Abstract:

Background: Despite evidence to support best practice in neonatal and pediatric venipuncture delivery and procedural support, there are inconsistencies in practice. To inform future research, education, and workforce innovation, the Association for Vascular Access Pediatric Special Interest Group (PediSIG) developed and undertook a survey to describe the current vascular access practice for clinicians caring for neonatal and pediatric patients.

Objective: Describe the current state of workforce models, training, and clinical practices surrounding pediatric and neonatal vascular access.

Design: Cross-sectional, electronic survey using convenience sampling.

Settings: International clinicians who provide vascular access (peripheral intravenous catheter insertion, venipuncture for blood sampling) for neonatal and pediatric patients.

Methods: An electronic survey was developed by the PediSIG. The survey covered workforce models, clinician training and competency, pain relief, procedural support, and device securement. The electronic survey was then distributed to the PediSIG membership and shared among several neonatal/pediatric email lists. Data were analyzed descriptively, with an exploration of association between clinical outcomes, workforce, and training.

Results: There were 242 responses from 5 countries showing a wide variance of practice. Workforce models showed many different team names and responsibilities along with a variance of personnel and staffing hours. Clinician training was described as 4 hours or less by 44% (n = 69) of respondents. Less than half of the responses (47%; n = 99) reported having a formal procedure to escalate a patient to an expert care and not having a set number of max attempts before escalation. Only two-thirds (n = 115) of respondents said they had a standardized protocol for pain control and procedural support, with only 13% (n = 23) and 15% (n = 27), respectively, self-reporting that they always followed the protocol.

Conclusions: The respondents reported a wide variance in neonatal and pediatric vascular access procedures and the resources used to support this practice. Core standards need to be developed to help guide neonatal and pediatric clinicians and their institutions. The standards should encompass recommendations for workforce models, proper training, competency, insertion guidelines, pain control.

Reference: