

Chicago's High Rate of Maternal/Infant Death is Bad for Business and the Community.

Can it be turned around?

This event was sponsored by Medela LLC together with the March of Dimes and UIC in cooperation with the office of U.S. Senator Tammy Duckworth. Event took place at the University of Illinois Chicago on October 8, 2019.

Panelists:

Aloka L. Patel, MD Rush University Children's Hospital Associate Professor, Department of Pediatrics Research Director for the Section of Neonatology Neonatal-Perinatal Fellowship Associate Director

Maura Quinlan, MD, MPH, Associate Professor, Dept of Obstetrics and Gynecology Northwestern University, Feinberg School of Medicine Legislative Chair, Illinois Section of ACOG

Paula P. Meier, PhD, RN Director of Lactation Services, Neonatal Intensive Care Professor of Pediatrics Professor of Women, Children and Family Nursing Rush University Medical Center

Jenny Thomas, MD, MPH, IBCLC, FAAP, FABM Pediatrician and Breastfeeding Medicine Specialist

Panel discussion moderator:

Dr. Ngozi Ezike, Director, Illinois Department of Public Health

Opening Remarks

Melissa Gonzales, Executive Vice President, Medela LLC

Thank you so much for joining us this morning to support this important local topic. Good morning. So great to have you all here. My name is Melissa Gonzales. I'm the Executive Vice President for Medela and I'm kicking this off today. We're so excited because the Senator's office and the March of Dimes and Medela have been talking about this event for about 18 months. Seven weeks ago Senator Duckworth finally said "we have a date." So, we got this together really fast. We appreciate all the RSVPs and we hope you find this fulfilling. This is an extra pleasure for me because I'm a College of Nursing graduate from the University of Illinois Chicago so super excited for all our nursing guests.

But, why are we here today, right? I think we all have a vested interest in this. Research indicates Chicago has a higher rate of infant mortality than the rest of the U.S. In 2015, at 5.9 deaths per 1,000 live births (compared to 7.9). We also know that black women today are three to four times more likely to die as a result of pregnancy, compared to white women. So, these are unacceptable statistics in our backyard. This rate is bad for the community, it's bad for the families, it's bad for our businesses. And it's our hope that through panel discussions like this today that we can really create awareness that energizes a renewed commitment around pursuing low-cost, high-value interventions that can turn this tragic loss around. And we all have a role to play.

At Medela, we've long viewed that breast milk feeding and access to breast milk in critical care situations is only a small part of a really big story. And, so we really want to make sure you can hear from the local experts that are doing a lot already within our healthcare community and they are going to share their expertise and insights on how we can change this reality for families and the community moving forward.

I want to thank our partners: March of Dimes, University of Illinois-Chicago, and Senator Duckworth and her staff, for the active and passionate role they play in already bringing awareness to maternal and infant health topics to our communities every day. And it is my pleasure to introduce Senator Tammy Duckworth who will share opening remarks to set the stage for our panel discussion.

I think most of you know who Senator Duckworth is but I'd just like to mention that she is an Iraqi war veteran, purple heart recipient, and former assistant secretary of the department of veteran's affairs. She served in the reserved forces for 23 years. She was one of the first army women to fly combat missions during Operation Iraqi Freedom when in 2004 her Blackhawk helicopter was hit by an RPG and she lost both of her legs and partial use of her right arm. While she was recovering at Walter Reed Army Medical Center, she became an active advocate for her fellow soldiers. She testified before congress about caring for our veterans and our wounded warriors and it's a role she has continued in every year since.

She was elected to the U.S. Senate in 2016 after representing Illinois' 8th Congressional District in the U.S. House of Representatives for two terms. In Congress, she's also advocated for working families, job creation, affordable education, increased government accountability and protecting our children from lead poisoning. Senator Duckworth and her husband Brian are the proud parents of two daughters of their own, Abigail and Maile. And with that I will turn it over to Senator Duckworth.

