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Effect of pelvic floor muscle training on quality of sexual intercourse and urinary incontinence in post-partum mothers in the working area of Lubuk Buaya Health Center In 2023

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Abstract

Dysfunction of the pelvic floor muscles following pregnancy and childbirth can lead to postpartum urine incontinence and sexual dysfunction. Exercises targeting the pelvic floor muscles can enhance sexual performance and reduce incontinence. In Koto Tangah District, Lubuk Buaya Community Health Center sees the most number of postpartum mother visits; most moms there report experiencing pain and discomfort during sex as well as postpartum urine incontinence. The purpose of this study was to ascertain how pelvic floor muscle training affected postpartum moms' urine incontinence and the quality of their sexual interactions.This study's design is a quasi-experiment with a control group for the pretest and posttest. From June to September of 2023, all postpartum women made up the study's population. Purposive sampling was used to split the 52 participants in the research sample into two groups: the intervention group and the control group. The chi square test was employed for data analysis.The group that received pelvic floor muscle training saw improvements in the quality of their sex and a reduction in their level of urine incontinence. According to statistics, pelvic floor muscle training has an impact on postpartum moms' quality of sexual relationships (p=0.024) and urinary incontinence (p= 0.005).The study concludes that pelvic floor muscle training affects postpartum mothers' quality of sexual relationships and urine incontinence. Regular practice for longer than four weeks can yield the best outcomes.

Keywords: Pelvic Floor Muscle Training; Quality of Sexual Relations; Urinary Incontinence; Post Partum Mothers

1. Introduction

Dysfunction of the pelvic floor muscles following pregnancy and childbirth can lead to postpartum incontinence and sexual dysfunction. Sexual and urinal needs are basic human wants that must be satisfied during the postpartum time in order to prevent morbidity—that is, poor physical, mental, spiritual, and social situations in the woman's life[1]

The Padang City Health Service projects that 13,748 women in Padang City will be postpartum moms in 2021. Koto Tangah District has 2,654 postpartum mothers, which is the greatest amount. There are five community health centers in the Koto Tangah District. 752 postpartum mothers were the most number of visitors to the Lubuk Buaya Community Health Center[2]

In a preliminary survey, 80% of the 10 postpartum women who attended the Lubuk Buaya Community Health Center gave birth vaginally. The mothers stated that they had their sexual activity after the postpartum period had ended, which

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was after six weeks or forty-two days. In addition, moms said that they were fearful of rupturing their episiotomy wounds, experiencing pain during intercourse, and feeling dry and loose in their vagina. Aside from that, 20% of the ten moms reported that pee leaks when they sneeze or cough, and 30% of them claimed they were unable to control their urination. None of the moms exercised their pelvic floor muscles when questioned. Interviews with midwives at the Lubuk Buaya Community Health Center revealed that, in contrast to the postpartum program that had been implemented, the midwives had never offered information or counseling regarding pelvic floor muscle exercises to enhance the quality of sexual relations and incontinence in postpartum mothers.

Exercise for the pelvic floor involves systematically contracting the levator ani muscles. It has been shown to alleviate symptoms of stress, cravings, and urinary incontinence. It is also believed to assist women have better sexual relationships[3]. Pelvic floor muscle training has been shown in several trials to enhance sexual function and lower the incidence of postpartum urine incontinence; however, the program's effectiveness is dependent on the participant's drive, aptitude, and willingness to practice.

2. Results and discussion

2.1. Univariate analyze

The frequency distribution of the quality of sexual relations and urinary incontinence in the intervention and control groups at pretest and posttest, as well as the frequency distribution depending on age, education, occupation, and parity, were all determined using univariate analysis. There were 52 responders in total for this study, 26 of them were in the case group and 26 in the control group.

2.1.1. Respondent Characteristics

The respondents in both groups were not at high risk, with ages ranging from 20 to 35 years old (69.2% and 76.9%). Over half of the respondents had completed high school (46.15 and 69.23%). Regarding work, all of the respondents in the group intervention were IRT (100%) while the majority of the respondents in the control group were IRT (80.77%). Additionally, the majority of the respondents in the intervention group were classified as multiparous (92.31%), whereas all of the respondents in the control group were classified as multiparous (100%).

2.1.2. Frequency Distribution of Quality of Sexual Relations pretest and posttest in the Intervention Group and Control Group

Table 1 Frequency Distribution of the Quality of Sexual Relations pretest and posttest in the Intervention Group and Control Group

Variable	**Intervention (n =26)**		**Control (n=26)**		**Intervention (n=26)**		**Control (n=26)**	
	Pretest				Posttest			
Quality of Sexual Relationship	f	%	f	%	f	%	f	%
No Sexual Dysfunction	7	26.9	4	15.4	15	57.7	6	23.1
Sexual Dysfunction	19	73.1	22	84.6	11	42.3	20	76.9
Sum	26	100%	26	100%	26	100%	26	100%

Frequency Distribution of the Quality of Sexual Relations pretest and posttest in the Intervention Group and Control Group

Table 1 shows that after receiving pelvic floor muscle training, the number of respondents in the intervention group who did not have sexual dysfunction increased and exceeded the number of respondents who did. In contrast, the number of respondents in the control group who did not receive pelvic floor muscle training was lower than the number of respondents who did not have sexual dysfunction.

