The effect of mode of delivery on female postpartum sexuality

A influência do tipo de parto na sexualidade feminina no pós-parto

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Abstract

Studies about the effect of mode of delivery in postpartum sexual function have shown inconsistent results, perpetuating the idea that a cesarean delivery has fewer consequences for women's sexuality.

This systematic review aims to examine the role of mode of delivery in sexual health after childbirth.

The published studies are scarce and quite heterogeneous. Any study has found a solid association between the mode of delivery and specific effects in long-term postpartum sexuality.

In light of this review, cesarean delivery does not seem to be associated with a protective effect in female postpartum sexuality.

Keywords: Delivery; Obstetric and postpartum period; Sexual behavior.

INTRODUCTION

The cesarean delivery (CD) rate has been increasing for the last two decades[1]. Although the maternal morbidity associated with CD is not very high, minor and severe complications associated with delivery are higher after CD (a surgical procedure) than vaginal delivery (VD)[2].

The number of CD at maternal request (when a woman explicitly asks for an elective CD in the absence of any medical or obstetric indications) is also increasing[3]. In this regard, misperceptions about maternal health outcomes after CD and VD have led to this increase[2]. Common reasons include previous negative birth experiences, fear of childbirth, complications in current pregnancy, the belief that a CD will be safer for the baby, fear of damage the pelvic floor and the perception that it might be protective for preservation of sexual function[1,3,4].

Data about the relationship between mode of delivery and postpartum sexual function are very heterogenic and inconclusive, perpetuating the idea that a CD has fewer consequences for women's sexuality.

The aim of this review is to examine the current literature on the role of the mode of delivery in female postpartum sexuality.

METHODS

A Medline search was performed for the MeSH terms "*delivery*", "*obstetric and postpartum period*" and "*sexual behavior*". Cross-sectional, prospective and retrospective studies published in English language from January 2011 to September 2016 were appraised.

We included studies with more than 80 participants and with clear measurements of sexual function. The studies that did not focus on the relationship between sexual function and mode of delivery and were presented as case reports and short reports were excluded.

RESULTS

A total of 15 references were found through the Med-

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line search; 5 were excluded through title or abstract analysis for not meeting the inclusion criteria and 10 articles were included in this review and carefully appraised (Table I).

DISCUSSION

Surprisingly, published studies about female sexuality after childbirth are scarce and quite heterogeneous,

TABLE I. STUDIES ABOUT MODE OF DELIVERY AND SEXUAL FUNCTION

Author*, year	Study design	Simple size	Main outcomes	Measures, Time	Results
Adanikin A. et al., 2014[5]	Prospective cohort	181 women VD: 102 CD: 79	Resumption of vaginal sex	Medical records Clinical interview 6 months postpartum	Significantly (aOR: 2.45; 95% CI: 1.30–4.73; p<0.005) fewer women who had CD resumed coitus within 6 months vs VD; Perineal injury did not predict resumption of coitus or experience of dyspareunia.
Alum A. et al., 2015[6]	Cross-sectional	374 women VD no tearing: 264 VD (episiotomy/tear) with stitches: 66 CD: 44	Resumption of vaginal sex	Medical records Clinical interview 6 months postpartum	Mode of delivery was not a significant determinant of resumption of sexual intercourse after childbirth.
Barbara G. et al., 2016[7]	Prospective cohort	269 primiparous VD: 132 Operative VD: 45 CD: 92	Resumption of vaginal sex Postpartum sexual functioning	Medical records FSFI 6 months postpartum	Mode of delivery did not significantly affect time to resumption of sexual intercourse. Women who underwent an operative VD had poorer scores on arousal, lubrication, orgasm, and global sexual functioning compared with the CD group. Women who underwent an operative VD had lower orgasm scores compared with the spontaneous VD group (p< .05).
Eid M. et al., 2015[8]	Prospective cohort	200 primiparous VD: 90 CD: 110	Postpartum sexual functioning	Medical records Clinical interview FSFI Before pregnancy 12 weeks postpartum	Mode of delivery has not significant effect on the FSFI 12 weeks after childbirth.
Faisal-Cury A. et al., 2015[9]	Prospective cohort	644 women Uncomplicated VD: 333 Complicated VD: 105 CD: 206	Resumption of sexual life Self-perception of decline of sexual life Presence of sexual desire	Medical records Clinical interview Antenatally (20-30 weeks pregnancy) Up to 18 months postpartum	No significant associations were found between mode of delivery and sexual health outcomes.
Kabakian-Kasholian T. et al., 2015[10]	Cross-sectional	238 women CD: 104 VD: 134	Pain during intercourse	Medical records Clinical interview 40 days–6 months postpartum	Were significantly more likely to report pain during intercourse postpartum women having a CD (1.96; CI:1.29–2.63)