Senator Tammy Duckworth

Thank you. Thank you. Hi everyone. It's a full room. This is a good thing. It's a pleasure to be with all of you this morning. Thank you to Dr. Ezike. Dr. Patel, Dr. Quinlan, Dr. Thomas and Professor Paula Meier for joining me on this panel today. You know, when I gave birth to my second child Maile in April of last year, she became the first newborn allowed on the senate floor, but through my 9 months of my pregnancy and my time in labor I wasn't thinking about changing the Senate rules, I was thinking about staying healthy.

And because I've seen the stats and read the horror stories I know that here in the United States expectant and new moms are dying at truly horrifying rates. We are the only developed nation in the world where the rate of women dying of pregnancy-related complications is still rising. With more women dying of these causes here at home than any comparably developed country, that is unacceptable. And you just heard the statistics that on average 73 women in Illinois die every year from pregnancy-related deaths.

If you look to the national average, that is more than 10% of the national average of total maternal mortality deaths that occur each year. And even worse, maternal mortality rates disproportionately impact black women. Think about it in human terms. Think about how many daughters will grow up with their mothers by their sides thanks, in part, to having States establish improved multi-disciplinary committees that track, analyze, and identify local solutions to prevent maternal deaths. Think about how many little boys would get to have their moms teach them to tie their shoes thanks to us increasing competitive grants to medical schools, nursing schools and other professional training programs that support implicit biased training.

If Serena Williams almost died giving birth with the wealth and privilege she has, and her knowledge of her own health conditions, imagine what someone who does not have those advantages faces when they're giving birth. It is simply unacceptable. There is a map that has been put out by the University of Virginia with all cities around the country and it shows that the mortality rate, not just maternal, in Chicago somebody who gets on the El on the Green line in the loop and when you get off the El in Washington Park your life expectancy has dropped 16 years. That's not acceptable and we can do better. We must teach and address this implicit bias that happens. And this isn't some catch-22. There are real, easy to implement solutions that could help end this crisis. I'm so glad to be here. I'm going to shut up, listen to all of you, listen to the panel of experts and

hopefully I learn something I can take with me to try to change the laws and provide support at the Federal level for the work that we're trying to do here today. Thank you.

Angela Ellison, Senior Director of the UIC Office of Community Engagement and Neighborhood Health Practice

Good morning and thank you. My name is Angela Ellison. I'm senior director here at UIC for the office of community engagement and neighborhood health partnerships and I have the pleasure to be able to introduce our moderator for (this event.) But before I do that, I want to give you an official welcome on behalf of the university and say thank you Senator Duckworth for taking on this issue, Medela and the March of Dimes for allowing this panel presentation to happen.

On behalf of the University of Illinois and UI Health it is my pleasure to welcome each of you to our campus today. Before I begin, I want to acknowledge some special people in the audience and you can wave your hand or stand up. Dr. Ken Fox of the Chicago Public School Systems, chief medical officer. Jennifer Seo, Chicago Department of Public Health, medical director maternal infant, child and adolescent health. Representative Camille Lilly, Illinois House of Representatives. Jennifer Alexander, mayoral office of early learning and early childhood. Lauren Harris, office of Senator Tammy Duckworth. Greg Bartholomew, executive director of United Healthcare, Michael Hirsch, U.S. Department of Health and Human Service Region 5. Dr. Raul Gupta, March of Dimes senior vice president chief medical health officer. And, I also recognize Dr. Terry Mason from Cook County Health Department.

UIC is home of the University of Illinois Hospital & Health Sciences system, also known as UI Health, a robust Health Care Research Enterprise comprised of seven UI Health colleges, translational research programs and the hospitals and clinics. With the strong commitment to the public pursuit of health inequity throughout the state of and beyond, UIC plays a central role in developing experts that are dedicated to address the complex health needs of our communities. Maternal and infant mortality is a central issue that convenes many of our academic and care delivery experts across the campus.

