Dear

Childbirth Study

Participant,

Thank you for joining us on this journey! We wanted to let you know a little bit more about the study now that it's complete.

Our Overall Goals

Pain during sex is common during pregnancy and in the postpartum period. So are changes in couples' sexual and relationship wellbeing in the transition to parenthood.

We wanted to know

- how prevalent pain during sex was throughout the transition to parenthood
- what biological, social, and psychological factors may predispose mothers* to, or protect them from, experiencing pain during sex in this transition
- if there are any psychosocial or interpersonal factors that can influence couples' sexual and relationship wellbeing during this transition

We conducted not just one, but THREE studies as a part of this project!

1 The Main Study

We followed first-time mothers recruited from the IWK Health Center from mid-pregnancy to 2-years postpartum.

These participants did up to 7 online surveys and some attended a physical examination.

2 The Partners Addition

We invited a sub-set of partners of the participants in the main study to join the partner study when baby was 3-months old.

These participants did up to 4 online surveys between 3-months and 2-years postpartum.

3 The Pain Self-Efficacy Study

We recruited couples online who had a baby 3-months old, who experienced pain during sex since their child was born.

These couples did two online surveys, one at 3-months postpartum and another at 6-months postpartum.

* Please note: We use 'mother' here in order to be concise. In these studies, we did not explicitly ask if the gestational participants identified as mothers, so it is possible that some of these individuals define their parental role differently. The use of 'mother' in this summary refers to the person who gave birth specifically, although we acknowledge that not all mothers delivered their children. We have adapted our questions and language to be more inclusive in our future research.

1

The Main Study

Our Goals

We wanted to know -

1) **how prevalent** experiencing pain during sex is during pregnancy and during the first 2-years after baby arrives.
2) if there are any **biological, psychological, or social factors** that might make this pain more or less likely

- so that we can create interventions to help prevent or reduce this common and difficult experience.

Recruitment

April 2015 to August 2017

We approached over 1000 patients at the Diagnostic Imaging Clinic at the IWK Health Centre who were attending their 20-week anatomy scan.

Some were not eligible, but 906 decided to enroll in the study.

In total, 822 of these participants completed the first survey and continued with the study.

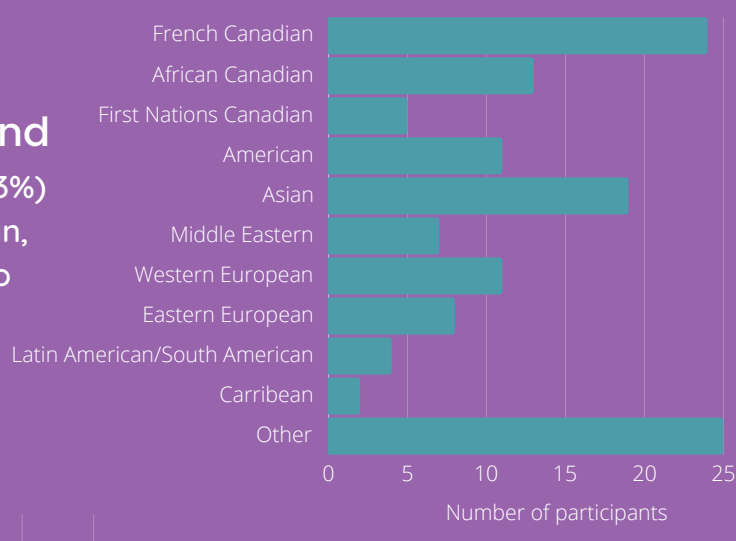
About The Participants

Age

The average age of participants during their second trimester was 29 years, and ranged from 18 to 45.

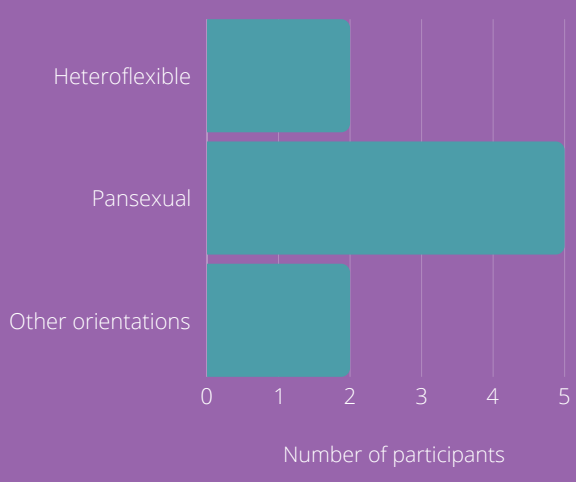
Cultural Background

While most participants (84.3%) identified as English Canadian, other backgrounds were also represented in this study.



