

Don't Stress Me Out: Post Traumatic Stress Disorder (PTSD) and Pregnancy

- My fear and anxiety over my soon-to-arrive first child is overwhelming on a daily basis...I'm angry some days, sad some days, and panicked other days.
- My anxiety and depression levels has been higher than normal
- I'm scared when I go anywhere or see anyone, even when I'm maintaining social distancing.
- We planned on having an amazing support team and the rug was pulled from under us.
- I realize this is uncharted territory, but I have not felt supported as a first-time mother.¹

These were the sentiments of pregnant individuals going through the pandemic. It was an unprecedented event and as MotherToBaby Specialists we were challenged with dealing with the anxiety of expectant parents as they tried to get reliable information and deal with their fears, anxiety, and frustrations. Fortunately, as time went on, the infection did not appear to increase the chance of birth defects but now there is a question of the emotional toil it put on pregnant women.

Post-traumatic stress disorder (PTSD) is a condition of persistent mental and emotional stress that occurs after suffering a stressful or extremely traumatic event. Unlike post-traumatic stress that lessens over time, the symptoms of PTSD do not fade. Symptoms of PTSD fall into the following four categories and can vary in severity:

- **Intrusion:** may include intrusive thoughts or distressing memories, flashbacks, nightmares
- **Avoidance:** may include avoiding thinking or talking about the event or their feelings; avoiding things that remind them of the event (people, places, activities).
- **Negative changes in thinking or mood:** may include lack of memory on details about the event; negative thoughts and feelings about themselves or others; feeling numb or detached from others; loss of interest in activities.
- **Changes in physical and emotional reactions (arousal):** may include being irritable and having angry outbursts; self-destructive behavior; having problems concentrating or sleeping.

In general, PTSD occurs more often in women than in men and in the pregnant population more than non-pregnant individuals. According to some studies, 3% to 19% of pregnant women experience PTSD.² When it comes to psychiatric disorders during pregnancy, PTSD after childbirth or postpartum PTSD is considered the third most common mental health disorder after depression and nicotine dependence.³

If left untreated or poorly treated, PTSD can have long lasting effects not only for the pregnant woman but also in her relationships with other people, especially family, and interfere in bonding with their child and breastfeeding that can have long-lasting impact on the child. Pregnant women with untreated PTSD have a higher chance of experiencing negative birth outcomes including gestational diabetes (diabetes that develops during pregnancy), preeclampsia (severe high blood pressure), low birthweight (weight at birth of < 2500 grams, 5.5 pounds), and preterm birth (before 37 weeks pregnancy). Also, quite alarming, PTSD is closely linked to attempting or committing suicide and substance abuse, two leading causes of maternal death in the United States.³

We know that the pandemic was a stressful situation for the entire country and especially pregnant women, but what were the long-term effects, particularly in regard to PTSD. In general, risk factors for postpartum PTSD include, but are not limited to, the fear of childbirth, prenatal health concerns (preeclampsia, birth defects), the lack of emotional/social support, depression and anxiety. During the pandemic the primary concern was the risk of infection for themselves and for their child before birth and after. Also, birth plans had to be changed due to hospital restrictions. They did not have the social support that they expected or planned with their doulas, partners, family or friends. The lack of social support was not only an issue during childbirth but remained after birth due to stay-at-home orders. Furthermore, expectant parents may have had to face other problems amplified by the pandemic like unemployment and the loss of a loved one. The sense of security and community was greatly affected during the pandemic and then expectant parents had to navigate a new world while just becoming parents, as expressed by pregnant women above. All of these factors can create a traumatic experience of childbirth and raise the chance for PTSD.

There have been multiple studies investigating the effects of the COVID-19 pandemic during pregnancy. While studies may have differed in their approach to review this topic, the results generally showed that giving birth during the pandemic had many effects on the pregnant population and that PTSD was quite common. Also, rates of PTSD were higher among Black and Latinx pregnant women than whites and lower socio-economic status (i.e., less educational and income).

Recommendations:

There is a call for PTSD to be screened during pregnancy and after to make sure that no one falls through the cracks. It is suggested that providers who had patients deliver in the early part of the pandemic, follow-up with them to make sure they are coping well. Not everyone who experiences PTSD will need counseling, but pregnant women should know about their options.

