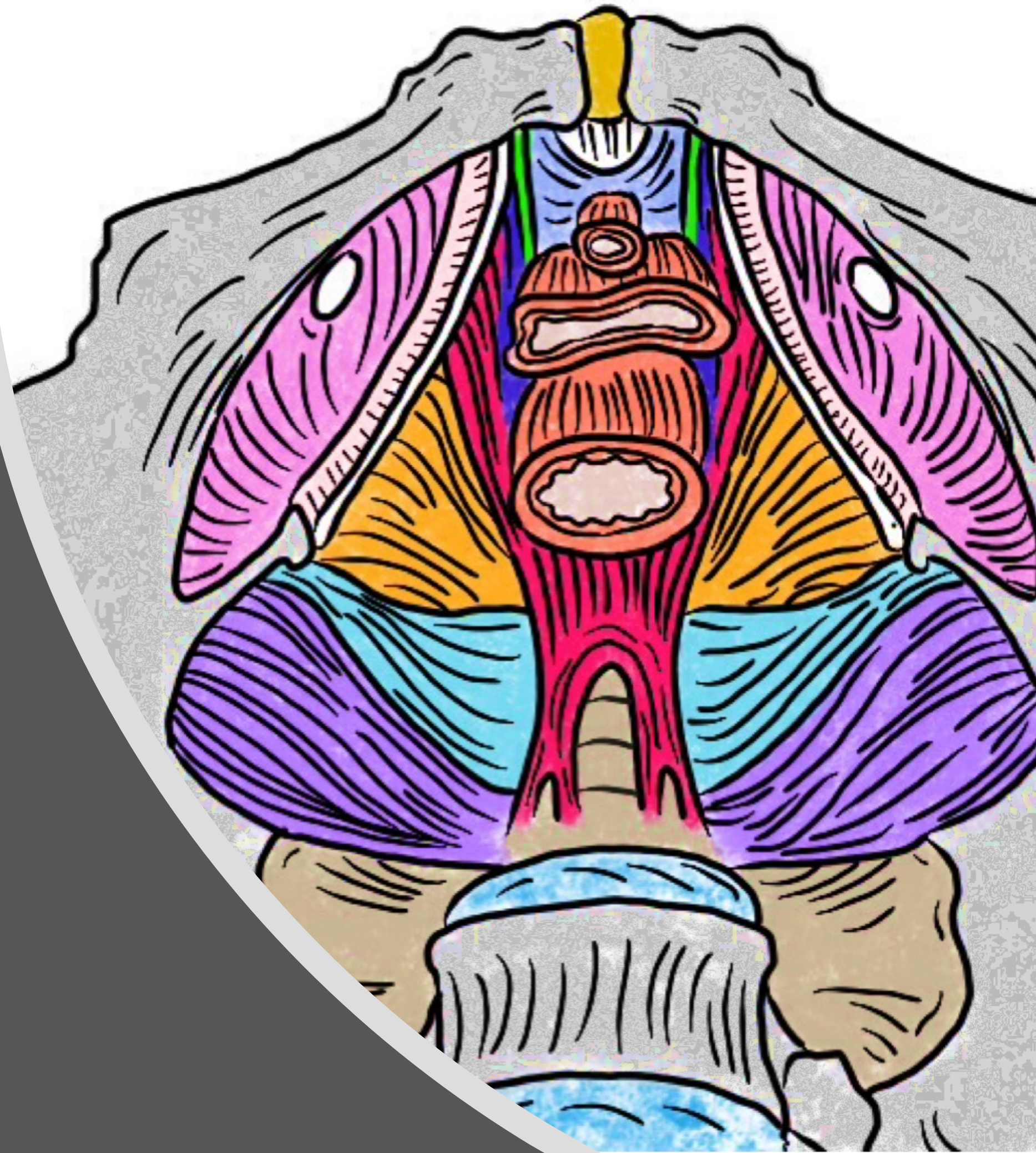


A Randomized Comparison Of Hands-on Versus Video-based Training Program Designed To Enhance Pelvic Floor Examination In Patients Presenting With Chronic Pelvic Pain

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Speaker Disclosure

Nothing to disclose

Chronic Pelvic Pain



Persistent pain for ≥ 6 months

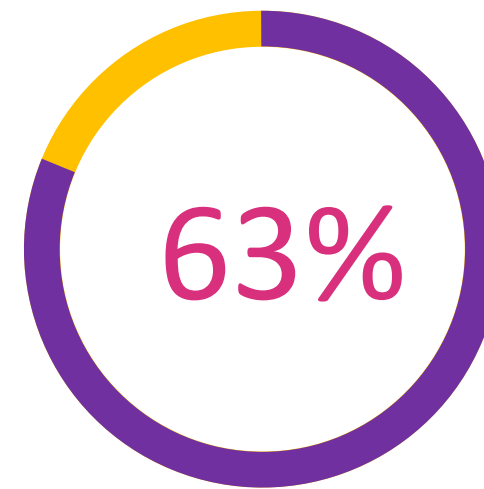


15-20% of women

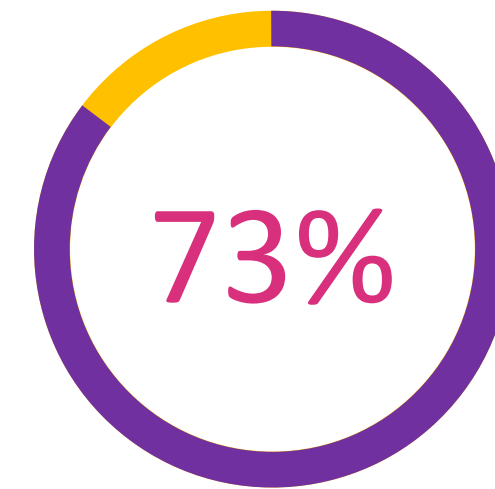
Pelvic Floor Myalgia



Patients with chronic pelvic pain who were also found to have pelvic floor myalgia:



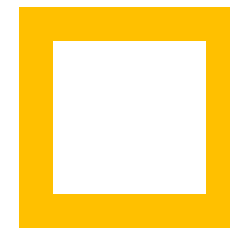
Examined by a
physician



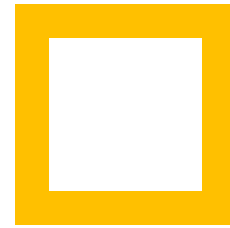
Examined by a
physiotherapist

Fitzgerald et al., 2011

Untreated Symptoms



Persistent symptoms



Central sensitization



Unnecessary laparoscopic surgery



Psychological distress



Impaired quality of life

Assessment of the Pelvic Floor Musculature

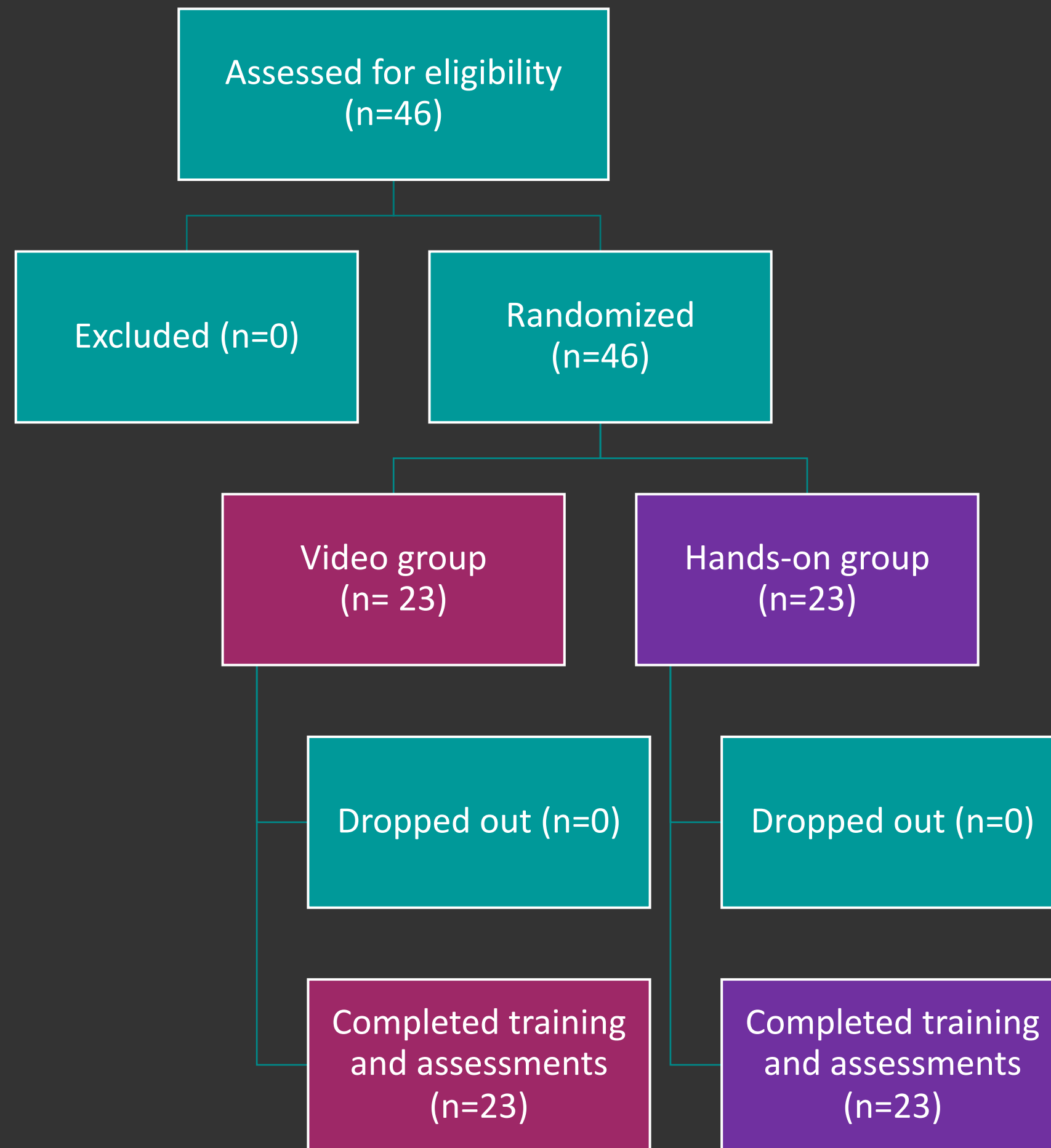


A randomized, single-blinded, single-center trial

January 1 - November 18, 2018

Objectives:

1. Compare the effectiveness of hands-on vs video-based training of a comprehensive assessment of the pelvic floor musculature on a pelvic model
2. Design an effective training program to enhance examination of the pelvic floor musculature for patients presenting with chronic pelvic pain



Study Population

1. Obstetricians and Gynecologists
2. Obstetrics and Gynecology resident physicians
3. Family Medicine physicians
4. Family Medicine resident physicians
5. Medical students (years 2-4)

Inclusion criteria:

1. Age ≥ 18 yo
2. Learners affiliated with College of Medicine at the University of Saskatchewan in Regina campus. This includes obstetrics and gynecology resident physicians (Years 1-5), family medicine resident physicians (Years 1-2), and medical students (Years 2-4).
3. Obstetrics and Gynecology staff affiliated with the University of Saskatchewan in Regina campus.