Sexual Orientation

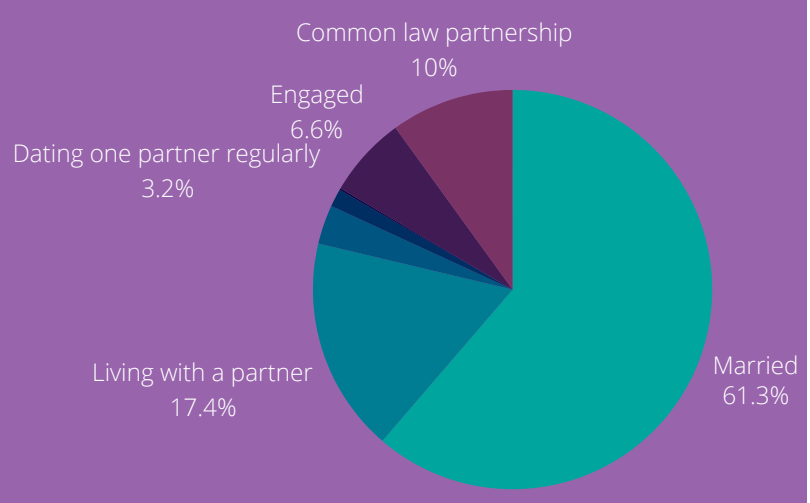
While most participants (99%) identified as heterosexual, some participants had 2SLGBTQ+ identities!



Relationship Length

The average relationship length was 5.75 years, and ranged from 7 months to 24 years.

Relationship Status



1

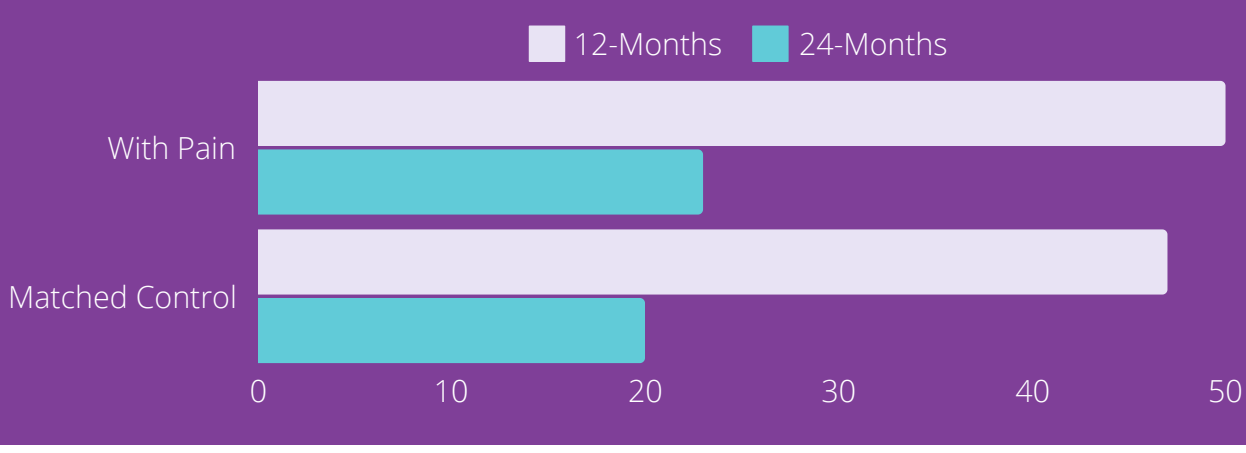
Gynaecological Exam

We invited participants who reported moderate to severe pain during sex at 12 months and/or 24 months postpartum to participate in a gynaecological examination.

In this exam, a doctor assessed whether there were any biological explanations for the pain.

We also invited participants similar in age and delivery type who experienced low or no pain to complete the same exam as a control group.

Number of Participants Who Attended an Exam



The Main Study - What We Found

Predictors of Two Trajectories of Dyspareunia from Pregnancy to 24 months Postpartum

Rosen, Dawson, Binik, Pierce, Brooks, Pukall, Chorney, Snelgrove-Clarke, & George (2022).

We examined two main questions:

1. Is new mothers' pain during vaginal intercourse—called dyspareunia—captured by one or multiple patterns of change over time?

