Top Tips For A Holly Jolly Pregnancy This Season

I can't begin to describe how organized I was during the holiday season when I was pregnant with my first child. Since I was pretty far along (5 months), I wanted to make sure each gift was chosen way ahead of time, I knew how long it would take me to get the food trimmings just right and whether I should emphasize red or green in my decorating scheme. All of this had to be done before that "pregnancy brain" I had heard so much about set-in. Little did I know, the most important items on my holiday to-do list weren't sitting on store shelves or mixed in with the tinsel and mistletoe.

Years later, as a teratogen information specialist for MotherToBaby, I realized some of the best gifts for a healthy pregnancy didn't come with ribbons and bows, but from awareness and education! For example, did you know the holiday buffet table could include foods that could potentially cause harm to a developing baby? Or, if not careful, decorating could put a pregnant woman in a dangerous situation? Today I encourage pregnant women to master must-know safety tips long before putting together must-have gift lists this season. Here are a few of my tips:

Tip 1. Importance of Getting Vaccinated

It is recommended that pregnant women have a flu vaccine in every pregnancy and be current on Tdap vaccine and Covid 19 vaccines. Women who are 32-36 weeks pregnant are currently eligible for the RSV vaccine https://mothertobaby.org/fact-sheets/rsv-vaccine/. This vaccine can pass protection to the developing baby, helping lower the chance of severe RSV infection once the baby is born.

Not only should a pregnant woman be up-to-date on vaccines, but **anyone** older than 6 months of age who will be around a newborn should be vaccinated.

Tip 2. Choose Wisely at the Buffet Table

Drinks like eggnog and spiced cider may contain alcohol https://mothertobaby.org/fact-sheets/alcohol-pregnancy. If you're not sure what's s in a beverage, ask the host. Also, avoid soft cheeses made from unpasteurized milk, as they may contain bacteria that can cause a serious illness for a developing baby called Listeria https://mothertobaby.org/fact-sheets/listeriosis-pregnancy, as well as increased risk of miscarriage, uterine infection, or premature labor. Meats like cocktail franks and pâté can also contain bacteria. Meats need to be thoroughly cooked so that bacteria are killed.

Tip 3. CMV (cytomegalovirus) May Be Lurking

CMV is a common virus that often has no symptoms. If a pregnant woman gets CMV https://mothertobaby.org/fact-sheets/cytomegalovirus-cmv-pregnancy, the baby could be at increased risk for hearing loss, developmental delays, or birth defects. To prevent infection, pregnant women should wash hands after changing diapers, feeding children, wiping children's noses, or handling children's toys. Also, avoid sharing food, eating utensils, toothbrushes, and pacifiers with children.

Tip 4. Holiday Decoration Safety

Some artificial trees, strings of lights, and ornaments may contain lead. Use gloves or wash hands after handling decorations to reduce exposure. Because of changes in their center of gravity, pregnant women should stay off ladders and let others decorate the hard-to-reach places.

Tip 5. Manage Anxiety and Depression

Having a 'happy holiday' can mean lots of stress, especially when pregnant. Anxiety https://mothertobaby.org/fact-sheets/anxiety-fact to have that ***perfect*** holiday is real. Depression https://mothertobaby.org/fact-sheets/depression-pregnancy can be triggered this time of year as well. Don't hesitate to ask for help if you are feeling overwhelmed with all the gift giving and holiday activities. Stay in-touch with your healthcare providers because…. help is available!

I hope these tips are helpful. While my son did end up turning out to be just fine, I think I would have caused myself less stress and worry had I known these tips during my pregnancy. If you have questions, don't hesitate to reach out to MotherToBaby by phone, text, chat or email.

On behalf of all of us at MotherToBaby, here's to wishing you a happy and healthy holiday!

Top Tips For A Holly Jolly Pregnancy This Season

You may have heard that the Centers for Disease Control and Prevention (CDC) recently recommended a new vaccine for use in the third trimester of pregnancy. Known as Abrysvo™, the vaccine helps protect newborns against severe cases of respiratory syncytial virus (RSV). RSV is the leading cause of infant hospitalization in the United States, with anywhere from 58,000-80,000 hospitalizations occurring each year among children younger than 5. Even more upsetting is that 100-300 children under age 5 die from RSV every year. With these statistics in mind, this new RSV vaccine is exciting news for infants and their families.

