



Empirical Articles

The Impact of Childbirth on Sexual Functioning in Women With Episiotomy

Isabel Leal^{*ab}, Sílvia Lourenço^b, Raquel V. Oliveira^a, Ana Carvalheira^{ab}, João Maroco^{ab}

[a] Research Unit in Psychology and Health – UIPES, I&D, ISPA – Instituto Universitário, Lisbon, Portugal. [b] ISPA – Instituto Universitário, Lisbon, Portugal.

Abstract

Objective: To compare the pregnancy period with the postpartum period, and infer if the presence of episiotomy interferes with the experience of female sexuality after childbirth. **Method:** This is an exploratory and descriptive, quantitative study. A non-probability, convenience sample of 108 women in the first stage (during pregnancy), and of 93 women in the second stage (after birth), was gathered in the Obstetrics and Gynaecology Service of a Portuguese hospital. The Female Sexual Function Index and a socio-demographic/clinical questionnaire were used for data collection. **Results:** Women that had an episiotomy/episiorrhaphy presented higher mean levels of sexual satisfaction after birth, lower mean levels of sexual desire, sexual arousal, and vaginal lubrication after delivery. Regarding the orgasm, they presented higher mean levels in the postpartum period. Statistical significant differences were found regarding the pain levels, as women with episiotomy presented a significantly higher intensity of pain during sexual intercourse after childbirth than during the pregnancy. **Conclusion:** The overall sexual function after childbirth did not present significant differences when compared to the pregnancy period. However, there was an exception regarding the pain, which was significantly higher in the postpartum period.

Keywords: episiotomy, sexual life, sexual function, postpartum

Psychology, Community & Health, 2013, Vol. 2(3), 307–316, doi:10.5964/pch.v2i3.58

Received: 2012-12-05. Accepted: 2013-09-06. Published (VoR): 2013-11-25.

Handling Editor: Pedro Costa, ISPA – Instituto Universitário, Lisbon, Portugal.

*Corresponding author at: UIPES, Instituto Superior de Psicologia Aplicada, Rua Jardim do Tabaco n°34, 1149-041, Lisbon, Portugal. E-mail: ileal@ispa.pt



This is an open access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/3.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

In spite of the controversy regarding the validity of the routine use of episiotomy, in obstetrics, the prevalence of this procedure is still high; however, it varies from region to region (Mattar, Aquino, & Mesquita, 2007). Thus, some authors mention that episiotomy is of the most performed surgical procedures worldwide (Cleary-Goldman & Robinson, 2003; Löwenstein et al., 2005; Tomasso, Althabe, Cafferata, Aleman, & Sosa, 2006).

Episiotomy was introduced, in the clinical practice, more than 250 years ago without any evidence that substantiated its benefits. Its use was justified by the prevention of severe perineal tears, a better preservation of the sexual function in the future, a reduction of urine and faecal incontinence and the protection of the newborn (Borges, Serrano, & Pereira, 2003).

However, many authors (Carroli & Mignini, 2009; Hartmann et al., 2005; Rathfisch et al., 2010) consider that its routine use is not advised and should be abandoned, and also recommend a more selective philosophy. In this sense, the American College of Obstetricians and Gynecologists (ACOG, 2006) and World Health Organization

(WHO, 2002), also indicated that the routine use of episiotomy should not be considered as an integral part of the obstetrical daily practice.

Furthermore, evidence shows that the routine use of episiotomy does not reduce the risk of severe perineal trauma (third and fourth-degree lacerations), nor does it prevent lacerations caused by delivery of the foetal head or improve the baby's Apgar score. Thus, some authors defend that a selective use of midline episiotomy, in nulliparous women, reduces the risk of third-degree perineal lacerations or injuries in the posterior perineum (Murphy et al., 2008; Rodriguez, Arenas, Osorio, Mendez, & Zuleta, 2008).

Moreover, the routine use of episiotomy causes a bigger blood loss and does not reduce the risk of stress urinary incontinence, dyspareunia, and perineal pain after childbirth (Carroli & Belizan, 2006). Actually recent studies have evidenced that it is cause for pain, which then interferes with physical and mental wellbeing, as well as with social activities (Chang, Chen, Lin, Chao, & Lai, 2011; Navvabi Rigi, Kerman-Saravi, Saroneh Rigi, & Abedian, 2011).

