Erin Welsh

We want to start with a disclaimer that throughout this series, we feature explanations and stories that include some heavy material, including early pregnancy loss, stillbirth, and other traumatic experiences of pregnancy, childbirth, and the postpartum period.

Anonymous

There's a lot I could say about the physical difficulty of carrying a baby, but I'm going to focus on the postpartum because that was what was most surprising and unsettling to me. Throughout my pregnancy I always expected that I would start kind of falling in love with the baby. Like I always heard people saying I'm already so in love with you, all those social media posts and what people are talking about. And I never really felt an attachment. But I was especially promised that when you give birth, it's the happiest day of your life. You look down at the baby and you love them instantly more and it's a different love than you've ever experienced before. And so after 3 days of pre-labor and then 15 hours of labor, I gave birth and the baby was put on my chest and I just felt this kind of heartbreaking missed step feeling because it felt the same as it always had. There was no immediate love. There was a baby on my chest and that was it.

And then in the hospital I kind of was feeling like I have no idea how to take care of this baby. There was kind of this helplessness. I couldn't feed it, he wasn't latching. I could hardly stand myself, like I needed help getting to the bathroom. I couldn't sit up, I didn't change into clothes. I just felt like very sick. And when the nurse came with the wheelchair and was going to wheel us out, I was like how the heck am I going to go home and take care of this baby? I have no idea and I don't even love it. Like does anyone know around me that I don't love this baby and that I don't know how to take care of it? And my husband drove us home and I walked into the house and it was even actually when we pulled into the garage, there was this immediate sense of everything around me looks different than it did. Nothing looks familiar. It's like we drove into this kind of parallel universe that I'd never lived in before and it was very unsettling. And my parents were there and everyone was so happy and I was like something feels so off to me.

And then my husband went to take the dog for a walk cause we'd been gone for three days and I felt a panic inside me. And I left the baby with my parents and I went into my bedroom and I cried because I didn't want to be without my husband. He was the only person who knew what I'd been through the last three days. So then I had this kind of like vague feeling of desolation for a long time and I would cry for hours at a time at night and I just kind of never really felt happy. I was always just kind of leaning towards depression I guess. And I'd never experienced depression before so I didn't recognize it. It just felt like homesickness, like this nagging sense of homesickness that intensified or dulled but never went away. And the scariest part was when my in-laws visited and my parents also visited and they were taking turns carrying the baby all day.

And when they finally gave him back to me after maybe an hour, I looked down and I didn't recognize my baby. And it could have been any baby. I had had him for 2 weeks, he was 2 weeks old and I didn't know who he was. They could have swapped him out and I would have had no idea and I started sobbing. I told my husband right away and he googled 'mother can't recognize baby' and I watched him google that and it was so heartbreaking. And I came up with this kind of soothing exercise where because my son's face didn't look familiar to me, I kind of broke it down into pieces and I would say like there's his mouth, there's his eyes, there's his nose, there's his ears. And I would memorize them in pieces. And from then on whenever I held him, I would go over and recognize each of those small pieces until they looked familiar to me. To this day, I don't know if it was like mild psychosis or depression. By the time I went to the doctor six weeks later, it had, I mean I was still sad and should have been treated with depression but it wasn't so startling that the doctors picked up on it and I didn't know how to report it myself because I didn't know what to recognize.

	I wish that I had seen a doctor way earlier but it wasn't required and I didn't know to ask for it. And I wish that I had been treated because that dull sadness probably stuck around for 6 months and if there had been earlier intervention, I think I would have had a much more enjoyable early motherhood experience. I also told my husband that I didn't love the baby as much as I loved him and that that seemed wrong to me. And he assured me that I've known my husband for 10 years, so it kind of made sense that I would love him more than somebody that I'd only known for two weeks. It probably took a year for me until I had the solid bond that I was expecting to have right away. And I wish that other women knew that sometimes it's just a bond that has to build as you get to know people. And now my son is 6 and I couldn't possibly love him more.
TPWKY	(This Podcast Will Kill You intro theme)
Erin Welsh	It has been so incredible to hear everyone's stories and we really can't thank everyone enough for sharing your stories with us.
Erin Allmann Updyke	Yeah.
Erin Welsh	We read hundreds of firsthand accounts.
Erin Allmann Updyke	Yeah.
Erin Welsh	And it truly is such an honor and it feels so... I can't, it feels surreal.
Erin Allmann Updyke	Yeah.
Erin Welsh	It's amazing. So thank you to each and every one of you who wrote in and who shared your stories.
Erin Allmann Updyke	Yeah. We tried so hard to include as many different stories from as many different perspectives and experiences of pregnancy and childbirth and the postpartum period as we could. And we know that as many as we included, there's so many that we didn't.
Erin Welsh	Yeah.
Erin Allmann Updyke	And we just want to thank you all again from the bottom of our hearts. We really, really appreciate it. It means the world to us and this podcast would not be the same without all of you. So thank you.
Erin Welsh	Absolutely not, yeah.
Erin Allmann Updyke	Yeah.
Erin Welsh	It's such an integral part. It's amazing.
Erin Allmann Updyke	It is, yeah.
Erin Welsh	Hi, I'm Erin Welsh.
Erin Allmann Updyke	And I'm Erin Allmann Updyke.

Erin Welsh	And this is This Podcast Will Kill You.
Erin Allmann Updyke	We are coming to you with the fourth and final, for now, episode in our series on pregnancy.
Erin Welsh	Yeah, for now. I mean to be continued, truly.
Erin Allmann Updyke	To be continued.
Erin Welsh	Yeah.
Erin Allmann Updyke	But this is our (trumpeting) season finale!
Erin Welsh	That was lovely.
Erin Allmann Updyke	Thank you. I did a drum even though it was more like a trumpet.
Erin Welsh	Yeah, no, I liked it.
Erin Allmann Updyke	Thank you.
Erin Welsh	It was a really nice touch.
Erin Allmann Updyke	Yeah. It's also our last episode recording in the Exactly Right studios. So thank you guys for having us here.
Erin Welsh	Yes.
Erin Allmann Updyke	We're having too much fun.
Erin Welsh	We are having too much fun.
Erin Allmann Updyke	Yeah.
Erin Welsh	Too much fun? No such thing. We're just relaxing.
Erin Allmann Updyke	That's been the joke all morning. If you listen to the first couple episodes, you get it.
Erin Welsh	Oh my god, okay.
Erin Allmann Updyke	Okay.
Erin Welsh	We still have an intro to get through.
Erin Allmann Updyke	We do, we do. We have some things to discuss.
Erin Welsh	Yes.

Erin Allmann Updyke	If you've listened to the other episodes, you've heard these before this before.
Erin Welsh	You've heard this before. Yeah, we want to just sort of briefly go through again what we've already covered in the first three episodes, what we're going to be covering in this episode, talk about some of the language that we'll be using and our goals overall with creating this series. And so we decided, like we have said, early on to dedicate four episodes to pregnancy, one for each trimester. Clearly not enough to actually cover this huge experience that is pregnancy, childbirth, and the postpartum period.
Erin Allmann Updyke	Yeah.
Erin Welsh	And so if you are like hey, I really want to hear more about this, I want to learn about this aspect, what about this? Send in your questions, send in your topic ideas. We are happy to have them.
Erin Allmann Updyke	Yeah.
Erin Welsh	This will not be the last episode on anything related to pregnancy.
Erin Allmann Updyke	No.
Erin Welsh	So yeah.
Erin Allmann Updyke	We've got more to go.
Erin Welsh	So, so much more.
Erin Allmann Updyke	We know that we haven't answered all of your questions, we still have this episode to try but we definitely have not covered every possible experience that a person could have during pregnancy, childbirth, and beyond because pregnancy is such an individual experience. So each episode that we have done thus far has covered roughly a trimester of pregnancy. So in our very first episode we talked about how you even know whether or not you're pregnant and what happens during early development.
Erin Welsh	The second episode we talked a lot about the placenta.
Erin Allmann Updyke	Yeah we did.
Erin Welsh	What an incredible organ that is.
Erin Allmann Updyke	So fun.
Erin Welsh	And we also talked about the physiological changes and anatomical changes that someone experiences throughout pregnancy and we touched on some of the complications that can arise.
Erin Allmann Updyke	Last episode last week we talked all about the process of childbirth itself.
Erin Welsh	Yeah.

Erin Allmann Updyke	All the different ways that you can do it.
Erin Welsh	Yeah.
Erin Allmann Updyke	A little bit about labor and modes of delivery and then the history of the cesarean section.
Erin Welsh	A lot about C-sections, yeah.
Erin Allmann Updyke	It wasn't Julius Caesar, y'all.
Erin Welsh	No.
Erin Allmann Updyke	Yeah.
Erin Welsh	Tune into episode three to find out more. And finally today our fourth episode, our final episode of the pregnancy series and our final episode of Season 7 will be about the concept of the 4th trimester.
Erin Allmann Updyke	Yes.
Erin Welsh	Talking about what changes are going on in your body after pregnancy. And we're also going to be talking about this big picture of how the medicalization of pregnancy and childbirth changed that experience and how we moved from home to hospital and some of the consequences of that.
Erin Allmann Updyke	Yes. I'm excited for this episode, Erin.
Erin Welsh	Me too.
Erin Allmann Updyke	We have intended for this pregnancy series, as with all of our episodes honestly, to be inclusive of all families. And we recognize that not everybody who experiences pregnancy identifies as a woman. So we try wherever we can to use gender neutral language and discuss pregnant people. At the same time we know that a lot of what we discuss, especially when it comes to medical bias during pregnancy and childbirth historically and today is a result of gender discrimination and racism. And so in those contexts, we use the term 'woman' or 'women' and throughout these episodes we also use the term 'mother' or 'maternal' and 'paternal' since these are the terms that are often used in the scientific and medical literature.
Erin Welsh	Yes. And we also want to just recognize that there is no such thing as a normal pregnancy. There's no this is what is going to happen and this is normal and that's it.
Erin Allmann Updyke	The only way that it can go.
Erin Welsh	The only way. There are so many different ways it can go.
Erin Allmann Updyke	Hopefully we've gone over that a lot in these episodes.
Erin Welsh	But it is really important in discussing a baseline of what is expected to happen-
Erin Allmann Updyke	Yeah.

Erin Welsh	So that we can understand what happens when things happen outside of those expectations and some of the complications that can happen as a result.
Erin Allmann Updyke	Yeah. Right.
Erin Welsh	Even defining what a complication is.
Erin Allmann Updyke	Exactly. Exactly. And we're going to do that today for the postpartum period.
Erin Welsh	We are, we are. But first-
Erin Allmann Updyke	It's quarantini time.
Erin Welsh	I remembered it this time. It's quarantini time. Erin, what are we drinking again this week?
Erin Allmann Updyke	We're drinking yet again Great Expectations.
Erin Welsh	Great Expectations.
Erin Allmann Updyke	Which is a placeborita.
Erin Welsh	Yes it is.
Erin Allmann Updyke	That is a non-alcoholic bev.
Erin Welsh	It's really good. It's got ginger ale, it's got muddled blackberries and mint. It's got lemon juice.
Erin Allmann Updyke	It is shockingly delicious.
Erin Welsh	It's very good.
Erin Allmann Updyke	Very refreshing.
Erin Welsh	Yeah, super refreshing. I love it. I'm thinking of it right now.
Erin Allmann Updyke	Me too. Wish I actually had one but alas.
Erin Welsh	Later today.
Erin Allmann Updyke	Yes! If you want to see us make it, we made a really fun quarantini video that you can find on the YouTube.
Erin Welsh	YouTube.
Erin Allmann Updyke	YouTube. We also were very honored to be joined by Georgia Hardstark who made us a quarantini, an alcoholic version to go along with these episodes. She called it the Auntini.
Erin Welsh	The Auntini. It's so great.

Erin Allmann Updyke	And it's delicious.
Erin Welsh	Yes.
Erin Allmann Updyke	And you can find that video on YouTube as well.
Erin Welsh	YouTube. And you can also find, I don't know if we have said this enough but you can find these episodes on YouTube.
Erin Allmann Updyke	These pregnancy episodes.
Erin Welsh	These pregnancy episodes, yeah.
Erin Allmann Updyke	With video.
Erin Welsh	With video.
Erin Allmann Updyke	And props.
Erin Welsh	And props. We're doing great today. And if you would like the recipes for these quarantini and placeborita for this series, check out also our social media. Make sure you're following us. We're now on Bluesky, I don't know if we've said that. Sure. And also our website thispodcastwillkillyou.com which features... Do you want me to do this one?
Erin Allmann Updyke	Listen, let's skip it today.
Erin Welsh	Okay.
Erin Allmann Updyke	Check out our website.
Erin Welsh	Transcripts.
Erin Allmann Updyke	Okay.
Erin Welsh	I just have to throw that in.
Erin Allmann Updyke	Okay.
Erin Welsh	Any more business?
Erin Allmann Updyke	Rate, review, and subscribe. We love you. Thanks for listening. Let's dig in.
Erin Welsh	We'll be back soon with a new season.
Erin Allmann Updyke	Yes.
Erin Welsh	And we have so... Like send us your ideas along the way, we are so excited to dig more into the world of health, medicine, disease, biology, evolution, ecology, epidemiology.

Erin Allmann Updyke	Literally like after we stop this, we already have a list of things that we're like okay, so next season. So like-
Erin Welsh	Air quality index.
Erin Allmann Updyke	Yes. Thank you, Kenton.
Erin Welsh	I'm obsessed, yeah. Thank you, Kenton. Okay.
Erin Allmann Updyke	Okay.
Erin Welsh	Let's begin?
Erin Allmann Updyke	Now? Let us. After a break.
TPWKY	(transition theme)
Anonymous	I found out I was pregnant on New Year's Day 2024. I was 33 and this would be my second baby. My pregnancy was relatively uneventful and actually a little easier than my first but both were low risk. I went into labor naturally at 39 weeks and went to the hospital. To help things along, my midwife broke my water manually. I felt a huge gush and things really intensified from there. At this point my memory is a little blurry but I do remember feeling more big gushes when I had contractions. I pushed for about an hour and then my daughter was born. When the midwives went to place her on my chest, they discovered that the cord was very short. They could only set her on my belly, under my belly button. I asked them to go ahead and cut the cord so that I could hold her on my chest instead. I got to hold her for maybe a minute and take some pictures before things started to go downhill.
	I was trying to nurse her and then I started to feel very weak. I yelled out for someone to take the baby because I thought I would drop her. I had been distracted but then I realized I still hadn't delivered the placenta. My midwives sprang to action and told me we needed to deliver it immediately. As soon as I pushed it out, I felt a huge gush. My first thought was that it was amniotic fluid because it felt like when my water was broken. But then I realized all that fluid had already been delivered with baby. And I said, was that blood? I looked at the midwife who had been standing between my legs and she was splattered with blood head to toe like she'd been sprayed with a hose. From there, everything was chaos. All of a sudden there were a lot of people in the room.
	The midwives were vigorously massaging my belly but my uterus wasn't contracting and I was bleeding out. I was given multiple drugs via different routes at the same time. One of these was Cytotec, also known as misoprostol. This drug is talked about a lot as it is the second step in a medication abortion but it is also used to help stop postpartum hemorrhage in labor and delivery. The hospital OB and my midwives were working frantically on me for about an hour to try to stop the bleeding. My husband was doing skin to skin with the baby. I remember thinking that my great grandmother had died from a postpartum hemorrhage. I asked one of the nurses if I was going to be okay and all she said was we are doing everything we can.