2. What factors predict these patterns of change?

Pain during sex was pretty common, ranging from 31% of people reporting pain at 3-months postpartum to 12% at 2 years postpartum.

We also found two distinct groups for pain during sex. While 79% experienced little pain, we found that 21% experienced moderate—that is, fairly significant—pain when they attempted vaginal intercourse.

We found no biomedical factor that differed between the groups (including delivery type, any need for vaginal repair after birth, or prior chronic pain), but we did find a key psychological factor that predicted which group participants belonged to.

Those who reported a lot of negative thoughts and feelings about pain—which is called pain catastrophizing—at 3-months postpartum were more likely to experience moderate and persistent pain during sex throughout pregnancy and the postpartum period.

Click Icons Below to Learn More

1

Is it Me or You? First-time Mothers' Attributions for Postpartum Sexual Concerns are Associated with Sexual and Relationship Satisfaction in the Transition to Parenthood

Vannier, Adare, & Rosen (2018)

We examined whether new mothers' attributions (the way they perceived the cause of an event) for postpartum sexual concerns were associated with sexual and relationship satisfaction.

We found that new mothers who consistently attributed relationship problems to their partners (rather than attributing it to a joint cause or a cause that they attributed to themselves) had lower sexual satisfaction, and that new moms who made partner-responsibility attributions had lower relationship satisfaction.

Click Icons Below to Learn More

A Descriptive and Longitudinal Analysis of Pain During Intercourse in Pregnancy

Rossi, Mooney, Binik, & Rosen (2019)

We examined the prevalence and characteristics of pain during intercourse in pregnancy, including comparing three groups of participants based on when clinically significant pain began and how long it persisted.

We found that 21% of our participants reported clinically significant pain during intercourse, and we found four pain characteristics that were consistent between the three pain groups.

Click Icons Below to Learn More

Sexual Intimacy in First-time Mothers: Associations with Sexual and Relationship Satisfaction Across Three Waves

Rosen, Williams, Vannier, & Mackinnon (2020)

We examined whether intimacy in a sexual context ("sexual intimacy") served as a protective factor for new mothers' sexual and relationship satisfaction across the first 12 months postpartum.

We found that greater levels of perceived partner responsiveness in a sexual context (an aspect of sexual intimacy) at one time point was an important predictor of higher levels of sexual and relationship satisfaction at the next time point.

Click Icons Below to Learn More

1

Biopsychosocial Predictors of Trajectories of Postpartum Sexual Function in First-time Mothers

Dawson, Vaillancourt-Morel, Pierce, & Rosen (2020)

We examined the sexual functioning of new mothers to determine two things: if postpartum sexual function is captured by one or multiple trajectories, and if those trajectories are linked with biomedical or psychosocial factors.

We found three distinct trajectories based on the severity of sexual dysfunction in early postpartum, each with a different pattern of improvement through to 12-months postpartum.
We found no biological factors that might contribute to these trajectories, but a psychosocial factor, sexual distress, was linked to the moderate and marked problems groups.

Click Icons Below to Learn More

Comparing Self-reported Pain during Intercourse and Pain during a Standardized Gynecological Exam at 12- and 24-months Postpartum

Rossi, Vermeir, Brooks, Pierce, Pukall, & Rosen (2021)

Using participants' self-report of pain, gynaecological exam findings, and their report of pain during the exam, we examined the difference in characteristics of pain between participants with little pain versus significant pain during sex; what biopsychosocial characteristics are related to the pain experience; and whether the self-reported pain during sex was similar to pain experienced during the exam.

We found that regardless of pain report during the surveys, most participants had normal findings in the exam, and no biomedical factors differed between the groups.

There was a relationship between self-reported pain and reporting pain during the exam, but the participants reported the pain during the exam was lower than they experienced during sexual activity (particularly in the clinically significant pain group).

Click Icons Below to Learn More

2

The Partner Study

Our Goals

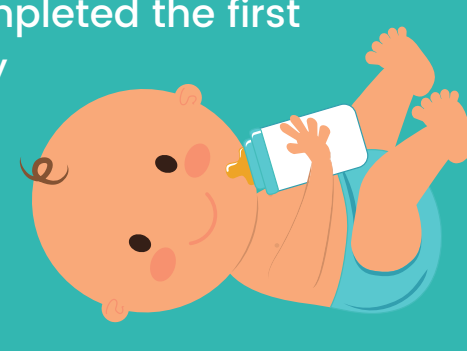
Data from non-gestational partners about their sexual and relationship wellbeing during postpartum helped us **assess the social or psychological factors** that may predict mothers' pain experience and couple wellbeing changes in the postpartum period.