However, this change from a routine to a more restrictive use of episiotomy in clinical practice appears to be difficult, requiring intervention and training for the practitioners, as well as mothers (Khani, Shirvani, & Nesami, 2009).

Impact of Episiotomy on Women's Sexual Life

Most studies that assessed the impact of childbirth on the female sexual life, focused primarily on the short term physical changes involved, but their results were divergent (Carroli & Belizan, 2006; Navvabi Rigi et al., 2011). However, recent studies found that there are significant differences between women with and without episiotomy regarding perineal pain and urinary incontinence up to three months after delivery (Chang et al., 2011).

Moreover, most authors agree that the couple's sex life is unavoidably influenced by the birth of a baby (Lourenço, 2002). Spouses have difficulties in harmonizing their parental roles with their sexual life, this leading to a reduction in the frequency of sexual intercourse (Ryding, 1984).

In a study developed by Olsson and colleagues (2005), women justified the decrease, or absence, of sexual desire (in the postpartum period) with the lack of time and fatigue from the tasks related to the baby, as well as vaginal lacerations and breastfeeding, as the breasts no longer have solely a sexual connotation, being related with feeding the baby.

In the puerperium it is common to find a decrease in the sexual response, a poor vaginal lubrication (Barrett et al., 2000), and a decrease in the intensity of the orgasm due to a diminished vasocongestion (Figueiredo & Silva, 2005). In addition, Baksu, Davas, Agar, Akyol, and Varolan (2007), mention that the pain felt during intercourse, as well as several aspects of the female sexual function (such as arousal, lubrication, orgasm, and satisfaction) are affected by the performance of medio-lateral episiotomy, far beyond the puerperal period. Thus, these women have lower levels of desire, arousal, lubrication, orgasm, and sexual satisfaction when compared with women undergoing elective caesarean section, six months after delivery. Moreover, in some women, episiotomy can affect self-image and therefore the relationship with the partner (Way, 1998).

Decline in the quality of the marital relationship, between the onset of pregnancy and postpartum, has been reported, as well as a decrease in proximity, communication and loving feelings, and an increase in conflicts and ambivalence between the couple, which translates into a decrease in marital satisfaction (Belsky, Spanier, & Rovine, 1983).

This decline is more pronounced in women than in men, being that those couples, who experienced more marital satisfaction before the birth, will also experience more marital satisfaction after the birth (Lourenço & Relvas, 2006).

Given what is known about episiotomy and its impact on women's lives after childbirth, our objective was to compare variables related to sexual functioning, namely: sexual desire, arousal, orgasm, pain, sexual satisfaction and sexual function in women that had an episiotomy/episiorrhaphy, during the pregnancy and three months after delivery, in women with episiotomy.

Methods

Sample

In this study we used a non-probabilistic, convenience sample of 108 women Portuguese in the first stage (during pregnancy), and of 93 women in the second stage (three months after birth), was collected in the Obstetrics and Gynaecology Service of Setubal's Hospital Centre, Portugal.

The participant's ages ranged from 21 to 42 years old, and the overall demographic and clinical data is similar in both groups (pre- and post-partum).

Most women were married (51.6%) or in cohabitation (35.5%). Regarding schooling, the majority completed high school. Concerning their clinical information, most had planned the pregnancy (88.2%), which was supervised (98.9%), and had a full term delivery (80.6%), being this their second (47.3%) or third (48.4%) child. The majority of the participants declared not being questioned by their doctor about their sexuality (50.5%).

The participants met all the inclusion criteria for this study, which included: being adult puerperal women; having given birth by eutocic delivery; primiparous or multiparous women in the early puerperium; women without any pathological complications during the pregnancy; had a medio-lateral episiotomy and episiorrhaphy of the perineum (women with perineum tears not caused by the episiotomy were not considered); women without any obstetric complications during the pregnancy or childbirth; women who had a sexual partner during pregnancy and that maintained the same partner.

Materials

Data on sexual functioning was collected with the "The Female Sexual Function Index" (FSFI), and for the participants' characterization, a Socio-Demographic questionnaire was used.