	They tried using an intrauterine balloon device to apply pressure from within. Unfortunately, it got clogged with clots and didn't work for me. Staff was scooping up blood and clots off of the bed and floor and weighing it to see how much I lost. Ultimately they said I lost about 2-3 liters and I was given 2 liters via transfusion. Eventually my uterus did contract and they were able to stitch me up. The other day I was looking back at those photos when I was holding my baby and I can see that my face has a weird gray cast to it. I'm so glad that I delivered in a hospital that had all of the best medications and resources available to stop the hemorrhage. If I hadn't, the outcome could have been very different.
Dawn	My name is Dawn and I live in Texas. In my mid-30s I became pregnant with my second child. My then husband and I were thrilled after having such joy from our first one. At my first prenatal appointment everything seemed fine. My vitals were good and we were able to detect a heartbeat. Since my first pregnancy was uneventful, I assumed this one would be similar. One thing that was very different about this pregnancy was the nausea, although I had had nausea with my first pregnancy. This one was much more intense. I felt awful most of the time and struggled to do normal things. Nothing seemed to help. At my second prenatal appointment, the midwife was unable to detect a heartbeat. She did an in-office ultrasound and confirmed the fetus was no longer alive. I don't believe any other information was gleaned from the ultrasound. My midwife suggested that I have a D&C soon. We were of course devastated to have lost a baby.
	Shortly after the D&C, the midwife contacted me and asked me to come back into the office. In the appointment she told me that pathology done on the placenta or fetal tissue had come back with some concerning results, which was that I had had a molar pregnancy. I had never heard of this diagnosis. She told me that I would need to come in for regular blood testing to be sure pregnancy hormone levels in my blood were steadily decreasing. After the appointment, I talked to my aunt who was an OBGYN nurse. She gave me the highlights of a molar pregnancy and of course I googled on my own after talking to my aunt. My basic understanding was that a molar pregnancy is an unusual non-viable pregnancy that can sometimes develop into cancer if all the abnormal cells are not removed. Years afterwards, my aunt told me she was very concerned for me.
	While the intense nausea remained for a few weeks after the D&C, my pregnancy hormone levels did steadily decline and after some time I was fortunate to have a third pregnancy that resulted in a healthy baby boy. Since I live in Texas, I do want to mention that I'm not sure if the D&C my midwife recommended would be possible now with the unprecedented removal of women's reproductive rights.
TPWKY	(transition theme)
Erin Welsh	Last week I took us through the history of cesarean sections, a procedure that has been used in some capacity since at least ancient times but one that physicians weren't able to widely utilize until the 20th century when antibiotics, antisepsis, transfusions, and surgical technique transformed it from an almost certain death sentence to a life saving tool. And we discussed how the high rates of C-sections have led people to question whether the surgery, life saving though it may be, is overused and what possible consequences might arise as a result. So for many, high rates of C-sections represent sort of this dark side of the medicalization of pregnancy and childbirth where medical intervention is seen as always necessary and women aren't trusted to give birth.

	This of course is not the complete picture. Because ultimately as childbirth moved from the home to hospitals, rates of maternal and perinatal mortality declined as medicine developed methods to manage the complications that in previous centuries may have resulted in tragedy. But this rosy picture of modern medicine marching onwards with doctors saving the day, that really fails to capture the inevitable and often overlooked cost of progress. What did we leave behind when we moved from the home to the hospital? So today I want to take this big picture view of how childbirth has changed over the centuries, exploring some of the factors that have underlaid those changes. And ultimately I want to kind of just think about this question of how can we use the past to ensure a better future?
	Before I dig in, I want to shout out a few of the major sources that I used to put this together. There was a book called 'Brought to Bed' by Judith Walzer Leavitt about childbirth in America from 1750-1950. The title sounds somewhat dry, it is one of the most fascinating books I have ever read, very enlightening.
Erin Allmann Updyke	Okay.
Erin Welsh	The book 'A Midwife's Tale' by Laurel Thatcher Ulrich which is so good. Oh my gosh, this is the excellent history book about the life of midwife Martha Ballard. The snippets, it's such... I love this book, I could talk about this forever. But the way that it approaches history is fascinating because it takes like here's a segment, here's a month in her life, now let's think about how marriage laws in Massachusetts. Or not in Massachusetts, in Maine in the late 1700s.
Erin Allmann Updyke	Okay. So like all the context of what was happening.
Erin Welsh	Yes!
Erin Allmann Updyke	Oh how interesting.
Erin Welsh	Yeah. It's so good. Not to mention like the aspects of midwifery and childbirth and so on.
Erin Allmann Updyke	Right. Okay.
Erin Welsh	Another book, I use snippets of a book called 'The Midwife Said Fear Not' which is about the history of midwifery in the US up through today. That one is by Helen Varney and Joyce E. Thompson. And then finally there's a book 'Blue' by Rachel Moran, not our our friend Rachel Moran-
Erin Allmann Updyke	Not our friend?
Erin Welsh	But a different Rachel Moran, about the history of postpartum depression in the US. So you can probably tell based on these titles that this history section is mostly going to be primarily focused on the US.
Erin Allmann Updyke	Love it.

Erin Welsh	Yeah. There is no origin story for midwives. Their existence probably predates written history and assistance during childbirth may even be a key part of human evolution, as we kind of talked about. The word 'midwife' means 'with women'. And over the centuries and across the globe, midwives have taken on various roles that have held different meanings. Wise woman, all around healer, witch to the haters, and so on. But there have been a few constants that have persisted. Midwife care often focuses specifically on women, that training often involves models of apprenticeship, that scientific knowledge is incorporated into practice, and that pregnancy and birth are considered normal life events. This is not a history of midwives. I won't be talking about the profession today.
Erin Allmann Updyke	Okay.
Erin Welsh	But it is a history of childbirth and the two are of course inextricably linked.
Erin Allmann Updyke	Right.
Erin Welsh	In the early years of the US, childbirth was at home, most commonly attended by midwives. Then by midwives with occasional visits from physicians, then by physicians with a woman's friends and family in attendance, and then in hospitals with no familiar faces. Husbands weren't even allowed in the hospital room until the 1960s, like the late 1960s.
Erin Allmann Updyke	Wow.
Erin Welsh	And non-spouses way later.
Erin Allmann Updyke	Wow. Very interesting.
Erin Welsh	Yeah. The transition from home to hospital and from midwife to physician was not uniform across the US. Immigrants, the less wealthy, non-white women, and those living in rural areas gave birth at home for much longer than wealthier individuals.
Erin Allmann Updyke	Okay.
Erin Welsh	And so to give you some idea of this timeline, in 1910 about 50% of all babies were delivered by midwives.
Erin Allmann Updyke	1910, 50%. Okay.
Erin Welsh	1910. By 1930, that number had gone down to 15%.
Erin Allmann Updyke	Wow.
Erin Welsh	And by 1973, about 1% of births were attended by a midwife.
Erin Allmann Updyke	Wow.
Erin Welsh	And compare that to 2021, which is the most recent one that I found, I'm sure there are more recent ones out there, 12% were attended by a midwife.
Erin Allmann Updyke	Okay. So we went all the way down and then a little bit back up.

Erin Welsh	Back up.
Erin Allmann Updyke	I will say that I know this is US centric but that is very different than the data today for most other high income countries even.
Erin Welsh	Yes. And that is wrapped up in the history of how the US treated midwives.
Erin Allmann Updyke	Okay.
Erin Welsh	Specifically laws.
Erin Allmann Updyke	Okay.
Erin Welsh	Yeah, yeah. The transition from home to hospital, this did not happen overnight nor was it simply a hostile takeover by physicians. As Leavitt puts it in 'Brought to Bed', "the process by which this occurred reflected the needs women felt to upgrade and to control their birthing experiences, as well as the increasing medical management of birth." What I really, really appreciate about this quote is what I feel like so many histories of childbirth leave out, that birthing women were and are agents of change. They were not just passive bystanders of the medical and legal attacks on midwifery. They held the power to say what they wanted their childbirth to be like. Until hospitals became the default place to give birth, women often chose who would be there to help, to support, to make decisions when she could not, and the people she chose were often midwives and her female friends and family. It was like a birthing network rather than just like here is the hospital staff.
Erin Allmann Updyke	Okay.
Erin Welsh	And as obstetrics became a more common part of medical training, many women opted to bring a physician into that network, believing that his professionalism, his tools, and his expertise would ensure the safety of mother and baby. And I say 'his' because that was almost universally the case.
Erin Allmann Updyke	Yup.
Erin Welsh	Yep. In 1900 only 6% of doctors in the US were women.
Erin Allmann Updyke	I'm actually surprised it was even that high.
Erin Welsh	It was that high? I know, I know. I mean the other thing, the other caveat to that is that yes, there were 6% but they had very few patients because most people didn't want to see them. But they were elected, like a lot of women who were giving birth wanted a female doctor.
Erin Allmann Updyke	Okay, interesting.
Erin Welsh	Even back then. Yeah. And of course most medical schools banned women and non-white men from applying. What led to women choosing physicians and hospitals for childbirth is wrapped up in the professionalization of medicine and active campaigns against midwifery.
Erin Allmann Updyke	Okay.

Erin Welsh	Midwives were portrayed as lacking the training and medical expertise to safely deliver babies while also being explicitly forbidden to seek that training and medical expertise.
Erin Allmann Updyke	Wow.
Erin Welsh	Yeah.
Erin Allmann Updyke	Okay.
Erin Welsh	And women wanting to make the safest decision for themselves and their baby brought in male physicians, believing that they would provide protection from the dangers of childbirth which there were many.
Erin Allmann Updyke	Yeah.
Erin Welsh	All right, so now that we've got the big picture view, let's dig a bit deeper to see how this all went down.
Erin Allmann Updyke	Yeah.
Erin Welsh	We as a society have a tendency to romanticize certain aspects of the past, like how much better food must have tasted. It didn't.
Erin Allmann Updyke	I feel like I've never thought of that.
Erin Welsh	Oh yeah, absolutely.
Erin Allmann Updyke	Okay.
Erin Welsh	And also see our Book Club on 'The Poison Squad', like there is a reason that pasteurization is hailed as one of the most life-saving inventions.
Erin Allmann Updyke	Yes.
Erin Welsh	And I think that this romanticization happens to a certain degree also with pregnancy and childbirth. A call for less medical intervention is understandable, especially when you consider how early medical interventions during childbirth often caused more harm than good. But it also fails to acknowledge that childbirth can be dangerous. And no, it is not a disease and it's not an unnatural state of being as early 20th century physicians believed but it is a physically demanding experience with potential impact on both mother and baby's life and health. Although I did find it interesting that in that 'Diary of a Midwife' life of Martha Ballard, when a woman was starting labor, she called it her illness is beginning which I think is very fascinating.
Erin Allmann Updyke	It was like the pregnancy was not the illness but the delivery part was.
Erin Welsh	The delivery, yeah. Which maybe just shows how she saw it as like this is a potential where there is a lot of attention that's needed here.
Erin Allmann Updyke	Right, right.

Erin Welsh	Yeah. Imagining the women of the 1700s giving birth with no fear, as relaxed as could be, is erasing the experience of so many who approached their labors with dread and apprehension. In the early 1800s, women in the US had an average of 7 children. The number of pregnancies was probably higher-
Erin Allmann Updyke	Yes.
Erin Welsh	Because that doesn't include miscarriage and stillbirth.
Erin Allmann Updyke	Miscarriage and stillbirth.
Erin Welsh	Many women spent the majority of their adult lives pregnant, breastfeeding, recovering from childbirth, and taking care of small children. A baby every 2 or 3 years was kind of expected, a routine part of life. But that didn't mean that women necessarily looked towards childbirth without anxiety. It wasn't just the loss of a child; the potential loss of a child that weighed on them, it was the physical act of childbirth that carried with it the threat of death. Diary entries and letters written in the 1800s give us a glimpse into these worries as women wrote wills or gave instructions on who should care for the baby if she died.
Erin Allmann Updyke	Ugh, this hurts my heart. Sorry.
Erin Welsh	I know, I know, I'm sorry. But I feel like it's such a part that we don't think that much about.
Erin Allmann Updyke	Yeah.
Erin Welsh	Or at least I don't, maybe that's just putting my own bias on it.
Erin Allmann Updyke	No, I do think especially because I think a lot of what you're talking about already is like we see... And we see this in a lot of aspects of medicine, we see these pendulum swings.
Erin Welsh	Yes.
Erin Allmann Updyke	Right? And we see things going from like absolutely no intervention to far too much intervention.
Erin Welsh	Full intervention.
Erin Allmann Updyke	And it's not just in obstetrics, right, it's in so many aspects of medicine. And so I think that we see that playing out a lot, especially in like social media right now where it's like there's all the intervention or there's natural childbirth which we talked about last episode. That word does not have meaning really.
Erin Welsh	Right, right.
Erin Allmann Updyke	And yeah, I just think that that is such an important part that isn't ever discussed when we're talking about like a low intervention birth or something like that.
Erin Welsh	Yeah, yeah.
Erin Allmann Updyke	That like it wasn't all roses back in the day.

