

EFFECT OF CHILDBIRTH VERSUS PARENTING PRESSURE ON SEXUAL FUNCTION

Hypothesis / aims of study

In previous work, nulliparous women reported superior sexual satisfaction scores compared with parous women, regardless of age and mode of delivery. However, the psychosocial effects of parenting pressures on sexual function were not assessed.¹ The aim of this study is to assess the impact of childbirth on sexual function while controlling for the effect of pregnancy and childbirth by using nulliparous adoptive mothers as the control group.

Study design, materials and methods

This was a population-based cross-sectional study assessing sexual function after childbirth in parous women in which controls were matched from a cohort of nulliparous adoptive mothers attending an annual meeting for adoptive families held in Tampa, Florida in 2007. Nulliparous adoptive moms were chosen as controls rather than nulliparous moms without any children to control for the effect of parenting pressure which may influence sexual function. Primiparous or multiparous mothers were identified from twin sisters who had attended an annual twins' festival in Twinsburg, Ohio in 2007. All participants were given a validated survey including the Pelvic Organ Prolapse/Urinary Incontinence Sexual Questionnaire (PISQ-12) to assess sexual function. PISQ-12 scores were compared amongst adoptive mothers who were nulliparous, and hence had not gone through pregnancy and delivery of their adopted child, versus women who had delivered either by vaginal or cesarean delivery. Variables analyzed included: age, body mass index (BMI), number of kids, urge, stress and fecal incontinence and prolapse surgery. A mixed-effects model adjusting for correlations between twin pairs was applied for comparison between each group to the PISQ score.

Table 1: PISQ scores after adjustment for age, BMI, number of children, incontinence and prolapse surgery

Adjusted variables	p value (Adoptive mothers compared to all parous mothers)	p value (Pair-wise comparison)		
		group 1 vs. group 2	group 1 vs. group3	group2 vs. group3
Age	0.0001	0.0001	0.012	0.246
BMI	0.001	0.002	0.027	0.237
Number of children	<0.0001	<0.0001	0.010	0.194
Urge incontinence	0.0001	<0.0001	0.009	0.307
Stress incontinence	<0.0001	<0.0001	0.009	0.245
Fecal incontinence	0.0003	0.0003	0.020	0.290
Prolapse surgery (Y/N)	<0.0001	<0.0001	0.008	0.238

Legend: Group1: nulliparous adoptive mothers; group2: at least one vaginal delivery; group3: cesarean delivery only. In the statistical model used, age and BMI are treated as continuous variables, types of incontinence and prolapse surgery are treated as present or absent. Number of children has been dichotomized to 1-3 vs. 4 or more.

Results

Cases were comprised of 588 women with at least one vaginal delivery and 114 women delivered by cesarean only. The control group consisted of 11 matched nulliparous adoptive mothers. In the univariate analysis, mean total PISQ scores were significantly different among the three groups ($p < 0.001$). Nulliparous adoptive moms had significantly higher PISQ scores (better sexual function) than the vaginal delivery group ($p < 0.001$) and cesarean only group ($p = 0.010$). After adjustment for the tested variables, nulliparous adoptive moms persisted to have significantly higher mean total PISQ scores. PISQ scores did not differ significantly in the parous women whether they delivered vaginally or by cesarean. None of the variables analyzed were found to be significant predictors of PISQ scores in cases or controls after bivariate analysis.

Interpretation of results

In controlling for the psychosocial pressures of parenting by using nulliparous adoptive moms as the control group, our results suggest that pregnancy, regardless of delivery mode was significantly associated with lower PISQ scores when compared to nulliparous adoptive moms.

Concluding message

This study demonstrated that child birth, whether vaginal or by caesarean, was associated with lower mean PISQ scores compared to adoptive mothers who did not undergo natural childbirth but were similarly engaged in a parenting process. Delivery mode did not significantly affect PISQ scores. These findings highlight the sexual repercussions of obstetrical pelvic floor injury, and the importance of screening for pelvic dysfunction and encouraging pelvic rehabilitation in parous women.

References

1. Botros SM, Abramov Y, Miller JJ, Sand PK, Gandhi S, Nickolov A, Goldberg RP. Effect of parity on sexual function: an identical twin study. *Obstet Gynecol.* 2006;107(4):765-70

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Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes

<i>Specify Name of Ethics Committee</i>	Evanston Internal Review Board
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	No