The FSFI is a multidimensional self-report instrument that assesses information on the female sexual function. This instrument was developed in order to fill a technical gap, as no specific instrument to assess the domains of sexual functioning had been developed (Rosen et al., 2000). It was later adapted into Portuguese by Hentschel, Alberton, Capp, Goldim, and Passos (2007). This instrument is composed by 19 items, which assess six different dimensions of the female sexual function: desire, arousal, lubrication, orgasm, satisfaction and pain (dyspareunia), concerning the four weeks prior to its application. The study of data reliability, for the Portuguese population revealed a good internal consistency (total Cronbach's α was 0.96; individual factors had α between 0.87 and 0.96) (Pereira, Silva, & Freitas, 2009).

The socio-demographic and clinical questionnaire was developed to gather specific socio-demographic data (eight questions) and obstetric/medical information (11 questions).

Procedures

Data Collection Procedure — After having authorization from the Ethics Committee of Setubal's Hospital Centre to conduct this study, we distributed the questionnaires.

We first contacted the participants (puerperal women) during their stay at the hospital, explaining the aims and scope of the study, and invited them to participate. All measuring instruments were pre-tested to access difficulties, in questionnaires and items' application, in a group of 19 mothers at the time of discharge from the Obstetrics and Gynaecology unit.

Each participant received an envelope with the informed consent form and the data collection instruments.

Three months after childbirth, the participants were asked to take part in a second part of the study. At this point the same instrument, to fill in with information solely regarding the postpartum period was sent via mail, along with a prepaid reply envelope, so that they could be returned.

Data Analysis Procedure — Differences in variables regarding the sexual functioning of women pre- and post-delivery were assessed with a paired samples t-test. Data normality was assessed with the Kolmogorov-Smirnov test with Lilliefors correction. We also assumed the robustness of these parametric tests to mild violation of data distribution assumptions for large samples, rather than using non-parametric alternatives.

Results

Our main results showed that, regarding Sexual Desire, women with episiotomy presented significantly lower mean levels of sexual desire after delivery when compared to the gestation period ($M = 2.79$; $SEM = 0.09$ vs. $M = 3.42$; $SEM = 0.12$ respectively) ($t(56) = 4.33$, $p < 0.001$) (see [Table 1](#)).

Moreover, concerning these women with episiotomy's Sexual Arousal, presented no statistically significant differences after delivery ($M = 4.55$; $SEM = 0.12$), as compared to during the pregnancy ($M = 4.68$; $SEM = 0.12$) ($t(56) = 0.78$; $p > 0.05$) ([Table 1](#)).

We also found that, women with episiotomy presented higher levels of Vaginal Lubrication during the pregnancy ($M = 3.45$; $SEM = 0.4$) than after birth ($M = 3.34$; $SEM = 0.05$), but the differences between the two moments did not reach statistical significance ($t(56) = 1.72$; $p > 0.05$) ([Table 1](#)).

When comparing the Orgasm mean levels in the postpartum period ($M = 4.08$; $SEM = 0.06$) with the gestation period ($M = 3.57$; $SEM = 0.09$), we can observe that the orgasm occurrence did not change between the two moments sampled ($t(56) = -4.64$; $p < 0.001$) ([Table 1](#)).

Concerning Pain, its average intensity after delivery ($M = 2.67$; $SEM = 0.13$) was significantly higher than the pain intensity during the pregnancy ($M = 1.89$; $SEM = 0.12$; $t(56) = -3.1$; $p < 0.001$) ([Table 1](#)).

Table 1

Comparison Between Women With Episiotomy During the Pregnancy and in the Postpartum

Variables	N		Average		Standard Deviation		Standard Error of the Mean	
	PG	PP	PG	PP	PG	PP	PG	PP
Sexual Desire	57	57	3.42	2.79	0.871	0.748	0.115	0.099
Sexual Arousal	57	57	4.68	4.55	0.935	0.889	0.124	0.118
Vaginal Lubrication	57	57	3.45	3.34	0.295	0.401	0.039	0.053
Orgasm	57	57	3.57	4.08	0.688	0.446	0.091	0.059
Pain	57	57	1.89	2.67	0.909	1.007	0.121	0.133
Sexual Satisfaction	57	57	4.88	5.14	1.606	0.669	0.213	0.088
Sexual Function Level	57	57	21.89	22.57	3.423	1.961	0.453	0.259

Note. PG = Pregnancy; PP = Postpartum.

Furthermore, women with episiotomy presented higher average levels of Sexual Satisfaction after birth ($M = 5.14$; $SEM = 0.09$), than during the gestation period ($M = 4.88$; $SEM = 0.21$). However these differences were not statistically significant ($t(56) = -1.247$; $p > 0.05$) (Table 1).