This is the issue that brings us here today. But this is also an issue, that if you know me I am particularly, particularly passionate about. And last year, I was asked to speak at a baby shower, a community baby shower to talk about maternal mortality and on my way to driving to that presentation I had a revelation. Back in 1969, I was getting my hair done on Christmas Eve to go see my mother who was in the hospital. And as I was waiting for my father to come pick me up, my father and my aunts were getting out of the car and they were crying and I didn't understand why. They were crying because my father came in to tell me that my mother had just passed. My mother had just given birth to my sister a little less than a month prior to that. So, I guess, it dawned on me that I guess I'm one of those statistics we're here (to talk about) today. And that is probably what's driven me to make saving babies and saving moms a passion.

To help with that passion, we were fortunate, the office of community engagement, we're fortunate to receive almost a \$5 million grant from HRSA to implement A Healthy Start program. That Healthy Start program will target moms, dads and babies, living in Englewood, Auburn Gresham and South Shore. Bringing case management, support services to women and their families, health education, and support but also to help them address the social detriments of health that can hinder them from living the quality of life they deserve. I am particularly passionate about this and I am glad you are all here to move this cause forward.

So, without further ado, I want to take a moment to introduce our moderator for today's panel Dr. Ngozi Ezike. She is currently director of the Illinois Department of Public Health. She is a board certified internist and pediatrician who joined the Illinois Department of Public Health from Cook County Health where she had served for more than 15 years promoting the organization's mission of delivering Integrated Health Services with dignity and respect regardless of the patient's ability to pay. Dr. Ezike has delivered in-patient care at Stroger Hospital as well as primary and preventive care and community and school-based clinics. As a medical director for Austin Health Center, located on the west side of Chicago, she engaged in communities with health initiatives such as obesity, diabetes and breastfeeding. Dr. Ezike is a national policy advisor on juvenile

correctional health topics and has presented at numerous local and national conferences for medical professionals and youth audiences alike. So, without much further ado, Dr. Ezike.

Dr. Ngozi Ezike

Thank you, Miss Angela, for that introduction and thank you for bringing the story home and making it so personal and reminding us that the statistics are not stats. There are people and families behind those statistics. Thank you. So, I'd like to begin by acknowledging IDPH, and the amazing work of the representatives of my amazing agency who invest blood, sweat and tears on a daily basis. Their time, their energy, their expertise into addressing maternal child health issues including maternal mortality and infant mortality, so big shout-out to the team from IDPH. So IDPH, of course houses all this important data, so we have seen that there has been improvements over the decades, but the truth is that many Illinois families as Miss Angela just shared are still continuing to experience significant health issues. And, there are significant disparities; the brunt of the issues that we are still facing are born disproportionately on our black and brown families, so we need to talk about that and figure out the appropriate strategies to make all our families whole.

So, all tough problems need even tougher solutions, so it's going to take a multifaceted approach to address this issue. As you know most of healthcare results are not are not the results of the actual hospital or doctor that you're seeing. Your workplace or lack of a workplace to go to, your health care, the policies, the communities that you come from, all of those play a significant role. So, (this is) why it's such a great thing that a variety of sectors are represented in this room today, because we know, it's not a cliché - it does take a village - it's the truth and I'm glad we're all ready to roll up our sleeves and play our part.

Our panelists today are Chicago-area practitioners who represent the continuum of care for maternal child health & gynecology obstetrics, neonatology and pediatrics. And I'd like to start off introducing Dr. Aloka Patel. She's the associate professor for the department of pediatrics, the research director for the section of neonatology and neonatal, perinatal fellowship associate director at Rush University. I'm going to go to the end now. Dr. Maura Quinlan is an associate professor in the department of obstetrics and gynecology at Northwestern University, Feinberg School of Medicine and the legislative chair of the Illinois Section of the American College of Obstetricians and Gynecologists.

