Factors Influencing Couples' Sexuality in the Puerperium: A Systematic Review

Elena Serrano Drozdowskyj, MD, PhD,[1,2] Esther Gimeno Castro,[1] Elena Trigo López,[1] Inés Bárcenas Taland,[1,3] and Carlos Chiclana Actis, MD, PhD[1,4]

ABSTRACT

Introduction: The puerperium is a period of adaptation in which various transformations take place in the lives of women and men on their way to becoming mothers and fathers. These changes can also have repercussions on their sexual relations. How the couple deals with this transition is crucial to the well-being of the couple and affects how parents relate to the baby.

Aim: This study aimed to explore the factors that influence sexuality in both women and men during postpartum.

Methods: We conducted a bibliographic review of 236 articles found on the PubMed database and published from 2008 to January 2019.

Main Outcome Measure: The main outcome measure was the impact of various physical, psychological, and sociocultural factors on couples' sexual functioning during postpartum.

Results: The main problems that couples face after childbirth can be classified as (i) psychological changes, such as loss of a sense of self, transitioning to parenthood, taking on the new roles of mother and father, and feelings of abandonment among men; (ii) body changes in women that affect their self-image and perineal trauma; (iii) hormonal changes in women and men that can lead to reduced sexual desire in both and vaginal dryness or dyspareunia in women; (iv) changes in the marital relationship, including changes in each other's roles, taking time for intimacy, and initiating sexual intercourse; (v) sociocultural influences, such as social support, culturally expected roles, and beliefs regarding when to resume sex; and (vi) lifestyle changes, especially with regard to baby care.

Conclusion: Sexuality during postpartum is influenced by multiple factors: physical, psychological, and sociocultural. Our findings offer a deeper understanding of how the transition to parenthood affects sexual relationships during the postpartum period. Implications regarding caring for and promoting the sexual health of individuals and couples after childbirth are discussed, and some medical recommendations for parents are offered.
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Key Words: Postpartum; Sexuality; Couples; Transition; Parenthood

INTRODUCTION

The transition to parenthood is a time of immense transformation for both women and men.[1] The intimate, sexual dimension of new parents is one of the most affected and vulnerable. The sexuality of both women and men is influenced by a multitude of simultaneous physiological and psychosocial factors,[2–5] including extreme tiredness, sleep deprivation, lifestyle adjustments, sexual desire discrepancy, and body image issues, all of which lead to changes in libido and intimacy.[1,4,6–11] According to the World Health Organization, the way in which people relate and express their sexuality has important implications for their health and well-being. Difficulties in doing so within the context of the postpartum period can negatively impact a couple's relationship and, therefore, their relationship with the new baby.

Indeed, many couples presenting for psychosexual therapy in midlife can trace their problems back to the birth of their first baby,[12] indicating that those struggles can have an impact over the long term. Despite the importance of this dimension with regard to the health and well-being of each person and the

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[1]Perinatal Mental Health Unit, Consulta Dr Carlos Chiclana, Madrid, Spain;
[2]Universidad Pontificia de Comillas, Madrid, Spain;
[3]Universidad Francisco de Victoria, Madrid, Spain;
[4]Universidad San Pablo CEU, Madrid, Spain

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couple, as well as their relationships with the baby, less than a third of women remember ever having talked about this issue with their gynecologists.[13] Most women report not being fully informed about the potential extent and repercussions of perineal trauma and believe it would be beneficial to have more information,[1,14] and men perceive that it is difficult to get accurate information about the changes in sexual relationships after childbirth.[1,8] In addition, studies have shown that insufficient information about changes that will occur during pregnancy and postpartum may contribute to psychological distress within the couples,[15,16] but medical visits before and after birth can offer a unique opportunity for couples to express their concerns and problems related to sexuality, which can counteract this stress.

This study aimed to explore how lifestyle, physical, psychological, and interpersonal changes related to the postpartum period may influence sexual desire and sexual behavior and how these changes can affect a couple's well-being. It is hoped that such information will help us better understand how new parents view their sexual relationships during the transition to parenthood and will suggest how caring science can aid in the adjustment of sexual life after childbirth. For this purpose, we performed a bibliographic review of the current evidence on this topic, which is summarized and discussed here.

