

Patterns Of Utilization Of Gynecological Ultrasound Among Reproductive Health Practitioners In Nigeria: A Cross-sectional Survey

Menakaya UA, Malele k, Akinmoladu J, Bukar M.

Introduction

Point-of-care ultrasound (POCUS) is a valuable diagnostic tool in modern gynaecological care. Its use is well established in high-income settings, but integration into routine practice in Nigeria remains inconsistent.

Objective

To assess patterns of utilization of gynaecological ultrasound among reproductive health practitioners in Nigeria and identify areas for targeted interventions.

Methodology

A cross-sectional online survey of Nigerian reproductive health providers using a 27-item questionnaire captured demographics, ultrasound practices, training history, perceived barriers, and procedural competencies.

Descriptive, logistic regression and multivariate analyses were performed (p<0.05 considered significant).

Results

Fifty-four practitioners completed the survey. 81.5% used ultrasound in clinical decision-making, and 61.1% had prior training.

Trained practitioners were 4.3 times more likely to self-perform POCUS (OR=4.33; 95% CI 1.35–13.92; p=0.01).

However, self-performance, prior training, and location of training did not significantly reduce reliance on radiologist-led imaging. This suggests a deficiency in interpretative competency.

Confidence to self-perform was strongly influenced by equipment sophistication (χ^2 (1) =24.98; p<0.001), while high equipment cost was a significant barrier to self-perform POCUS (aOR=10.01; 95% CI 2.13–47.07; p=0.004).

Table 1: Barriers to self perform POCUS

Variable	p-value	aOR	95% CI for aOR
Unavailability of quality ultrasound equipment	0.36	0.45	0.08 – 2.46
Cost of the ultrasound machine cost	0.004	10.01	2.13 - 47.07
Inaccessible formal training	0.56	0.63	0.14 - 2.96
Lack of awareness	0.46	1.92	0.35 - 10.61
Ready options for outsourcing services	0.16	0.23	0.03 – 1.83



Conclusion

Training and equipment sophistication enhance clinicians’ confidence in performing gynaecological POCUS.

Persistent reliance on radiologist-led services reflects structural barriers, including cost and variable training quality.

Standardizing training and improving access to modern ultrasound technology are essential to expand gynaecologist-led POCUS and optimize patient care.