Exclusion criteria:

1. Physical limitation that prevents a participant from performing a pelvic examination

Figure 1: Participant Enrollment Flow Figure

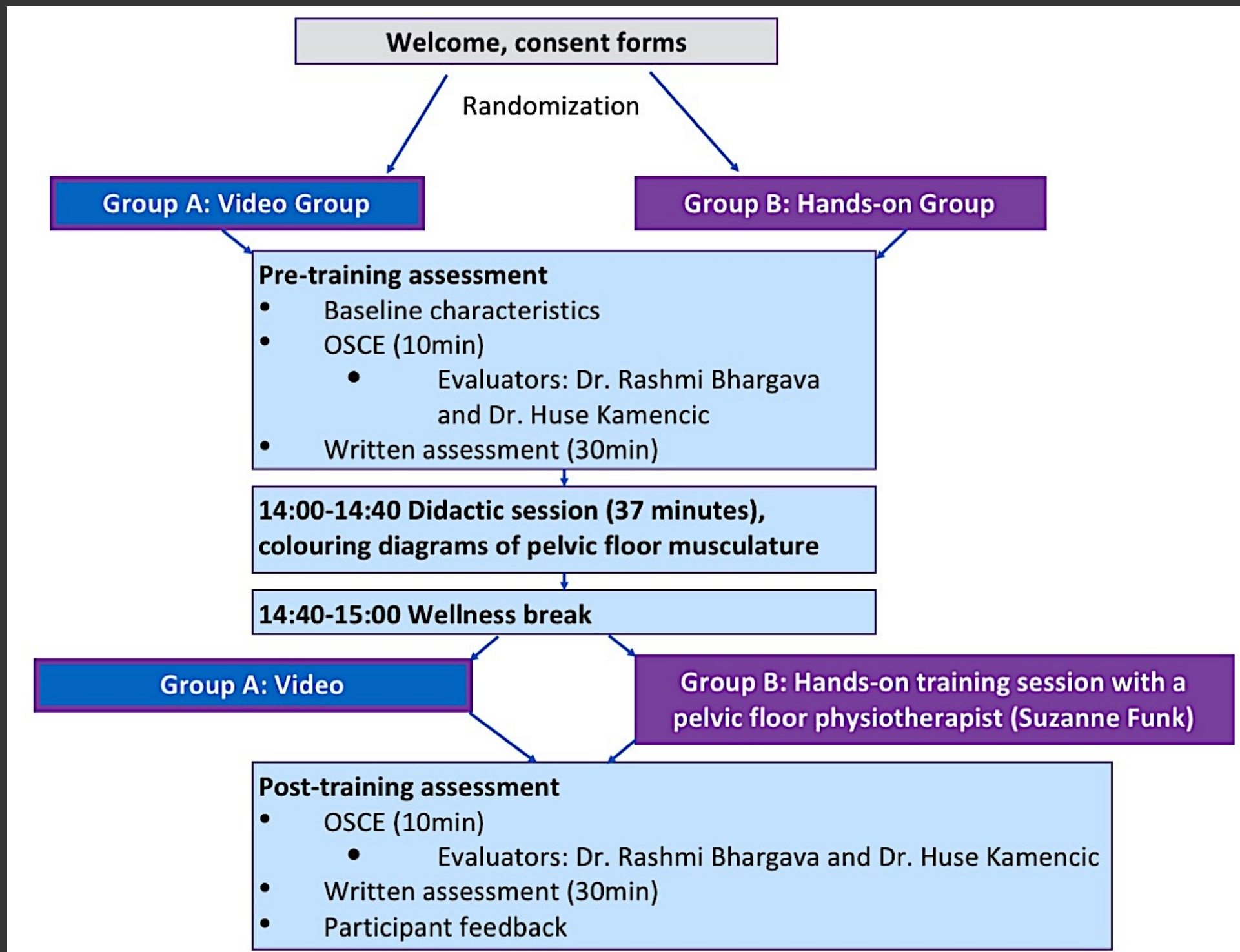


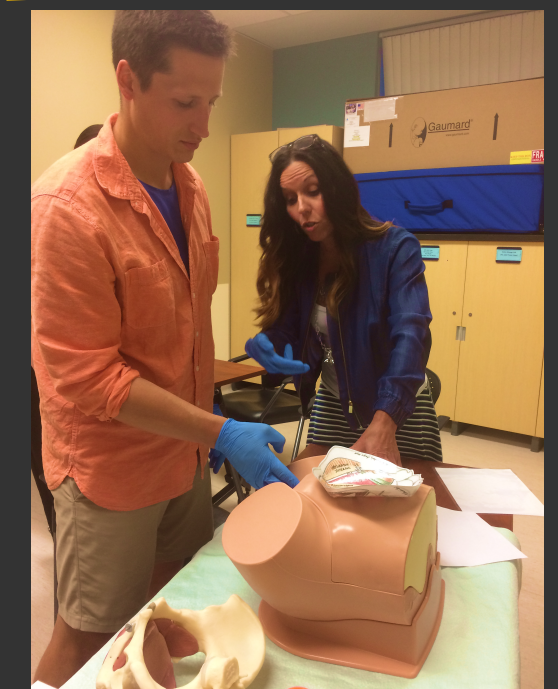
Figure 2: Structure Of The Training Session



