



SUNITA PATEL- PELVIC FLOOR RELAXATION SCALE (SP-PFRS): A NOVEL CLINICAL GRADING SYSTEM FOR ASSESSMENT OF PELVIC FLOOR RELAXATION

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ABSTRACT Pelvic floor assessment tools currently emphasize muscle contraction while largely ignoring relaxation capacity. However, many pelvic floor dysfunctions such as vaginismus, vulvodynia, chronic pelvic pain, and levator ani syndrome are primarily associated with pelvic floor hypertonicity and inability to relax. The absence of a standardized relaxation grading system limits accurate assessment, safe clinical decision-making, and research comparability. The purpose of this article is to introduce the **Sunita Patel- Pelvic Floor Relaxation Scale (SP-PFRS)**, a structured five-level clinical grading system designed to assess pelvic floor relaxation prior to contraction testing. The scale integrates psychological readiness, superficial and deep muscle tone, breathing pattern, insertion tolerance, therapist cueing, and functional impact. The SP-PFRS provides a logical, safe, and reproducible framework for evaluating relaxation, guiding treatment progression, and documenting outcomes in pelvic health physiotherapy. Future studies are recommended to establish reliability and validity.

KEYWORDS : Pelvic floor relaxation, hypertonicity, vaginismus, pelvic pain, physiotherapy assessment, women's health

INTRODUCTION

Pelvic floor function depends on the coordinated ability to both contract and relax. Existing assessment tools such as the Modified Oxford Scale and PERFECT scheme primarily evaluate contraction strength and assume adequate relaxation is present. In clinical practice, however, many patients present with pelvic floor over activity, guarding, and pain that prevent internal examination or contraction testing.

Conditions including vaginismus, vulvodynia, dyspareunia, postpartum scar hypertonicity, endometriosis, and levator ani syndrome commonly demonstrate impaired relaxation rather than weakness. Despite this, no standardized clinical tool exists to grade pelvic floor relaxation.

The **Sunita Patel- Pelvic Floor Relaxation Scale (SP-PFRS)** was developed to address this gap by providing a structured, safety-oriented method for assessing relaxation capacity before any contraction assessment is attempted.

AIM OF THE STUDY

To develop and describe a novel clinical grading system for pelvic floor relaxation that can be used for assessment, documentation, treatment planning, and future research.

MATERIALS AND METHODS

The SP-PFRS was developed based on more than ten years of clinical experience in pelvic health physiotherapy. The scale was conceptualized through repeated observation of patients presenting with pelvic floor hypertonicity across women's health, pelvic pain, postpartum rehabilitation, and sexual dysfunction clinics.

Key assessment domains were identified, including psychological readiness, muscle tone at different pelvic floor layers, breathing behaviour, insertion tolerance, therapist cueing requirement, and functional impact. The scale was refined iteratively through clinical application and professional discussions during pelvic health workshops.

Description of the Sunita Patel- Pelvic Floor Relaxation Scale (SP-PFRS)

Grade	Clinical Description
-1 Hypertonic Mind & Body	Patient psychologically unready for perineal assessment. Fear, anxiety, or trauma history present. Reflex guarding such as gluteal squeeze, adductor activation, or hip elevation observed. No relaxation possible.
-2 Superficial Layer Tension	External vulvar or perineal pain described as burning, stinging, or raw sensation. Superficial pelvic floor muscles remain tense. Insertion not attempted due to external pain.
-3 Orifice and Middle Layer Tightness	Vaginal or anal opening feels rigid, guarded, or "blocked." Middle-layer muscle hypertonicity present. Insertion painful or impossible.

-4 Deep Layer and Fascial Restriction	Pain or tightness on deep palpation involving levator ani, obturator internus, or coccygeus muscles. Fascial or organ restriction may be present. Insertion tolerated but painful.
-5 Complete Relaxation	Pelvic floor muscles soft and supple at baseline tone. No tenderness or resistance. Healthy fascial and organ mobility. Patient demonstrates independent voluntary relaxation.

Clinical Application

Assessment using the SP-PFRS must be performed before any pelvic floor contraction testing.

- Grades -1 to -4 indicate incomplete relaxation, and contraction assessment should not be attempted.
- Only when grade -5 (complete relaxation) is achieved can contraction grading be safely and accurately performed.
- The scale assists clinicians in selecting appropriate interventions, emphasizing relaxation and down-training strategies before progressing to strengthening exercises.

DISCUSSION

The SP-PFRS introduces a structured approach to pelvic floor relaxation assessment, addressing a critical limitation of existing contraction-based scales. By incorporating psychological, muscular, fascial, and functional domains, the scale reflects real-world clinical presentations.

The relaxation-first framework enhances patient safety, improves communication between clinicians, and supports individualized rehabilitation planning. The scale also provides a standardized language for documentation and future research on hypertonic pelvic floor disorders.

Limitations

The SP-PFRS is a clinically derived scale and currently lacks formal psychometric validation. Further studies are required to establish inter-rater reliability, construct validity, and responsiveness.

CONCLUSION

The **Sunita Patel- Pelvic Floor Relaxation Scale (SP-PFRS)** is a novel, clinically relevant grading system that fills a significant gap in pelvic floor assessment. By prioritizing relaxation assessment before contraction testing, the scale aligns with pelvic floor physiology and improves safety and accuracy in pelvic health practice. The SP-PFRS has strong potential for widespread clinical use and future research validation.

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