“Trauma is perhaps the most avoided, ignored, belittled, denied, misunderstood, and untreated cause of human suffering,” said Peter Levine, PhD, trauma specialist. For pregnant individuals, if your symptoms are interfering with your quality of life, please speak with your healthcare professional so that you can get the assistance that you need. ***As MotherToBaby information specialists we can connect you to the resources that can promote your health and well-being. We provide information about medications used to treat PTSD as well as exposure to anxiety, depression, and stress on pregnancy and breastfeeding. We are just one important resource that new and expecting parents can rely on for confidential information. Contact us today or visit our Resource Hub on Mental Health during pregnancy and breastfeeding.***

There are resources available to help you.

Postpartum Support International: <https://www.postpartum.net/learn-more/postpartum-post-traumatic-stress-disorder/>

National Maternal Mental Health Hotline: **1-833-943-5746 (1-833-9-HELP4MOMS)**

<https://mchb.hrsa.gov/national-maternal-mental-health-hotline>

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"I can't get rid of it fast enough!" Caroline was 5 months pregnant and at her wits end when she contacted MotherToBaby. "My migraine is so bad that I can barely get out of bed, but I feel like there's nothing I can do about it since I'm pregnant. I don't want to harm the baby!" We often get questions like Caroline's from women planning a pregnancy or already pregnant who would like information on the prevention and treatment of migraine headaches, so I start by asking Caroline what she would have used if she weren't pregnant. Caroline told me that she would have taken ibuprofen and or sumatriptan.

Migraine preventions and treatments fall into three basic categories:

- **Over the counter remedies** such as aspirin or other NSAIDs, or acetaminophen with or without caffeine.
- **Prescription medications** such as opioids, various anticonvulsants, triptans, tricyclic antidepressants and beta blockers.
- **Alternative therapies** such as Botox or other nerve block injections, massage therapy, acupuncture, high doses of magnesium, or essential oils.

Most women have tried more than one therapy that has failed before they find one or a combination of products that will work for them. Migraines can be very debilitating, so the thought of having to go without a prevention or treatment that works can be very anxiety producing. Yes, it is true that some women find that their migraines disappear during pregnancy, but in others, they become more frequent. Having a plan for prevention and treatment, just in case, is necessary. We can help with the development of that plan by providing migraine sufferers with evidence-based information about the safety of various treatments during pregnancy (and also while breastfeeding!). Below is a brief summary of many common migraine medications and treatments, but we encourage you to visit our [Fact Sheets](#) or [contact our experts](#) for more detailed information.

Over the Counter Remedies

Typically, non-steroidal anti-inflammatory medications like aspirin, **naproxen** and **ibuprofen** are not recommended in pregnancy.

Acetaminophen alone does not always provide relief for a migraine, but its use should not be of great concern depending on how much or how often it is needed.

Caffeine can sometimes be added to enhance the relief of a migraine in some individuals. Typically, such doses of caffeine are not expected to create an increased chance for adverse pregnancy outcome. For further guidance on caffeine, see our [fact sheet](#).

Other over the counter remedies that fall into the herbal or supplement categories are also not recommended since they are not well regulated or studied for safety. See our fact sheet on [herbal supplements](#).

Prescription Medications

Many women find that over-the-counter products are not helpful enough and turn to healthcare providers for prescription medication relief. Prevention of the headache in the first place is key for some.

Beta blockers have been around a long time and used daily for migraine prevention in some individuals. Studies do not suggest that their use in pregnancy is high risk. See our Fact Sheets on [metoprolol](#) and [propranolol](#) for additional information.

The tricyclic antidepressants, such as **amitriptyline** and **nortriptyline**, are older drugs that have been successful in some at the prevention of migraine headaches when used daily. They too have not been found to be high risk products when used in pregnancy.

Other medications such as certain anticonvulsants have been used to prevent or reduce the severity or frequency of migraines. However, these medications have more complex concerns when used in pregnancy. The chance for complications in pregnancy must be individually and carefully weighed against the benefits of keeping migraines in check.

The “triptan” products were designed specifically to treat migraine headaches and include **sumatriptan**, **rizatriptan**, **frovatriptan** and **naratriptan**. As the “triptan” medication that has been around the longest time, sumatriptan has relatively reassuring data on use during pregnancy.

Opioids are used to treat the extreme pain caused by migraines. While they are not typically found to cause a significant increased chance for birth defects, regular use can create problems later in pregnancy or after birth. In some cases, their use may cause rebound headaches and therefore create more need for treatment.

