipuncture, I remain accountable for my actions even when working under supervision or in team-based settings.	3.60	Very High	2
9.	Discloses limitations in my competence to the appropriate team members before performing venipuncture.	3.51	Very High	3
10.	Recognize how my professional actions during venipuncture contribute to the radiology department's reputation and credibility.	3.31	Very High	8
	Average	**3.40**	**Very High**	

Legend: (Strongly Agree/ Very High – 4, Agree/ High – 3, Disagree/ Low – 2, Strongly Disagree/ Very Low – 1)

As shown in Table 2, the respondents' level of legal authority awareness regarding professional accountability is presented as a weighted mean and its corresponding interpretation. The highest-ranked indicator, seeking guidance within the scope of authority, had a weighted mean of 3.67 and was interpreted as very high. This was followed by remaining accountable even under supervision (weighted mean 3.60) and by disclosing competence limitations (weighted mean 3.51), which ranked second and third, respectively.

Adherence to the legal scope of practice obtained a weighted mean of 3.45 and ranked fourth. Indicators such as responsibility for procedure outcomes and awareness of long-term professional impact both obtained a weighted mean of 3.42 and ranked 5.5. This was followed by compliance with policies and guidelines (weighted mean of 3.37) and contribution to department reputation and credibility (weighted mean of 3.31), which ranked seventh and eighth, respectively. Meanwhile, the initiative to address mistakes obtained a weighted mean of 3.25 and ranked ninth. The lowest-ranked indicator, addressing errors and preventing recurrence, had a weighted mean of 3.03, indicating it is high.

To sum up, an average weighted mean of 3.40 indicated that respondents demonstrated a very high level of awareness of legal authority regarding professional accountability. This indicates that radiologic technologists consistently uphold accountability in their clinical practice, particularly in recognizing when to seek guidance and in maintaining responsibility for their actions even under supervision.

The findings of the study support Peteet et al. (2023), who emphasized that seeking guidance within one's scope of practice reflects strong professional accountability and prioritizes patient safety over independent task completion.

Table 3
The Level of Professional Competence of the Respondents: Technical Proficiency

	Indicator	Weighted Mean	Verbal Interpretation	Rank
1.	Ability to adjust venipuncture technique based on the patient's physical condition or the quality of the vein.	3.33	High	8
2.	Confident in performing venipuncture safely on patients with difficult veins.	3.45	Very High	4.5
3.	Able to complete venipuncture procedures accurately without supervision.	3.28	High	9
4.	Handle unexpected complications during venipuncture, such as difficult vein access, bleeding, or patient discomfort.	3.36	Very High	6
5.	Remain calm and adapt my approach when a patient becomes anxious or uncooperative during venipuncture.	3.45	Very High	4.5
6.	Recognize signs of adverse reactions during venipuncture or contrast/radiopharmaceutical injection and respond appropriately.	3.06	High	10
7.	Communicate effectively with patients to reduce anxiety and gain cooperation.	3.61	Very High	1
8.	Prioritize patient safety while maintaining procedural accuracy under time pressure.	3.51	Very High	2
9.	Select and use appropriate venipuncture equipment based on the patient's condition and the requirements of the radiologic procedure.	3.48	Very High	3
10.	Prepare the venipuncture site and materials efficiently to minimize procedural delays and errors.	3.34	Very High	7
	Average	**3.39**	**Very High**	

Legend: (Strongly Agree/ Very High – 4, Agree/ High – 3, Disagree/ Low – 2, Strongly Disagree/ Very Low – 1)

As shown in Table 3, the respondents' level of professional competence in terms of technical proficiency is presented as a weighted mean and its corresponding interpretation. The highest-ranked indicator, patient communication to reduce anxiety and gain cooperation, had a weighted mean of 3.61 and was interpreted as very high. This was followed by prioritizing patient safety while maintaining procedural accuracy under time pressure (weighted mean of 3.51) and by selecting and properly using venipuncture equipment based on patient and procedure needs (weighted mean of 3.48), which ranked second and third, respectively.

Indicators such as confidence in performing venipuncture on patients with difficult veins and adaptability and emotional control for anxious and uncooperative patients both obtained a weighted mean of 3.45. This was followed by handling unexpected complications (weighted mean 3.36) and preparing the venipuncture site and materials efficiently (weighted

mean 3.34). Meanwhile, adjustment of venipuncture technique based on patient condition and vein quality, with a weighted mean of 3.33, and independent completion of procedures without supervision, with a weighted mean of 3.28, ranked lower. The lowest-ranked indicator was recognition and appropriate response to adverse reactions during procedures, which obtained a weighted mean of 3.06, interpreted as high.