METHODS

Literature Search

The PubMed database was searched to identify and select relevant articles concerning postpartum sexual functioning and satisfaction in couples. The last search update was on January 24, 2019. Key words used to identify relevant articles were "postpartum," "postnatal," "puerperium," "perinatal," "childbirth" or "breastfeeding" and "sexual behavior," "sexual function," "sexual dysfunction," and "sexual satisfaction." Relevant articles in the reference lists were identified to obtain additional published studies.

Inclusion and Exclusion Criteria

Studies that met our inclusion criteria included the following: (i) studies that explored sexual function and satisfaction in human couples during postpartum and factors that may influence them, such as breastfeeding, mental health, or type of delivery; (ii) studies that were published in the last 10 years; and (iii) publications that were in English, Spanish, or French. Only studies published in peer-reviewed journals were included; data from letters and meetings abstracts were not eligible. Studies were also rejected if they did not meet the inclusion criteria or if they reported duplicate or irrelevant data.

Data Extraction

Three authors (E.G.C., E.T.L., and E.S.D.) independently screened and determined the relevant studies and extracted data from each study. The primary outcome of interest in this review was the postpartum sexuality dimension and factors influencing this outcome.

RESULTS

A total of 200 citations were retrieved from PubMed after applying the search filters noted above; 93 additional articles were also included because of their relevance to the field. Of these, 10 were removed because they were duplicates (Figure 1). After preliminary screening of titles that met our criteria, 236 remained for a full text review. Of these, 79 were further excluded for various reasons, including relevant results not reported (n = 33), accurate data not reported (n = 15), results not generalizable due to sociocultural specificity of the sample (n = 21), and couples not being heterosexual (n = 10), which left 157 eligible articles.

After reviewing the selected articles, the reported findings about the prevalence and factors influencing sexual functioning in postpartum were organized as follows.

Frequency of Sexual Activity and Its Evolution During Postpartum Period

Fluctuations in intimacy and sexual activity are common during the transition to parenthood. Typically, there is a period of non-sexuality during the first months after delivery, followed by a gradual increase of sexuality from 3 to 6 months after the childbirth and continuing for 12 months or more.[2]

Physical Factors

Some studies indicate that the risk of not resuming sexual intercourse after birth is higher among women who have experienced severe maternal morbidity and physical risks during pregnancy,[17] women who have been assisted during birth with a forceps, or women who have suffered an episiotomy plus perineal tear.[18] All of these events can negatively impact physical and emotional recovery after childbirth through genital anatomical, morphological, and sensitivity changes and pain, as well as anxiety-related symptoms such as post-traumatic stress if life-threatening events take place during childbirth.[2]

Type of Delivery and Episiotomy

Many studies report that no significant association between the type of delivery (vaginal or cesarean) and sexual functioning,[19–27] postpartum sexual satisfaction,[28] the timing of resumption of sexual intercourse,[29] or main sexual functioning over the medium and long term.[30] Other studies, however, associate vaginal delivery with a greater incidence of adverse effects on postpartum sexual function, such as stress related to urinary and fecal incontinence,[31] higher pain levels during sexual intercourse that can persist up to 6 months postpartum,[32,33] a greater likelihood of suffering dyspareunia at 18 months,[34] and a later resumption of sexual intercourse.[35,36] On the other hand, women who have delivered by cesarean tend to report higher vaginal tone and greater partner sexual satisfaction, especially when compared with women who

