**Medical Students' competency in EFAST Components**

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**Introduction:** Ultrasound training in undergraduate medical education is developing, and its incorporation in the curriculum requires careful planning. Extended Focused Assessment Sonography for Trauma (EFAST) is commonly taught to medical students as one of the primary applications of ultrasound. Because false negative EFAST scans can affect patient clinical outcomes, it is essential to evaluate the individual components of this skill. We aim to determine which suboptimal EFAST components students perform after initial training.

**Methods:** In this prospective observational study, 90 medical students of two final-year cohorts were assessed in EFAST components after uniform training during the emergency medicine clerkship. All validated components of the standard EFAST exam were assessed. Descriptive performance analysis in individual components of EFAST was done.

**Results:** The hepatorenal space, splenorenal space, and pelvic space fluid investigations had the lowest completion rates. Pericardial fluid, pelvic free fluid, and right thoracic pleural fluid investigations were most often incorrectly applied. The fanning was most commonly missed in hepatorenal, splenorenal, and pelvic free fluid investigations. Between 12% to 50% of EFAST components had omitted reporting.

**Conclusions:** There were significant numbers of incomplete assessments for free intraperitoneal fluid, mostly due to lack of fanning in the hepatorenal, splenorenal, and pelvic areas. By targeting these challenging areas, trainers can effectively enhance student performance and outcomes. Further research might reveal whether residents and physicians show similar trends in EFAST completion.