To sum up, the average weighted mean of 3.39 indicates that respondents demonstrated a very high level of professional competence in technical proficiency. This indicates that radiologic technologists consistently exhibit strong technical skills in performing venipuncture, particularly in communicating effectively with patients to reduce anxiety and ensure cooperation.

The study's findings support Health Management's (2025) emphasis that effective communication improves procedural success and enhances patient comfort during clinical procedures.

Table 4
The Level of Professional Competence of the Respondents: Clinical Judgement

Indicator	Weighted Mean	Verbal Interpretation	Rank
1. Make appropriate decisions when unexpected situations occur during venipuncture.	3.46	Very High	9
2. Adjust my approach when initial venipuncture attempts are unsuccessful.	3.61	Very High	6.5
2. Consider multiple options before deciding how to handle a challenging venipuncture situation.	3.49	Very High	8
3. Implement alternative strategies when standard procedures do not work as expected.	3.63	Very High	4
4. Able to identify the best approach when encountering difficulties during venipuncture.	3.63	Very High	4
5. Evaluate whether to continue or change the venipuncture procedure if complications like bleeding or patient discomfort occur."	3.27	High	10
6. Make clinical decisions based on both patient condition and procedure requirements.	3.70	Very High	1
7. Adjust my technique when a patient experiences pain or discomfort during the procedure.	3.63	Very High	4
8. Anticipate challenges with difficult veins and plan my approach before starting venipuncture.	3.67	Very High	2
9. Seek guidance or involve a colleague when uncertain about the safest approach to venipuncture.	3.61	Very High	6.5
Average	**3.57**	**Very High**	

Legend: (Strongly Agree/ Very High – 4, Agree/ High – 3, Disagree/ Low – 2, Strongly Disagree/ Very Low – 1)

As shown in Table 4, the respondents' level of professional competence in clinical judgment during venipuncture is presented as a weighted mean and its corresponding interpretation. The highest-ranked indicator was patient-centered clinical decision-making,

with a weighted mean of 3.70 and an interpretation of very high. This was followed by anticipation and planning for difficult veins, with a weighted mean of 3.67, which ranked second. Indicators such as the implementation of alternative strategies, the identification of best approaches, and the adjustment of technique for patient discomfort each obtained a weighted mean of 3.63 and ranked fourth.

Adaptability after unsuccessful attempts and seeking guidance for safe practice both obtained a weighted mean of 3.61 and ranked 6.5. This was followed by consideration of multiple options (weighted mean of 3.49) and decision-making in unexpected situations (weighted mean of 3.46), which ranked eighth and ninth, respectively. The lowest-ranked indicator was evaluation of the procedure during complications, which obtained a weighted mean of 3.27, interpreted as high.

To sum up, the average weighted mean of 3.57 indicates that respondents demonstrated a very high level of professional competence in clinical judgment. This indicates that radiologic technologists consistently apply sound decision-making by considering both patient condition and procedural requirements to ensure safe, effective, and patient-centered venipuncture practice.

The findings of the study support Hissink et al. (2025), who emphasized that practitioners who can modify their approach in response to clinical situations demonstrate higher levels of professional competence.

Table 5
Ethical Practice of the Respondents in Performing Venipuncture: Legal Compliance

Indicator	Weighted Mean	Verbal Interpretation	Rank
1. Perform venipuncture strictly within my legal and authorized scope of practice, adjusting my actions when patient conditions or clinical circumstances are complex.	3.69	Highly Practiced	9.5
2. Apply institutional and professional policies consistently, making judgment calls when patient-specific situations require modifications.	3.73	Highly Practiced	7
3. Appropriately refuse, refer, or escalate tasks that exceed my legal authority to ensure patient safety and care quality.	3.76	Highly Practiced	4.5
4. Conduct venipuncture in accordance with patient safety, comfort, and ethical treatment, even under high-pressure conditions.	3.76	Highly Practiced	4.5
5. Complete documentation and reporting accurately, reflecting all relevant details, while managing occasional workflow interruptions.	3.76	Highly Practiced	4.5
6. Balance adherence to legal requirements with timely patient care when clinical priorities compete during venipuncture.	3.69	Highly Practiced	9.5