Didactic Lecture

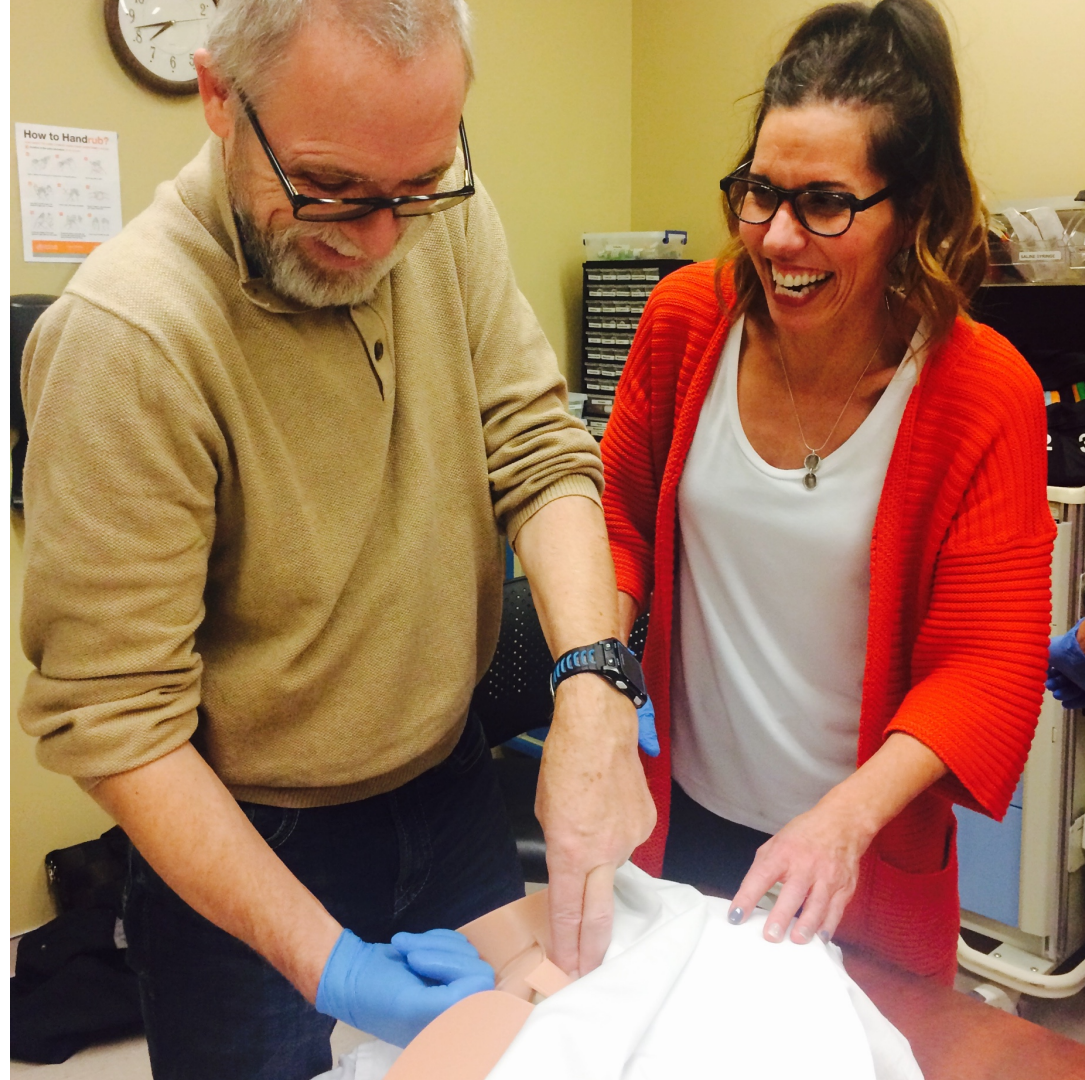


Video



Hands-on

Outcome Measures



Primary Outcome Measure:

1. Change in written examination and OSCE scores from pre-training to post-training assessments in the video and hands-on groups

Secondary Outcome Measures:

1. Change in the level of comfort with performing pelvic floor examination in patients presenting with chronic pelvic pain before and after the training program
2. Usefulness of the training program for clinical practice



Data Analysis

Sample size required:

- 21 participants per training group
 - Using the minimally important difference in OSCE and written examination scores of 15%, a standard deviation of 5, alpha level of 0.05, and power of 0.80