Finally, regarding the Total Level of Sexual Function, after childbirth women with episiotomy presented an average level of sexual function of 22.57 ($SEM = 0.26$), while during the pregnancy the average level was of 21.89 ($SEM = 0.45$). These differences were not statistically significant ($t(56) = -1.25$; $p > 0.05$) (Table 1).

Discussion

The sexual desire levels of women with episiotomy, three months after birth, are not significantly lower when compared to the gestation period. This conclusion goes against previous studies, which have argued that there is a decrease in sexual desire in the transition to parenthood (Figueiredo & Silva, 2005). As reported in previous studies, female sexuality after childbirth can be influenced by the transition to motherhood and the investment in caring for the baby (Figueiredo & Silva, 2005), as well as severely impaired due to postpartum depression (Augusto, Kumar, Calheiros, Matos, & Figueiredo, 1996; Boyce, 2003; Clay & Seehusen, 2004; Coutinho, Baptista, & Moraes, 2002; Figueiredo, 2001; Sousa & Piccinini, 2003).

In addition, some authors state that women with episiotomy present lower levels of desire six months after birth, when compared with their pre-pregnancy levels (Baksu et al., 2007), being this most likely due to the fear felt by these women, because their perineum is affected. Moreover, Barrett et al. (2000) demonstrated that sexual desire is lower in the three months after delivery, increasing thereafter up to six months after the birth, without achieving the levels prior to the delivery.

Regarding sexual arousal, the results showed no significant differences between the pregnancy and the postpartum period, thus going against the literature that defends the idea that the sexual arousal is adversely affected after delivery (Paterson, Davis, Khalifé, Amsel, & Binik, 2009).

As for vaginal lubrication, it was not possible to statistically prove that the presence of episiotomy influences, somehow, the female vaginal lubrication. However, it is important to note that this variable is strongly influenced by the lactation process. Thus, breastfeeding is a known cause of vaginal dryness, dyspareunia and decreased

libido. This is due to the physiological reaction of hyperprolactinemia, subsequent to the lactation process, causing decreased levels of oestrogens, progesterone, and androgens. Consequently, the decrease in oestrogen has an impact on the vaginal wall, causing decreased lubrication (Branden, 2000).

Based on the statistical analysis, we can conclude that, in the postpartum period, the orgasm is not significantly affected when compared to the pregnancy. This evidence goes in the same direction the results reported by Tolor and DiGrazia (1976) and Connolly, Thorp, and Pahel (2005), who mention that the ability to reach orgasm is acquired rapidly after delivery. In this sense the authors report that, six weeks after delivery, most women declare their ability to reach an orgasm was improved in comparison to the period prior to pregnancy. Moreover, Barrett et al. (1999) concluded that the difficulty in reaching an orgasm is most marked in the three months following the birth of the baby, returning gradually to pre-pregnant levels. In this sense, Signorello, Harlow, Chekos, and Repke (2000) state that six months after delivery 73.8% of the women included in their study were as likely, or even more likely, to reach orgasms as in the period prior to pregnancy.

Although dyspareunia after childbirth is a widely studied subject, the studies that compare levels of pain after childbirth with the pregnancy period are limited, thus we did not find any results obtained corroborating the ones we found in this study: women with episiotomies have significantly higher pain intensity after childbirth compared to the gestation period. In contrast, other studies (e.g., Coats, Chan, Wilkins, & Beard, 1980; Thranov, Kringelbach, Melchior, Olsen, & Damsgaard, 1990) suggest that perineal pain in the postpartum period is not influenced by the presence of episiotomy. In this sense, Hartmann et al. (2005) mentions that episiotomy does not increase the risk of dyspareunia, and Botros et al. (2006) add that episiotomy has no significant influence on the risk of dyspareunia. In 2007, Andrews, Thakar, Sultan, and Jones (2008) compared women with episiotomy, and women with perineal lacerations, and concluded that, despite perineal pain affecting 92% of women after childbirth, in most of them it disappeared two months postpartum. The authors also mention that a second-degree perineal laceration causes less pain than an episiotomy.

Furthermore, the existence of pain in the postpartum period may negatively affect the sexual function, as described by Paterson et al. (2009), which mention that the pain experienced by women in the postpartum period had a negative (medium to moderate) impact on their sexual functioning.

