OP01.01. Is simulation training only for inexperienced trainees? Exploring the effects of simulation-based ultrasound training on obstetricians’ diagnostic accuracy

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Introduction
Simulation-based training is an effective way to improve performance of ultrasound skills in novice learners. We know little of the effects in more experienced ultrasound operators.

Objectives
To assess the effect of simulation-based training on the diagnostic accuracy of fetal weight estimation by ultrasound in obstetricians at different levels of clinical experience.

Methods
Randomized, controlled, pre/post-test trial. 74 obstetricians at all levels of clinical experience (except fetal medicine specialists) were randomized to either a structured simulation-based training programme on a virtual reality simulator or no training. All participants performed two ultrasound scans, estimating fetal weight at baseline and follow-up after two months. The absolute percentage difference between EFW and birth weight was used as a measure of diagnostic accuracy.

Results
The intervention group reduced diagnostic error by -31.9% (95% CI -50.1; -6.9) (p=0.02), no significant change was seen in the control group (13.1% (95% CI; -17.9 – 55.9), p=0.45). The difference between groups was significant (p=0.02). There was no effect of clinical experience (p=0.54).

Conclusion
Simulation-based ultrasound training improves diagnostic accuracy of EFW in the clinical setting regardless of operator’s clinical experience.