Erin Welsh	Sunshine.
Erin Allmann Updyke	Yeah.
Erin Welsh	Yeah, yeah. So I pulled a lot of these quotes from 'Brought to Bed' because I think that they just illustrate this idea that it's not... There are many, there's a lot of nuance to how people felt about their impending pregnancy, childbirth, and so on.
Erin Allmann Updyke	Yeah.
Erin Welsh	So Lizzie Cabot wrote to her sister in the mid 1800s, "I have made my will and divided off all my little things and don't mean to leave undone what I ought to do if I can help it." Sarah Ripley Stearns wrote in her diary late in her pregnancy, "Perhaps this is the last time I shall be permitted to join with my earthly friends." A woman described her third birth in 1885, "Between oceans of pain, there stretched continents of fear, fear of death and dread of suffering beyond bearing." Those who attended births, midwives and physicians, felt similar apprehension. Like there was a physician writing in 1870 who described his feelings of alarm and gloomy forebodings after seeing a patient die unexpectedly during childbirth. He goes on to write about how those feelings stayed with him, making it impossible, quote, "while attending a case of confinement to banish the feeling of uncertainty and dread as to the results of cases which seemingly are terminating unfavorably."
	Sometimes the dread wasn't isolated to the act of childbirth itself but extended to the long period of recovery, like Agnes Reed's letter about her second pregnancy. "I confess I had dreaded it with a dread that every mother must feel in repeating the experience of childbearing. I could only think that another birth would mean another pitiful struggle of day's duration, followed by months of weakness as it had been before." Yeah.
Erin Allmann Updyke	Yeah.
Erin Welsh	And when comparing historical and modern experiences of childbirth, we use data, right, Like we're talking about what about the data?
Erin Allmann Updyke	Right.
Erin Welsh	And our data are limited to things like maternal mortality or complicated births. They're not that great anyway. And we can look at, I think it's interesting to Look at Martha Ballard's 814 deliveries from 1785-1812. So five maternal deaths, none during delivery, all during two weeks after birth. And that's today compared to 0.22 per every 1000. So 5 per 1,000. 0.22.
Erin Allmann Updyke	Okay. Okay, okay.
Erin Welsh	Yeah. Martha recorded 20 neonatal deaths, that's 2.5 for every 100 live births compared to today, 2.56.
Erin Allmann Updyke	Right. So that I think also is very often left out of the discussion even when we're talking about interventions that have reduced maternal mortality.
Erin Welsh	Yes.

Erin Allmann Updyke	I think that it's easy to gloss over how much we have improved infant survival.
Erin Welsh	Infant survival.
Erin Allmann Updyke	And reduced stillbirth and neonatal mortality like drastically.
Erin Welsh	Yes.
Erin Allmann Updyke	Not even to mention like vaccines and saving lives postpartum and all that for babies and children.
Erin Welsh	Right, right, right. During childbirth experience itself. Yes, exactly, yeah.
Erin Allmann Updyke	Exactly. Yeah.
Erin Welsh	Stillbirth she recorded 14, that's 1.8 for every 100. Today that's 0.6 in 100.
Erin Allmann Updyke	Wow. Yeah.
Erin Welsh	So there's a lot of, I mean we can use those data to a certain degree but I think also hearing those experiences from the women who went through this is a really fascinating part of it.
Erin Allmann Updyke	Yeah.
Erin Welsh	And these data also don't show us what women dealt with in other outcomes of pregnancy, like we talked about prolapsed uterus, fistulas, extensive tearing, perinatal mortality, and the emotional experience of that late pregnancy loss, the range of emotions that could accompany having limited control over your reproduction. Mary Foot described it in the 1800s as a sort of pendulum between joy and dread. For Hannah Whitall Smith, writing in 1852, that pendulum swung more towards dread. "I am very unhappy now. That trial of my womanhood which to me is so very bitter has come upon me again. When my little Ellie is 2 years old, she will have a little brother or sister. And this is the end of all my hopes, my pleasing anticipations, my returning youthful joyousness. Well it is a woman's lot and I must try to become resigned and bear it in patience and silence and not make my home unhappy because I am so. But oh, how hard it is."
Erin Allmann Updyke	Wow, that's really heartbreaking, Erin.
Erin Welsh	Yeah. Yeah.
Erin Allmann Updyke	Yeah.
Erin Welsh	We have gained so much and then now we're losing so much again.
Erin Allmann Updyke	I know. Because like she said, to not have any control over it.
Erin Welsh	To not have any control.
Erin Allmann Updyke	Any control over it.

Erin Welsh	Right. And it's just like here it is, it is my lot as a woman.
Erin Allmann Updyke	Lot in life.
Erin Welsh	Yeah. Ugh. So yeah, even though pregnancy and childbirth were much more common historically, that didn't necessarily make them more welcome or more looked forward to.
Erin Allmann Updyke	Okay.
Erin Welsh	Just as with today, women's experiences were incredibly varied and complex and they created ways to manage their fears, whether that was surrounding themselves with familiar faces or seeking the latest medical advancements or both. The choices available to women depended on when she lived, where she lived, and how much money she had.
Erin Allmann Updyke	Okay.
Erin Welsh	Early in US history, most births were attended by midwives who played a largely non-interventionist supportive role. According to Leavitt, "as much as possible, they let nature take its course. They examined the cervix or encouraged women to walk around. They lubricated the perineal tissues to aid stretching. They delivered the child and tied the umbilical cord. And sometimes they manually expressed the placenta." Historically, at least from my understanding, there wasn't a ton of postnatal care for like mom and baby.
Erin Allmann Updyke	Interesting.
Erin Welsh	She would be there for a bit and maybe make another visit.
Erin Allmann Updyke	Okay.
Erin Welsh	But usually the woman had other friends who would come and help with like home maintenance.
Erin Allmann Updyke	Okay. Other women in her life. Okay.
Erin Welsh	Yeah. And the midwife was typically not alone in attendance.
Erin Allmann Updyke	Right.
Erin Welsh	Often there were like friends and family there as well, usually female friends and family.
Erin Allmann Updyke	Yeah. The room was full.
Erin Welsh	But as the practice of medicine became a formal profession, meaning like you had to have a certificate, you had to go to show your training here.
Erin Allmann Updyke	Go to school.
Erin Welsh	Yep.
Erin Allmann Updyke	Then they developed residency. That's a whole episode someday probably.

Erin Welsh	That's a whole episode.
Erin Allmann Updyke	Yep.
Erin Welsh	So this active professionalization started in the late 1700s, early 1800s, maybe even a little bit earlier in the 1700s. That meant that towns and cities had more physicians that could be called in during birth. And sometimes that call came from the midwife who wanted a bit of extra assistance during a particularly difficult birth.
Erin Allmann Updyke	It's been a long time since I've watched Call the Midwife.
Erin Welsh	I know.
Erin Allmann Updyke	I love that show.
Erin Welsh	I love that show. I know.
Erin Allmann Updyke	I really loved that show.
Erin Welsh	There are probably seasons I haven't seen.
Erin Allmann Updyke	Oh definitely, yeah.
Erin Welsh	Yeah. We should watch it.
Erin Allmann Updyke	We should.
Erin Welsh	And physicians and midwives weren't always in direct opposition during this time.
Erin Allmann Updyke	Right.
Erin Welsh	And many physicians saw the potential for partnership, with midwives primarily being the ones attending the births and only calling in doctors in cases of emergency. And these occasions could also lead to tension though if the midwife and doctor disagreed. Some physicians might defer to a midwife with hundreds of births under her belt but gender and class dynamics ultimately put the authority in the hands of the doctor, no matter how little experience he had. So I want to read you a quote from Martha Ballard's diary. She records a few of these clashes and here's one of them. "They," meaning the parents, "they were intimidated and called Dr. Page, who gave my patient 20 drops of laudanum which put her into such a stupor that her pains, which were regular and promising, in a matter stopped til near night when she puked and they returned and she delivered at seven hour evening of a son her first born."
Erin Allmann Updyke	Okay Erin, so I told you that I read that like fictional...
Erin Welsh	Yeah! That is in there?
Erin Allmann Updyke	Okay, that whole story is in there but in like way more detail because it's obviously like a fictionalized version of history.

Erin Welsh	Yeah.
Erin Allmann Updyke	It is fascinating to hear-
Erin Welsh	The actual like diary entry?
Erin Allmann Updyke	Yes, yes! And then like the description. Because this story, it's called 'Frozen River' the book, and she goes so much into like what she assumes that Martha Ballard was thinking during the time and stuff like that which is just so like fun and fascinating.
Erin Welsh	Yeah.
Erin Allmann Updyke	Yeah. But that story is in there so I knew that one.
Erin Welsh	I want to read that book. I'm very curious because her diary entries are so sparse in terms of like detail.
Erin Allmann Updyke	Right, there's no detail. That's what she said.
Erin Welsh	There's very few emotions. There have been like a couple times where she'll say like poor, poor mother because she lost a baby or something.
Erin Allmann Updyke	Okay.
Erin Welsh	But yeah. And then I think there's another time she calls out Dr. Page.
Erin Allmann Updyke	Dr. Page!
Erin Welsh	And she's like what an unfortunate man or something like that. But it's hard to know if she's like... And who knows?
Erin Allmann Updyke	Right.
Erin Welsh	Is she irritated at him or does she actually feel bad because he has chosen a profession that clearly is not to his skill set?
Erin Allmann Updyke	Yeah.
Erin Welsh	Yeah.
Erin Allmann Updyke	It's so interesting.
Erin Welsh	Yeah.
Erin Allmann Updyke	Check out those books if you want.
Erin Welsh	Check out those books. As doctors became a more regular presence during childbirth, so did the doctor's tool kit. Which probably helped to bolster appearance of expertise, right?

Erin Allmann Updyke	Oh gosh, yeah.
Erin Welsh	If midwives took a largely non-interventionist approach, 19th century doctors did the opposite. There was laudanum or opium, as Martha mentioned, bloodletting even in the case of hemorrhage.
Erin Allmann Updyke	Oh my god, I still can't get...
Erin Welsh	I'm sorry, yeah. But yes.
Erin Allmann Updyke	We haven't talked about humors or bloodletting all these episodes though.
Erin Welsh	I know! The humors. That's the only thing that I haven't mentioned is the humors.
Erin Allmann Updyke	Yeah. At some point.
Erin Welsh	There was something called tobacco infusions. I don't know.
Erin Allmann Updyke	Doesn't sound great.
Erin Welsh	Surgical separation of pelvic bones which often led to disability.
Erin Allmann Updyke	Damage, yeah.
Erin Welsh	And of course forceps. By the mid-19th century, forceps came in all shapes and sizes and were restricted by law to medical professionals. Like you could not own a pair of forceps unless you could prove you were a doctor.
Erin Allmann Updyke	Wow, okay.
Erin Welsh	One doctor bragged in JAMA in the mid 1880s that, I hate this quote-
Erin Allmann Updyke	Okay.
Erin Welsh	Quote: "I take pride in stating that as far as my recollection goes, in no case of my own was a woman ever allowed to lie in suffering and danger til the cervix was completely dilated."
Erin Allmann Updyke	Oh no.
Erin Welsh	I'm sorry.
Erin Allmann Updyke	Oh no.
Erin Welsh	Yeah, yeah. They would like prophylactically use forceps.
Erin Allmann Updyke	But like before the cervix is fully dilated?
Erin Welsh	Yes.

Erin Allmann Updyke	No.
Erin Welsh	Like before the baby had even fully entered the birth canal.
Erin Allmann Updyke	No, no, no, no, no, no, no.
Erin Welsh	They had the long, long forceps.
Erin Allmann Updyke	No, no, no, nope, nope, nope, nope.
Erin Welsh	Yeah.
Erin Allmann Updyke	Nope, nope, nope, nope, nope, nope. That's not how forceps are used today, I just want to put that out there.
Erin Welsh	No, no, no. We have corrected the course, yeah.
Erin Allmann Updyke	Forceps are not used in that way today.
Erin Welsh	No.
Erin Allmann Updyke	Wow.
Erin Welsh	But they used to be.
Erin Allmann Updyke	Okay.
Erin Welsh	So unsurprisingly the sight of forceps was not always a welcome one. And so the doctor would just be instructed to like... He instructed his students to hide them, just wear a big gown so that you can hide your tools because it'll make the woman nervous. If a medical school included training specifically on obstetrics and few actually did in the late 1800s, it mostly centered on how to use these tools and rarely included hands-on supervised experience.
Erin Allmann Updyke	Awesome.
Erin Welsh	Okay, so there's one example that I want to share with you.
Erin Allmann Updyke	I don't want to hear it.
Erin Welsh	I hope it's an urban legend but I don't know. I would actually believe that it's not necessarily that. Okay. It tells the story of a newly graduated doctor, official doctor in the late 1800s who examined his first laboring patient only to be horrified at what he thought was a tumor blocking the birth canal. He figured, okay, she's a goner.
Erin Allmann Updyke	No. Stop it.
Erin Welsh	I just have to wait for her to pass. Only to realize a few minutes later after she gave birth, that what he thought was a tumor was the baby's head.

Erin Allmann Updyke	Okay. I thought it was going to go a different way and I was getting very nervous.
Erin Welsh	Oh no, what did you think I was gonna say?
Erin Allmann Updyke	I'm not gonna say.
Erin Welsh	Okay, we can discuss off camera.
Erin Allmann Updyke	Yeah. Okay.
Erin Welsh	So someone who is a medical doctor and didn't know how babies were born.
Erin Allmann Updyke	Well I mean that doesn't surprise me.
Erin Welsh	No, I know.
Erin Allmann Updyke	Back in the day.
Erin Welsh	Sure, sure.
Erin Allmann Updyke	Yeah, yeah, yeah. Sorry.
Erin Welsh	But wouldn't you have at least seen a diagram somewhere?
Erin Allmann Updyke	I don't know. I wasn't in med school in the 1800s.
Erin Welsh	They did have like theaters where someone-
Erin Allmann Updyke	Right.
Erin Welsh	The students could watch some. Can you just imagine the horror of that?
Erin Allmann Updyke	No.
Erin Welsh	Yeah. But aside from forceps, the other major tool that was employed by 19th century physicians was anesthesia. First ether and then chloroform were introduced in the mid 1800s and pretty quickly they exploded in popularity. And it wasn't just like popular with doctors, everyone wanted them, especially after Queen Victoria had one of her kids with, I don't know if it was ether or chloroform.
Erin Allmann Updyke	Okay.
Erin Welsh	But it made the news. You know who administered it?
Erin Allmann Updyke	No.
Erin Welsh	John Snow.
Erin Allmann Updyke	The John Snow?

Erin Welsh	As in John Snow of cholera fame.
Erin Allmann Updyke	Of cholera fame. Not Game of Thrones.
Erin Welsh	Not disgraced Game of Thrones.
Erin Allmann Updyke	Yeah.
Erin Welsh	Yep.
Erin Allmann Updyke	Wow!
Erin Welsh	Yeah.
Erin Allmann Updyke	Okay.
Erin Welsh	Yeah. And so that really I think allowed people to go, oh I want that.
Erin Allmann Updyke	Okay.
Erin Welsh	And she was like this was great, do it every time.
Erin Allmann Updyke	Yeah, I loved it.
Erin Welsh	Again.
Erin Allmann Updyke	Would highly recommend. Okay, yeah.
Erin Welsh	And I think it's pretty easy to see the appeal if you look at some of the... I mean even not based on today-
Erin Allmann Updyke	Right.
Erin Welsh	But people, like you have experienced childbirth. But at the time in these diary entries, in these letters, women described their labor pains as travail, suffering, screams of agony, anguish, tortures, pains from hell. And from the doctor's perspective, popular there too, right. It made for a much more compliant patient whose arms and legs would usually be strapped down to the bed. And yeah, this is when the bed often became the place instead of like a birthing stool.
Erin Allmann Updyke	Right.
Erin Welsh	Instead of leaning on somebody else; instead of doing what feels like you want to do.
Erin Allmann Updyke	Right.
Erin Welsh	You were physically in some cases strapped down to a bed.
Erin Allmann Updyke	Unable to, yeah.