Regarding sexual satisfaction, the participants presented higher levels three months after delivery than during the pregnancy, although these differences were not statistically significant. This data do goes against the results obtained by Paterson et al., in a 2009 study where they mention that sexual satisfaction after delivery is adversely affected.

In general, we did not find statistically significant differences in most of the studied variables, except for the levels of pain, which were clearly higher in the postpartum, and thus after the episiotomy, than during the pregnancy.

However, we believe this study contributed with additional information regarding female sexuality in the postpartum period, allowing an understanding of the impact of episiotomy on several dimensions of female sexuality, as many of the data produced, even when not statistically significant, was new and provided different information from the one found in the literature.

Competing Interests

The authors have declared that no competing interests exist.

Funding

The authors have no funding to report.

Acknowledgments

The authors would like to thank Setubal's Hospital Center as well as all the participants that took part in this study.

Ethics Approval

This study was approved by the Ethics Committee of Setubal's Hospital Centre.

References

- American College of Obstetricians and Gynecologists. (2006). ACOG Practise Bulletin No. 71 – Episiotomy: Clinical management guidelines for obstetrician-gynecologists. *Obstetrics and Gynecology*, 107(4), 956-962. doi:10.1097/00006250-200604000-00049
- Andrews, V., Thakar, R., Sultan, A. H., & Jones, P. W. (2008). Evaluation of postpartum perineal pain and dyspareunia: A prospective study. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 137(2), 152-156. doi:10.1016/j.ejogrb.2007.06.005
- Augusto, A., Kumar, R., Calheiros, J. M., Matos, E., & Figueiredo, E. (1996). Post-natal depression in an urban area of Portugal: Comparison of childbearing women and matched controls. *Psychological Medicine*, 26, 135-141. doi:10.1017/S0033291700033778
- Baksu, B., Davas, I., Agar, E., Akyol, A., & Varolan, A. (2007). The effect of mode of delivery on postpartum sexual functioning in primiparous women. *International Urogynecology Journal*, 18(4), 401-406. doi:10.1007/s00192-006-0156-0
- Barrett, G., Pendry, E., Peacock, J., Victor, C., Thacker, R., & Manyonda, I. (1999). Women's sexuality after childbirth: A pilot study. *Archives of Sexual Behavior*, 28(2), 179-191. doi:10.1023/A:1018771906780
- Barrett, G., Pendry, E., Peacock, J., Victor, C., Thacker, R., & Manyonda, I. (2000). Women's sexual health after childbirth. *British Journal of Obstetrics and Gynaecology*, 107(2), 186-195. doi:10.1111/j.1471-0528.2000.tb11689.x
- Belsky, J., Spanier, G. B., & Rovine, M. (1983). Stability and change in marriage across the transition to parenthood. *Journal of Marriage and Family*, 45, 567-577. doi:10.2307/351661
- Borges, B. B., Serrano, F., & Pereira, F. (2003). Episiotomia: Uso generalizado versus selectivo. *Acta Medica Portuguesa*, 16(6), 447-454. <http://www.actamedicaportuguesa.com/pdf/2003-16/6/447-454.pdf>
- Botros, S. M., Abramov, Y., Miller, J.-J., Sand, P. K., Gandhi, S., Nickolov, A., & Golberg, R. P. (2006). Effect of parity on sexual function: An identical twin study. *Obstetrics and Gynecology*, 107(4), 765-770. doi:10.1097/01.AOG.0000207677.03235.76
- Boyce, P. M. (2003). Risk factors for postnatal depression: A review and risk factors in Australian populations. *Archives of Women's Mental Health*, 6(2, Suppl.), s43-s50. doi:10.1007/s00737-003-0005-9
- Branden, P. S. (2000). *Enfermagem materno-infantil* (2nd ed.). Rio de Janeiro, Brazil: Reichmann & Affonso.