Ava, 24 weeks along with her first pregnancy, contacted the MotherToBaby live chat service early one morning with some questions about the new RSV vaccine. First, she wanted to understand how vaccinating a pregnant woman could provide protection for a baby. As a Teratogen Information Specialist, I was happy to answer this question for Ava. I started by explaining that when a person gets vaccinated, their body makes antibodies. These antibodies protect the body against the actual infection if a person is exposed to the virus or bacteria later in life. During pregnancy, the antibodies that a pregnant woman makes after being vaccinated can cross the placenta and pass to the developing baby, providing the newborn with some protection against the infection during the first few months of life.

I went on to explain that although the RSV vaccine is new, the idea of getting a vaccine during pregnancy to protect

the baby (called “passive immunity”) has been around for some time. The Tdap vaccine, which protects against tetanus, diphtheria, and pertussis (whooping cough), has been recommended for use in pregnancy since 2011. Whooping cough is another infection that can be very serious for newborns, so having protection from birth as a result of maternal vaccination is ideal. The flu shot and COVID-19 vaccine can also pass antibodies to the developing baby during pregnancy. This is great news since newborns can’t get their own flu or COVID-19 shots until 6 months of age and need to rely on passive immunity in the meantime.

Next, Ava had a question about ***when*** she should get the RSV vaccine. She had plans to get her flu shot and Tdap vaccine at her next prenatal visit at 28 weeks. She wanted to know if she could get the RSV vaccine at the same time. Although these three vaccines (along with the updated COVID-19 vaccine) can all be given on the same day, the RSV vaccine should be given during a specific timeframe in order to pass as many antibodies as possible to the baby. Experts recommend that the RSV shot be given between 32 and 36 weeks of pregnancy. This allows enough time for RSV antibodies to pass to the baby before delivery.

With this recommendation in mind, Ava decided that her prenatal appointment at 32 weeks would be the perfect time to get the RSV vaccine. She had seen firsthand just how serious RSV can be when her 1-month-old niece was hospitalized with RSV last winter, so she didn’t want to take any chances with forgetting to get the RSV vaccine during her pregnancy.

Before we ended the chat, I mentioned to Ava that there is also a shot called nirsevimab (Beyfortus™) that can be given directly to babies under 8 months of age. Also known as a monoclonal antibody, this shot is another way to protect infants against severe RSV disease. Most babies do not need nirsevimab if their mom received the RSV vaccine during pregnancy. I suggested Ava talk with her healthcare provider about the pros and cons of both options.

Although having to remember to get another vaccine in pregnancy can feel like just one more thing a pregnant woman needs to add to their never-ending to do list, the decision to vaccinate can prevent serious complications from RSV, and possibly even save the baby’s life. Here at MotherToBaby we are happy to go over the current recommendations for vaccines in pregnancy and answer any questions that you may have. Don’t hesitate to call, chat, text, or email with any questions about the RSV vaccine or other exposures during pregnancy. You can also check out our newest fact sheet about this vaccine here https://mothertobaby.org/fact-sheets/respiratory-syncytial-virus-rsv-vaccine-abrysvo/.

References:

Centers for Disease Control and Prevention. 2023. RSV Vaccination for Pregnant Women. Available at: https://www.cdc.gov/vaccines/vpd/rsv/public/pregnancy.html

Centers for Disease Control and Prevention. 2023. RSV Surveillance & Research. Available at: https://www.cdc.gov/rsv/research/index.html

Top Tips For A Holly Jolly Pregnancy This Season

Let's be honest, we live in an era of perfection. Perfect hair, perfect nails, perfect teeth, perfect everything! Nowadays, it seems like almost all the celebrities, and influencers, have some type of work done on their teeth, and it looks great! Makes you want to try it out for yourself. However, these options might not be affordable or available to everyone. I know I wouldn't be able to get those treatments for myself. So, I have settled for teeth whitening products used at home. Because yes, I too want pearly white teeth!

Now, does it matter if I am pregnant or breastfeeding? Which ones are okay to use, the strips, the toothpastes, and/or the blue light therapy? So many options to choose from, right? Before we talk about each of those ingredients, it's important to point out that every pregnancy starts out with a small chance (3-5%) of having a baby with a birth defect, we call this the background risk. Now that we have defined the background risk, when we talk about any possible increased risk for birth defects, we refer to the increased risk above that background risk. Now, let's break it down and take a look at some of these products and their ingredients.