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TABLE I. CONTINUATION

Author*, year	Study design	Simple size	Main outcomes	Measures, Time	Results
Khajehei M. et al., 2015[11]	Cross-sectional	325 women VD without tears/ /episiotomy: 130 VD with tears/ /episiotomy: 107 Instrumental: 17 CD: 71	Resumption of vaginal sex Postpartum sexual functioning	Clinical interview FSFI PHQ-8 RAS 18 months postpartum	Significant risk factors for sexual dysfunction: 1 – Fortnightly or less frequent sexual activity; 2 – Not being the initiator of sexual activity with a partner; 3 – Late resumption of postnatal sexual activity; 4 – The first 5 months after childbirth; 5 – Primiparity; 6 – Depression; 7 – Relationship dissatisfaction No significant associations were found between mode of delivery and sexual health outcomes.
Lurie S. et al., 2013[12]	Prospective longitudinal	82 women VD without episiotomy: 6 VD with episiotomy: 14 Instrumental: 16 Emergent CD: 19 Elective CD: 17	Resumption of vaginal sex Postpartum sexual functioning	Clinical interview FSFI 6, 12 and 24 weeks postpartum	FSFI total score did not differ significantly across types of mode of delivery at 6, 12, or 24 weeks postpartum.
McDonald E., Brown S., 2013[13]	Prospective cohort	1305 women Spontaneous VD: 634 Forceps: 140 Vacuum extraction: 140 CD, no labour: 128 CD, labored: 263	Resumption of vaginal sex	Medical records Clinical interview At recruitment (up to 24 weeks pregnancy) 3, 6 and 12 months postpartum	Women who had a spontaneous VD with an episiotomy (aOR: 3.43, 95% CI: 1.9–6.2) or sutured perineal tear (aOR: 3.18, 95% CI: 2.1–4.9) were more likely not to have resumed vaginal sex by 6 weeks postpartum vs women who had a spontaneous VD with an intact perineum.
Yee L. et al., 2013[14]	Observational prospective	160 women VD: 120 CD: 40	Resumption of sexual activity Postpartum sexual functioning	Telephone interview Clinical interview SHOW-Q 8 to 10 weeks postpartum 6 to 8 months postpartum	Multiparity and younger age predict early resumption of sexual activity. No significant associations were found between mode of delivery and SHOW-Q scores.

*Studies were listed in alphabetical order based on author's name
VD: Vaginal delivery; CD: cesarean delivery; FSFI: Female Sexual Function Index; PHQ-8: Patient Health Questionnaire; RAS: Relationship Assessment Scale; SHOW-Q:Sexual Health Outcomes in Women Questionnaire; aOR: adjusted odds ratio

which makes it difficult to perform a comparison of their results. In fact, one of the main limitations of these studies is related to samples' characteristics. Women having a VD are not a homogenous group and it is important to take into account the different subgroups (intact perineum after spontaneous VD, episiotomy/ /tears or operative VD). The same applies to the CD (scheduled or urgent).

Additionally, it is notable the lack of studies that contain a validated assessment tool for sexual function.

Studies analyzed in this review investigated as primary outcomes the timing of resumption of intercourse after childbirth, presence of dyspareunia, and postpartum sexual functioning. This last measure was evaluated through the Female Sexual Function Index (FSFI) in four studies and Sexual Health Outcomes in Women Questionnaire (SHOW-Q) in one study. Only one of the studies assessed the relationship satisfaction through the Relationship Assessment Scale (RAS).

The Female Sexual Functioning Index (FSFI)[15] is a brief nineteen-item self-report measure of female sexual function in the previous four weeks. It assesses six domains of sexual function: desire, arousal, lubrication, orgasm, satisfaction, and pain.