Professor Paula Meier, I don't know if you remember, you helped train me when I was a resident at Rush and she helped me when I had two babies in residency trying to get the babies to latch on. Dr. Meier is the director of lactation services, for Neonatal Intensive Care, both a Professor of Pediatrics and of Women, Children and Family Nursing, at Rush University Medical Center.

And Dr. Jenny Thomas is our pediatrician in the trenches. She is a pediatrician and breastfeeding medicine specialist, clinical assistant professor of community and family medicine and pediatrics at the Medical College of Wisconsin, and founder and the past chairperson of the Wisconsin Breastfeeding Coalition. Dr. Thomas has received national awards for teaching, advocacy for children, and innovation and is one of only a few physicians internationally to be recognized as a Fellow of the Academy of Breastfeeding Medicine for her expertise on breastfeeding.

Dr. Ngozi Ezike

*So, with this esteemed panel, I would like to go ahead and kick it off. I'd like to start with **What's going well around maternal and child health** and I'd like to talk about some of the new programs or recommendations that are being implemented around maternal and child health. The ones you think are going to help advance us. Can you share some of the recent advances you've seen in your practice in recent years and you can all make a brief comment on that.*

Dr. Jenny Thomas

I can start. I'm the Wisconsinite. I'm only 80 miles north of here so I'm closer than some of you. Last year the American Academy of Pediatrics working with the United States breastfeeding Committee along with funding from the Centers of Disease Control and Prevention got a five year grant funded to do a nationwide education

for physicians in training, whatever their subspecialty is, to have them learn about breastfeeding in their residency. Because what you'll hear is that a lot of us never got any training on breastfeeding and we turn out to be not very good advocates of breastfeeding in the one on one, every 15-minute appointments we get to do in our practices. So, we are very excited to be working on that grant and to be working on the next generation of physicians to get them to understand how important infant feeding is not only to the baby but to the maternal health as well.

Prof. Paula P. Meier

I would probably just follow along with that to say that it's exciting to see the number of Chicago area hospitals that have either acquired or are moving towards a designation towards baby-friendly status because I think the healthy populations this speaks to the commitment and the promotion and the protection of breastfeeding during the initial hospital stay and I would add to this again, not so much programs but as a researcher primarily the amount of new evidence that's come out in the last several years about the central role of mother's own milk in shaping infants gut microbiomes. So, it's not yet actionable, but the research is there that informs why we should be implementing many of the projects.

Dr. Aloka Patel

I can probably follow up on that. I think in the neonatal world and the NICU it's been really striking in the past ten years-I've been practicing 20 now-is just significant improvement in infant mortality and all the morbidities that we think about in premature infants. They've all decreased in the last ten years and that's nationwide. That's really, really exciting and probably the work that's really spearheaded that is the science of the research supporting breast milk and other interventions, but really the quality improvement programs that I think hospital by hospital system has undertaken, and so it's been human milk has played a really big role in things like in late onset necrotizing enterocolitis, but really it's the implementation. If you take that knowledge and what does it really mean, in the hospital, by the nurse, by the doctor, how we speak, what practices we support and that's been really, really wonderful however there is still a pretty significant racial disparity and is what's really concerning because infant mortality rates are improving but they're not the same. Those are two different things.

Dr. Maura Quinlan

So, I can talk as an obstetrician to step back a little bit to maternal mortality, addressing those issues, of particular I'm happy, and many of us are really involved in the Illinois Maternal and Mortality Review Report that has really highlighted what's happening in our state, what the causes of the maternal deaths are and its led to some really practical changes in our state to try to decrease particularly what we know now are many of the causes. That's the thing like bundles within each birthing hospital, to address hemorrhage, to address hypertension issues establishing maternal levels of care so that women of different risk categories are delivering in the place that is safest for them. So, I think this document from our state has shown what the causes of these deaths and how we can approach them. So, there are some really practical things that have happened.