Recruitment

August 2017 to April 2018

We contacted a sub-set of the partners of the participants in the main study to ask if they were interested in completing surveys at 3-, 6-, 12- and 24-months after baby was born

In total, **99** of these participants completed the first survey and continued with the study



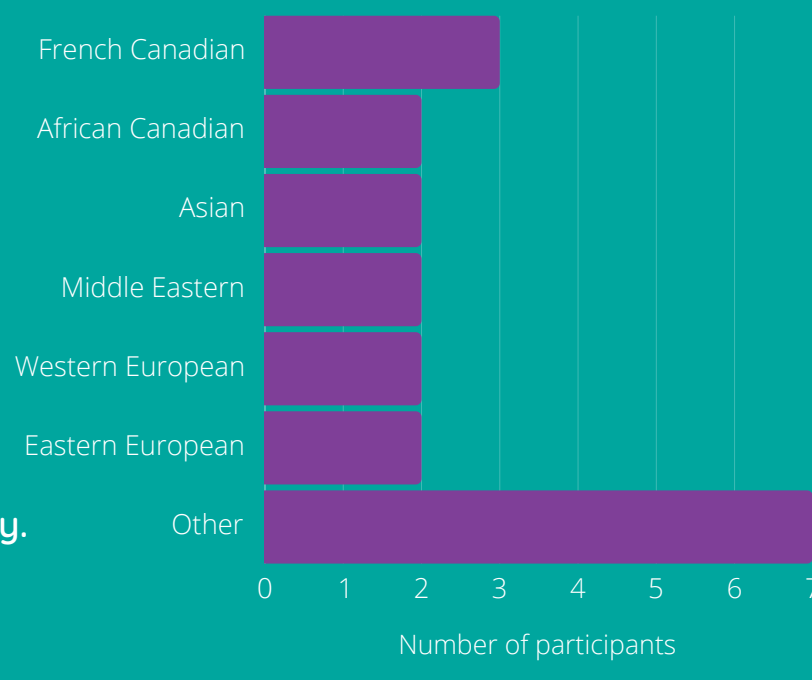
About The Participants

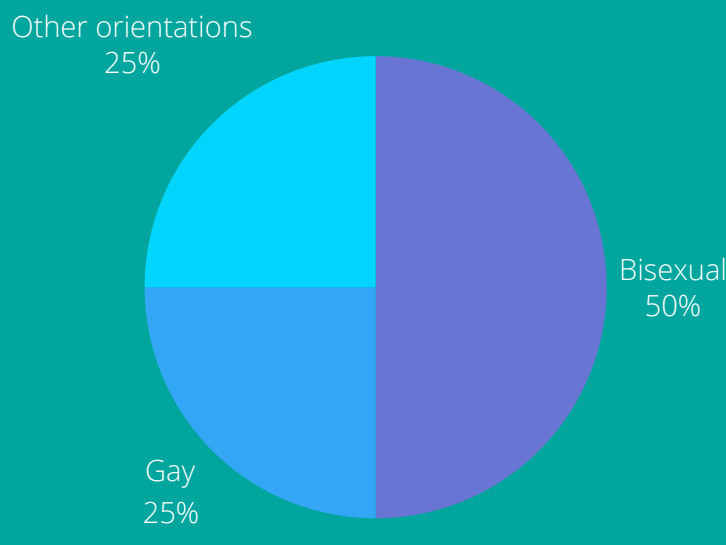
Age

The average age of participants (that is, the partners of the participants of study 1) when their baby was 3-months-old was 31 years, and ranged from 19 years to 43 years.

Cultural Background

While most participants (79.8%) identified as English Canadian, other backgrounds were also represented in this part of the study.





Sexual Orientation

While most participants (95%) identified as heterosexual, some participants had 2SLGBTQ+ identities (see chart to left)!

2

The Partner Study - What We Found

A Comparison of the Sexual Well-being of New Parents to Community Couples

Schwenck, Dawson, Muise, & Rosen (2020)

We compared the sexual well-being (frequency, satisfaction, desire, and distress) of first-time parent couples in the first year following the birth of their child to community couples not experiencing a transition to parenthood.

We found three main results:

1) New parent couples reported lower sexual satisfaction and desire, and higher sexual distress compared to control couples in the first year postpartum (at 3, 6, and 12 months).