- Carroli, G., & Belizan, J. (2006). Episiotomy for vaginal birth [Review]. *The Cochrane Library*, 2006(1). Oxford: Update Software.
- Carroli, G., & Mignini, L. (2009). Episiotomy for vaginal birth. *Cochrane Database of Systematic Reviews*, 1, Article CD000081. doi:10.1002/14651858.CD000081.pub2
- Chang, S.-R., Chen, K.-H., Lin, H.-H., Chao, Y.-M. Y., & Lai, Y.-H. (2011). Comparison of the effects of episiotomy and no episiotomy on pain, urinary incontinence, and sexual function 3 months postpartum: A prospective follow-up study. *International Journal of Nursing Studies*, 48(4), 409-418. doi:10.1016/j.ijnurstu.2010.07.017
- Clay, E. C., & Seehusen, D. A. (2004). A review of postpartum depression for the primary care physician. *Southern Medical Journal*, 97(2), 157-161. doi:10.1097/01.SMJ.0000091029.34773.33
- Cleary-Goldman, J., & Robinson, J. N. (2003). The role of episiotomy in current obstetric practice. *Seminars in Perinatology*, 27(1), 3-12. doi:10.1053/sper.2003.50000
- Coats, P. M., Chan, K. K., Wilkins, M., & Beard, R. J. (1980). A comparison between midline and mediolateral episiotomies. *BJOG: An International Journal of Obstetrics & Gynaecology*, 87(5), 408-412. doi:10.1111/j.1471-0528.1980.tb04569.x
- Connolly, A., Thorp, J., & Pahel, L. (2005). Effects of pregnancy and childbirth on postpartum sexual function: A longitudinal prospective study. *International Urogynecology Journal*, 16, 263-267. doi:10.1007/s00192-005-1293-6
- Coutinho, D. S., Baptista, M. N., & Moraes, P. R. (2002). Depressão pós-parto: Prevalência e correlação com o suporte social. *Neuropsiquiatria da Infância e Adolescência*, 10(2), 63-71.
- Figueiredo, B. (2001). Perturbações Psicopatológicas do Puerpério. In M. C. Canavarro (Ed.), *Psicologia da Gravidez e da Maternidade* (pp. 161-188). Coimbra, Portugal: Quarteto Editora.
- Figueiredo, B., & Silva, A. I. (2005). Sexualidade na gravidez e no pós-parto. *Psiquiatria Clínica*, 25(3), 253-264. Retrieved from <http://repositorium.sdum.uminho.pt/bitstream/1822/4720/1/SEXUALIDADE%20NA%20GRAVIDEZ.pdf>
- Hartmann, K., Viswanathan, M., Palmieri, R., Gartieher, G., Thorp, J., & Lohr, K. N. (2005). Outcomes of routine episiotomy: A systematic review. *Journal of the American Medical Association*, 293(17), 2141-2148. doi:10.1001/jama.293.17.2141
- Hentschel, H., Alberton, D. L., Capp, E., Goldim, J. R., & Passos, E. P. (2007). Validação do Female Sexual Function Index (FSFI) para uso em Língua Portuguesa. *Revista do Hospital de Clínicas de Porto Alegre*, 27(1), 10-14. <http://seer.ufrgs.br/hcpa/article/view/471/828>
- Khani, S., Shirvani, M. A., & Nesami, M. B. (2009). The view of delivery by practitioners in routine episiotomy: A qualitative study. *Journal of Mazandaran University of Medical Sciences*, 18(68), 27-36. http://jmums.mazums.ac.ir/browse.php?a_id=520&sid=1&slc_lang=en
- Lourenço, M. C. (2002). Conjugalidade e parentalidade: Continuar a díade na presença de um terceiro. *Psychologica*, 31, 25-42. http://repositorio.ul.pt/bitstream/10451/820/1/20978_ulsd056139_tm.pdf
- Lourenço, M. C., & Relvas, A. P. (2006). Uma abordagem familiar da gravidez e da maternidade: Perspectiva sistémica. In M. C. Canavarro (Ed.), *Psicologia da gravidez e da maternidade* (2nd ed., pp. 105-132). Coimbra, Portugal: Quarteto.
- Löwenstein, L., Drugan, A., Gonen, R., Itskovitz-Eldor, J., Bardicef, M., & Jakobi, P. (2005). Episiotomy: Beliefs, practice and the impact of educational intervention. *European Journal of Obstetrics, Gynecology, and Reproductive Biology*, 123, 179-182. doi:10.1016/j.ejogrb.2005.04.006

