

ABSTRACT:

Background: Utilizing point-of-care ultrasound in emergency patient resuscitation is now becoming very common. There is a lack of research study findings about its early utilization and challenges. Thus, this study addressed the current state of early Point of Care Ultrasound utilization in emergency patient resuscitation and its challenges.

Objectives: To determine the magnitude of early Point of Care Ultrasound utilization and associated factors during emergency patient resuscitation and explore its challenges.

Methods: A cross-sectional survey of 113 patients was consecutively enrolled followed by a qualitative study of key informants at Tikur Anbessa Specialized Hospital Emergency Department. Description of socio-demographic variables, median and categorization of time of utilization of Point of Care Ultrasound and logistic regression of associated factors of early Point Of Care Ultrasound utilization were employed for phase 1. Phase 2 was analyzed in themes.

Results: There were 113 patients with Point of Care Ultrasound performed during the study period. It was performed during primary survey of patient resuscitation in 80.5%; 95% confidence intervals [CI], 73-88. Resident's consultation of attending physician (adjusted odds ratio [OR], 3.15; 95% confidence intervals [CI], 1.11-8.94) and having abdominopelvic fluid collection (adjusted odds ratio [OR], 4.726; 95% confidence intervals [CI], 1.1-21.9) were statistically significant with p-value <0.1. Analysis of Point of Care Ultrasound utilization challenges revealed 4 major themes of ultrasound access, training, supervision and clinical care setup.

Conclusion & recommendation: The current level of early Point of Care Ultrasound utilization was encouraging despite existing challenges. Residents should get supervision and consult about their findings. Challenges of Point of Care Ultrasound utilization should be addressed.