Alternative Therapies

Migraines can be really difficult to prevent or treat, and some women turn to alternative therapies. **Botox, bupivacaine, or lidocaine** injections have been used as nerve blockers to treat migraines. However, it may not be best to try these out for the first time during a pregnancy.

Some non-pharmaceutical options include massage therapy and **acupuncture**. Your healthcare provider may be able to refer you to someone who has experience implementing these treatments with pregnant women.

Essential oils are used topically or in a diffuser. Be careful not to ingest any. If you are nursing or have an infant, be sure not to leave oils on your body where they might accidentally ingest them.

We have had questions about the use of high doses of magnesium to curb migraines. We cannot recommend this option and suggest that you seek out the advice of your healthcare provider to determine if such treatment would be helpful or wise.

The Takeaway

I gave Caroline a summary of what is known about her usual migraine treatments, and suggested she have a conversation with her healthcare provider to discuss a safer alternative to ibuprofen and whether her provider would suggest any other changes to her treatment plan. The bottom-line is the benefits of some treatments may outweigh the risks of not treating migraines. A healthy mama from toe to head (especially a pain-free head) is best for baby too.

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Migraine headaches affect one billion people worldwide. Migraines are more common in people who could become pregnant, and during pregnancy their frequency can increase, decrease, or stay the same. **Last year we talked to Caroline** about treating her migraine headache at five months of pregnancy. Now she has reached out to us to discuss treatment options before she tries to get pregnant again. Back when she was pregnant with her first child, she was using acetaminophen and sumatriptan, but found that her migraines were much less responsive to these products over time. Today, Caroline is considering the newer drugs that have come onto the market since her last pregnancy. She has never used a preventive medication and was curious about the data on the new products. Caroline's healthcare provider has mentioned trying Emgality® (galcanezumab-gnlm) or Nurtec ODT® (rimegepant).

Since there are many new drugs marketed to treat and prevent migraines, let us start with an overview. These newer medications are called calcitonin gene-related peptide (CGRP) antagonists, CGRP receptor blockers and CGRP blockers, and are a new category of migraine treatments. Some treat migraine attacks, while some prevent migraines, and some do both (like those Caroline is interested in).

There are so many choices, so let's look at what the data says when these medications are studied during pregnancy.

Medications that *prevent* chronic migraines:

- Qulipta® (atogepant) - oral; CGRP receptor antagonist
- Ajovy® (fremanezumab-vfrm)-injection; CGRP blocker
- Vyepti® (eptinezumab-jjmr)- injection; CGRP receptor blocker
- Aimovig® (erenumab-aooe)- injection; CGRP receptor blocker
- Emgality® (galcanezumab-gnlm)- injection; CGRP blocker
- Nurtec ODT® (rimegepant)- tabs; CGRP receptor antagonist

Medications that *treat* the symptoms of acute migraines:

- Emgality® (galcanezumab-gnlm) - injection; CGRP blocker
- Nurtec ODT® (rimegepant)- tabs; CGRP receptor antagonist
- Ubrelvy® (ubrogepant)- oral; CGRP receptor antagonist

Medications that *prevent* and *treat* migraines:

- Emgality® (galcanezumab-gnlm) - injection; CGRP blocker
- Nurtec ODT® (rimegepant)- tabs; CGRP receptor antagonist

Unfortunately, there is very little information involving human data on Quilpta®, Nurtec ODT® or Ubrelvy® so we are left without the information we need for a full risk assessment of these medications. However, there are some data in humans on the medications on Ajovy®, Vyepti®, Aimovig® and Emgality®. These data are limited, meaning we don't have a lot of information.

Let's begin by breaking down the information that we have on Ajovy®, Vyepti®, Aimovig® and Emgality®. These four medications are all monoclonal antibodies, which in scientific terms means they are extremely large molecules. That means that they are unlikely to cross the placenta until around mid-pregnancy after the baby's structures and organs have developed. Therefore, these medications should not have a direct impact on the baby's development. It cannot be said that there is no increased chance of the baby being affected, but these medications may not be high risk exposures. These medications stay in the person's system for a very long time. So if Caroline would like to have any of these out of her system before she gets pregnant, it may take approximately 5 months to clear.

What are the specific reports that we have on Ajovy®, Vyepti®, Aimovig® and Emgality® that help us assess the risk of use in pregnancy?