2) Birthing parents experienced persistently lower sexual desire than control couples, but their partners didn't experience this decrease in desire.

3) By 6-months postpartum, new parent couples had resumed typical sexual frequency, and by 12-months the differences between new parents and controls, although still significant, had decreased.

Click Icons Below to Learn More

Longitudinal Associations between Depressive Symptoms and Sexual Concerns among First-time Parent Couples during the Transition to Parenthood

Dawson, Strickland, & Rosen (2020)

We examined how postpartum sexual concerns and depressive symptoms change overtime as well as the extent to which depressive symptoms predict initial levels of and changes in postpartum sexual concerns.

We found that both parents experience declines in sexual concerns between 3- and 12-months postpartum.

We also found that mothers' levels of postpartum depressive symptoms remained stable over time and partners' slightly increased.

Finally, we found that when either member of the couple had higher initial levels of depressive symptoms, the other member tended to have higher initial levels of sexual concerns.

Click Icons Below to Learn More

A Longitudinal Examination of Common Dyadic Coping and Sexual Distress in New Parent Couples during the Transition to Parenthood

Tutelman, Dawson, Schwenck, & Rosen (2021)

We examined the links between common dyadic coping and sexual distress in first-time parent couples during the postpartum period to better understand how new parents can better cope with sexual changes.

We found that birthing mothers initially reported clinically elevated sexual distress compared to their partners at 3-months postpartum, and that a parent's higher common dyadic coping was associated with their own lower sexual distress at 3-months postpartum.

We also found that birthing-mothers' sexual distress significantly declined overtime.

Finally, we found that there was no significant association between common dyadic coping and changes in sexual distress overtime.

Click Icons Below to Learn More

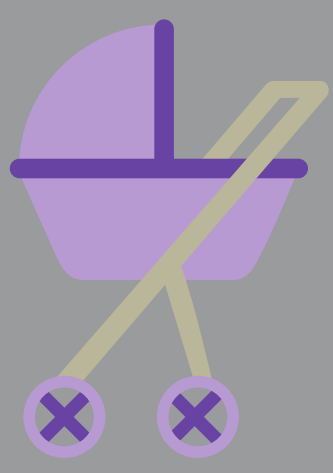
3

The Pain Self-Efficacy Study

Our Goals

Pain self-efficacy refers to a person's confidence in their ability to manage pain, and having more pain self-efficacy can result in less pain and disability in many groups who experience pain.

We assessed both the pain self-efficacy of first-time mothers who experienced pain during sex, and their partners' perception of their pain self-efficacy.



Recruitment

April 2018 to April 2019

We reached out online to find first-time parent couples who were up to 16-weeks postpartum and in which the mother experienced pain during sex when they resumed sexual activity after baby arrived.

A total of **87** couples were enrolled in this part of the study.

About The Participants

Age

The average age of participants in the pain self-efficacy study was 30 years, and ranged from 18 years to 42 years.

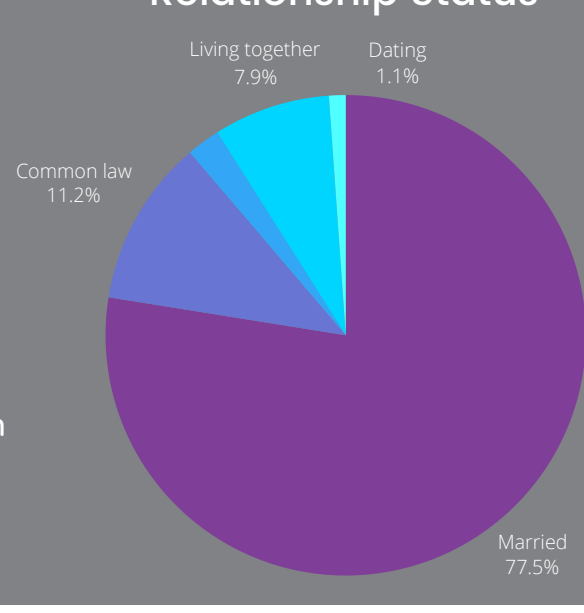
Relationship Length

At the time of recruitment, couples enrolled in this study had been together for an average of 7 years

Sexual Orientation

All couples enrolled in this study were in heterosexual-presenting relationships.

