#354 How do vaginal penetration cognitions affect results of a graded motor imagery program in women suffering genito-pelvic pain/penetration disorder.

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Hypothesis / aims of study

Genito-Pelvic Pain/Penetration Disorder (GPPPD) is a common sexual dysfunction with a complex physically and psychological etiological factors.

Women with GPPPD often have negative beliefs and cognitions about vaginal penetration, causing anticipatory anxiety which leads to more pain.

Graded Motor Imagery (GMI) is an effective treatment option for persistent pain conditions, such as GPPPD. However, the effectiveness of a GMI program in addressing negative beliefs associated with vaginal penetration is less understood.

This study investigated the impact of such beliefs using the Vaginal Penetration Cognition Questionnaire (VPCQ) on the outcomes of a GMI program on women diagnosed with GPPPD.

Study design, materials and methods

In this randomized controlled trial, we explore the association between negative beliefs about vaginal penetration and the effectiveness of a GMI program on managing symptoms on women with GPPPD.

The study was conducting following the ethical recommendations of the Declaration of Helsinki.

Participants provided informed consent and provided baseline assessments, which included the VPCQ, prior to randomization. The intervention group underwent a 6-week GMI program, tailored to address pelvic floor dysfunctions, while the control group received no treatment, but were assessed every 2 weeks as per the treatment group. Outcome measurements included pain intensity using the VAS and sexual function using the FSFI-6 and were evaluated pre and post intervention and after every completed phase (2 weeks).

Statistical analysis involved a mixed model two-way repeated measures ANOVA to explore changes within-subject and in-between groups differences, and the Pearson's Correlation Coefficient was used to find the correlation between VPCQ scores and outcomes.

Results and interpretation

83 participants were recruited for this study and analyzed. Results show significant reductions in pain intensity within the GMI group ($p<0.05$) irrespective of participants' negative cognitions on vaginal penetration. Sexual function did not show any significant improvements after the GMI program.

Correlation analysis show a significant negative association ($p<0.05$) between the VPCQ outcome and FSFI outcome, specially in the control group. This finding suggests that higher scored on the VPCQ, indicating more negative thoughts on vaginal penetration, were associated with lower levels of sexual function.

Variable		GMI GROUP		CONTROL GROUP	
		Pearson's Correlation Index	P-Value	Pearson's Correlation Index	P-Value
VPCQ	VAS	0.234	P=0.06	0.256	P=0.05
	FSFI	-0.205	P=0.06	-0.412	**P<0.05**

The findings underscore the effectiveness of the GMI program in alleviating pain intensity among women with GPPPD, regardless of their negative beliefs about vaginal penetration. However, negative beliefs about vaginal penetration significantly correlated with impaired sexual function in the control group. These results highlight the potential impact of addressing negative cognitions about vaginal penetration on improving sexual outcomes in women with GPPPD.

Conclusions

While the GMI program demonstrates efficacy in reducing pain intensity in women with GPPPD, addressing negative beliefs about vaginal penetration may be crucial for enhancing sexual function. Future interventions should consider incorporating strategies to target and modify these beliefs to improve overall outcomes and quality of life for individuals living with GPPPD.

References

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