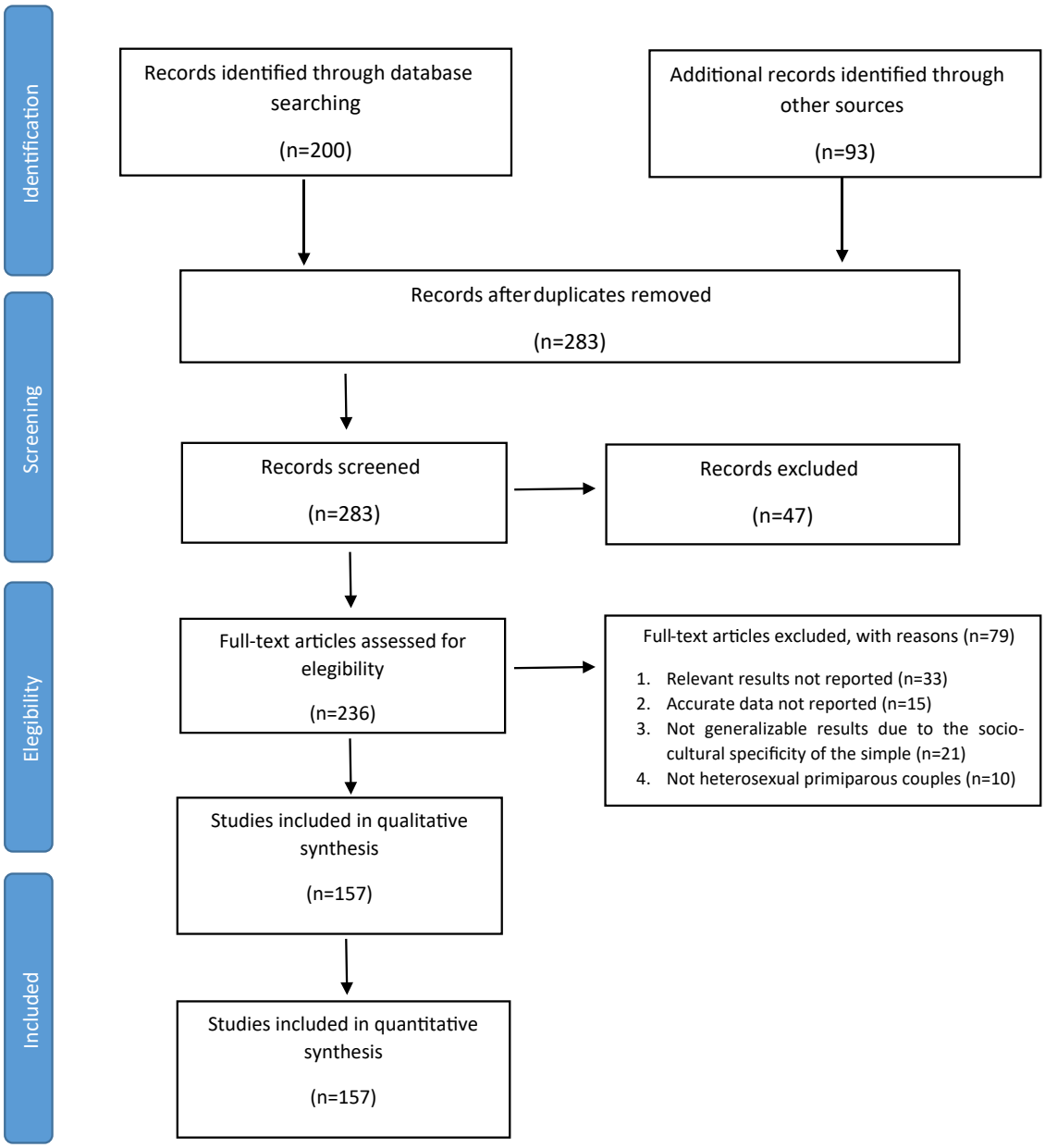

Figure 1. PRISMA flowchart showing the study selection process. Figure 1 is available in color online at www.smr.jsexmed.org.

have had vaginal and instrumental deliveries.[37] Some investigations have reported different outcomes based on the technique used to assist delivery. Women who had forceps-assisted vaginal births were found to have a greater risk of experiencing worse postnatal health and well-being compared with women who had ventouse-assisted vaginal births,[38] which will delay sexual resumption. Regarding episiotomy, although there are no significant differences in perineal pain perception among the various kinds of episiotomy techniques,[39] pain is always greater compared with women who have not undergone episiotomy.[40]

Severe Perinatal Trauma

Severe perineal trauma is an injury in the perineum affecting the external and internal anal sphincter and anal epithelium. Higher degree perineal tears have a negative effect on female sexual function up to 1 year after delivery,[20,41–43] including later resumption of coital activity after delivery, a higher incidence of dyspareunia,[44–46] and a lower frequency of sexual intercourse at 6 months postpartum.[47] Women who have suffered severe perineal trauma report less desire to be held, touched, and stroked by their partners.[48–51]