Dr. Ngozi Ezike

*Thank you. So, now, I think some of you have broached (one of our main topics). I think we're going to get right into it. **What is causing infant death, and why is Chicago - Illinois as a State have some of the highest rates in the industrialized world?***

Dr. Jenny Thomas

Well, I'm the general pediatrician so infant death, it's... it's brutal anybody that has been involved with a family that has lost a child, this is one of the hardest things that we do in our job and it's what makes us passionate advocates. In general, the most common reason that infants die is congenital abnormalities and we still have a long way to go in helping prevent them. And then we get the very unsatisfying diagnosis of SIDS or Sudden Unexpected Infant Death Syndrome which basically means your baby was younger than one year of age, we did an autopsy, and a death scene investigation and we still don't know why she lost her baby and that's probably the most heartbreaking diagnosis that we can give people is we just don't know what happened. And I can tell you from the interesting things that happened in Milwaukee, as well as in Chicago, that there are lots of

interventions being made to try to decrease the incidence of SIDS and we're just not seeing that we're making much of a dent. So that all the things that have happened since the back to sleep enormous drop that we had we haven't really made any progress since then. So, we still have a lot of work to do to find out why infants are dying in bed while they were seemingly perfectly healthy hours before.

Prof. Paula P. Meier

I guess I would add to that, obviously, the rate of premature birth, especially extremely preterm infants, and I know Aloka will add to this, but increasingly the smaller infants are, the more likely they are to develop potentially preventable complications, and that, of course, is where mother's own milk comes in to help reduce those. But at the same time, I think that the rate of preterm birth in Chicago is concerning, because mothers who are black are significantly more likely to give birth to babies who are born prematurely so that is one of the big disparities as far as infant mortality goes.

Dr. Aloka Patel

I was going to say the same thing, actually. I think prematurity is one of the top three causes of infant death. I think it goes back to maternal health. So, as a neonatologist, when I receive a baby that was born at 24 weeks or 26 weeks the game has already left the gate. The problem has already happened. It's stepping back from what I can do at that point or any of us as neonatologists at that moment but how do we get to this place? (Since) I've been practicing for (twenty) years I've noticed that mothers are getting sicker and sicker. (In the past), the mothers who (were) delivering (at) 25-weeks had a 25-week infant. Now those mothers have many medical problems of their own. So, I think the complexity of care for the obstetricians is just exponential and the question comes to: Are mothers getting the care they need? How could we have prevented getting into the situation? I think we've made a lot of progress of bringing down rates of the mortality. I just recently said once the baby is born it's a little too late. We need to get behind that, we need to get there earlier.

Dr. Maura Quinlan

Yeah, that's a perfect setup, and it's true. I've been nursing for a good while and I've definitely seen women with chronic medical conditions be able happily to get pregnant but those pregnancies can certainly be complicated. I think a huge thing is access so women with complicated medical conditions not having access to care to help sort of make them as healthy as they can be before pregnancy. And birth spacing, to make sure women have babies in the interval of their choosing because we know babies born, the shorter the pregnancy interval between two babies the more likely that second baby is to be born early. So, our role is to get her healthy as she can to space her babies as she wants so that she is more likely to have a good outcome

Dr. Jenny Thomas

But, it isn't always just taking care of the individual, right? There the disparities remain despite the same medical condition a white woman versus a non-white woman, the outcomes could be completely different for those moms. So, it's really taking a look past the individual to see what -- and we mentioned this, her risks for social determinants of health are, what does her community look like, does she have a supportive family -- so extending past the individual, looking to the community to see if there are things we can do. A community-wide effort to improve maternal health as she enters into her pregnancy and continues through her pregnancy so when she finally gets to me I have a great healthy baby to take care of.

Dr. Ngozi Ezike

Dr. Thomas, that was perfect and leads me right into -- as you said we know that there are specific disparities amongst communities with the rate of non-white babies in Illinois and the rate of death for them it's triple that of white infants, so can we talk specifically about recommendations to address that disparity?

