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Standardizing the Pelvic Floor Exam: Is It Reproducible and Durable?

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CLINICAL SCIENCE ABSTRACTS

Non-Moderated Posters

#NM1 | STANDARDIZING THE PELVIC FLOOR EXAM: IS IT REPRODUCIBLE AND DURABLE?

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Presented By: Ly Hoang Roberts, MD

Introduction: The pelvic floor exam is critical in evaluating pelvic floor disorders yet there is little guidance on training clinicians to accurately and consistently perform this examination. This study evaluates the reproducibility and durability of a standardized pelvic floor muscle exam in various clinicians before and after in-service teaching.

Methods: Participants were female pelvic medicine and reconstructive surgery (FPMRS) fellows, urology residents, urology staff physicians, FPMRS mid-level providers (ML), and pelvic floor physical therapists (PFPT). Participants were blinded to the data and applied what they considered “mild” and “moderate” pressure three times. Standardized “mild” and “moderate” pressures were determined a priori by experts (mild: 280-424 g, moderate: 442-906 g). After this initial test, participants were given in-service training on mild and moderate pressures. Within a few minutes, they completed a blinded post training test on appropriate mild and moderate pressures. The testing was then repeated at minimum 2 weeks after training to assess retention of pelvic floor pressure training. Data was analyzed using two-way ANOVA.

Results: Twenty-six clinicians participated- 4 PFPT, 2 ML, 10 residents, 3 fellows, and 8 staff physicians. Prior to in-service training, mean mild pressure was 529 g (range: 148-1400g) and mean moderate pressure was 966 g (range: 286-2100g). Cumulatively, after in-service training, there was more accuracy and less variation in pressures for both mild (mean: 366g, $p<0.05$) and moderate (mean: 610g, $p<0.01$) pressures. Within individual cohorts, the largest variation was seen in the resident group, who significantly improved their performance after in-service training ($p<0.01$). At time of long-term measurement (range: 14- 84 days), the variance in the cumulative and resident cohort data had widened and mirrored that of pre-training (see figure). ML and PFPT measurements were the most consistent over all time points.

Conclusion: A standard pelvic exam is reproducible across various clinicians after in-service training, with greatest improvement amongst those with less experience performing the exam. Those who regularly perform the pelvic exam – mid-level providers, pelvic floor therapist, and attending physicians – had consistent and accurate results at all time points. However, the training benefit in less experienced clinicians was not durable, and the clinician who is learning or less experienced may benefit from interval in-service training.

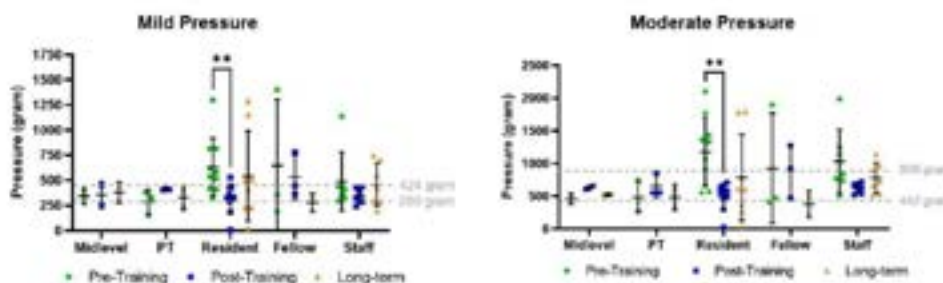


Figure 1. Greater accuracy in both pressure measurements after in-service training, with most significant improvement in resident cohort ($p<0.01$). Pre- and post-training and long-term measurements for individual cohorts are compared. A priori standards for both pressures as indicated.

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