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abstract

Possible Routes of Contamination of Samples During Blood Collection for Bacteriological Examination in Pediatric Patients and their Prevention

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Possible Routes of Contamination of Samples During Blood Collection for Bacteriological Examination in Pediatric Patients and their Prevention

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Introduction: Venous blood sampling is essential in clinical practice, especially for sterility testing, where accurate and sterile techniques are critical to prevent contamination. This study assessed the technical and theoretical knowledge of 24 nurses on venous blood sampling for sterility testing. Over a 5-day period, nurses performed simulated procedures using mannequins, with performance graded against an 11-element checklist. Common errors, such as improper site preparation and equipment handling, were identified. A targeted training program was then implemented to address these deficiencies and enhance nursing proficiency.

Methodology: The 5-day assessment evaluated 24 nurses using mannequins, focusing on critical skills outlined in a detailed checklist to ensure comprehensive evaluation of technique and sterility adherence.

Results: Frequent mistakes included incorrect site preparation and failure to maintain sterility. Checklist-based grading highlighted areas for improvement, providing clear performance metrics.

Conclusion: This study underscores the importance of continuous assessment and targeted training to enhance nursing proficiency in venous blood sampling, ensuring reliable test results and improved patient care. Future research should explore the long-term impact of such training programs on clinical practice.