1. Whitening strips

Most teeth whitening products contain various ingredients that are not well studied in pregnancy or lactation. Without good research it's difficult to know whether the ingredients can cause a problem for the developing baby or breastfed infant. However, when the product is used as directed on the teeth (not swallowed) it is unlikely that a significant amount would enter the pregnant woman's system or the breast milk. Let's take a closer look at some of those common ingredients:

- Carbamide peroxide breaks down into urea and hydrogen peroxide when in contact with organic compounds in living tissues.
    - Urea is a chemical formed from protein breakdown and is often used in lotions to improve hydration. Urea is also found naturally in the body and is also part of breast milk. Since the body can excrete large amounts of urea, exposure to small or moderate amounts of urea is not expected to increase the chance of birth defects or cause any adverse effects to the breastfed infant.

    - Hydrogen peroxide is added to cosmetics and personal care products as an antimicrobial ingredient to

inhibit the growth of microorganisms. It also oxidizes stains on the teeth to whiten them. When in contact with your teeth, hydrogen peroxide will break down as a molecule of water and oxygen gas. Because of this, it is not likely to pose any significant chance for birth defects or problems while breastfeeding.

You may also find,

- Sodium Hydroxide. This ingredient is commonly found in industry and home-based products, such as soaps. It is toxic to tissues, and it is not meant to ingest or breathe. When used in dental preparations, they alter the acidity of the mouth for better protection of the teeth. There are no human studies done on sodium hydroxide in pregnancy or breastfeeding. However, due to potential maternal alkalosis (increase in the pH of the body), careful use should be advised in when an individual has kidney problems during pregnancy or while breastfeeding.

- Glycerin is colorless, odorless, and a sweet glycerol (sugar alcohol), used as a lubrication agent in multiple cosmetic products such as toothpaste, shaving cream, and soaps. Glycerin crosses the placenta in small amounts but there are no studies in humans looking at glycerin. However, since data in animals did not show any increase in birth defects, it is not likely that glycerin in tooth whitening would put a pregnancy or breastfed infant at increased chance for problems.

- Menthol is widely used in a variety of products in the cosmetic world as a flavoring and fragrance agent. There are no studies in humans on use of menthol in pregnancy or breastfeeding. However, animal data did not show any increase in birth defects. Therefore, when used in small amounts, it is unlikely to pose any increased chances for birth defects or any other problems during pregnancy or while breastfeeding your baby.

- Carbomer is commonly used as thickening agents and emulsifiers for pharmaceuticals and many other products. Carbomer is added to teeth whitening strips as a thickener and usually found in small amounts in some products. Because of the large molecular size of carbomer and the small amount used in these products, it would be unlikely to cause problems during pregnancy or enter the breast milk in amounts that are of concern for a breastfeeding baby.

2. Whitening toothpastes

Majority of these toothpastes contain:

- Sodium Monofluorophosphate (MFP), a sodium salt commonly used to increase the amount of fluoride incorporated into the enamel which can help prevent cavities. No research has been done during pregnancy; it is unknown if it causes problems for the baby. Sodium Monofluorophosphate can potentially cause adverse

effects if ingested, its use should be monitored closely during pregnancy and while breastfeeding your baby.

- Sodium fluoride is a colorless or white powder that dissolves in liquid. Sodium fluoride is mostly used for prevention of dental cavities, to polish the teeth, and reduce oral odor. Sodium fluoride can be found in drinking water. Ingestion of these ingredients in excessive amounts during pregnancy could lead to impaired development of the baby's teeth. Sodium fluoride gets into the breastmilk in small amounts, and it is not expected to cause adverse effects to the breast-fed infant.

3. Blue (LED) Light Therapy

This therapy is often used to treat acne and sun damage. This therapy will only work in areas where the light reaches, and it usually needs a combination of photosynthesizing drugs to activate the ingredients and help whiten the teeth. This blue (LED) light therapy is used with gels or strips containing some of the ingredients above. Some may contain ingredients we have not reviewed above. There is limited research on the use of blue light therapy during pregnancy or breastfeeding and the risk of birth defects or other pregnancy problems are unknown. However, the light itself is not expected to increase the risk of birth defects or pose any adverse effects to the breastfed infant.