Categorical variables

Chi-square test

Continuous variables

Mixed design ANOVA

Results

Written Assessment Scores

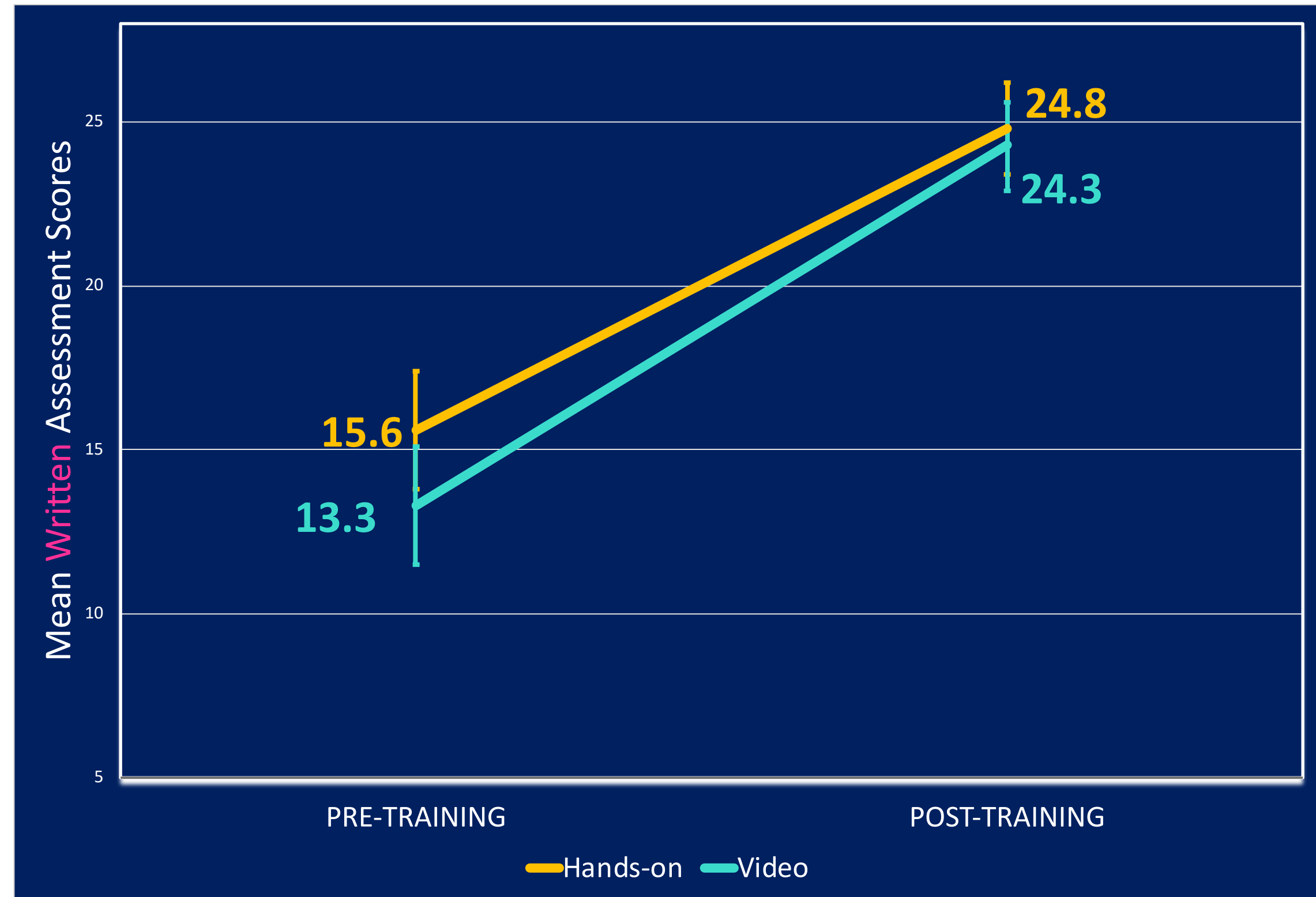


Figure 3: Mean written assessment scores before and after training in video and hands-on groups (maximum score was 30). There was no statistically significant difference between the 2 groups ($p=0.19$).

Results

OSCE Scores

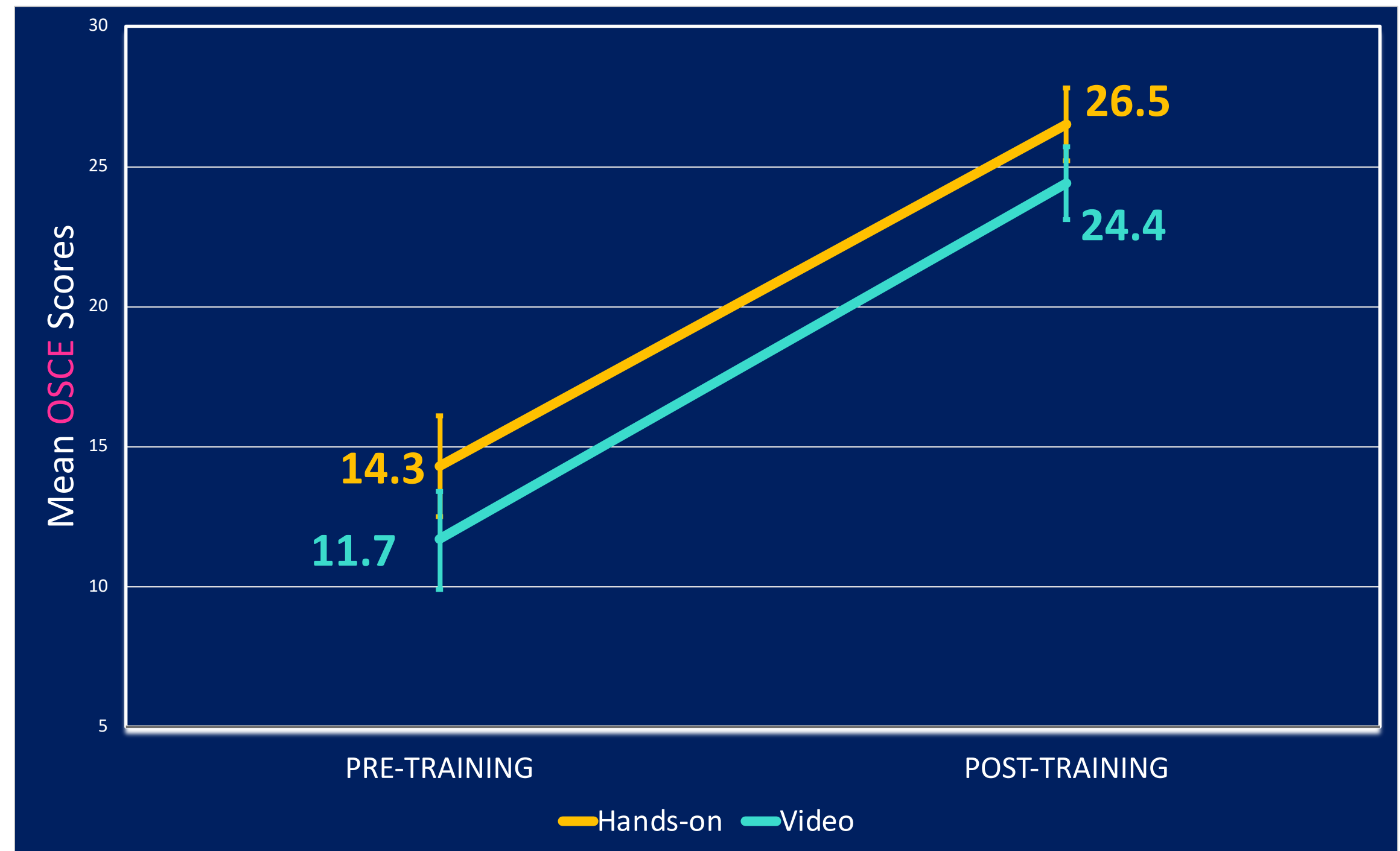


Figure 4: Mean OSCE scores before and after training in video and hands-on groups (maximum score was 30). There was no statistically significant difference between the 2 groups ($p=0.10$).