Dr. Jenny Thomas

Well, one of the specific recommendations is to breastfeed and it isn't an accident that we're all talking about human milk up here. There is very good data that associates ever breastfeeding with a decreased risk of SIDS and exclusive breastfeeding with a very big decrease in the risk of SIDS. One of the things that has to happen

if we're going to focus on infant mortality is that we have to help all populations breastfeed. Right now, nationally, 83% of women have listened to us and have initiated breastfeeding. The problem is continuing to breastfeed in a nation that's not very supportive of breastfeeding. And what can we do to help women past their 7-second maternity leave and their ability to maybe pump at work or not pump at work. How can we help them continue to breastfeed because right now in my practice I can't do anything more powerful to help SIDS reduction than help moms breastfeed.

Prof. Paula P. Meier

I would maybe add on to what Jenny just said, in that the evidence right now is developing at such a rapid rate on lactation as reduction in maternal risk as well. So, when we focus specifically on the infant, there are many positive outcomes of breastfeeding that is dose response, in other words the longer, the more months over her lifetime a woman breastfeeds the less likely she is to have a number of complications including breast cancer. And what's so interesting is that the evidence is evolving so, what is the mechanism of those? So, it's not just an association anymore, it's a mechanism. And I think increasingly as we look at maternal child health and breastfeeding setting up a lifetime of health we can't overlook the impact of lactation on the mother's long-term health as well. Especially in the black community that bears a disproportionate burden of these different later morbidities that affect women.

Dr. Aloka Patel

And I would add to that I think while we know this knowledge --that breastfeeding and lactation is essential for both babies and their mothers it's how do we do it. And that's where the gaps I think are now is getting the message out into the communities and getting the resources. It's one thing to say "you need to do this but sorry good luck I'll see you in six weeks." It's really figuring out how you're going to make it actionable and so I've recently got involved with a program that Rush is part of, which is Westside United and I think there are six other centers in the Chicagoland area working on it and trying to look specifically at the black community on the westside of Chicago where the mortality rate is so much higher and life expectancy is lower, of how can we help these mothers.

We're just working on a test, coming up with a program, getting people to work with the mother as a navigator from before the pregnancy all the way through to going home, but I think they originally envisioned is that you would be going to the home a few weeks after the baby's born, but I think if you really want to get to breastfeeding you need to be there that first week. When that woman goes home and it's day four and things aren't working. If we wait until 2 weeks we've kinda missed the boat. I think it's doing these concrete things, having people on the panel that can say that's too late from a pediatric point of view, from a lactation point of view it's really, really essential. The global public health outcome is exciting but if we don't have the details we're not going to make a change.

Dr. Jenny Thomas

So, there's a strong recommendation from the American Academy of Pediatrics that all of these babies get seen at day 3 to 5 post-discharge. And what we're trying to do is to find somebody in that office who knows something about breastfeeding, because it's great that they're all being checked at days 3 and 5 for jaundice and weight loss and complications of breastfeeding, but if there's nobody in that office, then we don't really have an actionable plan. So, if you work with pediatric providers and you do lactation specialties, please reach out to those providers to let them know what you offer in the community, so we know that we have somebody that has our back that we can refer to so that we can help these women at a really crucial time in their journey,

Dr. Maura Quinlan

Just a follow-up on that in the obstetric community, we feel the same way. We have complicated pregnant patients who have a complicated delivery, and then the traditional follow-up was a 6-week post-partum visit, and we felt like that was that is so long and we would try to hit or miss and see patients sooner. But ACOG has described this now as the fourth trimester, and that six weeks is too long. At our institution we have a two-week check in, but it's very fluid, so some patients come back at one week for us to follow up their medical issues

and to make their breastfeeding support and to work as a team, to be on Mom's side with the lactation support that we have in our office to see those women sooner to hopefully make some changes.