4. Other ingredients commonly used:

- Herbals are not regulated by the Food and Drug Administration (FDA). Therefore, we are never sure what is in the product, and there is not enough information to evaluate possible risk to a developing baby or breastfed infant. For more information about herbals and supplements during pregnancy or breastfeeding, please refer to our fact sheet at: https://mothertobaby.org/fact-sheets/herbal-products-pregnancy/.

- Alcohol should be avoided completely during pregnancy. It has been established that there is no known amount or type of alcohol that is okay to consume during pregnancy. However, using a teeth whitener with alcohol is not expected to result in a significant amount getting in your bloodstream or the breast milk since the product is applied topically. Do not swallow or drink any of these products and use as directed on the package. If desired, you can select an alcohol-free product. To read more about alcohol during pregnancy and while breastfeeding, please refer to our Fact Sheet at: https://mothertobaby.org/fact-sheets/alcohol-pregnancy/ .

If you are interested in learning more about other products and their individual ingredients, make sure to contact the experts at MotherToBaby.

And remember, it is important to feel good in your own skin but, if you are leaning towards getting your teeth whitened, here are some tips to think about before buying any product.

- Look for non-alcohol based products.

- Use the product as directed, do not swallow it, and do not exceed the time listed on the package.
- Contact the experts at MotherToBaby.org with your questions.

Top Tips For A Holly Jolly Pregnancy This Season

Sara contacted us on the MotherToBaby live chat service after being referred by her OB/GYN who had told her that the Paxil (drug name paroxetine) she was taking could cause a heart defect. She was 14 weeks along and wanted to learn more, but was confused because all her genetic testing results had come back normal. She asked: “How could my baby have a heart defect if my non-invasive prenatal testing (NIPT) was negative?”

During pregnancy, there are many tests done to check on the health and development of your baby. It can be difficult to keep track of what they are all looking for and why they are important. To understand these tests, it can be helpful to know the differences between a birth defect and a chromosomal abnormality and what they each mean for the health of your baby.

All pregnancies have a background risk for birth defects of 3-5%, but certain exposures can increase the risk of birth defects above this background estimate. Most birth defects occur during the first trimester while the baby is growing and developing. A certain body part – such as the heart, brain, or limbs – might not develop correctly, and the baby’s body may look or function differently than it should. You may have heard of a baby being born with a hole in the heart,

or with something called a cleft lip. These are two examples of birth defects that can occur during pregnancy. Birth defects can range from mild to severe, and the health of the baby will be dependent on where the birth defect occurs and how severe the problem is.

Certain tests done during pregnancy can look at your baby to see if there are birth defects. For example, most pregnant individuals will go in for an anatomy scan between 18 and 22 weeks where the healthcare provider will look at the baby using an ultrasound. Most people know this as the time when they can learn the gender of the baby, but the ultrasound will also take a detailed look at the baby's organs and body parts, including the heart, brain, face, and stomach, to check for birth defects. While this is an important screening test, it is not perfect, and more minor defects may go unnoticed until birth.

Chromosomal abnormalities are changes in the baby's DNA that happen at the time of conception. The best way to understand DNA is to think of it like a recipe book that holds all the recipes for the growth and development of different body parts. If a certain recipe calls for one stick of butter, but the printed book accidentally says two sticks of butter, the recipe will turn out different. In the same way, sometimes people have extra or missing amounts of DNA that can cause changes in development. For example, people who have a chromosomal abnormality known as Down syndrome have three copies of their 21st chromosome rather than only two. This extra amount of DNA is what causes the developmental differences in individuals with Down syndrome.

During your pregnancy, your healthcare provider may suggest that you meet with a genetic counselor to have non-invasive prenatal testing, or NIPT, performed. This test can be done as early as 10 weeks. During pregnancy, some of the baby's DNA enters the pregnant woman's bloodstream. By taking a small blood sample from mom, a lab can take a look at the baby's DNA and tell if they have certain chromosomal abnormalities, such as Down syndrome. When you meet with a genetic counselor, they will go over all of the pros and cons of this test as well as your family history, and will meet with you again to review the results.

Back on the live chat service, Sara asked: "So because my NIPT results were normal, the baby is unlikely to have a chromosomal abnormality. However, a birth defect still could have happened in the first trimester, and I need to wait until my anatomy scan to get those results, is that right?" That's exactly right, I replied. I then went on to explain that although Paxil (paroxetine) has been shown to increase the risk for heart defects in some studies, other studies do not suggest a risk, so the overall chance of the baby being affected is low.