Usefulness for Clinical Practice

Participants found the training program to be useful for their clinical practice



Conclusion

Both hands-on and video-based training methods are effective.

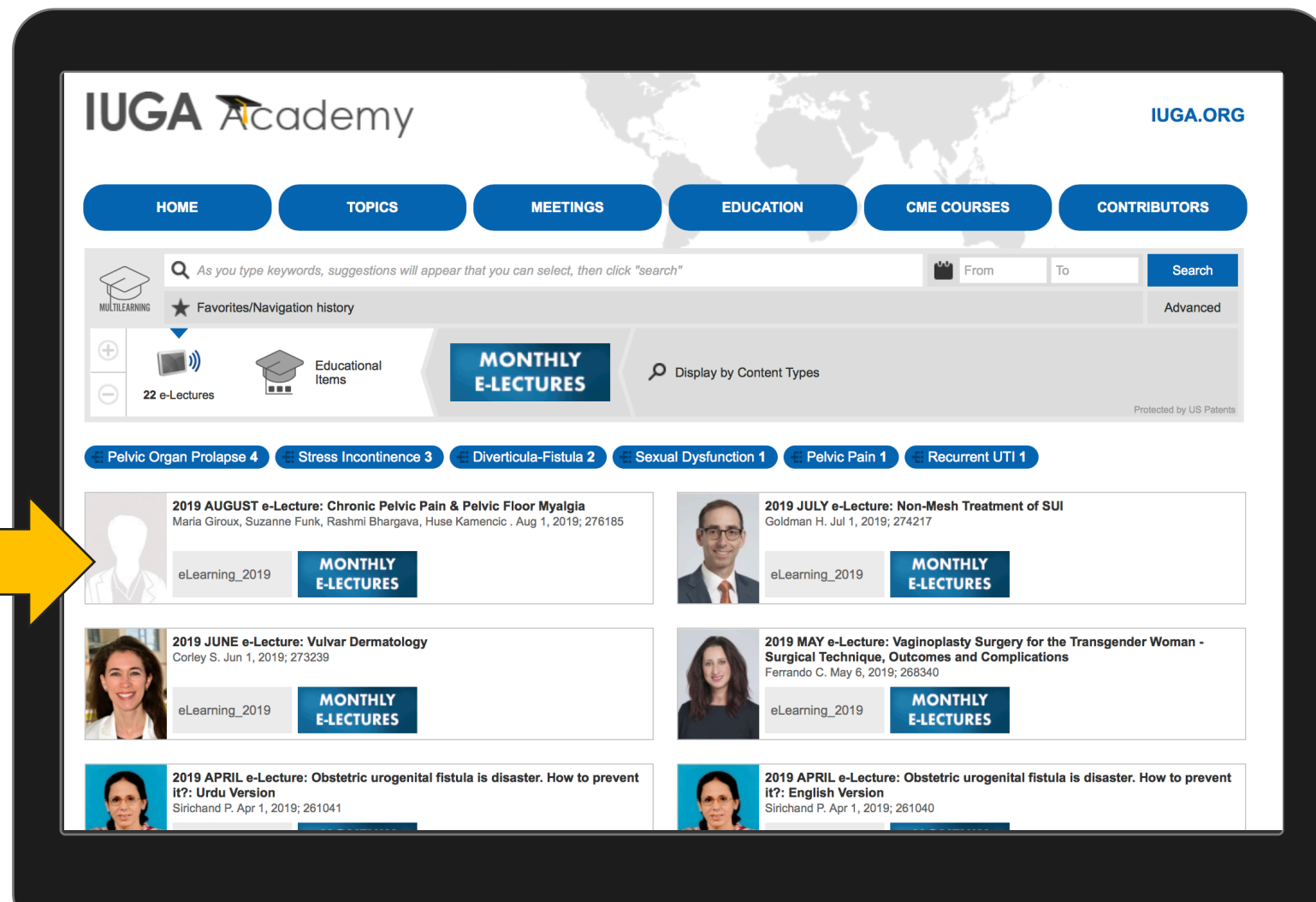
There is no difference in the degree of improvement in assessment scores between both methods.


Significance

New effective multidisciplinary training program for teaching the assessment of the pelvic floor musculature to identify a possible muscular cause or contribution to chronic pelvic pain and provide early referral for appropriate treatment.

