

# Electromyographic Biofeedback Therapy for Pelvic Floor Dysfunction

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## INTRODUCTION

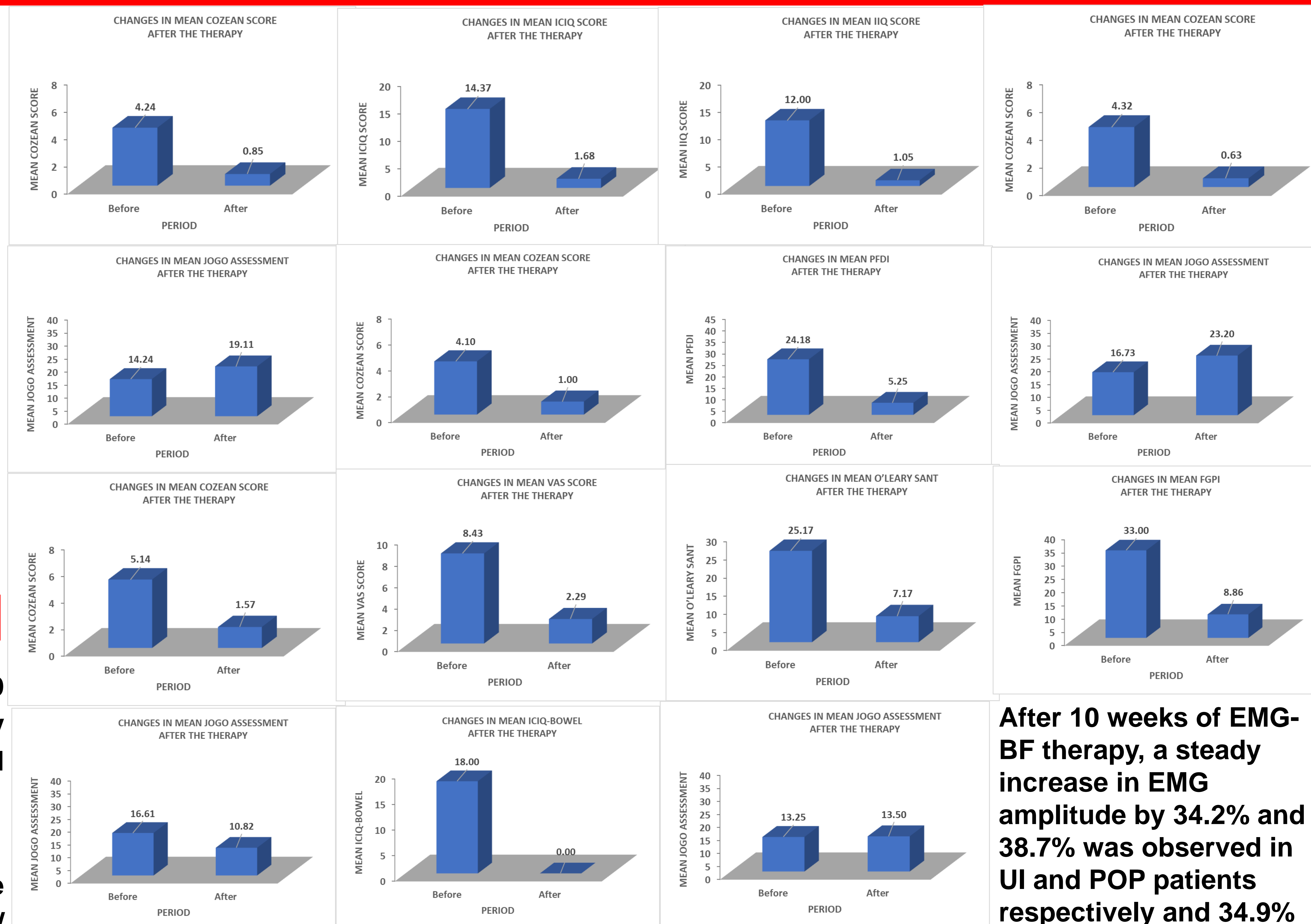
- Pelvic floor dysfunction (PFD) may lead to disorders such as Urinary Incontinence (UI), Fecal Incontinence (FI), Pelvic Organ Prolapse (POP), Voiding Dysfunction (VD) etc.
- Effective pelvic floor contractions and relaxations are important for improving PFD symptoms, and can be achieved by electromyographic biofeedback (EMG-BF) with the pelvic floor physiotherapy.
- ICIQ-UI SF, Incontinence Impact Questionnaire, Short Form (IIQ-7), Cozean PFD Screening Questionnaire, Pelvic Floor Distress Inventory 20 (PFDI-20), VAS, O'Leary Sant questionnaire, GUPI were used



## MATERIAL AND METHODS

- Case series involving 33 female patients with PFD (19 UI, 10 POP, 7 VD, 01 FI) who received 10 weekly sessions of EMG-BF using JOGO EMG-BF digital therapeutic portable device.
- The outcomes were measured using subjective scores and analyzed using Wilcoxon sign rank test / student's t-test. EMG amplitude was also assessed.
- The treatment goal for UI, POP & FI patients was to increase strength and endurance through Pelvic floor muscle training (PFMT), and for VD patients was to decrease muscle tone through Pelvic floor relaxation training (PFRT).

## RESULTS



After 10 weeks of EMG-BF therapy, a steady increase in EMG amplitude by 34.2% and 38.7% was observed in UI and POP patients respectively and 34.9% decrease in VD patients. There was 100% improvement ICIQ-B score in FI patient.

## CONCLUSION

EMG-BFB assisted pelvic floor physiotherapy causes substantial improvement in clinical signs and symptoms and quality of life as evident by subjective scores and EMG amplitude in UI, POP, VD and FI, suggesting it's promising role in treating PFD.