Prof. Paula P. Meier

Again, going back to the NICU and the complicated mothers that we're seeing with the very sick babies, and it was a session this last weekend from Vermont Oxford that brought this home so nicely. We can't just focus on the baby or the mother, but it's the mother-infant dyad. So, yes, the complications that the mother brought to this resulted in the premature baby, but the premature baby's stay in the NICU weighs heavily on the mother in terms of her maternal distress or the response to this whole situation that just doesn't go away. That was the message that I think impacted me; it's that it just doesn't end with the NICU. So, you have mothers that are traumatized by this. In addition to having come with physical illness, they are leaving with post-traumatic stress disorder, and some of those other things that go in to how the child is cared for, and parented and into subsequent pregnancies. So, I think we can't overlook the fact that baby might go home from the NICU and we all assume the mother is happy, but the mother can very well be quite traumatized by all of this and the intervention we need just isn't there, especially for mothers who are low-income. The intervention just isn't there.

Dr. Aloka Patel

And by intervention you mean mental health?

Prof. Paula P. Meier

Yes, that is what I mean, mental health.

Dr. Aloka Patel

Because even in the NICU, that's a huge gap even while mothers are with their infants in the NICU. Inadequate support for them is lacking in hospital and even more so when the babies are discharged.

Dr. Jenny Thomas

If you're familiar with the baby-friendly hospital initiative, the 10th step of the 10 steps is fostering relationships with the community and I am just so excited to see so many people in the community here because every time we look as a nation at how we're doing on the 10th step of the 10 steps were terrible at it. So, there is now this disconnect between pediatrician seeing kids in the hospital and then a different pediatrician seeing the baby out in the community. And the overwhelming responsibility that the pediatrician in a 15-minute to 30-minute time frame, to be able to support this new mom, all of her questions, all of the things she may have experienced in the hospital. We know typically they are not going to see their obstetrician for a while, so pediatricians have started to do postpartum depression screenings and that first visit gets to be sort of overwhelming for all of us to try to get the right information about their health, community resources.

Like all of the wonderful faces looking at us today, it is so, so great that you're here and that you can hear the plea -- it says we need your help, we need your help to be able to manage these mom's. Not just the mom and the baby, but the dad and the grandmother and anyone, anybody else who is trying to help facilitate the care for that child. We need to get them in a position where we can do the teaching, help them with transportation, help them with access. There are so many things that need to happen, that we can do a better job of taking care of these people in the first one to two weeks after delivery.

Dr. Ngozi Ezike

*Thank you for all of those astute answers. I'd like to switch gears just a little bit and talk about the differences we note in the rural areas. **What are some of the challenges you've seen around that?***

Dr. Jenny Thomas

In the rural areas, it has got to be access to care, right? It's... it's trying to find creative ways to get access to care and to specialized care. Though being very fortunate to be in this wonderful city and have so many people available for sub specialty care but then getting a little bit too far out and being away from specialty care even from pediatric care is... is a huge barrier to effective medical treatment.

Prof. Paula P. Meier

So, I guess I would like to add that I think a geographic barrier to care, but there's also an economic barrier to care that affects many of our complicated mothers. And it may be the difficulty or the wait to get in to see the specialist that she wants to see. So, I think that definitely, access to care is an issue- rural- but it's also an issue in urban population as well.

Dr. Ngozi Ezike

So, in thinking about infant death, one of the common determinants mentioned is babies born premature and at low birth weight. Can you help us understand the impact of prematurity on survival likelihood and what, specifically, you are seeing with patients and families in your practices?