Video

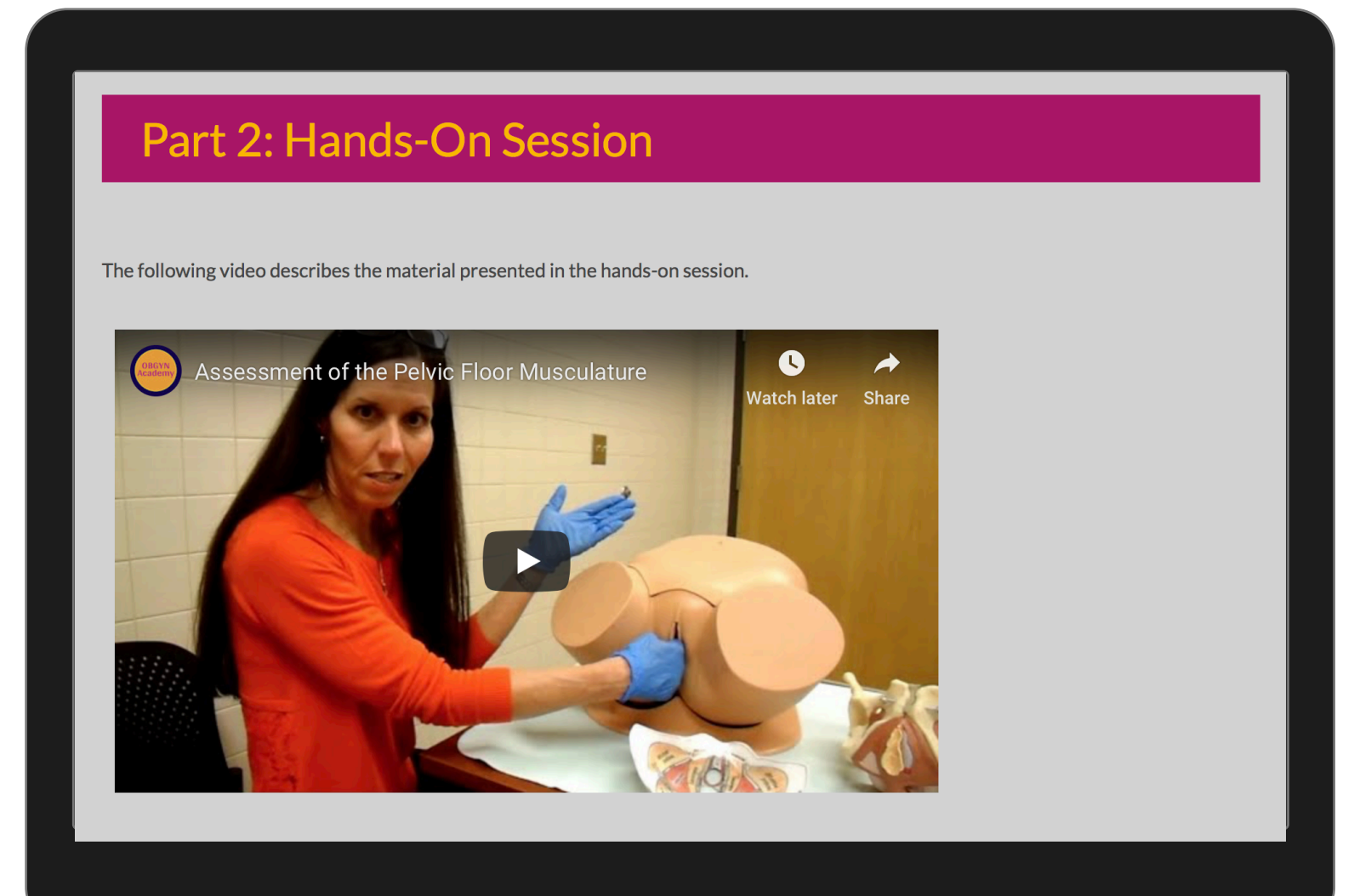
IUGA Academy



 <https://academy.iuga.org>

SEARCH

OBGYN Academy



 <https://obgynacademy.com>

SEARCH

Hands-on

Chronic Pelvic Pain & Pelvic Floor Myalgia Workshop

<https://obgynacademy.com/chronic-pelvic-pain/>

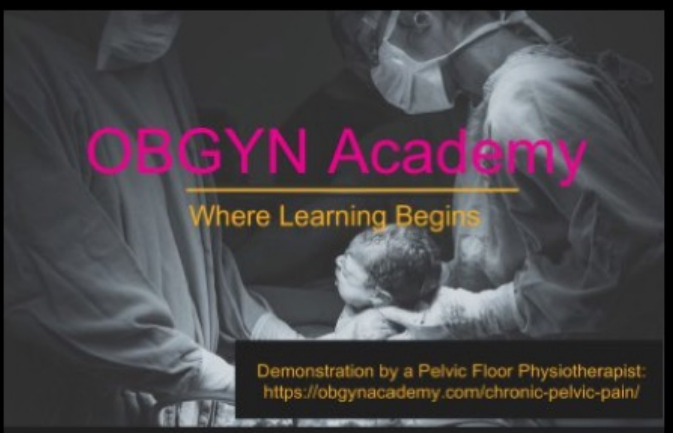


Both versions

Guide to Assessment of the Pelvic Floor Musculature

<https://obgynacademy.com/chronic-pelvic-pain/>

1) A Guide to Assessment of the Pelvic Floor Musculature



OBGYN Academy
Where Learning Begins

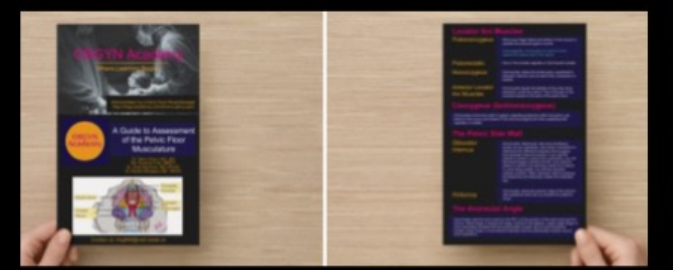
Demonstration by a Pelvic Floor Physiotherapist:
<https://obgynacademy.com/chronic-pelvic-pain/>

OBGYN Academy

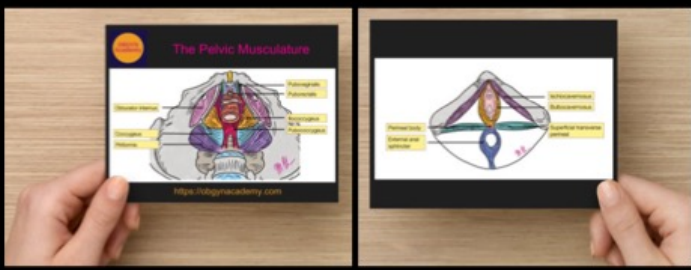
A Guide to Assessment of the Pelvic Floor Musculature