Erin Welsh	I'm not going to get into twilight sleep here.
Erin Allmann Updyke	Okay.
Erin Welsh	Because I had a long section that I was like this deserves its own thing when we talk about anesthesia.
Erin Allmann Updyke	Anesthesia.
Erin Welsh	But twilight birth was this thing where you would be given like scopolamine and something else. And often the effect was not or the goal was not necessarily to relieve pain but it was to make you forget. And it could induce a lot of like anxiety and delusions and so they would be physically strapped down. And then this idea was that you would wake up with a baby in your arms.
Erin Allmann Updyke	À la Mad Men.
Erin Welsh	À la Mad Men and Betty, yeah. Yep. By 1900, ether or chloroform was used in 50% of births attended by a physician.
Erin Allmann Updyke	Wow.
Erin Welsh	Ether or chloroform, we got better later on in terms of like the safety.
Erin Allmann Updyke	Okay.
Erin Welsh	Because a lot of doctors did have concerns about the safety of like general anesthesia and these in particular.
Erin Allmann Updyke	Safety.
Erin Welsh	And the demand for anesthesia during childbirth actually helped to speed up the move from home birth to hospital.
Erin Allmann Updyke	Okay.
Erin Welsh	Because the equipment necessary to administer these drugs would be hard to haul around from house to house. The introduction of both anesthesia and other medical tools changed expectations for childbirth in the late 19th century.
Erin Allmann Updyke	Okay.
Erin Welsh	It can be done quickly, safely, and with no pain. That was what childbirth had become, right.
Erin Allmann Updyke	Okay.
Erin Welsh	Like this is what medicine promised.
Erin Allmann Updyke	This is an option, yeah.

Erin Welsh	And of course that was not always the reality, nor was it the reality for those who couldn't afford to pay for a physician or who felt it was taboo to have a man present during labor and delivery. Doctors charged more for midwives. So for instance, Martha Ballard charged $2 for her assistance during labor and delivery and her contemporary Dr. Page charged $6.
Erin Allmann Updyke	Okay.
Erin Welsh	Yeah. This could be a lucrative job for physicians and as more doctors incorporated childbirth into their practice, they increasingly saw midwives as competition for patients rather than collaborators.
Erin Allmann Updyke	Okay.
Erin Welsh	And instead of this high price discouraging people from hiring doctors, it played into this psychological phenomenon familiar to many of us, all of us, where higher prices equated with higher quality.
Erin Allmann Updyke	Yeah, yeah, yeah.
Erin Welsh	And that is completely understandable, right?
Erin Allmann Updyke	Yeah.
Erin Welsh	Who wouldn't pay whatever they could if it meant the best care possible for mom and baby? The issue was whether it was actually the best care. In the last few decades of the 1800s, childbirth became increasingly medicalized. Physicians now attended nearly half of all births and tried their hands at various interventions, none of which had been adequately examined for safety or efficacy. And while women still held the power in home childbirth, doctors were growing more resentful of that. "Conversation should be prohibited. Nothing is more common than for the patient's friends to object to bloodletting, urging as a reason that she has lost blood enough. Of this, they are in no respect suitable judges."
Erin Allmann Updyke	Oh gosh.
Erin Welsh	Right. Her friends are probably like she has been drained, stop.
Erin Allmann Updyke	Yeah, stop.
Erin Welsh	And he's like oh come on, you don't know anything.
Erin Allmann Updyke	You didn't go to Harvard Medical School.
Erin Welsh	Midwives were also blamed for high rates of puerperal fever and sepsis, despite evidence that it was in fact doctors who were much more responsible for the infections due to their proclivity to just go from cadaver dissection to the labor and delivery room in hospitals. Listen to our puerperal fever episode.
Erin Allmann Updyke	So much more on that.

Erin Welsh	And in fact, maternal mortality in the US was on the decline by the end of the 19th century but it plateaued for a while until the late 1930s, which was after most births were happening in hospitals.
Erin Allmann Updyke	Interesting. Okay.
Erin Welsh	And that's probably because of all of the adjustment, we'll charitably call it adjustment-
Erin Allmann Updyke	Okay.
Erin Welsh	For transition to the hospital where people were still trying to figure things out.
Erin Allmann Updyke	Well and still studying and learning things because they hadn't done that, right.
Erin Welsh	Yep.
Erin Allmann Updyke	Yeah.
Erin Welsh	It's all... Yeah, yeah. The field of gynecology being built on the backs of people who probably did not consent in a way that was meaningful.
Erin Allmann Updyke	Oh yeah.
Erin Welsh	Yeah.
Erin Allmann Updyke	Read 'Medical Bondage' for more on that.
Erin Welsh	Medical Bondage', yes. Yeah, that's such a great book. The US seemed an especially deadly place to have a baby. In 1910, 1 mother died for every 154 live births.
Erin Allmann Updyke	Wow.
Erin Welsh	Compare that to Sweden at the same time where the number was 1 in every 430.
Erin Allmann Updyke	Okay, wow.
Erin Welsh	Yeah. In the early 1900s, US states introduced laws banning midwifery and all midwifery became illegal in 1959 under a law that redefined midwifery as the practice of medicine.
Erin Allmann Updyke	Interesting.
Erin Welsh	Yeah.
Erin Allmann Updyke	Erin, I did not know that.

Erin Welsh	Yeah. And I'm not saying that we should have like, I'm not advocating for a blanket defense of midwifery at the time because undoubtedly there were unnecessary injuries or infections and deaths at the hands of midwives just as there were for doctors. But those early bans did not provide any pathways for training or certification for midwives. And so then that disproportionately impacted poor women who couldn't afford a doctor or who were then forced to go to a hospital which were deadly at the time.
Erin Allmann Updyke	And this is like at the time when becoming a physician and like the process of that is becoming very well regulated.
Erin Welsh	Oh even before then, yeah.
Erin Allmann Updyke	And then there's no pathway to become a certified licensed midwife the way that we have today with like a registered nurse midwife kind of a thing.
Erin Welsh	Yes. And so other countries did have that pathway for midwives.
Erin Allmann Updyke	But we didn't in the US.
Erin Welsh	But in the US we did not.
Erin Allmann Updyke	Got it, got it.
Erin Welsh	And so then this eliminated an entire career path that women had. So then what do you do?
Erin Allmann Updyke	Interesting. Okay.
Erin Welsh	This process devalued the contribution of midwives and the importance of human presence as an essential part of care. Like familiar human presence, not just like a nurse or a doctor popping in every hour, 30 minutes, something like that. This also furthered the notion of pregnancy and childbirth as pathologies. The father of modern obstetrics, Joseph DeLee, does his name sound familiar to you at all? I don't think I've ever talked about him.
Erin Allmann Updyke	Yeah.
Erin Welsh	Okay, I didn't know if like in med school or something.
Erin Allmann Updyke	No.
Erin Welsh	Okay. He wrote in 1920, "So frequent are these bad effects that I often wonder whether nature did not deliberately intend women to be used up in the process of reproduction in a manner analogous to that of salmon which dies after spawning."
Erin Allmann Updyke	Oh my god.
Erin Welsh	We're just fish. Also male salmon die too. Come on.
Erin Allmann Updyke	But also that doesn't make evolution... Like clearly you don't understand evolution for that to make sense because salmon spawn like bajillions of fish and we're reproducing one offspring at a time who's going to require intensive care thereafter. Like come on.

Erin Welsh	Listen. He's the father of modern obstetrics, not the modern synthesis and evolution.
Erin Allmann Updyke	R/K selection. Clearly.
Erin Welsh	Okay. And for his part, because there's nuance to everyone, most people-
Erin Allmann Updyke	Of course.
Erin Welsh	He was aware of the dangers that hospitals posed in terms of infections.
Erin Allmann Updyke	Okay.
Erin Welsh	And he was a big advocate for home birth or like birthing centers.
Erin Allmann Updyke	Okay.
Erin Welsh	And like creating new different types of maternity wards where you'd be separate from the rest of the hospital and you had different kind of care.
Erin Allmann Updyke	Interesting.
Erin Welsh	So yeah.
Erin Allmann Updyke	Okay, okay.
Erin Welsh	Right? Still thinks we're salmon but... But pathologizing childbirth was a way to send home the message that midwives were not qualified, right.
Erin Allmann Updyke	Okay.
Erin Welsh	This is a dangerous state and you need someone who has been trained in this way and has this diploma from this university.
Erin Allmann Updyke	Right, right. Okay, okay.
Erin Welsh	And the way that society saw women during this time, especially middle and upper class white women, as fragile and over civilized, in need of protection, right.
Erin Allmann Updyke	We're such delicate flowers.
Erin Welsh	Exactly.
Erin Allmann Updyke	Yeah.
Erin Welsh	Exactly. And so all of these factors drove childbirth from the home to the hospital.
Erin Allmann Updyke	Okay.

Erin Welsh	Midwifery discredited and banned, the pathologization of childbirth, the growth of hospitals, women themselves choosing hospitals and physicians.
Erin Allmann Updyke	Okay.
Erin Welsh	As Leavitt writes, women who opted for hospital childbirth, quote, "gave up some kinds of control for others because on balance the new benefits seemed more important."
Erin Allmann Updyke	Okay.
Erin Welsh	Yeah.
Erin Allmann Updyke	Yeah.
Erin Welsh	That's completely understandable.
Erin Allmann Updyke	Yeah.
Erin Welsh	One woman wrote to her mother in 1918, "I have placed myself in the hands of a specialist in obstetrics. I have every confidence in him and it is a great relief." Another described her hospital stay as a quote unquote "lovely vacation". But some women felt the loss of familiar faces keenly. Quote: "The cruelest part of hospital childbirth is being alone among strangers." Another called it a nightmare of impersonality. Another quote: "Months later, I would scream out loud and wake up remembering that lonely labor room and just feeling no one cared what happened to me. No one kind, reassuring word was spoken by nurse or doctor. I was treated as if I was an inanimate object."
Erin Allmann Updyke	Oh my god.
Erin Welsh	Yeah.
Erin Allmann Updyke	Awful.
Erin Welsh	Awful. Truly like dehumanizing.
Erin Allmann Updyke	Yeah.
Erin Welsh	You are just a machine to make babies and no one cares about your mental well-being. We know best. This period from the 1930s to the 1960s is marked by tremendous gains in our understanding of the physiology of childbirth, which is clear from the drastic drop in maternal and neonatal mortality during this time.
Erin Allmann Updyke	Okay.
Erin Welsh	But along with those gains came losses. The loss of control and choice that women had in previous centuries, the loss of friends and family in the birthing room, and the loss of a voice. This was just how it was. Deal with it. This is what you get. And it took women years to reckon with those losses and to put words to them. And of course not everyone felt those losses to the same degree, right? Some women didn't think twice about their hospital experience. It was a lovely vacation. Others maybe didn't love it but didn't mind it overall and it was like yeah, okay, that was... Sure.

Erin Allmann Updyke	It was what it was and now it's done.
Erin Welsh	Right, exactly.
Erin Allmann Updyke	Yeah.
Erin Welsh	And then some were completely traumatized. And everything inbetween.
Erin Allmann Updyke	Yeah.
Erin Welsh	As we've said a million times, there is no universal childbirth, pregnancy, postpartum experience.
Erin Allmann Updyke	Experience. Right.
Erin Welsh	In the 1960s and the 1970s, those who did feel the losses began to fight against them to reclaim a voice in the birthing room.
Erin Allmann Updyke	Okay.
Erin Welsh	They demanded that their partners be allowed in, that they could breastfeed on their own schedule rather than the hospital mandated one-
Erin Allmann Updyke	Oh that is really, really interesting, Erin.
Erin Welsh	Yeah. They would be like oh no, not here.
Erin Allmann Updyke	Q2 hours.
Erin Welsh	Yes!
Erin Allmann Updyke	And also that was at the time too when it was like nurseries and so your baby was taken away and put in a nursery which is like the opposite of what we do now.
Erin Welsh	Yes.
Erin Allmann Updyke	Which also people have opinions about because then it means the mother doesn't get any rest. Oh my god, there's so much to cover.
Erin Welsh	I know, right?
Erin Allmann Updyke	Yeah.
Erin Welsh	I mean we have... This is like jumping ahead a little bit but the history of of this, this whole series-
Erin Allmann Updyke	Yeah.

Erin Welsh	Just shows us that we don't have everything figured out. And I mean that's okay.
Erin Allmann Updyke	It is.
Erin Welsh	Things are really overall good.
Erin Allmann Updyke	Yeah. Much better.
Erin Welsh	And because people are talking about them, are researching them, are writing about them, are sharing their experiences-
Erin Allmann Updyke	Right.
Erin Welsh	I think it just gives such hope that things will continue to improve. But it is really also that is not to erase the experience of people who are like I did not have a good time.
Erin Allmann Updyke	Right.
Erin Welsh	Yeah.
Erin Allmann Updyke	Right. And I think it is just so interesting to do what you're doing right now, Erin, which is look back at like how did it used to be? How did people feel about that at the time?
Erin Welsh	Yeah.
Erin Allmann Updyke	How did we get from there to here? Why did the pendulum swing this way? Where are we in this pendulum arc right now?
Erin Welsh	Who even knows? Yeah.
Erin Allmann Updyke	I know but it's so interesting to go back and try and kind of piece it together on like... Because it gives you so much context that sometimes might make something that feels horrible today make more sense and then make it more like you can... Okay, I understand why this thing happened. Right?
Erin Welsh	Right.
Erin Allmann Updyke	I think that's so important.
Erin Welsh	Why are we here today?
Erin Allmann Updyke	Why are we here today?
Erin Welsh	Yeah. Did not mean to get that existential. Although I'm surprised, given that this is a series on pregnancy that we haven't gotten that existential.
Erin Allmann Updyke	I know! Here we go, fourth ep.
Erin Welsh	Oh my gosh, yeah.