2.1.3. Frequency Distribution of Urinary Incontinence pretest and posttest in the Intervention Group and Control Group

Table 2 revealed that respondents with mild urine incontinence dominated the intervention group following pelvic floor muscle training, whereas respondents with moderate urinary incontinence dominated the control group, which did not receive pelvic floor muscle training.

Table 2 Frequency Distribution of Urinary Incontinence pretest and posttest in the Intervention Group and Control Group

Variable	**Intervention (n =26)**		**Control (n=26)**		**Intervention (n=26)**		**Control (n=26)**	
	Pretest				Posttest			
Urinary Incontinence	f	%	f	%	f	%	f	%
Light	15	57.7	13	50	20	76.9	9	34.6
Moderate	11	42.3	13	50	6	23.1	17	65.4
Sum	26	100%	26	100%	26	100%	26	100%

2.2. Bivariate Analyze

2.2.1. The Effect of Pelvic Floor Muscle Training on the Quality of Sexual Relations in Post Partum Mothers

Tabel 3 The Effect of Pelvic Floor Muscle Training on the Quality of Sexual Relations in Post Partum Mothers

	Quality of Sexual Relationship						*p value*
	No Sexual Dysfunction		Sexual Dysfunction		Sum		
	f	%	f	%	f	%	
Intervention	15	57.7	11	42.3	26	100%	0.024
Control	6	23.1	20	76.9	26	100%	

Table 3 shows that, in contrast to the control group (57.7% : 23.1%), the intervention group had a lower percentage of sexual dysfunction cases. The quality of sexual relations differs between the intervention group and the control group, as indicated by the chi square statistical test findings, which yielded a p value of 0.024 ($p < 0.05$). We can draw the conclusion that pelvic muscle training affects the caliber of sexual interactions.

The average sexual function in the intervention group was considerably higher than in the control group, which did not get pelvic floor muscle training treatment (p value = 0.001), which is consistent with studies by Pourkhiz et al. (2017). Through muscular hypertrophy, activities targeting the pelvic floor muscles can enhance the levator ani muscles. A woman's ability to achieve an orgasm through maximal muscle contractions during a sexual encounter is enhanced by her levator ani muscle (Psik et al., 2017). Because it's thought that improving pelvic floor strength enhances sexual function (Hadizadeh-Talasaz et al., 2019)

2.2.2. The effect of pelvic floor muscle training on post-partum maternal urinary incontinence

Tabel 4 The effect of pelvic floor muscle training on post-partum maternal urinary incontinence

	Urinary Incontinence						***p value***
	Light		Moderate		Sum		
	f	%	f	%	f	%	
Intervention	20	76.9	6	23.1	26	100%	0.005
Control	9	34.6	17	65.4	26	100%	

Table 4 shows that the intervention group had a higher incidence of moderate urine incontinence (76.9%: 34.6%) than did the control group. The chi square statistical test produced a p value of 0.005 ($p < 0.05$), indicating that the intervention group and the control group had different types of urine incontinence. We can conclude that pelvic muscle training has an impact on urine incontinence.

The present study's findings are consistent with a study carried out by Adzany et al. (2023) which found that vaginal postpartum mothers who underwent pelvic floor muscle training intervention experienced a reduction in their level of

urine incontinence, which was previously severe, to moderate. Research by Ketut et al. (2018), which found that postpartum moms' urine incontinence is reduced ($p < 0.026$) when pelvic floor muscle training is used, further supports this study. Training the pelvic floor muscles has been shown to be beneficial in treating and preventing urine incontinence during the prenatal and postpartum phases ($p<0.0008$), according to a different study by Yang et al., (2022).

The study's findings demonstrated that up to six moms had moderate urine incontinence. Following an evaluation, it was determined that the following factors contributed: one mother gave birth to a large baby weighing 3800 grams; the mother also gained weight during her pregnancy and delivery, weighing 98 grams. kg; three mothers experienced labor that lasted longer than 90 minutes during the second stage of multiparous labor, which should have only lasted 30 minutes; and two more people were affected by the mother's increased weight during her pregnancy, gaining 20 to 25 kg. which, throughout pregnancy, should only weigh between 10 and 12 kg.

3. Conclusion

It can be concluded that a mother's level of incontinence increases with her number of factors. Research has demonstrated that a mother who gained weight while pregnant and gave birth to a child weighing 3800 kg increased the strain on her pelvic floor muscles. The mother experienced mild incontinence at first, but this improved after four weeks of pelvic floor muscle exercises.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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