- Mattar, R., Aquino, M. M. A., & Mesquita, M. R. S. (2007). A prática da episiotomia no Brasil. *Revista Brasileira de Ginecologia e Obstetrícia*, 29(1), 1-2. doi:10.1590/S0100-72032007000100001
- Murphy, D. J., Macleod, M., Bahl, R., Goyder, K., Howarth, L., & Strachan, B. (2008). A randomized controlled trial of routine versus restrictive use of episiotomy at operative vaginal delivery: A multicentre pilot study. *BJOG: An International Journal of Obstetrics & Gynaecology*, 115, 1695-1703. doi:10.1111/j.1471-0528.2008.01960.x
- Navvabi Rigi, S. H., Kerman-Saravi, F., Saroneh Rigi, M., & Abedian, Z. (2011). Cold and reduced episiotomy pain interfere with mood and daily activity. *Shiraz E-Medical Journal*, 12(2), 87-92. <http://semj.sums.ac.ir/vol12/apr2011/89003.htm>
- Olsson, A., Lundqvist, M., Faxelid, E., & Nissen, E. (2005). Women's thoughts about sexual life after childbirth: Focus group discussions with women after childbirth. *Scandinavian Journal of Caring Sciences*, 19, 381-387. doi:10.1111/j.1471-6712.2005.00357.x
- Paterson, L. Q. P., Davis, S. N. P., Khalifé, S., Amsel, R., & Binik, Y. M. (2009). Persistent genital and pelvic pain after childbirth. *Journal of Sexual Medicine*, 6, 215-221. doi:10.1111/j.1743-6109.2008.01063.x
- Pereira, A. A. G., Silva, M. I. P., & Freitas, V. A. S. (2009). Estudo psicométrico do Índice de Funcionamento Sexual Feminino (FSFI). *Psicologia - O portal dos Psicólogos*. Retrieved from <http://www.psicologia.com.pt/artigos/textos/A0480.pdf>
- Rathfisch, G., Dikencik, B. K., Beji, N. K., Comert, N., Tekirdag, A. I., & Kadioglu, A. (2010). Effects of perineal trauma on postpartum sexual function. *Journal of Advanced Nursing*, 66(12), 2640-2649. doi:10.1111/j.1365-2648.2010.05428.x
- Rodriguez, A., Arenas, E., Osorio, A., Mendez, O., & Zuleta, J. (2008). Selective vs routine midline episiotomy for the prevention of third and four-degree lacerations in nulliparous women. *American Journal of Obstetrics & Gynecology*, 198, 285.e1-285.e4. doi:10.1016/j.ajog.2007.11.007
- Rosen, R., Brown, C., Heiman, J., Leiblum, S., Meston, C., Shabsigh, R., . . . Agostino, R. (2000). The Female Sexual Function Index (FSFI): A multidimensional self-report instrument for the assessment of female sexual function. *Journal of Sex & Marital Therapy*, 26(2), 191-208. doi:10.1080/009262300278597
- Ryding, E.-L. (1984). Sexuality during and after pregnancy. *Acta Obstetrica et Gynecologica Scandinavica*, 63, 679-682. doi:10.3109/00016348409154662
- Signorello, L. B., Harlow, B. L., Chekos, A. K., & Repke, J. T. (2000). Midline episiotomy and anal incontinence: Retrospective cohort study. *British Medical Journal*, 320, 86-90. doi:10.1136/bmj.320.7227.86
- Sousa, D. C., & Piccinini, C. A. (2003). O impacto da depressão pós-parto para a interação mãe-bebê. *Estudos de Psicologia*, 8(3), 403-411. <http://www.scielo.br/pdf/epsic/v8n3/19962.pdf>
- Thranov, I., Kringelbach, A. M., Melchior, E., Olsen, O., & Damsgaard, M. T. (1990). Postpartum symptoms: Episiotomy or tear at vaginal delivery. *Acta Obstetrica et Gynecologica Scandinavica*, 69(1), 11-15. doi:10.3109/00016349009021032
- Tolor, A., & DiGrazia, M. (1976). Sexual attitudes and behavior patterns during and following pregnancy. *Archives of Sexual Behavior*, 5(6), 539-551. doi:10.1007/BF01541218
- Tomasso, G., Althabe, F., Cafferata, M. L., Aleman, A., & Sosa, C. (2006). The need to avoid the routine use of episiotomy. *Current Women's Health Reviews*, 2(2), 99-102. doi:10.2174/157340406776931034
- Way, S. (1998). Social construction of episiotomy. *Journal of Clinical Nursing*, 7, 113-117. doi:10.1111/j.1365-2702.1998.00123.x

World Health Organization. (2002). Integrated management of pregnancy and childbirth: Managing complications in pregnancy and childbirth: A guide for midwives and doctors. Geneva, Switzerland: Author.