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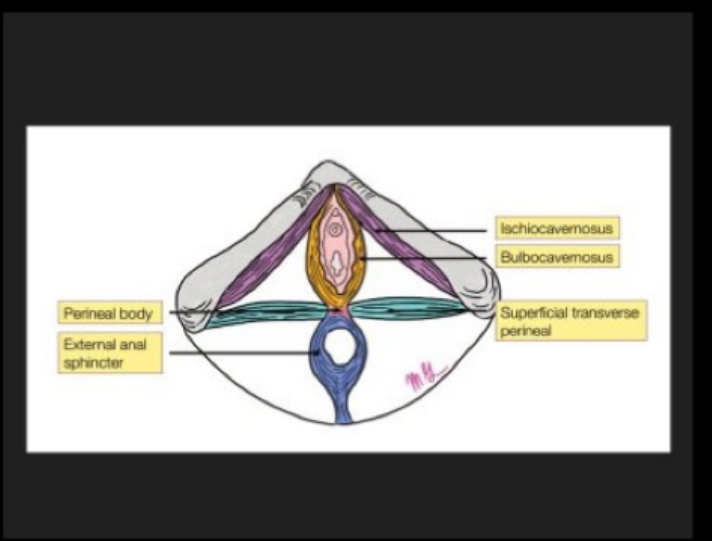
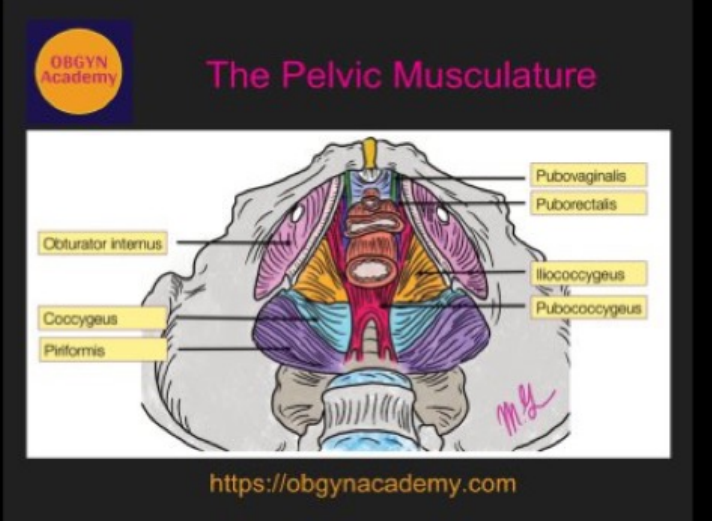
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- Levator Ani Muscles**
- Pubococcygeus**: Move your finger lateral and inferior to the coccyx to palpate the pubococcygeus muscle.
Pubovaginalis- 1st knuckle at 3 and 9 o'clock against the lateral wall of the vagina.
 - Puborectalis**: 2nd or 3rd knuckle vaginally or 2nd knuckle rectally.
 - Iliococcygeus**: 2nd knuckle, below the ischial spine, superficial to obturator internus (can do pelvic floor contraction to isolate).
 - Anterior Levator Ani Muscles**: 2nd knuckle beside the bladder at the pubic bone anteriorly, avoid the urethra. This is the part of the muscles closest to the back of the pubic bone.
- Coccygeus (Ischiococcygeus)**: 3rd knuckle at the back wall of vaginal, palpating posteriorly within the pelvis, just lateral to the coccyx and lateral to the sacrococcygeal joint when palpating both vaginally or rectally.
- The Pelvic Side Wall**
- Obturator Internus**: 2nd knuckle, lateral wall. Use arcus tendineus levator ani as a landmark. Use active contraction to determine the difference between iliococcygeus and obturator internus muscles. If you ask the patient to perform a pelvic floor contraction, you will feel iliococcygeus contract and lift. If you ask the patient to perform hip abduction while hip is flexed in crook lying position, you will feel obturator internus contract. (Note: obturator internus abducts the flexed hip and externally rotates the extended hip).
 - Piriformis**: 3rd knuckle, along the superior edge of the sacrum, with ipsilateral knee bent up towards the patient's chest.
- The Anorectal Angle**: Insert finger past the anal canal (so the PIP is at the junction of the anal canal and the rectum). Bend finger to assess the angle. Normal is 90 degrees. Larger angle (finger is more extended) indicates that the puborectalis muscle may be more hypotonic. Smaller angle (finger is more flexed) indicates that the puborectalis muscle may be more hypertonic.



2) The Pelvic Musculature




3) Anatomy Pen



Future Direction

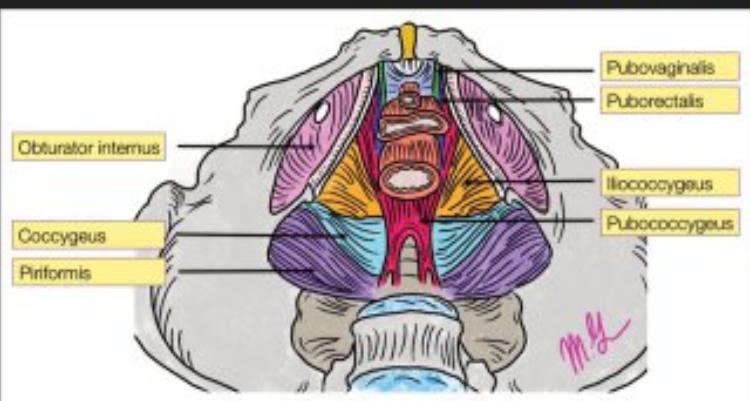


Workshop at both national and international levels in order to improve patient care through provider education

A Guide to Assessment of the Pelvic Floor Musculature

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