There are 13 cases of exposure prior to pregnancy and 10 exposures during pregnancy in one report on Ajovy®

(fremanezumab-vfrm). In these cases, there was no increase in pregnancy loss, and one child was born with kidney and GI issues that cannot be proven to be caused by the medication treatment at this time.

There are two cases of Vyepti® (eptinezumab-jjmr) use during pregnancy. Outcome was reported on only one pregnancy which resulted in a miscarriage. However, based on what we know about monoclonal antibodies and the size of this molecule potentially being too large to pass through the placenta, it also would not be expected to have an increased risk of problems when used in the first trimester. More data and studies are needed to support this statement, though.

There are 116 cases of Aimovig® (erenumab-aooe) in one report. These studies include one prior to pregnancy, 108 during pregnancy, five during lactation and two at an unknown time. There was no increase in pregnancy loss or pattern of birth defects seen in the cases with known outcome. There were six cases of early birth in this group. One infant had growth issues but that mother was on multiple medications. There are at least five other cases in the medical literature that resulted in infants born without adverse pregnancy outcome or birth defects.

Finally Emgality® (galcanezumab-gnlm) was suggested to Caroline. There are 125 cases with data to consider. Six cases were with use of the medication prior to pregnancy, 107 cases were with use during pregnancy, 5 were with use during lactation and 1 case was use of the medication by dad. Six cases had unknown timing of use. No increase chance for pregnancy loss or pattern of birth defects was reported in this group of cases.

Back to our call with Caroline, and how we advised her on the medications that she was interested in – remember these: Nurtec ODT® and Emgality®. Both of the choices offered to Caroline can treat **and** prevent migraines, so one doesn't have an advantage over the other in that area. We discussed with Caroline that at this time there are no human studies on Nurtec ODT®. However, the animal data looks promising and low risk at this time. Additionally, it is a drug that quickly clears from the body. So she would not have to be off of it for months to have it clear from her body prior to pregnancy. In that time, there may be new human data reported that we could share with her closer to when she would try to conceive. Otherwise, the current human data on Emgality® looks promising. Caroline stated she plans to discuss these reproductive data with her prescribing healthcare provider and come up with a plan of action. Caroline may decide to try either of these medications now see how they work for her before trying to get pregnant knowing there may be waiting periods to have the medications clear from her body.

At the end of the day, dealing with a migraine might be a pain, but examining up-to-date data doesn't have to be a headache. That's why **MotherToBaby** is here to help!

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Welcome, spring! Did someone say wildflowers? (**AHHH...**) Trees? (**AHHH...**) Grasses? (**CHOO!**) **Ugh!** While many people enjoy renewed energy brought on by the bursting forth of spring color, others feel only the misery of seasonal allergies due to pollen, mold, and other springtime triggers. Combine seasonal allergy symptoms with pregnancy, and you can end up short on sleep, long on fatigue, and with an increased chance of respiratory complications if you have **asthma**. None of these things are good for you or your baby, and keeping asthma symptoms under control is especially important during pregnancy.

Wash Your Cares Away

A simple over-the-counter (OTC) saline nose spray can rinse pollen, dust, and other allergy triggers from your nose. This option is not expected to result in an exposure for the pregnancy or to increase pregnancy risks.

Sleep, Magical Sleep

To help you sleep better, consider using OTC nasal strips to open your nasal passages at night. Use a pillow cover to reduce dust and other allergens. Also try sleeping with your head slightly elevated to help drain the sinuses and reduce inflammation.

Still Suffering?

It may be worth having a conversation with your healthcare provider about the pros and cons of various allergy medications. Before grabbing an over-the-counter medication to treat your symptoms, consider this:

- With any medication, take the time to read your labels. Some allergy medications marketed for cough and cold contain alcohol, which should be avoided during pregnancy. Also, multi-symptom formulas might contain additional medications that you don't need. As with any medication in pregnancy, use allergy medications for the shortest amount of time needed, and follow dosing instructions carefully.
- **Antihistamines:** Older antihistamines like **diphenhydramine** (sold under the name Benadryl® and other brands) and **chlorpheniramine** can make you sleepy, so they aren't ideal for daytime use. Newer antihistamines, such as **cetirizine** (Zyrtec®), **fexofenadine** (Allegra®), and **loratadine** (Claritin®), are less likely to make you drowsy and have not been shown to increase the chance of birth defects or other pregnancy complications when used as directed.
- **Eye drops:** Allergy eye drops may contain antihistamines, steroid medications, or other active ingredients. Eye drops result in lower exposure for the pregnancy than oral (swallowed) medications do. However, some eye drops have been better studied for use in pregnancy than others have. Check with your healthcare provider or

contact a MotherToBaby specialist for questions about your specific eye drop.