7.	Maintain ethical and legal standards when performing venipuncture despite limited resources, staffing constraints, or time pressure.	3.76	Highly Practiced	4.5
8.	Take appropriate action when observing practices during venipuncture that may violate legal or ethical standards.	3.72	Highly Practiced	8
9.	Verify that all venipuncture procedures follow current laws, regulations, and institutional protocols before initiating the procedure.	3.79	Highly Practiced	2
10.	Ensure informed consent is obtained and documented appropriately before performing venipuncture, even in urgent or high-pressure situations.	3.81	Highly Practiced	1
	Average	**3.75**	**Highly Practiced**	

Legend: (Strongly Agree / Highly Practiced – 4, Agree / Moderately Practiced – 3, Disagree / Slightly Practiced – 2, Strongly Disagree / Not Practiced – 1)

As shown in Table 5, the respondents' level of ethical practice in performing venipuncture regarding legal compliance is presented as a weighted mean and its corresponding interpretation. The highest-ranked indicator was obtaining and documenting informed consent for venipuncture, with a weighted mean of 3.81 and an interpretation of highly practiced. This was followed by verification of legal and institutional compliance before venipuncture, with a weighted mean of 3.79, which ranked second.

Indicators such as appropriate refusal, referral, or escalation of tasks within the scope of practice; provision of patient safety, comfort, and ethical care; accurate documentation and reporting; and maintaining ethical and legal standards under constraints each obtained a weighted mean of 3.76 and ranked 4.5. This was followed by the consistent application of institutional and professional policies (weighted mean of 3.73) and by identifying and responding to legal and ethical violations (weighted mean of 3.72), which ranked seventh and eighth, respectively. The lowest-ranked indicators were practicing within legal scope while adapting to clinical complexity and balancing legal compliance with timely patient care, both of which had weighted means of 3.69, indicating highly practiced.

To sum up, an average weighted mean of 3.75 indicated that respondents demonstrated a high level of ethical practice in legal compliance. This indicates that radiologic technologists consistently uphold informed consent, legal accountability, and ethical standards, even in demanding clinical situations.

The findings of the study support Thetford (2023), who emphasized that obtaining informed consent reflects respect for patient autonomy and reinforces ethical responsibility in clinical practice.

Table 6
Ethical Practice of the Respondents in Performing Venipuncture: Safety Protocol

	Indicator	Weighted Mean	Verbal Interpretation	Rank
1.	Identify and address patient anxiety or discomfort during venipuncture, adapting my approach to each patient's needs.	3.70	Highly Practiced	9
2.	Perform procedures efficiently and within reasonable time frames, balancing speed with patient safety and quality of care.	3.73	Highly Practiced	7.5
3.	Apply protocols and authorized procedures consistently while making appropriate adjustments for patient-specific factors.	3.76	Highly Practiced	4.5
4.	Manage challenges during venipuncture (e.g., difficult veins, patient movement) responsibly, using judgment to prevent errors or complications.	3.76	Highly Practiced	4.5
5.	Organize and maintain systematic work practices, reflecting on procedural efficiency and identifying areas for improvement.	3.76	Highly Practiced	4.5
6.	Ensure aseptic and infection-control measures are consistently applied to protect patient safety during venipuncture.	3.67	Highly Practiced	10
7.	Monitor patients closely during and after venipuncture to detect early signs of complications and take timely action.	3.76	Highly Practiced	4.5
8.	Adjust positioning, equipment, or technique to reduce the risk of injury or sample error during venipuncture.	3.73	Highly Practiced	7.5
9.	Respond promptly and appropriately if a patient experiences unexpected reactions or complications during venipuncture.	3.79	Highly Practiced	2
10.	Ensure all venipuncture equipment and materials are properly checked and prepared before each procedure to maintain patient safety.	3.82	Highly Practiced	1
	Average	**3.75**	**Highly Practiced**	

Legend: (Strongly Agree / Highly Practiced – 4, Agree / Moderately Practiced – 3, Disagree / Slightly Practiced – 2, Strongly Disagree / Not Practiced – 1)

As shown in Table 6, the respondents' level of ethical practice in performing venipuncture, in terms of safety protocols, is presented as a weighted mean and its corresponding interpretation. The highest-ranked indicator was pre-procedure equipment preparation and safety checks during venipuncture, with a weighted mean of 3.82, indicating highly practiced. This was followed by a prompt response to complications during venipuncture, with a weighted mean of 3.79, which ranked second.