Relationship Status



Biased Partner Perceptions of Women's Pain Self-Efficacy for Postpartum Pain during Intercourse: A Longitudinal Dyadic Examination

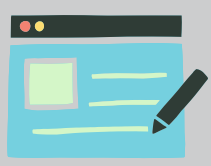
Rossi, Maxwell, & Rosen (2020)

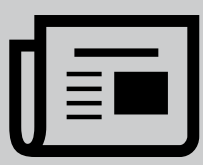
We examined whether partners are accurate in their perceptions of women's pain self-efficacy, as well as how inaccurate estimations of pain self-efficacy by a partner during the postpartum period can affect a woman's pain intensity and a couple's sexual well-being.

We found that overall, partners are accurate in their perceptions of women's pain self-efficacy; however, depending on their mutual perception, both pain and sexual well-being were positively or negatively impacted.

That is, we found that if both partners agreed that she was able to manage her pain, the women reported less pain and couples indicated greater sexual well-being, and vice versa if they both felt that she was not able to handle her pain well.

Click Icons Below to Learn More





Thank you

for your participation in our research. We greatly appreciate your time and dedication!

couples & sexual health research

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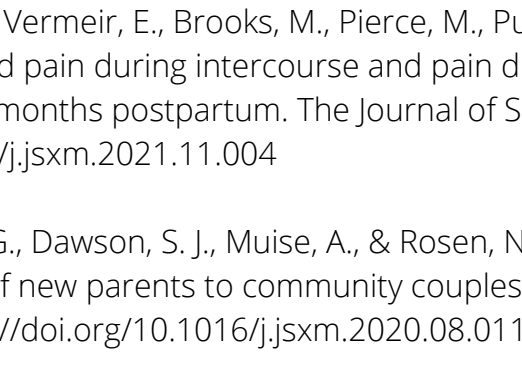

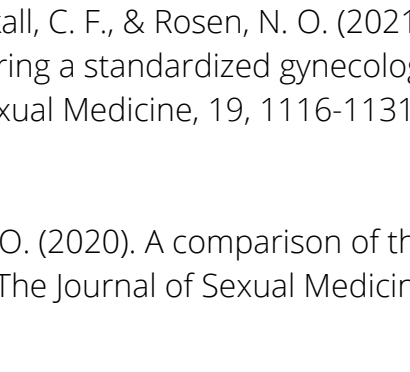

Our knowledge translation initative for new parents!

Dawson, S. J., Vaillancourt-Morel, M.-P., Pierce, M., & Rosen, N. O. (2020). Biopsychosocial predictors of trajectories of postpartum sexual function in first-time mothers. Health Psychology, 39, 700-710. https://doi.org/10.1037/hea0000861

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Rosen, N. O., Williams, L., Vannier, S. A., & Mackinnon, S. P. (2020). Sexual intimacy in first-time mothers: Associations with sexual and relationship satisfaction across three waves. Archives of Sexual Behavior, 49, 2849-2861. https://doi.org/10.1007/s10508-020-01667-1

Rosen, N. O., Dawson, S. J., Binik, Y. M., Pierce, M., Brooks, M., Pukall, C., Chorney, J., Snelgrove-Clarke, E., & George, R. (2022). Predictors of two trajectories of dyspareunia from pregnancy to 24 months postpartum. Obstetrics & Gynecology, 139, 391-399. doi:10.1097/AOG.0000000000004662

Rossi, M., Mooney, K., Binik, Y. M., & Rosen, N. O. (2019). A descriptive and longitudinal analysis of pain during intercourse in pregnancy. The Journal of Sexual Medicine, 16, 1966-1977. https://doi.org/10.1016/j.jsxm.2019.09.011

Rossi, M., Maxwell, J. E., & Rosen, N. O. (2020). Biased partner perceptions of women's pain self-efficacy for postpartum pain during intercourse: A longitudinal dyadic examination. The Journal of Pain, 21, 1047-1059. https://doi.org/10.1016/j.jpain.2020.01.006
*1st Runner-up, Best Student Manuscript Award, International Academy of Sex Research

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Tutelman, P. R., Dawson, S. J., Schwenck, G. C., & Rosen, N. O. (2021). A Longitudinal Examination of Common Dyadic Coping and Sexual Distress in New Parent Couples during the Transition to Parenthood. Family Process. https://doi: 10.1111/famp.12661

Vannier, S. A., Adare, K. E., & Rosen, N. O. (2018). Is it me or you? First-time mothers' attributions for postpartum sexual concerns are associated with sexual and relationship satisfaction in the transition to parenthood. Journal of Social and Personal Relationships, 35, 577-599. https://doi.org/10.1177/0265407517743086