- **Steroid nasal sprays:** OTC options include budesonide, fluticasone, and triamcinolone (you can find the active ingredients listed on the label). Some older studies suggested that using oral steroid medications might increase the chance of cleft lip or palate and affect the baby's growth, but newer studies don't find this to be true. In addition, nasal sprays are not well absorbed into the bloodstream when used as recommended, so there is less exposure for the pregnancy. Compared to some other nasal spray ingredients, fluticasone might be absorbed in greater amounts, but these still would not reach the amounts seen with oral medications. No increased pregnancy risks have been seen specifically with OTC steroid nasal sprays.
- **Decongestants:** The overall research does not suggest that using decongestants for a short time would increase pregnancy risks. However, decongestants work by temporarily making the blood vessels narrower. There are concerns that this could limit the supply of oxygen to the placenta and the developing baby. Some healthcare providers recommend avoiding decongestants in the first trimester, and using them with caution any time in pregnancy. Short term use (3 days or less) of nasal spray decongestants results in less exposure for the pregnancy than oral decongestants do.
- **Allergy shots:** Most reactions to allergy shots (redness, swelling, itching) are not dangerous. If someone is already receiving allergy shots before they get pregnant, there is no general recommendation to stop during the pregnancy. However, there is a small chance that a person could have a life-threatening allergic reaction (anaphylaxis) if they are new to allergy shots or are building up their dose. For this reason, it is not recommended to start getting allergy shots for the first time or to increase the dose during pregnancy.

If you have questions about specific allergy medications during pregnancy, including those available by prescription, talk to your healthcare provider or **contact us** at MotherToBaby. Happy spring!

Select References:

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Katie recently reached out to us; she told us that she has lupus and has been taking hydroxychloroquine for years to successfully manage her lupus symptoms. Her concern? "I just found out I am pregnant and my rheumatologist was not sure if I can continue taking hydroxychloroquine during pregnancy. I am worried for my baby but I am also worried about stopping my lupus medication since it helps my symptoms so much. I haven't had a flare in over a year! I can suffer through the flares if I have to, but I don't want to harm my baby. I don't know what to do."

Katie's concerns about how to balance the management of her chronic health condition against her baby's health during pregnancy are not uncommon. Generally, the healthier a woman is during pregnancy, the better it is for both them and their baby. When taking medication during pregnancy, the risks and benefits of taking or not taking the medication should be carefully considered. More specifically, could the untreated condition cause more problems than taking the medication?

What is lupus and how could it affect a pregnancy?

Lupus, also known as systemic lupus erythematosus (SLE), is an autoimmune disease that affects many different parts of the body. The symptoms are variable; however, the kidneys, joints, and skin are commonly affected. It is very important for both the health of the pregnancy as well as the health of the woman who is pregnant to achieve optimal control of lupus and maintain that control without flares (relapses in symptoms) throughout the pregnancy. For those who are planning a pregnancy, it is generally advised that at least 6 months without flares reduces the chances of pregnancy-related problems.

Lupus, especially if not well controlled, can cause serious health complications for both the woman who is pregnant as well as the baby. These complications include nephritis (inflammation of the kidneys that causes difficulty filtering waste from the body) and blood conditions such as anemia (a condition in which you don't have enough healthy red blood cells to carry adequate amounts of oxygen to your body's tissues) and thrombocytopenia (a condition in which the blood does not clot as fast as it should, which can cause excess blood loss). Inflammation in the lungs, heart, or brain can also occur and cause serious health problems.

People who have lupus also have a higher chance to develop high blood pressure during pregnancy and preeclampsia (a pregnancy-related condition that has several symptoms including a dangerous rise in blood pressure). People with lupus, most often the ones who develop high blood pressure or other health problems, may also have a higher chance of having a baby with poor growth which can lead to late miscarriage and preterm delivery (delivery before week 37).