Breastfeeding

Breastfeeding triggers different sensations and feelings in women with regard to sexuality.[52] Some studies indicate that breastfeeding has positive effects on sexual functioning in new mothers,[53,54] including higher self-reported sexual functioning and a higher level of commitment to and love for the woman's

current partner.[55] Other studies, however, have reported negative effects, such as low coital activity, low sexual desire, and low sexual satisfaction among females and their partners.[54,56,57] Hormonal changes and fatigue linked to lactation, as well as psychological and psychosocial factors, may contribute to this negative association. The hormonal changes induced by breastfeeding may also lead to low sexual desire, dyspareunia, and vaginal dryness.

Psychological Factors

Both partners need to be psychologically (and physically) ready to resume intimacy and sexual activity after childbirth. Several psychological factors are involved in sexual behavior, desire, and satisfaction,[58] including intrapartum experiences,[14] changes in a woman's body image,[59] taking on and negotiating new roles by the couple,[60] and sociocultural expectations and beliefs.[61]

Birth Experiences

During delivery, the experiences of each partner can be very different and can influence how men and women face postpartum sexuality.[14] Some experiences can be sensual and erotic, but others can be traumatic, having a negative effect on postpartum sexual functioning.[2]

Body Image and Self

A woman's body image is a psychological representation of her body that is composed of her attitudes and self-perceptions about her appearance, which have developed from biological, psychological, and sociocultural influences.[62,63] Qualitative research in adult women has indicated that experiencing a sense of bodily acceptance is critical to healthy sexual functioning,[64] but body changes after delivery can negatively affect a woman's self-esteem.[59] Body image issues can affect all domains of sexual functioning. Women who reported feeling more negative about their bodies had lower levels of desire and arousal, increased avoidance, and decreased pleasure, orgasm, and sexual satisfaction.[65] In most Western countries, socially constructed ideals about how a woman's body should look include being thin and having shapely breasts and unmarked skin,[66] but a woman's body does not fulfill these social requirements during the perinatal period.

Although body changes during pregnancy are conceived as developmental and well tolerated, after delivery women may expect to return quickly to the social body ideal,[7,60,67] thus leading to body image concerns[4,68–71] and dissatisfaction.[60,72] During postpartum, changes in a woman's body imply a restructuring of the woman's sense of self. Especially during childbirth, women can experience a sense of loss of self and changes in body boundaries. In the case of perineal trauma, the loss of body boundaries can be more dramatic and may affect the way in which the woman interacts with her partner and baby.[14]

A woman's relationship with her genitals and breast may also change after birth.[70] A woman may perceive her vagina as being "big and loose," even though her partner has not expressed this opinion, and she may consider her breasts to be a source of nutrition but not pleasure.[70] Despite the fact that the phenomena most studied with regard to a woman's postpartum sexual functioning are physical factors (eg, vaginal and perineal trauma, breastfeeding, dyspareunia), some authors suggest that a woman's perceptions of her partner's sexuality can have a greater impact,[73] including the partner's attitude toward the woman's body and her maternal role, as well as how these factors can influence a woman's self-confidence.[65,74]

Role Transition and Couple's Relation

Becoming a mother or a father is a rite of passage and requires that women and men recognize each other's new roles.[52] Women usually perceive the physical manifestations of being a mother as being incongruent with their other roles as wife, sexual partner, or working woman.[60] Breastfeeding, in particular, can limit the time available for intimacy with the woman's husband, thus leading to a perception of her body as only a source of nutrition, not of pleasure.[60] This can make the woman feel less desirable, a problem that has been reported by many women.[60]