Erin Allmann Updyke	Putting it all on the table.
Erin Welsh	All on the table. But yeah, all of these new choices or choices that previously had not been available, things like having your partner in the room.
Erin Allmann Updyke	Right.
Erin Welsh	Breastfeeding whenever you want. Do I want an epidural or not? And so many other choices that simply probably were not available.
Erin Allmann Updyke	Right.
Erin Welsh	And we are now I think coming to terms with some of these, like the choices and the range of choices. And I will say too that that is a double-edged sword, right. Since the 1970s, women, along with researchers, doctors, nurses, midwives, doulas, partners, parents have examined the childbirth experience from every angle, asking what do I want? What's best for me? What's safest for baby? How do we balance everyone's needs? And today there are so many choices. There are so many options and there is so much information out there that it can feel overwhelming. How do you make the right choice? Especially when the internet has very strong opinions about everything. What happens when you are not able to choose or if the choice is made for you? Navigating pregnancy, childbirth, and the 4th trimester is a huge challenge which is the understatement of this series.
Erin Allmann Updyke	I'm getting like so many flashbacks right now. It's a lot.
Erin Welsh	From your-
Erin Allmann Updyke	Yeah.
Erin Welsh	Yeah.
Erin Allmann Updyke	Yeah.
Erin Welsh	Yeah.
Erin Allmann Updyke	Yeah. Keep going, Erin.
Erin Welsh	Is this the right stroller?
Erin Allmann Updyke	Is this the right choice? Was that the right choice? If I don't make a choice, what does that mean?
Erin Welsh	What does that mean? Yeah.
Erin Allmann Updyke	And then if this happens...
Erin Welsh	Yes. And what if there's a choice that like did I have a choice? I'm not sure.
Erin Allmann Updyke	Right, yeah.

Erin Welsh	Yeah. And there are a million voices telling you yes, no, maybe in conflict, maybe not in conflict, do this, do that.
Erin Allmann Updyke	Right.
Erin Welsh	That we have more choices and more knowledge today than we did 60 or 100 years ago is a powerful testament to the work of countless women and modern medicine striving to make this a safer and better experience. And of course there's still room for improvement. There will always be room for improvement. But understanding our past, understanding what we lost during the medicalization of pregnancy as well as just how much we've gained is crucial for creating a better future. Recognizing those gains is especially important because I think sometimes we take them for granted.
Erin Allmann Updyke	Yes.
Erin Welsh	Or we lose sight of them next to the negative impacts of medicalization. That is what stands out the most to us.
Erin Allmann Updyke	Yeah.
Erin Welsh	For instance, take postpartum depression and other postpartum perinatal mood disorders. From puerperal insanity in the late 19th century, which is what it was called. Well it was a diagnosis.
Erin Allmann Updyke	Okay.
Erin Welsh	It's not necessarily... There's more nuance to puerperal insanity. Yes, yeah. To what was called Baby Blues post World War II, to postpartum depression finally making it into the DSM-4 in 1994. 1994. I told my mom that and she was like really?
Erin Allmann Updyke	Just wait.
Erin Welsh	Oh and it's not even... I know. And then in there there's like a whole journey about how it got in there and it wasn't actually placed in there in an appropriate way.
Erin Allmann Updyke	Yeah. And what we don't have in there today.
Erin Welsh	What we don't have in there today.
Erin Allmann Updyke	It's gonna be good.
Erin Welsh	And then also like there's the book 'Blue' is really fascinating too because it talks about how postpartum depression gained more awareness. And it was through the work of a lot of people, advocates who worked really strongly to make people more aware of this potential outcome. But the way that popular media often seized on postpartum depression was through the most sensationalist news stories possible.
Erin Allmann Updyke	Right.

Erin Welsh	And so then that I think in some ways had this effect of oh well I don't I think I had depression because I wasn't-
Erin Allmann Updyke	Right. It wasn't that bad.
Erin Welsh	Exactly, it wasn't that bad.
Erin Allmann Updyke	Yeah. All the extreme scenarios.
Erin Welsh	Right, right. And I think that we have now, like there's been such incredible representation in the media and it's still again room for improvement. But yeah, I mean I think it's safe to say that since the late 1800s, postpartum depression, postpartum mental health has really been on a journey. And ultimately creating a clinical definition for PPD, imperfect though it may be, it opened up research areas for treatment. It raised awareness and established ways to treat people or reach people who might need help. And it removed some of the blame that had been so central to postpartum mental health for decades. Oh she's depressed because she hasn't accepted her role as a mother. Thanks, Freud. She's got PPD because she had a C-section.
Erin Allmann Updyke	Right.
Erin Welsh	Working moms bring on PPD themselves because they're just not equipped. Yeah, yeah.
Erin Allmann Updyke	Yep.
Erin Welsh	Blame certainly remains.
Erin Allmann Updyke	Yes.
Erin Welsh	It is not gone by any means.
Erin Allmann Updyke	No.
Erin Welsh	But turning this into having a more biological framework for understanding this has helped to remove some of that to some degree. And there is of course downside to this medicalization, right? It has discouraged to some degree consideration of systemic and societal drivers that might underlie PPD that I know you're going to talk about.
Erin Allmann Updyke	I sure am.
Erin Welsh	Because if you're treating it just as a hormonal or chemical imbalance then it's like so... But it's not happening in a vacuum.
Erin Allmann Updyke	Oh my god, Erin, I literally can't believe how well this is segueing into what I'm going to talk about.
Erin Welsh	So perfect. It's like we do this sometimes.
Erin Allmann Updyke	It's almost like it's our job. But yes, 100%.

Erin Welsh	Yes. And it creates boundaries around what is normal, right, and those boundaries might be different for different people but it's really hard to incorporate that into a medical definition, right.
Erin Allmann Updyke	Yeah.
Erin Welsh	And I will say also those boundaries are a necessary part of any medical definition. But having that lack of nuance and understanding the individual can also really have consequences associated with it, yeah.
Erin Allmann Updyke	Yeah.
Erin Welsh	Personalization of care is a crucial aspect, not just for PPD but also for childbirth and pregnancy more broadly. And I want to end with yet another quote by Judith Walzer Leavitt, I really love this book as you can tell. Quote: "Throughout American history, women have wanted and have worked to achieve their own ideals of childbirth, ideals that have developed and been nurtured within their own communities in conjunction with the rest of their life experiences. Childbirth remains, as it has always been, a cultural event as much as a biological one. Problems emerged during the middle of the 20th century because the hospital acted to homogenize the birth experience and make it similar for all women. But childbirth cannot successfully be reduced to one kind of experience and at the same time satisfy the wide range of expectations women bring to it. The diversity that women seek will continue to reflect the differences of the women themselves." End quote. And chills. And with that, Erin, I'll turn it over to you.
Erin Allmann Updyke	Oh just leaving me right there, huh?
Erin Welsh	Tell me about the 4th trimester.
Erin Allmann Updyke	Okay. I might need a little breather after that.
Erin Welsh	Okay, we can do that.
Erin Allmann Updyke	We'll take a break and then get into it, shall we?
Erin Welsh	Yeah. Let's do it.
TPWKY	(transition theme)
Anonymous	At 32 years old, I got pregnant for the first time. I had what you'd call a textbook pregnancy. Healthy baby, low risk, and a noticeable glow. But there was a lot of things that I wasn't warned about and things that just weren't talked about unless I brought them up. Hubby and I started trying for a baby in September and luckily enough by November I was pregnant. My first symptom wasn't morning sickness or anything like that. In fact it was excruciating period pain. I genuinely thought I was about to have the worst period ever as some kind of cruel joke. Turns out it was implantation. The next time I felt that level of pain was actually in active labor.

Within two weeks of conception, my body already started changing. My boobs went from an A to a C cup almost overnight and they continued to grow throughout my pregnancy and got pretty big during breastfeeding. My stomach also grew quickly. I was mostly water because baby boy was measuring perfect the entire time. I was very lucky when it came to nausea, I only experienced it for about a week and cardamom tea helped a lot. I only vomited twice, once from a bad meal which my husband also got sick from and once when I accidentally ate bacon because pork was a major food aversion for me, which is kind of surprising given my Italian-Australian background. Thankfully since my husband is Muslim, pork wasn't something I had to deal with in the house.

The cravings did start really early. At first it was salt and vinegar chips and anything sour, especially lemon ice cream. In the second trimester I craved corn and coffee. Of course I only drank decaf but I never drank coffee before pregnancy. Funnily enough I'm still drinking it now after giving birth. By the 3rd trimester, my cravings had evolved to steak with an egg on top. On the flip side, I couldn't stand chicken or pork. Even the smell of chicken made nauseous, to the point that if my husband ate it, he had to brush his teeth before coming near me. Pregnancy also came with a long list of symptoms I just wasn't prepared for. Blood noses, gray hairs, loose ligaments, ligament pain triggered by sneezing, dry skin, exhaustion that left me sleeping for 10 hours at night and then still napping for 4 hours during the day. Acid reflux and reoccurring thrush, which I had never experienced before pregnancy.

The physical strain was pretty intense. At times it felt like I'd done a hardcore leg day at the gym or I'd been riding a horse bareback for hours. I had to give up weightlifting and running because I was just too exhausted but I did manage to do a little bit of yoga a couple of times a week. And maybe that's why I could still tie my own shoes at 9 months pregnant, who knows? In my 3rd trimester, I needed an iron infusion. My iron levels were actually fine but my hemoglobins were slightly low so it was recommended that I do it. Around this time baby boy started moving into position and I could feel every shift. There was a moment when I genuinely thought that he might just fall out because of how low he moved.

Despite all the unexpected symptoms, I got the birth experience that I wanted. I had a pain relief water birth and in the final moments I reached down and pulled my baby out myself. It was an intense and transformative experience and one that I'm really grateful for. Looking back, I know I was lucky to have such a smooth pregnancy but that doesn't mean it was easy. There were a lot of challenges, surprises, and lots of moments of discomfort. Through it all, my body did exactly what I needed it to do and I'm so grateful for my body for doing that and for giving me my beautiful healthy baby boy.

Miranda

Hi, Erins. My name is Miranda and I want to thank you for allowing me to share my pregnancy and birth journey. I have to say that overall my pregnancy journey was relatively uneventful and I'm very thankful for that, for the health of myself and of my baby boy who is now 18 months old. I will say the most annoying and most prominent pregnancy symptom I had was actually carpal tunnel syndrome, which going into pregnancy I had no idea that that was a common symptom. I spent probably the second half of my pregnancy with my hands being numb or tingling or painful almost 24/7. So that was definitely frustrating. Other than that, towards the end of my pregnancy I started to have some gestational hypertension. So we did a few non-stress tests and biophysical profiles to make sure that I was safe and that my little guy was safe.

	On the 4th of July, maybe I had a little too much fun on the lake and enjoyed some salty snacks but my blood pressure did go pretty high, so they ended up deciding to induce me when I was due in mid-July. So it was not too early. I really didn't need much of a kickstart for labor thankfully. I started labor pretty darn quickly without even having any Pitocin. Unfortunately I did not progress in labor as we hoped. I was in labor for 18 hours and I was dilated to 9.5 centimeters and I was stalled out. So after about 6 hours stalled out, my son's heart rate started dropping and my doctor advised us that we could wait a little bit longer and potentially have to have an emergency C-section or we could just do a C-section now. And after 18 hours of labor, I was on board with that.
	We had a beautiful and wonderful C-section experience and I'm so thankful for all of the staff and my husband and my mom for being there to support me. I was very surprised by the swelling after the C-section, I couldn't wear shoes for 2-3 days. But other than that, my little guy was happy and healthy and I had an overall great experience. Thank you.
TPWKY	(transition theme)
Erin Allmann Updyke	So last week at the end of episode 3, I ended where most conversations regarding pregnancy end and that is once the baby is delivered.
Erin Welsh	Right. Everything's over.
Erin Allmann Updyke	Yeah. But that's not where pregnancy ends. At all. So Erin, you just walked us through a lot of the kind of social and institutional high level factors that have caused this shift in where delivery happens and how these things have kind of contributed to a lot of the big picture postpartum outcomes. Those big picture things are like maternal mortality rates, even like postpartum depression rates which we'll get into. And so that is where I'm kind of picking up your threads right there.
Erin Welsh	Perfect.
Erin Allmann Updyke	But then I'm going to unravel them a little bit more to also remind us of what is going on biologically in this so-called 4th trimester.
Erin Welsh	Yeah.
Erin Allmann Updyke	Why it might be rocky for some of us. And my favorite, what do we know about evidence-based ways to improve outcomes?
Erin Welsh	Ugh, evidence-based.
Erin Allmann Updyke	Spoilers.
Erin Welsh	What a beautiful phrase.
Erin Allmann Updyke	Isn't it?
Erin Welsh	Ugh, I just love it.
Erin Allmann Updyke	You want a spoiler alert on what it is?

Erin Welsh	We don't know?
Erin Allmann Updyke	Public health, Erin.
Erin Welsh	Oh okay.
Erin Allmann Updyke	Don't worry, we know.
Erin Welsh	I was like don't tell me it's 'we don't know'.
Erin Allmann Updyke	No, we do know.
Erin Welsh	Public health but then, yeah.
Erin Allmann Updyke	Public health!
Erin Welsh	Do we invest in public health?
Erin Allmann Updyke	Maybe we will. Someone will listen to this episode and be like aha! I didn't want to read The Lancet Global Health article but I listened to This Podcast Will Kill You and now I have all the answers. Okay. I do also want to quickly acknowledge what I am not going to talk about in this episode, even though it's so cool, and that is the physiology of the newborn.
Erin Welsh	Yeah.
Erin Allmann Updyke	Just like I kind of breezed through early embryonic development and I didn't talk at all about the the rest of fetal development, I am not going to talk about the physiology of the newborn but it is really cool and fascinating.
Erin Welsh	We'll do it someday.
Erin Allmann Updyke	We will.
Erin Welsh	It's the second 4th trimester.
Erin Allmann Updyke	Exactly.
Erin Welsh	Yeah.
Erin Allmann Updyke	Yeah. But this is pregnancy and so this is the 4th trimester of pregnancy in pregnant person here.
Erin Welsh	Yeah.

Erin Allmann Updyke	Okay? Physiologically there is still a lot of changes to take place after the baby and placenta have been delivered. Now the placenta, our favorite, is the primary organ that was making all of the hormones that kept the pregnancy going. So once that placenta has been delivered, you have a rapid withdrawal of placental hormones and that results in significant decreases. Because the placental hormones are like, there's a whole a bunch of different things. And a lot of them, it's not necessarily just like estrogen and progesterone alone but it's hormones that are telling us to make more estrogen and progesterone and stuff.
Erin Welsh	Yeah. It's like both a radio tower... It's not just like... Okay, here's what I was thinking about.
Erin Allmann Updyke	Give it to me.
Erin Welsh	Love Is Blind. It's not just the window between the two, right? It's like if the window were also saying 'now go get flowers and a cake'.
Erin Allmann Updyke	Right, it's also the producers.
Erin Welsh	Yes. Exactly!
Erin Allmann Updyke	It's the producers. This analogy does not need to exist but I like it.
Erin Welsh	We love a bad analogy.
Erin Allmann Updyke	Yes, okay, it's that.
Erin Welsh	Okay.
Erin Allmann Updyke	It is the producer, the director, whatever. But so once this placenta is gone, you have a significant and pretty rapid, like in a number of days, weeks, decline in estrogen and progesterone especially. And this cascade is what results in a lot of the physiologic changes that we see. So I'm going to kind of walk through again a little bit system by system about what some of these changes are. Most of these changes kind of get you back to, and I hate to say back to because it's really a new normal-
Erin Welsh	Okay.
Erin Allmann Updyke	But in terms of your physiology a lot of it is closer to pre-pregnancy levels of the stuff that we're going to talk about.
Erin Welsh	Okay, yeah.
Erin Allmann Updyke	By about 6 weeks, some of it takes about 12 weeks.
Erin Welsh	So can I ask a question about like how different are those changes? Is there just a way so I can in my head quantify what that looks like? And I guess it's hard to know like how much estrogen is actually-
Erin Allmann Updyke	Oh yeah, those numbers.
Erin Welsh	Yeah.