Sexual Health Outcomes in Women Questionnaire (SHOW-Q) was developed to assess the impact of pelvic problems in sexual desire, frequency, satisfaction, orgasm, and discomfort[16]. The Relationship Assessment Scale (RAS)[17] is a brief measure of global relationship satisfaction. It consists of seven multiple-choice questions whose items are scored based on a five-point Likert scale. A score equal to or higher than 4 indicates high levels of relationship satisfaction. Research has shown that this score is correlated with other measures of love, sexual attitudes, self-disclosure, commitment, and investment in a relationship[18].

Pregnancy and delivery are important periods in women's lives[19]. Evidence clearly shows that a significant proportion of women experience reduced sexual function during pregnancy, including decreased sexual interest, desire, frequency of sexual intercourse, sexual enjoyment, coital activity, orgasm, and satisfaction. More specifically, female sexual function declines slightly in the first trimester of pregnancy, shows variable patterns in the second trimester, and decreases sharply in the third trimester[20].

Postpartum period refers to the period of time required for reproductive organs to return to their pre-pregnancy state, which takes about six weeks[21]. However, the resumption of sexual intercourse after childbirth does not depend only on the female physical recovery[21]. This is a complex process that is affected by many factors such as socio-cultural, age, parity, breastfeeding, depression, tiredness, sexual inactivity during the first trimester, postpartum body image and worries about getting pregnant again[4].

Postpartum sexual dysfunction is identified in 41–83% of women at 2–3 months postpartum and dyspareunia, specifically, is extremely common in the first 3–6 months postpartum[19].

Anatomically, perineal trauma contributes to dyspareunia and has important effects on both the timing and quality of the resumption of sexual intercourse. Breastfeeding may alter sexual function as a result of vaginal dryness produced by the high levels of prolactin and the low estrogen levels. Family structure and ever changing sleep patterns decrease the likelihood of women and their partners have time and privacy to reestablish intimacy.

Cultural and societal dictates regarding the resumption of sexual activity may influence individual couples. Postpartum depression with accompanying loss of sexual desire, or secondary loss of desire, arousal or ability to achieve orgasm resulting from antidepressant medications may also contribute to postpartum sexual dysfunction[19].

A recent study[20] emphasizes the relation between pre-pregnancy sexuality, sexuality during pregnancy and in the postpartum period. Its results are very interesting: during the first two trimesters of pregnancy and after delivery, sexuality maintains in the same direction as pre-pregnancy patterns and sexual changes during pregnancy have no effect in postpartum sexual function. Based on these findings, the authors conclude that pre-pregnancy sexuality could be protective of sexual function during pregnancy and after delivery.

Another major factor closely associated with postpartum sexual life is the satisfaction with the marital relationship. On one hand, the satisfaction with the marital relationship is strongly associated with sexual desire in the postpartum period, and on the other hand marital conflicts have been implicated in the deterioration of sexual life during the same period[19,21]. This is an important factor since current studies show that the relationship quality with baby s father has a great impact on postpartum maternal depression regardless of marital status[22]. In fact, childbirth can bring significant changes to women's feelings about sexuality, and those who experience significant libido decreases may be vulnerable to feelings of guilt and failure[23]. In this context, after childbirth, the communication between partners surrounding sexual expectations is especially important, given that many women worry about their partner's sexual satisfaction[24]. Therefore, considerable attention should be paid to this issue during postnatal care, and sexual difficulties should be addressed during medical visits. This will help dispel myths about what is normal and abnormal, and reduce feelings of anxiety and guilt about resuming sexual activity[25].

CONCLUSIONS

CD rate is increasing in part due to the perception that it might be protective for preservation of a good sexual function. However, this review allows a systematization of available studies in this field and supports the lack of evidence to recommend an elective CD for the purpose to preserve postpartum sexual health. In fact, other factors should be considered since postpartum sexual function is a multidimensional phenomenon affected by biological, psychological, social, interpersonal, and cultural factors.

Therefore, it is very important that clinicians discuss during prenatal and postpartum care this issue in order to provide to both women and their partners more information about the most appropriate mode of delivery and postpartum sexual health.

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