In the other hand, some fathers can feel postpartum sexual aversion, a kind of "existential angst" resulting from a combination of profound remorse over having put their partner into what they perceived as a life-threatening situation during childbirth and their perceived moral and ethical obligations to provide support in this setting. In addition, women can have mixed attitudes about fathers that adopt culturally specific, traditional kin support, which can lead to marital conflict.[61] Particularly, the first year of parenthood can be a tough time for marital relationships.[75] The dramatic change in a couple's sexual life is usually perceived as a temporary state that will eventually pass.[8] New fathers are normally prepared to postpone sex until the woman is ready, although they say they need reassurance,[8] even when they believe it is a transient phenomenon.[76] Some fathers can experience a degree of loss and abandonment, as they may feel they are competing with the baby for the attention of their partner, and some might try to enter into the dyad.[8,12] If they look for reassurance in the sexual encounter and they are rejected, the feeling of abandonment can increase. Some will handle this situation by withdrawing from the household, dedicating an increased amount of time to work or sport activities.[8]

Studies suggest that a couple's perceived closeness is influenced by their ability to communicate about sex,[8] their capacity to prioritize it among other forms of affection and consideration,[8] and shared happiness about being parents.[77] Another factor that limits sexual behavior and a sense of closeness during postpartum is that the baby is usually present in the room.[8] Studies show that a couple's pre-pregnancy sexuality plays an important role in maintaining sexuality during

pregnancy and the postpartum period, which means that any pre-pregnancy sexual problems are likely to still exist during pregnancy and postpartum.[78,79]

Postpartum Depression

Postpartum depression (PPD) is a mood disorder that affects approximately 10−15% of adult mothers each year.[80] It usually occurs within 4 to 6 weeks after childbirth, and depressive symptoms can last more than 6 months. When untreated, PPD has been associated with negative personal, family, and child developmental outcomes.[81] PPD has been found to be associated with decreased frequency and interest in sexual intercourse at 8 to 12 weeks postpartum[82,83] and less sexual desire at 6 months postpartum when compared with women without PPD.[18,83] Even after full remission of depressive symptoms, sexual dysfunction may prevail. This may reflect the long-lasting negative impact of PPD on marital relationships or the effect of medications taken to treat PPD. Antidepressant medications, such as selective serotonin reuptake inhibitors, can also decrease sexual desire, contributing to sexual dysfunction. Other factors that may affect sexual functioning and have been found to be associated with PPD are dissatisfaction with the quality of the couple's relationship[84,85] and cesarean delivery.[32,86]

To a lesser degree, fathers can also be at risk of developing postpartum depression,[87] and PPD in fathers is positively correlated with maternal depression.[87,88] Although it is a relatively unknown phenomenon, the prevalence of PPD in fathers has been estimated to be 8.4%.[89] As it does in mothers, PPD in fathers also has important negative consequences with regard to infant-parental bonding, child development, the couple's well-being,[90,91] and sexual desire.

During postpartum, both mother and father go through important and complex hormonal changes, albeit on a smaller scale for fathers. These changes involve the hypothalamus-pituitary axis, gonadal hormones, vasopressin, oxytocin, and testosterone, among others. These biological changes prepare for delivery and facilitate childbearing behaviors, but they can also increase individual risk for PPD and induce sexual behavior changes.[92] Particularly, a sharp decline in reproductive hormone levels after delivery may trigger changes in the peripheral and central monoamine centers, including serotonin and dopamine neurotransmission,[93,94] which may increase the mother's risk for PPD.[95−98] Fathers also suffer similar hormonal changes, but much less so. Lower testosterone levels have been associated with pair bonding and paternal caregiving and may promote family well-being,[99] but they decrease sexual desire.

Social Support and Cultural Factors

Overcoming difficulties related to the transition to parenthood depends on the type of relationship the couple previously had and on the levels of family and social support.[52] Usually, there are some taboos and traditions regarding when to initiate sexual intercourse and expectations that modulate sexual behavior that should be taken into count when addressing sexual concerns during postpartum.

Expectations and Concerns: The Role of Education

Expectations can modulate how a couple deals with parenthood transition challenges.[100] Over the last several decades, many authors have defended the relevance of educating new parents before delivery and how it can affect their psychological adjustment and relationship as a couple.[15,16] The impact that this education has on parents is also reflected in the types of concerns they face during pregnancy and after delivery. Frequently, fathers and mothers recognize they would have liked to have been better informed about the impact that pregnancy and childbirth would have on their sexual life.[1,8] Such a lack of information has been shown to contribute to psychological distress and poorer marital relationships.[15] New mothers also report not receiving enough information before becoming parents regarding the risk of suffering perineal trauma and its consequences,[14] as well as potential changes in the couple's relationship.[16] Among the main topics related to puerperal sexuality that concern parents are the woman's physical state after delivery, when to resume intercourse, birth control, possible changes in the woman's body, and discrepancies in sexual desire.[9]