Indicators such as applying protocols with patient-specific adjustments, managing procedural challenges, maintaining systematic work practices, and monitoring patients during and after venipuncture each obtained a weighted mean of 3.76 and ranked 4.5. This was followed by efficient and safe performance of venipuncture procedures and appropriate adjustment of positioning, equipment, and technique to reduce procedural risk, both of which

obtained a weighted mean of 3.73 and ranked 7.5. Meanwhile, identifying and addressing patient anxiety or discomfort obtained a weighted mean of 3.70 and ranked ninth. The lowest-ranked indicator was Indicator 6, which had a weighted mean of 3.67, indicating it was highly practiced.

To sum up, an average weighted mean of 3.75 revealed that respondents demonstrated a highly practiced level of ethical practice in terms of safety protocols. This indicates that radiologic technologists consistently adhere to safety standards, particularly in thorough preparation and equipment checks prior to procedures to minimize risks and ensure patient safety.

The study's findings support Jordan (2022), who emphasized that careful preparation and equipment verification are essential for preventing errors, ensuring accurate diagnostic outcomes, and promoting patient safety and trust.

Table 7
Relationship between the Level of Legal Authority Awareness and the Level of Professional Competence of the Respondents in Performing Venipuncture

Legal Authority Awareness	Professional Competence	
	Technical proficiency	Clinical judgement
Scope of practice	r=0.136 Low correlation p=0.272	r=0.261* Low correlation p=0.033
Professional accountability	r=0.331* Low correlation p=0.006	r=0.025 Negligible correlation p=0.842
*Significant @ 0.05		

As shown in Table 7, the relationship between the level of legal authority awareness and the respondents' professional competence in performing venipuncture is presented. In terms of scope of practice, a low and non-significant correlation was observed with technical proficiency (r = 0.136, p = 0.272), indicating that awareness of scope of practice does not significantly influence technical skills. However, a low but significant correlation was found with clinical judgment (r = 0.261, p = 0.033), suggesting that increased awareness of the scope of practice is associated with better clinical decision-making. Regarding professional accountability, a low but significant correlation was found with technical proficiency (r = 0.331, p = 0.006), suggesting that greater accountability is associated with improved technical skills. On the other hand, a negligible and non-significant correlation was observed between professional accountability and clinical judgment (r = 0.025, p = 0.842), suggesting no meaningful relationship between the two variables.

These findings imply that legal authority awareness does not consistently influence all aspects of professional competence but contributes to improvements in clinical judgment and certain technical skills. Radiologic technologists who demonstrate greater awareness of their legal responsibilities tend to exhibit better decision-making and accountability in clinical practice. The findings of the study support Xu et al. (2024), who emphasized that legal awareness is a critical component of professional competence, as it enables healthcare

professionals to perform their duties within defined boundaries and promotes safe, effective, and accountable clinical practice.

Table 8
Relationship between the Level of Legal Authority Awareness and the Level of Ethical Practice of the Respondents in Performing Venipuncture

Legal Authority Awareness	Ethical Practice	
	Legal compliance	Safety protocol
Scope of practice	r=0.305* Low correlation p=0.012	r=0.248* Low correlation p=0.043
Professional accountability	r=0.461* Moderate correlation p=0.000	r=0.274* Low correlation p=0.025

*Significant @ 0.05

As shown in Table 11, the relationship between the level of legal authority awareness and the level of ethical practice among respondents in performing venipuncture is presented. In terms of scope of practice, a low but significant positive correlation was found with legal compliance ($r = 0.305$, $p = 0.012$) and safe practice ($r = 0.248$, $p = 0.043$), indicating that respondents with greater awareness of their professional boundaries tend to demonstrate better adherence to legal requirements and safer venipuncture practices. Regarding professional accountability, a moderate and significant positive correlation was observed with legal compliance ($r = 0.461$, $p < 0.001$), suggesting that higher levels of accountability are associated with greater adherence to legal and ethical standards. Additionally, a low but significant correlation was found with safe practice ($r = 0.274$, $p = 0.025$), indicating that accountability also contributes to patient safety during venipuncture procedures.

These findings imply that awareness of legal authority is significantly associated with ethical practice during venipuncture. Radiologic technologists who are more aware of their legal responsibilities are more likely to adhere to ethical standards, ensure patient safety, and perform procedures within appropriate professional boundaries. The findings of the study support Varkey (2021), which emphasized that awareness of legal regulations enhances ethical decision-making, promotes safe clinical practice, and improves overall patient outcomes.