Erin Allmann Updyke	I don't know.
Erin Welsh	Okay.
Erin Allmann Updyke	I think one of the graphs that I had in last episode showed like hormone concentrations and stuff like that.
Erin Welsh	Okay.
Erin Allmann Updyke	But there's also such ranges and especially like anyone who is menstruating, your levels fluctuate so much with your menstrual cycle.
Erin Welsh	Okay.
Erin Allmann Updyke	I will say that in postpartum, you have a withdrawal of these hormones so they go down to very low levels. And if you are breastfeeding, they remain suppressed because of prolactin. So like the withdrawal of progesterone, skipping around in my notes, the withdrawal of progesterone causes an increase in prolactin which is the hormone that stimulates milk production. So if you are then breastfeeding, you continue to have high levels of prolactin and that suppresses the release of LH which is luteinizing hormone and FSH which is follicle stimulating hormone. And those are what would induce a normal ovulatory and menstrual cycle.
Erin Welsh	Right, right.
Erin Allmann Updyke	And that is why you see suppression of menses during breastfeeding.
Erin Welsh	Yeah.
Erin Allmann Updyke	And why that is, for a lot of people, a good form of contraception.
Erin Welsh	But it doesn't always happen that way.
Erin Allmann Updyke	It doesn't. But okay. But I mean it's more effective than condoms.
Erin Welsh	Okay, that's interesting.
Erin Allmann Updyke	Yes. I had a whole paragraph on this somewhere but I can't even find it, so I'm going to just talk to you from my brain.
Erin Welsh	Yeah.
Erin Allmann Updyke	It is. I forget the exact number but it is actually quite effective but it's only for the first 6 months postpartum that we have the data on it.
Erin Welsh	Okay.

Erin Allmann Updyke	And it's only when people are exclusively breastfeeding which does not include pumping. Because it is also breastfeeding on demand, which means that you are breastfeeding based on your newborn's cues and not necessarily on an hourly schedule which is what you end up having to do if you're exclusively pumping.
Erin Welsh	Right, right.
Erin Allmann Updyke	Not everybody is going to remain amenorrheic which means they're not having menses.
Erin Welsh	Yeah.
Erin Allmann Updyke	But it is actually, as per the World Health Organization guidelines, it is an effective and recommended form of birth control for a lot of people.
Erin Welsh	Oh my god, okay. I didn't know that.
Erin Allmann Updyke	Yes.
Erin Welsh	There's more nuance because I know a number of people who have gotten pregnant while breastfeeding and that makes sense.
Erin Allmann Updyke	Absolutely, absolutely. And so there's more nuance too because if you are sort of supplementing with formula or if you're having to be away and then you're pumping and things like that, then absolutely your menses can come back earlier than that 6 months.
Erin Welsh	Yeah.
Erin Allmann Updyke	They can come back in a matter of weeks. Again, it's going to be different person to person. That's why it's not 100% effective.
Erin Welsh	Right, right.
Erin Allmann Updyke	By any means. But yeah, it is really interesting. Yeah. Little tangent for us there.
Erin Welsh	I love a tangent.
Erin Allmann Updyke	Me too. So yes, we see this big hormonal change and then a lot of those physiologic changes that happened to sustain the pregnancy are going to kind of unravel themselves. So your blood volume, which again had increased by about 50% during pregnancy, is going to return to pre-pregnancy baseline within a matter of weeks. And what that means is that you immediately after birth have way more fluid on your body than your body thinks that it needs now that there's no placenta there secreting hormones to keep up this blood volume.
Erin Welsh	Okay.
Erin Allmann Updyke	So your kidneys have to take over the work of excreting all that extra fluid. And so your kidneys have to further increase their diuresis and so you have this physiologic diuresis. So a lot of times you'll be very kind of puffy immediately postpartum. And that's because of all this excess fluid that your kidneys are now just trying to like shunt out and then you're peeing all the time because of that.

Erin Welsh	And how long does that last?
Erin Allmann Updyke	A few days usually for like the physiologic diuresis.
Erin Welsh	Okay.
Erin Allmann Updyke	I think, I don't remember the exact days that it peaks. But it's like a few days and then you kind of go back to your pre-pregnancy baseline-ish.
Erin Welsh	Yeah.
Erin Allmann Updyke	Your GI tract, which remember slowed down a lot during pregnancy because of progesterone, it actually slows down even further during labor. And it will start to return to a pre-pregnancy type of functioning, like mobility will come back within a few days. But in those first few days immediately postpartum, you can have that continue, like it's a little bit more slow and that can result in constipation. This is exacerbated by C-sections because those are again abdominal surgeries where it can cause the bowels to kind of go to sleep a little bit.
Erin Welsh	Yeah.
Erin Allmann Updyke	And so that can mean that you can end up a little bit constipated. Plus opioids are often used and so those slow down the bowels even more.
Erin Welsh	Yeah. Super slow, yeah.
Erin Allmann Updyke	So that can make people either very nervous about their first bowel movement postpartum, because whether you had a vaginal delivery or a C-section, you might be worried about a hard stool that might be harder to pass.
Erin Welsh	Yep.
Erin Allmann Updyke	So yes, that's a thing that can happen is constipation postpartum.
Erin Welsh	Okay.
Erin Allmann Updyke	It usually gets better within a few days. Unless you're on opioids continuously.
Erin Welsh	Okay.
Erin Allmann Updyke	Yeah. Your uterus, which of course had to grow so large that it displaced all of the rest of your organs, like we talked about last episode, has to shrink back down. And it does this very quickly except that it doesn't go all the way back to pre-pregnancy baseline until a number of weeks later, closer to 6 weeks later, because it just has to continue to shrink. Part of that process also means a couple things are happening to encourage that process. One is that the release of oxytocin which is triggered by breastfeeding. So for people who are breastfeeding, they're going to have an increase in the release of oxytocin. That oxytocin is the hormone that stimulates uterine contraction. So that's going to cause further uterine shrinkage back down to like the size of a fist, which is what it is pre-pregnancy.
Erin Welsh	And is that pumping or pumping or breastfeeding?

Erin Allmann Updyke	Pumping or breastfeeding, either one.
Erin Welsh	Okay.
Erin Allmann Updyke	And then even if you are not breastfeeding, it's still going to shrink on its own.
Erin Welsh	Yeah, yeah, it's still gonna shrink.
Erin Allmann Updyke	It just might maybe take a little bit longer or things like that.
Erin Welsh	Okay.
Erin Allmann Updyke	But yeah, so it's going to take a few weeks before it really goes back down. It's not like automatic. It clamps way down but it doesn't like go back. Takes time.
Erin Welsh	Yeah.
Erin Allmann Updyke	Takes time. And as part of all of this, as this uterus is continuing to shrink and contract, it also means that you are going to be shedding all of the remnants of your endometrium regardless of your mode of delivery. You are going to be shedding this lining of your uterus and your uterus is remodeling its whole inner lining, so you have a lot of vaginal bleeding. This is called the lochia. That's like just what we call the postpartum bleeding.
Erin Welsh	How do you spell lochia?
Erin Allmann Updyke	L-O-C-H-I-A. Lochia.
Erin Welsh	And how long does that last? How much blood? Yeah.
Erin Allmann Updyke	So how much blood can vary of course.
Erin Welsh	Of course.
Erin Allmann Updyke	It usually can last anywhere from a couple of weeks to a month or more.
Erin Welsh	Okay.
Erin Allmann Updyke	Totally person dependent.
Erin Welsh	Okay.
Erin Allmann Updyke	Yeah.
Erin Welsh	And the amount of blood like relative to if you have more regular periods?
Erin Allmann Updyke	What is a regular period, Erin?
Erin Welsh	For an individual. That doesn't even track.

Erin Allmann Updyke	No, yeah, it totally varies.
Erin Welsh	Okay, okay.
Erin Allmann Updyke	What I will say is what we... Okay. We talked a lot about postpartum hemorrhage last episode.
Erin Welsh	Yeah.
Erin Allmann Updyke	Delayed postpartum hemorrhage is also a thing.
Erin Welsh	Yeah.
Erin Allmann Updyke	Where you can have a hemorrhage that occurs later on after delivery in the days or weeks postpartum.
Erin Welsh	Days or weeks, okay.
Erin Allmann Updyke	And so what I will say is like the general advice in terms of how much is too much bleeding... I don't actually like to give medical advice on this podcast. This is not medical advice. We are not your doctors. Please consult your doctor. But usually if somebody is bleeding so much that they're like completely saturating pads for like hours in a row or they're passing very large blood clots, that is usually considered too much bleeding.
Erin Welsh	Okay.
Erin Allmann Updyke	So it should be like a moderate amount but not like heavy, heavy bleeding.
Erin Welsh	Right.
Erin Allmann Updyke	But again, can really vary. Some people have very little bleeding.
Erin Welsh	Okay.
Erin Allmann Updyke	Yeah. And then we of course have milk production which we kind of already talked about, so I can skip it unless you have any other questions about that.
Erin Welsh	When does it really like... Of course I have questions about that. You kidding me?
Erin Allmann Updyke	So the "first milk" quote unquote that you produce-
Erin Welsh	Yeah.
Erin Allmann Updyke	All of this is stimulated by again this withdrawal of hormones and then the increase of prolactin. But even before that process has really kind of kicked in in those first couple of days, your body is producing this substance called colostrum.
Erin Welsh	Yeah.

Erin Allmann Updyke	And that's that kind of yellowy, like it's a different texture, it looks different substance. We actually start making that, most people, during about the 2nd trimester. Some people might notice it, some people might not. And then it takes usually 2 or 3 days on average for your breast milk to come in.
Erin Welsh	Okay.
Erin Allmann Updyke	In people who aren't going to be breastfeeding. There are a lot of situations that can cause challenges to that, whether it's delayed milk production. One of the risk factors for delayed milk production might be a C-section. The mechanism there, not fully known.
Erin Welsh	Right, we don't know.
Erin Allmann Updyke	But it is the case that C-section is associated with an increased risk of delayed milk production. Also early delivery, whether that's early term which would be before 37 weeks-
Erin Welsh	Okay.
Erin Allmann Updyke	Or like late preterm, it's like 34-36 weeks or so in there. Or even just that like early term 37, 38 weeks, sometimes people have a little bit of a delay or have like a little bit of a delayed start in their breast milk production.
Erin Welsh	Okay.
Erin Allmann Updyke	And then there's so many individual factors as well that play in. Have you ever breastfed before? Like so many different things. There's also infant factors that can really contribute to the successful breastfeeding relationship. Babies who are born early, either that early term or preterm might have difficulty latching, they might not have really good muscle tone yet because they weren't fully developed in utero and so they don't have a great suck. Like there's literally so many things.
Erin Welsh	Yeah.
Erin Allmann Updyke	And I feel very strongly about the rhetoric around breastfeeding today.
Erin Welsh	Yeah, we do.
Erin Allmann Updyke	I do feel that it deserves its whole own episode.
Erin Welsh	We will do one. That is a promise, yes.
Erin Allmann Updyke	We absolutely will because there is a lot to unpack there.
Erin Welsh	Yeah.
Erin Allmann Updyke	And the short answer is, in my opinion and per medical establishment regardless of whether they admit it or not, fed is best. Okay!
Erin Welsh	Fed is best.

Erin Allmann Updyke	Long story short, 2-3 days for breast milk production postpartum usually. Now during all of these physiologic changes that we've gone through, whether you notice them or not, like you might not notice your blood volume changing but you might notice that you're peeing a lot sort of thing-
Erin Welsh	Yeah.
Erin Allmann Updyke	You also have just given birth either vaginally or through a C-section. So you might have stitches either in your abdomen or in your perineum or maybe not. In either case you're probably going to be sore. There's going to be pain that is there because of the whole process that literally just happened.
Erin Welsh	Yep.
Erin Allmann Updyke	And then on top of that, you have an infant or multiple who needs literal constant care.
Erin Welsh	Constant, around the clock, 24/7.
Erin Allmann Updyke	Cannot be left alone for a minute, who sucks at sleeping. They suck at it.
Erin Welsh	Why are they so bad at sleeping?
Erin Allmann Updyke	Why are they so bad at sleeping? They suck at pooping. They're not even good at pooping yet.
Erin Welsh	They're not good at pooping.
Erin Allmann Updyke	They suck at eating.
Erin Welsh	Yeah.
Erin Allmann Updyke	They cannot figure it out. And you are now entirely responsible for them.
Erin Welsh	Yeah.
Erin Allmann Updyke	This is a very difficult time period.
Erin Welsh	Yeah.
Erin Allmann Updyke	Even if you are good at it or you've done it before or something like that, it's very hard. And we talked in these last few episodes a lot about the risky parts of pregnancy. The postpartum period really often, especially in the US, gets dismissed, right?
Erin Welsh	Oh yeah.
Erin Allmann Updyke	But all of these physiologic changes that we've gone through, they don't reverse themselves automatically and they are still kind of changing and finding a brand new baseline in this postpartum period. Which means that we are still at increased risk of things like postpartum preeclampsia-
Erin Welsh	Yeah.