DISCUSSION

The results of this review show that sexuality during postpartum is influenced by multiple factors: physical, psychological, and sociocultural. Acknowledging these factors and understanding how they affect the postpartum couple will help both the couple and health care professionals to better understand how new parents view their sexual relationship during the transition to parenthood and how to modify it after childbirth. It is crucial to help couples adjust to their new roles, demands, and limitations, and communication and information seem to be key to counteracting the distressing effects of unrealistic expectations about sexual life and intimacy in the postpartum period. Prenatal and postnatal visits can offer a great opportunity to discuss all of these issues with parents,[7] specifically by addressing body changes, pain, fatigue, and role changes, as these are among the most common problems. Also, such visits could help detect depressive or anxiety symptoms in both the mother and father for early intervention.

Routine postnatal consultations could also help to identify altered sexual patterns and provide an opportunity to counsel parents with regard to maintaining a healthy parenthood.[101,102] Such interventions should explore the childbirth experience, the relationship the parents have with their baby, the new parenting roles and roles within the family, and how the mother and father are feeling as a couple.

Interventions before delivery, such as psychoeducation by midwives, have been demonstrated to reduce both a woman's fears about childbirth and the probability of requesting cesarean surgery in primiparous women,[103,104] and attendance at delivery

Table 1. Recommendations for prevention, early detection, and treatment of postpartum sexual concerns

Prenatal care
Discuss the physical, emotional, sexual function, and lifestyle changes that commonly occur postpartum.
Explore any sexual concerns, as well as current and previous sexual dysfunction issues.
Offer training on perineal massage to minimize perineal trauma and postpartum pain.
Provide training in relaxation techniques to be applied during labor.
Encourage couples to attend delivery preparation classes.
Evaluate the presence of depressive symptoms in both the father and the mother, and offer psychological treatment, if needed.
Promote a healthy lifestyle, including regular exercise.
Explore marital satisfaction.
Discuss expectations and concerns about changes that could occur within the couple during the postpartum period.
Intrapartum care
Encourage the use of relaxation techniques (eg, massage, music) to reduce pain during childbirth.
Limit the use of episiotomy and operative vaginal delivery and forceps (if possible) to minimize physical damage and pain.
Perform a careful postpartum examination to detect and repair sphincter and perineal lacerations.
Discuss perineal pain, dyspareunia, and initiation of postpartum sexual activity before hospital discharge.
Assess emotional well-being, especially depressive, anxiety, and post-traumatic stress symptoms.
Postpartum care
Assess sexual function and address concerns, including considering the use of the Brief Sexual Function Inventory screening questionnaire.
Assess perineal repair and urinary or fecal incontinence.
Suggest the use of vaginal lubricants to help with the physiological hypoestrogenic state during breastfeeding.
Evaluate adequacy of sleep and promote a healthy lifestyle.
Explore mood changes. If depressive symptoms are present, offer support and referral to mental health services. If psychopharmacological treatment is needed, evaluate potential side effects on sexual dysfunction and discuss possible alternatives.
Assess the transition to parenthood, and discuss ways to decrease stress related to new demands.
Explore marital relations, concerns, and time for intimacy. Promote dyadic empathy within the couple.
If sexual anxiety or dysfunction is present, offer training in sensate focus techniques and pharmacological techniques, if needed.
Recommendations for husbands
Learn about the physical, emotional, sexual function, and lifestyle changes that commonly occur during pregnancy and postpartum.
Accompany the mother to medical consultations and delivery preparation classes during the pregnancy.
Be with the mother during delivery.
Ensure that the mother's need for sleep is covered.
Reduce the level of demands on the mother (eg, her responsibility for housework).
In cases of postpartum depression, do not to criticize or complain about the mother's depressive behavior.
Accept and validate the mother's feelings of depression, encourage her to seek professional help when needed, and accompany her to the doctor visit.
Reinforce every little achievement in baby care, and avoid criticizing mistakes.
Help the mother with decisions about childcare, work, breastfeeding, etc.
Encourage her to set limits with family or friends, when necessary.
Support the mother by spending time with her, without distractions, listening and empathizing with her.
Wait until she wants to resume sexual activity; do not insist on it or pressure her.