Table 9
Relationship between the Level of Professional Competence and the Level of Ethical Practice of the Respondents in Performing Venipuncture

Professional competence	Ethical Practice	
	Legal compliance	Safety protocol
Technical proficiency	r=0.256* Low correlation p=0.036	r=0.494** Moderate correlation p=0.000
Clinical judgment	r=0.123 Low correlation p=0.321	r=0.447** Moderate correlation p=0.000

**Significant @ 0.01, *Significant @ 0.05

As shown in Table 9, the relationship between the level of professional competence and the level of ethical practice among respondents in performing venipuncture is presented. Technical proficiency showed a low but significant correlation with legal compliance ($r = 0.256$, $p = 0.036$), suggesting that higher technical proficiency is associated with greater adherence to legal requirements. A moderate, highly significant correlation was also observed between technical proficiency and safe practice ($r = 0.494$, $p < 0.001$), suggesting that greater technical competence is associated with safer venipuncture procedures. In terms of clinical judgment, a low, non-significant correlation was found with legal compliance ($r = 0.123$, $p = 0.321$), suggesting no meaningful relationship. However, a moderate and highly significant correlation was observed with safe practice ($r = 0.447$, $p < 0.001$), suggesting that better clinical judgment is associated with improved patient safety during venipuncture.

These findings imply that professional competence is significantly associated with ethical practice, particularly in ensuring safe procedures. Radiologic technologists with higher levels of technical proficiency and clinical judgment are more likely to demonstrate ethical behavior by adhering to safety protocols and providing patient-centered care. The findings of the study support Flarey (2024), who emphasized that ethical practice complements professional competence by guiding decision-making, ensuring patient safety, and promoting responsible and ethical clinical performance.

Conclusion

Radiologic technologists demonstrated very high levels of legal authority awareness, professional competence, and ethical practice in performing venipuncture. Their awareness of legal authority was evident in their strong sense of professional accountability, particularly in seeking guidance rather than performing procedures beyond their scope of practice. Professional competence was reflected in their ability to make sound clinical decisions based on both patient condition and procedural requirements. Ethical practice was consistently observed, as respondents adhered to legal standards by properly collecting and documenting informed consent and maintained strict compliance with safety protocols through regular equipment verification and preparation.

Additionally, the findings revealed that legal authority awareness, professional competence, and ethical practice are significantly related. As awareness of legal authority increases, professional competence and ethical practice in venipuncture also improve. Radiologic technologists with higher levels of competence are more likely to demonstrate ethical behavior, particularly in ensuring patient safety and adherence to clinical standards. These results highlight the importance of strengthening legal awareness and competency development to sustain safe and ethical clinical practice. The implementation of the proposed intervention plan is therefore essential to further enhance legal authority awareness, professional competence, and ethical practice among radiologic technologists in performing venipuncture.

Table 10
Proposed intervention plan to enhance radiologic technologists' legal awareness, professional competence, and ethical practice in performing venipuncture

Areas of Concern	Objectives	Activities	Time Frame	Focal Person	Budget Allocation (₱)	Success Indicators (%)
Awareness	To sustain a very high level of legal authority awareness in venipuncture	Conduct regular seminars on scope of practice and legal responsibilities, case-based discussions on non-routine procedures, and dissemination of updated policies and guidelines	Quarterly	Chief Radiologic Technologist	5,000–8,000	95%–100% of respondents demonstrate high awareness in post-evaluation
Professional Competence	To maintain high clinical judgment and technical proficiency in venipuncture	Skills training and return demonstrations; simulation of difficult venipuncture scenarios; workshops on managing adverse reactions	Semi-annual	Chief Radiologic Technologist / Clinical Instructor	10,000–15,000	95%–100% competency rating; reduced errors and improved performance
Ethical Compliance	To ensure consistent adherence to ethical standards and patient safety protocols	Training on ethical decision-making and accountability, monitoring adherence to infection control practices, and audit and feedback on clinical performance	Quarterly	Hospital Administrator / HR Officer	6,000–10,000	95%–100% compliance rate; zero major ethical violations reported

Recommendations

The study's findings highlight the need to sustain high levels of legal authority awareness, professional competence, and ethical practice among radiologic technologists performing venipuncture. Continuous training, policy reinforcement, and competency assessments are recommended to ensure adherence to legal standards, patient safety, and infection control practices. Healthcare institutions are encouraged to provide updated protocols, adequate resources, and support for professional development to maintain high-

quality clinical performance. Future researchers are also encouraged to explore additional factors influencing legal awareness, competence, and ethical practice, and to expand the study to larger populations and diverse healthcare settings to gain more comprehensive insights.

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