Erin Allmann Updyke	Okay? Of delayed postpartum hemorrhage like I talked about. There's also the risk of infections like endometritis which can happen post delivery. So there there is a lot of different topics that I could go into but what I'm going to now shift to focusing on is one of the biggest contributors to postpartum morbidity and that is postpartum depression and postpartum anxiety and other postpartum mood disorders. So postpartum depression, which is the one that gets probably the most press these days and is the most well defined because it does exist kind of in the DSM-5, it is generally recognized as more than 2 weeks and sometimes it's like has to be developed in the first 4 weeks of a depressed mood.
Erin Welsh	Okay.
Erin Allmann Updyke	In the postpartum period. And we use a number of different screening tools that are very well validated, like this questionnaire which is called the Edinburgh Depression Scale or Edinburgh Postpartum Depression Scale, to decide if somebody meets criteria or needs additional evaluation for postpartum depression. So it's a series of questions and there are things like in the last two weeks, how often have you felt like I'm not looking forward to enjoyment with things? Or how often... Some of the ones that I really hate are like do you feel like you are worried for no good reason? This is when I told you I feel like I lie on these.
Erin Welsh	Yeah.
Erin Allmann Updyke	Because I'm like sorry, I'm very worried for a very good reason.
Erin Welsh	A good reason, yeah.
Erin Allmann Updyke	I have been anxious for no good reason at all.
Erin Welsh	Right.
Erin Allmann Updyke	Or I've been crying for no reason at all.
Erin Welsh	To ask someone to say are your anxieties justified? Are your worries justified?
Erin Allmann Updyke	Yeah. Yeah, yeah.
Erin Welsh	Like that's not...
Erin Allmann Updyke	Yeah. But that's just my personal feelings. These are very well validated tools for screening.
Erin Welsh	They are, yeah.
Erin Allmann Updyke	And so this is the kind of first thing that's recommended that everybody during pregnancy and postpartum is supposed to be offered questionnaires like this to try and identify people who are perhaps experiencing postpartum mood disorders or who are at risk of developing postpartum mood disorders. Globally postpartum depression has an estimated prevalence of 17%. That is so much higher than any of the other complications that we have talked about.
Erin Welsh	Yeah.
Erin Allmann Updyke	Like so much higher. That global number though is not like you can't just leave it there, okay.

Erin Welsh	Yeah.
Erin Allmann Updyke	Because the variation geographically is huge.
Erin Welsh	Okay.
Erin Allmann Updyke	Now low and middle income countries, prevalence is significantly higher, significantly higher than in high income countries. The average, if you just lump all low and middle income countries which is not a fair thing to do but if you do that, then the prevalence is estimated at around 20%.
Erin Welsh	Okay.
Erin Allmann Updyke	High income countries, the average is like 15.5%. But as you can see there's a graph that's in a paper that I cite that shows this huge range in distribution. Some countries are as high as in the 30th percentile.
Erin Welsh	Wow.
Erin Allmann Updyke	So yeah, so the range is really, really huge. And a lot of high income countries the prevalence of postpartum depression is in the single digits, like 8%-9%.
Erin Welsh	Okay.
Erin Allmann Updyke	The US and the UK are a little bit of outliers in the high income country bracket where the prevalence is estimated at 18%-20% respectively.
Erin Welsh	Okay.
Erin Allmann Updyke	Okay. Now pause for a second.
Erin Welsh	Okay.
Erin Allmann Updyke	Because we're going to Erin math this a little bit.
Erin Welsh	Yeah, yeah, yeah.
Erin Allmann Updyke	Because in the US we have an estimated around 3.5 million live births every year. If 18% of those, and postpartum depression is not limited to live births so this also encompasses depression post miscarriage and stillbirth which those rates are even higher. But even if we just look at those numbers, 3.5 million live births, 18% of those people having postpartum depression is over 630,000 people in just the US every year. That's not a small number of individuals or families that are being affected.
Erin Welsh	No, that is not a small number. Families, yeah.
Erin Allmann Updyke	So that's postpartum depression which is just one of the postpartum mood disorders. Postpartum anxiety-

Erin Welsh	I have a question, wait.
Erin Allmann Updyke	Okay, go.
Erin Welsh	I know you're like-
Erin Allmann Updyke	I just wanna-
Erin Welsh	I know, I know, I know. Okay, this map that shows the rate of postpartum depression or the prevalence. Prevalence?
Erin Allmann Updyke	Prevalence, prevalence. Yeah.
Erin Welsh	Okay. Is postpartum depression; is this all being defined in the same way?
Erin Allmann Updyke	It's all being defined as DSM-5 definitions. Yes.
Erin Welsh	DSM-5 definitions.
Erin Allmann Updyke	Yeah, yeah, yeah. Postpartum anxiety, another one of the postpartum mood disorders, estimated to affect 8%-12% of people postpartum. Here's the big problem here.
Erin Welsh	Okay.
Erin Allmann Updyke	We don't have diagnostic criteria. There is no such disorder in the DSM.
Erin Welsh	It's not in the DSM?
Erin Allmann Updyke	There is no disorder that is called postpartum anxiety. We also do not have a screening test. In theory the EDS should be capturing people who are at risk for postpartum anxiety type mood disorders and depressive disorders.
Erin Welsh	Yeah.
Erin Allmann Updyke	But it doesn't.
Erin Welsh	Yeah.
Erin Allmann Updyke	Like there's no screening test for anxiety that is universally administered in the postpartum period and there is also not a specific disorder that is recognized as a postpartum anxiety disorder. So then people have to, like to get a "diagnosis" quote unquote, whether that's important or not is a different discussion, but it would then be a different type of anxiety disorder like a generalized anxiety disorder, obsessive compulsive disorder, right.
Erin Welsh	Right.
Erin Allmann Updyke	Like all these other type of anxiety disorders. Because anxiety is a symptom and not a diagnosis.

Erin Welsh	Okay, a few questions here. So a person could have postpartum depression and postpartum anxiety.
Erin Allmann Updyke	Absolutely.
Erin Welsh	Okay. Secondly then do postpartum depression, postpartum anxiety... Because I know that in reading about the history, the postpartum, like there was a huge fight or struggle to get postpartum to be a specific thing. And part of that was really to insurance and stuff so that it's like oh if this was pre-existing, we're not going to cover it.
Erin Allmann Updyke	Correct.
Erin Welsh	But and so then that postpartum period was shown as a risk factor and that is how we got postpartum depression as a diagnosis.
Erin Allmann Updyke	Right.
Erin Welsh	But then what?
Erin Allmann Updyke	So I think it usually has to last longer than 2 weeks.
Erin Welsh	Okay.
Erin Allmann Updyke	Because the first 2 weeks postpartum, people can have a depressed mood that is still called the Baby Blues, the postpartum blues.
Erin Welsh	Yep. Which people have described it as infantilizing.
Erin Allmann Updyke	I'd agree with that.
Erin Welsh	Yeah.
Erin Allmann Updyke	Yeah.
Erin Welsh	In the 60s, do you want to know what like, I think it was Dr. Spock or something. Like the Benjamin Spock who was like this is how they care for the baby.
Erin Allmann Updyke	No, I only know this Spock with like the live long and prosper.
Erin Welsh	This is relative.
Erin Allmann Updyke	Okay.
Erin Welsh	Yeah.
Erin Allmann Updyke	Wait.
Erin Welsh	Not really.

Erin Allmann Updyke	Oh. I was like really?
Erin Welsh	He's an alien, Erin.
Erin Allmann Updyke	I know! That's why I was so confused.
Erin Welsh	I was like oh no. No, it was recommended that like oh, if you have Baby Blues, pick yourself up by getting yourself a new hat or treat yourself to a new dress. Go get your hair done.
Erin Allmann Updyke	Get your hair did.
Erin Welsh	That was literally... Yeah.
Erin Allmann Updyke	Okay, great. Love that.
Erin Welsh	Anyway.
Erin Allmann Updyke	Yeah, so lasting more than 2 weeks.
Erin Welsh	More than 2 weeks.
Erin Allmann Updyke	And then in terms of the onset of development, it's usually the first year postpartum is all still considered within the postpartum period.
Erin Welsh	Okay.
Erin Allmann Updyke	Yeah. Yeah, yeah.
Erin Welsh	That was my terribly worded question I was trying to get at.
Erin Allmann Updyke	The overall time frame?
Erin Welsh	Yeah.
Erin Allmann Updyke	Yeah, yeah, yeah. And then of course there is also the most severe spectrum of maternal postpartum mental health disorders and that is postpartum psychosis, which is not called postpartum psychosis, it's Brief Psychotic Disorder with Postpartum Onset is the DSM-5 title. But this is the onset of hallucinations or delusions and disorganized behavior and things like that that usually go along with depression or depressive symptoms during this postpartum period. This is thought to be relatively rare though our studies are not as robust on it but estimated between 0.86-2.6 per 1000 births. So it's commonly cited as like 1-2 per 1000 based on a global analysis from 2017. But it is also the most acutely dangerous of the maternal mental health disorders.
Erin Welsh	Yeah.
Erin Allmann Updyke	Because this it can be very severe and really disturbing for the mom and the family. And so often results in hospitalization.

Erin Welsh	Yeah. I think I told you this, Erin, but I listened to a memoir called 'Inferno: A Memoir of Motherhood and Madness' by Catherine Cho. And it was about this person's experience with with postpartum psychosis and it was a really insightful and meaningful and also like really... It just feels like a really important book.
Erin Allmann Updyke	Book, yeah. Yeah.
Erin Welsh	I really appreciated it. But the other thing that I think was really interesting about that was how she talked about she was in the US when this happened and when she was hospitalized but she was actually like traveling from the UK where she lived in the UK.
Erin Allmann Updyke	Okay.
Erin Welsh	And the treatment is very different in terms of the management of like okay, well keep mom with baby in the UK, keep mom separate from baby in the US.
Erin Allmann Updyke	Okay.
Erin Welsh	And just like interesting... I just, yeah.
Erin Allmann Updyke	The different nuances.
Erin Welsh	All the different choices.
Erin Allmann Updyke	And I will say that our understanding of the neurologic or the biologic basis that underpins postpartum depression, anxiety, psychosis, it is poor to say the least.
Erin Welsh	Yeah. Yeah.
Erin Allmann Updyke	That's like an understatement. It is very often blamed, especially in popular media press about postpartum depression, on quote unquote "hormones".
Erin Welsh	Yeah.
Erin Allmann Updyke	Maybe there is some data that that might be true for this quote unquote "Baby Blues" period.
Erin Welsh	Yeah.
Erin Allmann Updyke	Where also it's important to say that like 40%-70% of people can experience this mood lability during those first two weeks and that is when our hormonal shifts are the most extreme. So sure, maybe that is responsible for that first period but we actually do not have data to suggest that there are hormonal differences in people who are experiencing other postpartum mood disorders past that 2 week period and people who do not.
Erin Welsh	Right, right.
Erin Allmann Updyke	So we do not understand it the same way that we don't understand the biologic causes of depression or anxiety or other mood disorders outside of the postpartum period. However-
Erin Welsh	However?

Erin Allmann Updyke	What is clear from the epidemiological correlates, from the facts that for example as we saw globally, the rates are significantly higher in low and middle income countries that lack health infrastructure, that lack access to healthcare in the prenatal and postnatal period, or that rates of postpartum depression are significantly higher in lower income households in high income countries that lack access to healthcare. That they are higher in people who are subjected to additional stressors such as abusive or unsafe relationships or unintended pregnancies. What is clear from these epidemiological studies is that a lot of the factors that contribute to an increased risk of postpartum depression and other mood disorders are potentially modifiable and not on an individual level.
Erin Welsh	So important.
Erin Allmann Updyke	Not on an individual level.
Erin Welsh	Yeah.
Erin Allmann Updyke	And in fact, the single greatest risk factor for postpartum depression and postpartum anxiety are untreated anxiety and depression outside or during pregnancy. So if we can actually recognize and provide treatment of mental health disorders outside of the context of pregnancy, we can help reduce the burden of postpartum disorders as well. So I'm going to now shift this to talk about what we know from data about how to improve postpartum outcomes overall.
Erin Welsh	Yeah.
Erin Allmann Updyke	Ready?
Erin Welsh	Evidence-based.
Erin Allmann Updyke	Evidence-based medicine. I found a quote from an article from 2016 in the American Journal of Obstetrics and Gynecology that said, and I quote, "The intense focus on women's health prenatally is unbalanced by infrequent and late postpartum care." End quote.
Erin Welsh	Yep.
Erin Allmann Updyke	And that in the United States of America is an understatement.
Erin Welsh	Yes.
Erin Allmann Updyke	Because postpartum care is not just infrequent, for most people in the US it is one singular visit which 40% of people, especially those on public insurance, do not usually attend. And it occurs at 6 weeks postpartum which is when I already said that most of those changes that are happening are done. They're done. Contrast this with getting weekly visits for at least the first 4 weeks prior to delivery and then every 2 week visits for the several months prior to that.
Erin Welsh	Yeah. Well okay, also then, Erin, and I feel like I'm jumping ahead but-
Erin Allmann Updyke	Give it.
Erin Welsh	During pregnancy, who are you seeing? And then after pregnancy, who are you seeing?

Erin Allmann Updyke	Well Erin, let me tell you as a family medicine physician what my feelings about that are. Yes. In the US our system is very fragmented.
Erin Welsh	Yes.
Erin Allmann Updyke	We are generally seeing OBGYN providers primarily during prenatal period, during all your prenatal visits, and then afterwards you're seeing a pediatrician. And you are seeing them pretty frequently and they are there for baby and not for you. And then you see your OBGYN one time at 6 weeks.
Erin Welsh	Yeah.
Erin Allmann Updyke	Okay. So this concept of a 4th trimester is a recent concept at least in US medicine. And it really is kind of an admission of our failure thus far to adequately care for people who have recently given birth. In the US, an estimated 23% of employed women return to work within 10 days postpartum.
Erin Welsh	I'm sorry, 10 days?
Erin Allmann Updyke	10 days postpartum. And if that is not one of the most shocking statistics, then I don't know if you've been paying attention to these episodes. Now that is not the case everywhere.
Erin Welsh	Yeah.
Erin Allmann Updyke	So I'm going to walk you through a paper that really was very interesting. It was a comparative analysis that compared and contrasted postpartum care, prenatal and postpartum care in the US and five other high income countries. Because again, this is what we have to compare to like kind of apples to apples, right? And this compared the US to France, Japan, Australia, England, and the Netherlands. And we know from things like the data on maternal mortality that outcomes are very different in the United States compared to all of those other high income countries. Our maternal mortality rates are 3 times as high as France and the UK and nearly 10 times as high as Australia. Our maternal mortality rates in the US have been on a rise faster than any other countries, though there has been a rise in the UK but it's been at a less substantial rate compared to the US. And maternal mortality is incredibly unequal.
Erin Welsh	Yeah.
Erin Allmann Updyke	With Black American women dying at nearly 3 times the rate. In 2022, maternal mortality for Black women was 50 per 100,000 live births compared to 19 per 100,000 for white women and 16 per 100,000 for Latino women. And I will say the numbers were different in 2021 but we don't know if that was because of COVID or what.
Erin Welsh	Right, right.
Erin Allmann Updyke	But this trend has been there for decades.
Erin Welsh	Yeah.