As we ended our chat, Sara shared that she was feeling much more knowledgeable about the difference between a birth defect and a chromosomal abnormality. She was able to breathe a sigh of relief that her NIPT results came back normal, indicating a low risk for conditions like Down syndrome. She also felt much more confident heading to her anatomy scan in a few weeks knowing that this test, while not perfect, would be the best way to identify birth defects before her baby is born.

If you have any questions about birth defects or exposures during pregnancy, speak with a MotherToBaby specialist via phone, text, live chat, or email. For any questions regarding genetic testing in pregnancy, or to find a genetic counselor in your area, visit the Find a Genetic Counselor page on the National Society of Genetic Counselors website: https://findageneticcounselor.nsgc.org/

Top Tips For A Holly Jolly Pregnancy This Season

By: Kirstie Perrotta, MPH and Becky Spencer, PhD, APRN, PMHNP-BC, IBCLC, PMH-C, FILCA

Shannon was newly pregnant and had been referred to MotherToBaby by her doctor. She was taking 50 mg of sertraline per day for general anxiety and her doctor thought that she may need to wean off the medication now that she was 5 weeks pregnant. Shannon had been taking the medication for 3 years and was feeling great on her current dose, so she had some concerns about this plan. On the MotherToBaby website's live chat service, Shannon was connected with me, a teratogen information specialist, where she asked "Do I really need to stop my anxiety medication, or could I just continue on a lower dose?"

I started by addressing the importance of weighing the risks vs. benefits of taking any mental health medication during pregnancy. Sertraline is very well studied and has not been associated with a risk for birth defects, but does have the potential to cause neonatal adaptation syndrome or withdrawal approximately 10-30% of the time and persistent pulmonary hypertension in less than 1% of exposed infants. On the other hand, we know that untreated anxiety can also cause problems for the pregnancy, including an increased risk for preterm delivery. For many patients, the benefits of staying on a medication like sertraline outweigh the potential risks, but each case is unique and ultimately the patient needs to decide what they are most comfortable with.

Getting to Shannon's next question about dose, I shared that although many pregnant women feel they need to decrease their dose once they get a positive pregnancy test, the opposite is in fact true. During pregnancy, there are many changes that occur including weight gain, increased blood volume and enlargement of the kidneys. On the outside, things won't look much different, but research shows these changes happen soon after conception. This means that medication doses that previously worked well to control a condition become "diluted," in a sense, and may not be as effective. In some cases, women need to actually increase their dose to continue to control the disease.

To learn more about how bodily changes during pregnancy impact medication dosing, we turn to Becky Spencer, PhD, APRN, PMHNP-BC, IBCLC, PMH-C, a psychiatric nurse practitioner who specializes in perinatal mental health at Texas Women's University with some more questions about this fascinating phenomenon.

Q. Can you tell us a little more about what is happening in the body during pregnancy and why medications become less effective?

Becky Spencer: You are correct, Kirstie, that pregnancy has a significant impact on drug absorption, which is how a drug is transported into the bloodstream, drug distribution, which is the disbursement of a drug as it moves through the blood and tissues of the body, and drug metabolism, which is the process by which the body breaks down and eliminates drugs or other substances. During pregnancy, especially later in pregnancy, drug absorption from the stomach into the bloodstream is decreased due to slower gastric emptying and slower movement of the bowel and colon, so it can take longer for a medication to be absorbed and get to work.

A pregnant woman's blood volume almost doubles during pregnancy which impacts drug distribution. With the dilution effect there is a lower concentration of medication in the blood plasma which results in less medication reaching the target tissues. Most drugs are metabolized in the liver or kidneys. During pregnancy, the increased blood flow to the kidneys results in an increased glomerular filtration rate (GFR), which means that medications are cleared from the bloodstream quicker, meaning the drug stays in the body less time. Similarly, hormone levels increase during pregnancy which increases the activity of various metabolic enzymes in the liver that metabolize drugs. When the liver metabolizes a drug more quickly there is less drug that reaches the target tissues.

