In Primipara Mothers who delivered vaginally or by cesarean section, is there an impact on the sexual function?

Thesis

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بسم الله الرحمن الرحيم
قالوا
سبحانك لا علم لنا
إلا ما علمتنا إنك أنت
العليم الحكيم
صدق الله العظيم
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Mahmoud Mohammed Elsayed Elsayed

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List of Abbreviations

Abbr.	Full-term
ACOG	: American Congress of Obstetricians and Gynecologists
BMI	: Mass index
CDMR	: Caesarean delivery on maternal request
CS	: Caesarean section
CS	: Caesarean section
EMG	: Electro-myography
FI	: Fecal incontinence
FSFI	: Female Sexual Function Index
HLKNL	: Hydroxylysino-keto-norleucine
MRI	: Magnetic resonance imaging
NVD	: Normal vaginal delivery
PNTML	: Pudendal nerve terminal motor latency
SD	: Standard deviation
SPSS	: Statistical package for social science
SUI	: Stress urinary incontinence
UI	: Urinary incontinence
VBAC	: Vaginal birth after caesarean
WHO	: World Health Organization

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ABSTRACT

Background: The strength of the muscles of the pelvic floor and other supporting structures of the pelvic organs are affected by various events that occur during a woman's lifetime. Pregnancy and childbirth have a pronounced influence on maternal anatomy and physiology. **Aim of the Work:** The aim of the study was to investigate the impact of the mode of delivery on the sexual function (arousal-pleasure-orgasm-desire) -among a representative sample of Egyptian primiparae. **Subjects and Methods:** This cross-sectional observational comparative study was conducted at Ain Shams University Maternity Hospital during the period between November 2017and July 2018 on 260 women who had single uncomplicated delivery within a duration of not less than 6 months and not more than 2 years from recruitment of the study. **Results:** Pain was significantly positively correlated to the age [r=0.319, p=0.013] and social class [r=0.276, p=0.028]. Both satisfaction and the overall sexual function score was also significantly positively correlated to social class[r=0.275, p=0.032; r=0.237, p=0.048; respectively]. Pelvic floor muscle strength was poorly correlated to sexual function. **Conclusions:** The study revealed a significant difference in pelvic floor muscle strength between women who delivered vaginally and those who delivered by Cesarean section. However, there was no significant difference in sexual function between women who delivered vaginally and those who delivered by Cesarean section. Pelvic floor muscle strength was poorly correlated to sexual function. **Recommendations:** Cesarean section on demand should not be considered as prophylaxis against sexual dysfunction. A larger, nation-wide based study should be performed for assessment of sexual dysfunction among women of different age groups and parities.

Key words: primipara, vaginal delivery, cesarean section, sexual function

Introduction

Over the ages, the objective of cesarean delivery has dramatically evolved from a universally postmortem procedure toward saving the lives of both the mother and the child ***(Lurie, 2005).***

At the beginning of twenty-first century, we continue to act on behalf the health and the safety of both the mother and the child; but we also act in accordance with the mother's desire and preference and child's rights. This motion raised the concept of prophylactic cesarean delivery or as it sometimes referred as cesarean on patient's demand ***(Handelzalts et al., 2012).***

One of the apparent concerns that influence women who choose cesarean delivery is fear that vaginal delivery impinges on sexual function after childbirth ***(Nama and Wilcock, 2011).***

Certain aspects of female sexual function after childbirth have been studied by many investigators since 1960; still, the vast majority of available studies do not adequately separate the data between the different modes of deliveries ***(Serati et al., 2010).***

During the first 3 months postpartum, many women experience some problems related to sexual function, such as dyspareunia, decreased libido, difficulty achieving orgasm, or vaginal dryness ***(Handa, 2006).***

Typically, these problems resolve by the end of first postpartum year.There are three mechanisms which may contribute to sexual dysfunction after childbirth: dyspareunia, birth canal injury (‘‘pudendal neuropathy’’), and overall general health of the mother ***(Handa, 2006).***

Thus, various obstetrical events such as cesarean, instrumental or spontaneous delivery or episiotomy could theoretically affect maternal sexual function in a dissimilar way. However, it is unclear whether or how these different obstetrical events influence short- or long-term prognosis for maternal sexual function ***(Handa, 2006).***

Several investigators have addressed some aspects of the influence of some obstetrical events on sexual function after childbirth. Rate of resumption of sexual activity has been reported to be independent of mode of delivery (vaginal or cesarean) at 6 weeks ***(Woranitat and Taneepanichskul, 2007)***, at 3 months ***(Wiklund et al., 2007)*** or 2 years ***(Hannah et al., 2004)*** postpartum.

At 6 weeks postpartum, women who had delivered vaginally without an episiotomy were reported to resume sexual activity sooner than those with an episiotomy ***(Woranitat and Taneepanichskul, 2007)***.

At 6 months postpartum, women who sustained anal sphincter lacerations were reported less likely to return to sexual activity ***(Brubaker et al., 2008).***

The prevalence of dyspareunia was reported to be higher in women after vaginal than after cesarean delivery at 3 months postpartum ***(Klein et al., 2009)***, and in women after instrumental delivery than after cesarean delivery in the second stage of labor ***(Liebling et al., 2004).***

This protective effect of cesarean delivery usually disappears by 6 months postpartum ***(Buhling et al., 2006).***

Sexual function was reported to be similar among women who delivered vaginally or by cesarean at 6 weeks ***(Woranitat and Taneepanichskul, 2007),***or at 3 months ***(Klein et al., 2009)*** or at 6 months ***(Brubaker et al., 2008)***postpartum.

Additionally, there was no reported impact of planned mode of delivery (vaginal vs. cesarean) on satisfaction with sexual relations at 2 years postpartum ***(Hannah et al., 2004).***

Likewise, mode of delivery history (vaginal vs. cesarean) did not appear to have a significant effect on sexual function at 6 years postpartum ***(Dean et al., 2008).***

Traditionally, the postpartum period has been defined as beginning 1 hour after delivery of the placenta and lasting