Erin Allmann Updyke	Okay. And so this comparative analysis was looking at prenatal and postnatal care, not just looking at delivery method or one time point but let's look at these overall systems of care to see if there are any big themes that come out. And boy howdy, do they. So as a baseline to understand where a lot of other countries maybe are getting ideas from, the World Health Organization recommends immediate postpartum care, so immediately in that postpartum period, like after delivery of placenta for the 1st 24 hours.
Erin Welsh	Yeah.
Erin Allmann Updyke	And then care in the 1st 24 hours. And then additional visits at 3 days, 7-14 days, and at 6 weeks postpartum. And that should include both maternal and newborn care. And again, in the US our care is divided between specialists in obstetrics and gynecology and pediatricians. So in this comparative analysis, in every other country that they analyzed aside from the US, postnatal care included home visits, universal home visits that begin immediately post discharge from the hospital and are specifically intended to address both maternal and infant health. These programs are typically run, Erin, by midwives or nurses who are trained in prenatal care and infant care.
Erin Welsh	Yep.
Erin Allmann Updyke	The US has absolutely no such universal system. None.
Erin Welsh	Yeah.
Erin Allmann Updyke	We have some programs in some parts of the country or maybe some specific cities but they only ever target specific populations that are considered high risk, which also means that they usually carry with them a lot of shame and stigma.
Erin Welsh	Yep.
Erin Allmann Updyke	Okay?
Erin Welsh	Yep.
Erin Allmann Updyke	Now it's also true that the US in this comparative analysis was the only country where the majority of our prenatal care was conducted by OBGYNs as opposed to midwives. Okay? We also in the US, it's not just postnatal care, it's not just postpartum care, we have huge inequalities in our access to care early in pregnancy because of our ridiculous insurance system. Those are my editorialization, that wasn't in the paper. So that even though in the US pregnant people are guaranteed access to Medicaid services, however individuals, like from data, individuals that are on public insurance such as Medicaid start prenatal care significantly later, they in many states lose their insurance at 60 days postpartum. I'm sorry, what?
Erin Welsh	Yeah.
Erin Allmann Updyke	And what that means is that in the US more people are coming into their pregnancy without any access to healthcare to address their underlying or chronic health conditions that existed prior to pregnancy.
Erin Welsh	Yeah.

Erin Allmann Updyke	Then they have the bare minimum of prenatal care. And in fact over 6% of pregnant women in the US have no prenatal care at all or they don't start prenatal care until the 3rd trimester, even though again they're supposed to be eligible for Medicaid services. And then they attend one postpartum visit if they're lucky and then they lose their insurance again. It is not like this in other high income countries, period.
Erin Welsh	Period.
Erin Allmann Updyke	Now there is data, and I think you mentioned this at one point, I don't remember in which episode, that the prevalence of a lot of conditions that we know are associated with an increased risk of adverse pregnancy outcomes, right. Things like hypertension, diabetes, older maternal age at your first pregnancy.
Erin Welsh	Yeah.
Erin Allmann Updyke	We know that these things are associated with riskier pregnancies and some of these things are in fact on the rise in the US and elsewhere. And certainly that likely contributes to some of the trends that we are seeing. But I think that what ends up happening in the rhetoric about this is that politicians especially and organizations and even individuals lay this blame on individuals themselves. It's because of your pre-existing condition.
Erin Welsh	Yes.
Erin Allmann Updyke	It's your medical complications.
Erin Welsh	It's your age. Yeah.
Erin Allmann Updyke	It's your age.
Erin Welsh	You chose to have a career first.
Erin Allmann Updyke	It's your choice.
Erin Welsh	Yep.
Erin Allmann Updyke	And that makes it seem like it was unavoidable or it was your lifestyle.
Erin Welsh	Lifestyle. Yeah.
Erin Allmann Updyke	That is a lie, period. Across the globe, not just in the US, millions of maternal deaths each decade are due to preventable factors. And this is not just coming from me, this is coming from The Lancet Global Health 2024. They said, and I quote, these maternal deaths are, quote, "tangible manifestations of the prevailing determinants of maternal health and persistent inequities in global health and socioeconomic development."
Erin Welsh	Yep. Yep.
Erin Allmann Updyke	So we know. I'm getting sweaty from how angry I get about this because it's like I feel really passionate about this.

Erin Welsh	Justifiably angry, yeah.
Erin Allmann Updyke	We know the things to do to prevent this. We can prevent maternal mortality. We can prevent adverse neonatal outcomes as well. By doing what, Erin? Let me tell you.
Erin Welsh	Public health.
Erin Allmann Updyke	Number one, access to universal healthcare. Number 2, specifically access to comprehensive... This is again from data. This is not just me, Erin Allmann Updyke saying this, okay? I say this but this is literally the data that we have on what prevents adverse outcomes.
Erin Welsh	We have sources! We have citations!
Erin Allmann Updyke	We need universal access to comprehensive and modern contraception so that people can plan if and when they want to get pregnant.
Erin Welsh	Yep.
Erin Allmann Updyke	We need universal, legal, safe access to abortion services which are life saving medical care.
Erin Welsh	Medical care.
Erin Allmann Updyke	We need universal access to high quality prenatal, intrapartum, and postpartum care which includes midwives and obstetrics and gynecology and family physicians and pediatricians, all of it.
Erin Welsh	All of it working together.
Erin Allmann Updyke	Working together as a medical system. And this particular paper does not get into this deep of detail but I have other sources that show that guaranteed paid parental leave, which we also do not have in the US, is in fact associated with reductions in the risk of postpartum depression, depression later in life, lower risk of intimate partner violence which is at its peak during pregnancy and postpartum-
Erin Welsh	Yep, it is.
Erin Allmann Updyke	Paid parental leave also increases the likelihood and duration of breastfeeding, so folks who are all making sure that everyone breastfeeds, that's a thing that can help it. And it is directly associated with decreased infant mortality.
Erin Welsh	Yep.
Erin Allmann Updyke	Sorry, we have a playbook.
Erin Welsh	The answer is here.
Erin Allmann Updyke	We know the answers.
Erin Welsh	We know the answer.

Erin Allmann Updyke	We just have to implement them.
Erin Welsh	Yep.
Erin Allmann Updyke	I'm done.
Erin Welsh	No but it's really hard sometimes because it's like on the one hand I want to find that very inspirational or like hopeful or like here, look, we know how to do this, we have answers!
Erin Allmann Updyke	It is hopeful.
Erin Welsh	We have had these answers for so long.
Erin Allmann Updyke	I know. I know. I know it. I know it.
Erin Welsh	Yeah.
Erin Allmann Updyke	It's true, it's true, it's true. But we have the answers. We know the answers, right?
Erin Welsh	Yeah.
Erin Allmann Updyke	These answers just have to be enacted and they are being done in certain places.
Erin Welsh	They are.
Erin Allmann Updyke	I mean the state by state mortality data in the US is shocking. If you go to the CDC website and you look at what the rates are in one state vs another.
Erin Welsh	I would like to know, yeah.
Erin Allmann Updyke	The disparities are very severe, systemic racism played a huge role in all of this in the United States.
Erin Welsh	Right.
Erin Allmann Updyke	In addition to the quality of care that people get depending on what color their skin is. So there is a lot of things that are not easy to fix. I mean they could be easy to fix because we know how to do them.
Erin Welsh	We can fix parts of most everything.
Erin Allmann Updyke	Right.
Erin Welsh	Yeah.
Erin Allmann Updyke	But so we've done all your work for you. We've laid it out.
Erin Welsh	It requires investment.

Erin Allmann Updyke	It does.
Erin Welsh	And that is the hardest thing to convince people of.
Erin Allmann Updyke	That's our constant theme and it's my favorite thing on This Podcast Will Kill You.
Erin Welsh	Investment and trade-offs and investing now and public health and public health is investing and saving money and it's not... Yeah.
Erin Allmann Updyke	Yeah.
Erin Welsh	I know.
Erin Allmann Updyke	So Erin.
Erin Welsh	I can't believe, are we done?
Erin Allmann Updyke	We're done for now.
Erin Welsh	Wow.
Erin Allmann Updyke	We're done with this season, we're done with this series.
Erin Welsh	I have so many feelings about everything.
Erin Allmann Updyke	Me too. I also just want to say because I know that there was a lot of parts of this series where we got very heavy-
Erin Welsh	We got very heavy.
Erin Allmann Updyke	And where we focused a lot on the kind of complications or things that can go wrong. I love to know these things and know at the same time in my brain how often everything goes just fine.
Erin Welsh	Yep. Absolutely.
Erin Allmann Updyke	And it is beautiful and amazing and phenomenal to see that happen and to know that it happens so frequently. It truly is like I really love prenatal care, I really love this whole process. I just love everything about this and I really loved doing this.
Erin Welsh	Yeah, yeah.
Erin Allmann Updyke	Even though I know we focused a lot on the bad things.
Erin Welsh	Well I feel like it's all about contextualizing everything, right?
Erin Allmann Updyke	It is, yeah.
Erin Welsh	Like you and I had a lot of discussions about this.

Erin Allmann Updyke	Yeah.
Erin Welsh	Like how do we balance this approach where we're not doing the 'What To Expect When You're Expecting'.
Erin Allmann Updyke	You just lay back and have a baby.
Erin Welsh	You just lay back and let everyone else do the work. It's totally fine.
Erin Allmann Updyke	Right.
Erin Welsh	And it's like knowledge is power.
Erin Allmann Updyke	It is.
Erin Welsh	But we also-
Erin Allmann Updyke	And it can increase my anxiety.
Erin Welsh	And it can increase anxiety.
Erin Allmann Updyke	Yeah.
Erin Welsh	And so I feel like we really did try hard to balance talking about what are the pieces that we feel are valuable to talk about.
Erin Allmann Updyke	Yeah.
Erin Welsh	And also while not talking about everything that is valuable to talk about.
Erin Allmann Updyke	Right.
Erin Welsh	So yeah. But it's true, I hope we didn't make everyone be like oh god.
Erin Allmann Updyke	Oh god. Never for me.
Erin Welsh	Right. Never for me or our healthcare system and country is broken.
Erin Allmann Updyke	Yeah. Totally broken, I mean. I have no interest in having any other kids, definitely not, absolutely not. I'm done.
Erin Welsh	Yeah.
Erin Allmann Updyke	But there were moments in this where I was like aw. Reading, like relearning these things.
Erin Welsh	Yeah.
Erin Allmann Updyke	And it's a little bit of magic, I feel.

Erin Welsh	Absolutely.
Erin Allmann Updyke	That's just me, yeah.
Erin Welsh	I mean I think I've never wanted to have kids but throughout this series, I called my mom so often to be like-
Erin Allmann Updyke	Yeah.
Erin Welsh	Ooh, what about this? Did you take a pregnancy test?
Erin Allmann Updyke	Same. Yeah.
Erin Welsh	Like tell me about your ultrasound, tell me about your delivery.
Erin Allmann Updyke	Yeah.
Erin Welsh	What was it like? She waited for one of my brothers, ER was on and she was like a like a rabid ER fan. And she was like I went into labor and I waited, I watched ER and then I went to the hospital because I didn't want to miss it.
Erin Allmann Updyke	Yeah. Yeah.
Erin Welsh	And that was before DVR.
Erin Allmann Updyke	Right.
Erin Welsh	But that experience, like so many things that we had never talked about before about pregnancy.
Erin Allmann Updyke	Yeah. Right.
Erin Welsh	And thinking about her experiences and it's been such an amazing process to like do all this reading and and think about... Yeah.
Erin Allmann Updyke	Yeah. Think about so many different aspects of it. If you want to learn so much more-
Erin Welsh	So much more.
Erin Allmann Updyke	We've got sources.
Erin Welsh	Oh my god, I feel like this was one, this is, yeah. I have a lot of books for this.
Erin Allmann Updyke	I know.
Erin Welsh	I'm going to briefly, because I've already mentioned a few of them, I'll mention them again.
Erin Allmann Updyke	Yeah.

Erin Welsh	So 'Brought to Bed' by Judith Walzer Leavitt. Tina Cassidy, a book called 'Birth: The Surprising History of How We Are Born'. Barbara Ehrenreich and Deirdre English wrote a book called 'Witches, Midwives, and Nurses'. It's like a classic feminist text. Rachel Moran, again, 'Blue: A History of Postpartum Depression in America'. Joyce Thompson and Helen Varney Burst, 'A History of Midwifery in the United States'. Laurel Thatcher Ulrich, 'A Midwife's Tale: The Life of Martha Ballard, Based on her Diary'. And again, that memoir 'Inferno' by Catherine Cho.
Erin Allmann Updyke	I had a lot of papers for this one. I already shouted out a couple like that Lancet Global Health 2024 paper that was 'A global analysis of the determinants of maternal health and transitions and maternal mortality'. Such a good read. There was also the paper I mentioned, it was from the American Journal of Obstetrics and Gynecology titled 'The Fourth Trimester: A Critical Transition Period with Unmet Maternal Health Needs'. I think I might have said 2016, it was actually 2017. And then the paper where the map of postpartum depression trends came from was from Translational Psychiatry from 2021, that was titled 'Mapping Global Prevalence of Depression Among Postpartum Women'. But we have so many more on our website thispodcastwillkillyou.com where we list all of the sources from this episode and every one of our episodes from all seven seasons.
Erin Welsh	There's so many sources.
Erin Allmann Updyke	So many.
Erin Welsh	We've said thank you every single episode and we mean it every single episode. And thank you to every single person who provided a firsthand account-
Erin Allmann Updyke	Yeah.
Erin Welsh	Who sent in their firsthand account; who thought about sending in a firsthand account.
Erin Allmann Updyke	Yeah.
Erin Welsh	We appreciate you. The series would have not been the same by any means without you.
Erin Allmann Updyke	No, it means the absolute world to us. Thank you.
Erin Welsh	Yeah.
Erin Allmann Updyke	Thank you, thank you, thank you.
Erin Welsh	Thank you.
Erin Allmann Updyke	Thank you to everyone here at the Exactly Right studios. We're really sad to have to leave because we had so much fun doing this.
Erin Welsh	I know!
Erin Allmann Updyke	Thank you to today Lianna and Jessica and Brent and Craig and Tom yesterday, everyone, all of you here. Thank you, thank you, thank you.
Erin Welsh	Thank you to Bloodmobile for providing the music for this episode and all of our episodes.

Erin Allmann Updyke	And thank you to you, listeners. 7 seasons in, 4 episodes on pregnancy.
Erin Welsh	Oh my gosh.
Erin Allmann Updyke	Thank you for sticking with us.
Erin Welsh	Yes.
Erin Allmann Updyke	In this short break between seasons, tell us what you want to hear more of.
Erin Welsh	Always, we love to hear it.
Erin Allmann Updyke	Yeah we do.
Erin Welsh	And a big thank you of course to our generous, beautiful, fantastic patrons. We appreciate your support so very much.
Erin Allmann Updyke	We really do. Thank you.
Erin Welsh	Until next season, wash your hands.
Erin Allmann Updyke	You filthy animals.