preparation classes seems to be the best way to involve both partners before childbirth. It is recommended that women practice relaxation techniques (eg, massage, music) during delivery to help reduce pain and that they receive early labor assessment to minimize obstetric interventions and to prepare them for birth.[105]

In the postpartum period, group interventions for new parents that are based on rational emotive behavioral therapy or behavioral therapy can help couples to better understand how biological, psychological, and relational factors contribute to changes in their sexual intimacy and may lead to postpartum sexual struggles. These programs address concepts such as sexual response, sexual desire, hormonal changes related to breastfeeding, and various sexual problems in women and how they are connected to intimacy between partners and other relational factors. Cognitive distortions regarding postnatal sexuality are identified, and couples are asked to apply these concepts to their relational issues, such as avoidance of sexual behavior or self-blame. Later, alternative thoughts are discussed and generated by the group.[106]

Dyadic empathy intervention can improve the sexual and relational well-being in couples transitioning to parenthood. Increasing dyadic empathy within the couple has become a priority objective in these interventions, and it can be achieved by having the couple discuss and share their thoughts and feelings

about the sexual and relational changes that have occurred since becoming parents. This approach has been shown to improve both sexual and relational well-being in new parents[107] by promoting a better understanding and acceptance of each parent's perspective.

The behavioral aspect of such interventions consists of training couples to learn to create spaces that increase sexual intimacy. To re-establish their physical and sexual connection, couples are also trained in sensate focus techniques.[106] In this regard, the new parents must learn new ways to approach their partner in the absence of sex by prioritizing the expression of love and consideration over sexual activities.

Although these interventions can be effective, on occasion they can be complemented with pharmacological treatment in order to guarantee a better adaptation to this stage of transition to paternity. When depressive symptoms are present, interpersonal therapy, administered as monotherapy or in combination with antidepressants, can effectively shorten recovery time and prolong clinical remission time.[108,109] Furthermore, such an approach has also been demonstrated to be useful in preventing postpartum depression.[109] Psychopharmacological interventions may help to relieve depressive symptoms, but they can also contribute to sexual dysfunction, a typical side effect. It is important to discuss this issue in order to offer treatments that are effective but produce fewer sexual side effects.

CONCLUSIONS

Sexual interventions should be part of holistic perinatal health care in order to help couples maintain a positive intimate and sexual relationship (Table 1). Prenatal and postnatal visits can be a great opportunity to discuss postpartum sexuality concerns and detecting risk factors that may be modifiable. Future studies should consider assessing other contextual factors influencing sexual behaviors, such as each partner's experiences, and increase efforts in recruitment of diverse samples including non-heterosexual postpartum individuals, and partners of postpartum women.

Corresponding Author: Esther Gimeno Castro, Perinatal Mental Health Unit, Consulta Dr Carlos Chiclana, Av de Filipinas 52, 28003 Madrid, Spain. Tel: (+34) 91 534 05 74; E-mail: e.gimenocastro@gmail.com

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STATEMENT OF AUTHORSHIP

Category 1

(a) Conception and Design
Elena Serrano-Drozdowskyj; Esther Gimeno Castro; Elena Trigo López; Inés Bárcenas Taland; Carlos Chiclana Actis

(b) Acquisition of Data
Elena Serrano-Drozdowskyj; Esther Gimeno Castro

(c) Analysis and Interpretation of Data
Elena Serrano-Drozdowskyj; Esther Gimeno Castro; Elena Trigo López

Category 2

(a) Drafting the Article
Elena Serrano-Drozdowskyj; Esther Gimeno Castro

(b) Revising It for Intellectual Content
Elena Trigo López; Carlos Chiclana Actis; Inés Bárcenas Taland; Esther Gimeno Castro

Category 3

(a) Final Approval of the Completed Article
Elena Serrano-Drozdowskyj; Esther Gimeno Castro; Elena Trigo López; Carlos Chiclana Actis; Inés Bárcenas Taland

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