Rare complications for the baby may include being born with symptoms of lupus (called neonatal lupus erythematosus (NLE)). These may be temporary and often disappear by six months of age. NLE is mostly seen in children when the pregnant woman has anti-SSA and anti-SSB antibodies. The most serious complication of neonatal lupus is a heart rhythm problem called congenital heart block which can often be detected on ultrasound and may lead to health complications and death. If these antibodies are present, additional ultrasounds for the heart may be recommended.

Katie was surprised. 'I thought if I stopped my medications my flares would be painful and uncomfortable, but I never thought it could seriously affect my health or the health of my baby. Can you tell me more what is known about taking my lupus medication during pregnancy?'

So what do we know about lupus medications and pregnancy?

Many medications used to treat lupus are not thought to increase risks to a pregnancy over background chances that all pregnant individuals have. Medications work differently for different people. It is very important to talk with your healthcare providers before making any changes to how you take your medication. It is important to consider (with help of a rheumatologist) which medication works best to treat you. Regarding Katie's question, the Society of Maternal Fetal Medicine (SMFM) recommends continuing the use of hydroxychloroquine during pregnancy. This recommendation is based on studies which did NOT show an increased risk for pregnancy related problems when hydroxychloroquine is used. Additionally, the studies showed a lower chance of lupus related problems during pregnancy when hydroxychloroquine is used.

There are many other medications such as steroids and biologics that lower the body's immune system (immunosuppressants) that can also be considered for use during pregnancy. However, certain medications for lupus are not recommended for use during pregnancy because they can increase the chance for birth defects and other pregnancy-related problems. SMFM recommends that methotrexate should be stopped 1-3 months before pregnancy and mycophenolate mofetil/mycophenolic acid should be stopped at least 6 weeks before attempting pregnancy. NSAIDs (non-steroidal anti-inflammatory drugs), such as ibuprofen, high dose aspirin, etc. are not recommended for use during pregnancy.

For information on specific medications make sure you talk with your healthcare provider or contact MotherToBaby and see our medication fact sheets at <https://mothertobaby.org/fact-sheets/>. It is very important to talk with your healthcare providers before making any changes to how you take your medication.

Katie summarized the information she was given very well, 'It seems like making sure my lupus is well controlled will set both me and my baby up for the highest chance of being healthy. I feel much more comfortable continuing my medication knowing that with my own health, I am helping my baby to be healthy as well. I will talk with my healthcare providers to plan for monitoring both me and the pregnancy. Is there anything else I should know?'

Other info to know about lupus and pregnancy

It's not uncommon for new medications to be developed for the treatment of lupus. If there is one thing that these new medications have in common, it's that they very rarely have adequate, real-world data that describes whether the medication is safe to take during pregnancy. Pregnancy registries are the types of studies that give us this information, which is what allows us to provide risk assessments to people like Katie. That's why we suggest to any pregnant woman with lupus that they consider joining the pregnancy registry for the medication(s) they are taking if one exists. The U.S. Food and Drug Administration (FDA) maintains a list of ongoing pregnancy registry studies on their [website](#). If you're planning a pregnancy or are already pregnant, now is a great time to find out more about the benefits of joining a lupus pregnancy study.

Women who are pregnant and have lupus will require some additional monitoring during pregnancy. They should be followed by their rheumatologist to make sure their symptoms are well controlled. Additional monitoring during

pregnancy such as blood pressure checks, additional lab tests and additional ultrasounds may be recommended. Make sure you talk with your healthcare provider to discuss the management plan for your pregnancy.

Katie returned to MotherToBaby a few weeks later and told us she has been working together with her rheumatologist as well as her obstetric team including a high-risk pregnancy provider (also called Maternal Fetal Medicine (MFM) specialist) to make sure both her and her baby are as healthy as they possibly can be. 'I felt empowered by being informed, having all my healthcare providers in my corner and knowing that by taking care of myself, I am taking care of my baby too. Thank you, MotherToBaby!'

For more information about lupus and pregnancy, including links to lupus-related MotherToBaby Fact Sheets, visit our lupus resources page at <https://mothertobaby.org/pregnancy-breastfeeding-exposures/lupus/>. You can also contact one of our information specialists for a no-cost risk assessment by visiting <https://mothertobaby.org/contact/>.

If you are pregnant and taking belimumab (Benlysta®) to treat SLE or lupus nephritis, please consider enrolling into our observational study. This study will give women with lupus better answers about how lupus and its management can affect a pregnancy and a developing baby. You will not be asked to take or change any medications, and you can participate from the comfort of your home.

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