What these changes mean for pregnant women who take medication for mood and anxiety disorders is that the dose of medication that they were taking before pregnancy may have a decreased effect during pregnancy, because the biological changes effectively decrease the amount of medication reaching the target tissues, in this case, the brain. Pregnant women may have an increase in mood and anxiety symptoms that they interpret as a worsening condition when, in fact, the decrease in circulating medication is the cause for an increase in symptoms.

Q. In your practice, how often do you see women increasing their mood medication dose? Does the dose need to be increased substantially?

Becky Spencer: That is a great question. The answer is that it depends on the type of medication, the specific condition (depression, anxiety, obsessive compulsive disorder, bipolar, etc.), and the severity of symptoms. Psychiatric providers typically increase medication dosages in gradual amounts until the patient has symptom relief or desired therapeutic effect. If a patient is experiencing a partial response to a medication (some improvement in mood and anxiety symptoms) best practice is to increase the dose of that medication before considering adding an additional medication.

Another question that I hear is whether or not dosages of medication should be based on achieving a specific blood plasma concentration level. The short answer is, for most medications, no. We don't routinely check blood plasma concentrations of most antidepressants because valid and reliable therapeutic plasma concentration ranges do not exist. Some mood stabilizing medications like valproate or lithium do require blood plasma monitoring both during pregnancy and outside of pregnancy. Euthymia, or stable mood, is the goal of medication dose adjustments for mood and anxiety disorders during pregnancy.

Q. What about after delivery? Does the dose need to be decreased right away?

Becky Spencer: It depends on the type of medication, and, to some extent, the symptoms that the patient is experiencing. The postpartum period is a vulnerable time for mood and anxiety disorders for several reasons including the significant hormonal shift that occurs after birth, lack of sleep, role adjustment to caring for a baby, and for some new parents, lack of necessary social and emotional support. Decreasing antidepressants too quickly after birth could exacerbate mood and anxiety symptoms during that very vulnerable time. The decision to decrease dosages of any medication prescribed for mood and anxiety disorders should be a collaborative decision between the patient and the provider. If decreasing mediation dose is desirable, it should occur gradually and any change in mood and anxiety symptoms should be reported to the provider. The one exception to this rule is for patients taking lithium. If lithium dosages were increased during pregnancy, they must be decreased to pre-pregnancy dosages after delivery.

Q. Shannon is asking about sertraline, an anti-anxiety medication, but are there other drugs that women need to also increase their dose of during pregnancy?

Becky Spencer: Any medications used to treat mood and anxiety disorders, including antidepressants, mood stabilizers, antipsychotics, and anti-anxiety medications, may need dose increases during pregnancy. The most important point is for pregnant women to monitor their mood and anxiety symptoms and report them to their provider. The decision to increase doses of medication should always be a collaborative decision between the patient and the healthcare prescriber.

Q. How should patients approach this conversation with their healthcare provider?

Becky Spencer: The decision to take any medication during pregnancy must be based on a discussion between healthcare providers and patients that takes into consideration the available research on the risks of specific medications AND the risks of untreated or undertreated mental conditions for both the pregnant woman and the baby. The risks of not treating mood and anxiety disorders during pregnancy are well documented and significant. Untreated or undertreated mood and anxiety disorders during pregnancy are associated with hypertension, preterm delivery, low birth weight, and long-term negative impacts on motor and cognitive development of the baby. Mental health conditions are the leading cause of maternal mortality in the United States. Effective treatment for mood and anxiety disorders in the perinatal period will literally save lives.

My top three tips for having a discussion with healthcare providers about medications for mood and anxiety disorders in the perinatal period include:

- Make an appointment with a psychiatric provider who specializes in perinatal mood and anxiety disorders or reproductive psychiatry. The provider directory on the Postpartum Support International website is a great place to find specialists in your state, and many provide telehealth services.

- If your obstetric provider is hesitant to treat your mood and anxiety symptoms, recommend that they make an appointment to speak with a psychiatric provider who specializes in treatment of perinatal mood and anxiety disorders during pregnancy at the Postpartum Support International Psychiatric Consult Line. This free service is staffed by perinatal psychiatrists who are available to share their skills and expertise and provide guidance to fellow medical professionals on prescribing medications during pregnancy and lactation.

- MotherToBaby Fact Sheets are an excellent resource and a great way to start a conversation with your provider about specific medications for mental health during pregnancy and lactation. I recommend that pregnant and lactating women who are taking medications for mood and anxiety disorders access and print out the MotherToBaby Fact Sheets for the medications that they are taking or are interested in learning more about, read them, jot down questions, and take them to their obstetric and/or psychiatric providers to start the conversation. Remember that you are your own best advocate for you and your baby's health.

Thanks so much for sharing your insight, Becky. It's always great to learn more about this topic.

Ultimately, Shannon decided to stick with her current dose for the first few weeks of pregnancy and make an appointment with her psychiatrist to discuss increasing her dose in a few weeks. In the meantime, she was planning to monitor her mood to make sure the anxiety remained well controlled.

If you have questions about mental health medications, dose, or any other exposures in pregnancy or lactation, please feel free to reach out to a MotherToBaby specialist via phone, chat, text, or email for more information. Additionally, you can visit our Mental Health Resource Hub to access fact sheets, blogs, and podcasts on mental health conditions and the medications used to treat them during pregnancy and breastfeeding.

References:

- Cook, N., Ayers, S., & Horsch, A. (2018). Maternal posttraumatic stress disorder during the perinatal period and child outcomes: A systematic review. ***Journal of Affective Disorders, 225***, 18–31. doi:10.1016/j.jad.2017.07.045
- Davenport, M. H., Meyer, S., Meah, V. L., Strynadka, M. C., & Khurana, R. (2020). Moms Are Not OK: COVID-19 and Maternal Mental Health. ***Frontiers in Global Women's Health***, 1. doi:10.3389/fgwh.2020.00001
- Deligiannidis, K. M., Byatt, N., & Freeman, M. P. (2014). Pharmacotherapy for mood disorders in pregnancy: a review of pharmacokinetic changes and clinical recommendations for therapeutic drug monitoring. ***Journal of Clinical Psychopharmacology***, ***34***(2), 244-255. doi: 10.1097/JCP.0000000000000087
- Grigoriadis, S., Graves, L., Peer, M., Mamisashvili, L., Tomlinson, G., Vigod, S. N.... Richter, M. (2018). Maternal Anxiety During Pregnancy and the Association with Adverse Perinatal Outcomes. ***The Journal of Clinical Psychiatry***, 79(5). doi:10.4088/jcp.17r12011
- Hussein W, Lafayette RA. Renal function in normal and disordered pregnancy. Curr Opin Nephrol Hypertens. 2014 Jan;23(1):46-53. doi: 10.1097/01.mnh.0000436545.94132.52. PMID: 24247824; PMCID: PMC4117802.
- Hutner, L. A., Catapano, L. A., Nagle-Yang, S. M., Williams, K. E., & Osborne, L. M. (Eds.). (2021). ***Textbook of women's reproductive mental health***. American Psychiatric Pub.
- Prakash, C., & Nagle-Yang, S. (2019). Postpartum psychosis: Protecting mother and infant. ***Current Psychiatry***, ***18***(4), 12-21.
- Rusner, M., Berg, M., & Begley, C. (2016). Bipolar disorder in pregnancy and childbirth: a systematic review of outcomes. BMC Pregnancy and Childbirth, 16(1). doi:10.1186/s12884-016-1127-1
- Sachdeva P, Patel BG, Patel BK. Drug use in pregnancy; a point to ponder! Indian J Pharm Sci. 2009 Jan;71(1):1-7. doi: 10.4103/0250-474X.51941. PMID: 20177448; PMCID: PMC2810038.
- Shay, M., MacKinnon, A. L., Metcalfe, A., Giesbrecht, G., Campbell, T., Nerenberg, K. ... Tomfohr-Madsen, L.

(2020). Depressed mood and anxiety as risk factors for hypertensive disorders of pregnancy: a systematic review and meta-analysis. ***Psychological Medicine***, 50(13), 2128–2140. doi:10.1017/s0033291720003062

- Slomian, J., Honvo, G., Emonts, P., Reginster, J.-Y., & Bruyère, O. (2019).

- Consequences of maternal postpartum depression: A systematic review of maternal and infant outcomes. ***Women's Health, 15***, 174550651984404. doi:10.1177/1745506519844044

- Trost, S. L., Beauregard, J. L., Chandra, G., Njie, F., Berry, J., Harvey, A., Goodman, D. (2023). Pregnancy-Related Deaths: Maternal Mortality Review Committees in 36 states, 2017–19. https://www.cdc.gov/reproductivehealth/maternal-mortality/erase-mm/data-mmrc.html