Dr. Aloka Patel

So, prematurity in terms of survival has improved significantly in the last 20 years, but there are still approximately about a 50% survival if you are born at 24 weeks going up to about 80% by 28 weeks so the very, very immature infants have a very high mortality rate, and this is in hospital. What it doesn't capture is that once these babies are discharged from the hospital they are much more prone to have later deaths or rehospitalizations. So, it's not just an in-NICU outcome, it's a lifelong outcome in terms of being at risk for reinfection, so that's why we do RSV-prophylactics - to make sure in our hospital we vaccinate the entire family for flu for free if they let us just because these babies are so prone when they are discharged to get flu. But most people are afraid of the flu vaccine, so we are trying to do that education for the family that we have to protect them before the babies go home but they are much more prone to rehospitalization. And even beyond that, educational deficits and delays in that. We know from studies out of the UK and out of Florida as well that the cost of educating children that were born very preterm way eclipses the cost of the in-hospital stay. We think about the hospitalization cost, but that lifelong cost is tremendous.

Prof. Paula P. Meier

I would just add to that something, because those are really important data. I think from a clinical perspective too, one of the things we know that's going to improve the ability for the parent to care for the baby is to be with the baby as much as possible in the NICU hospital stay. We have data from our research that informs the maternal visiting patterns and if you look at the NICU families it's not that they don't want to come. It's not that they're not interested. It's that, again, there's a disparity here. They're back at work, they're back in positions that don't allow them to come back to the hospital. They don't have transportation to come back to the hospital. You add to that the hours of skin-to-skin care and that is also a dose-response -- you hold your baby skin-to-skin as a parent that is going to improve the processes that are involved in neural development. So, it starts already as a disparity in the NICU when babies don't have their parents with them to the extent that they do in other countries. Where there is a paid maternity leave, or paternity leave and mothers and fathers can live in and take care of their baby. So, I think it starts even earlier the impact on survival-- it really starts with the ability of the parent to be an active participant in the care and learn to be an advocate for their baby during the hospital stay.

Dr. Aloka Patel

I want to add to that. We recently had a group from Denmark visit our hospital from the NICU there and the care model works but was completely opposite of how we do it, because the mother does get a year maternity leave, they expect the parents to be in the hospital 24/7 and provide what we would consider nursing care, and the parents do it. They don't intubate the baby, but they provide the feedings, they draw up the medications. So, there is a whole other way that people are doing it around the world and their outcomes are better -- they are definitely not worse. And it's a matter of opening up our minds to what do we expect mothers to be doing or families to be doing when they have a baby. What are we willing to support?

Dr. Jenny Thomas

And I see that in pediatrics where we are creating babies with special needs, these kids are born prematurely, they need care beyond intensive care unit, where they are g-tube fed or they have respiratory complications that needs the use of a nebulizer or they have frequent visits to consultants to make sure their growth and development continues to go on a pace and if not get the desired services that we need for kids. I have such tremendous respect for these parents, because they are now thrown into a totally different life than they thought they were going to have. And the ability to adapt to this new life to have this special needs child that is going to be required all sorts of extra special care. We need to get them enrolled in the right services. We need to make sure they can get prescriptions covered, they can get to doctor's appointments, that they can get to the therapies that they need -- maybe the therapies could be offered at home. But some of this continuity of care - it's just overwhelming to place on one family and, again, it comes to the community. What can we support? How can we help these families? And an unfortunate consequence of kids with special needs is that they are often intentionally harmed. They are often victims of child abuse and I can see how stressors on the family might lead to intentional harm of a child and we can do a better job of supporting those families.

Dr. Ngozi Ezike

Thank you. So, we do have business leaders in our audience today, and as we said here, babies born prematurely or with low birthweight are some of the leading causes of infant mortality. According to a March of Dimes report, preterm birth costs cost employers more than \$12 billion (with a B) billion dollars annually in excess healthcare costs. So, can we talk about specific ways that the business community can support mothers and outcomes, and maybe I can bring you in Senator Duckworth, because you have done some amazing work related to family-friendly businesses.

Senator Tammy Duckworth

Well, I do think there is a need for universal family leave in this country. And it needs to be paid. I also think it's unfair that as a nation we rely on corporate America, on businesses, to provide healthcare for our citizens, when this should be a human right. That said, there are many ways that we can get to the point where we can have family leave. I'm on a bill that creates an insurance plan that would cost workers about \$2 a week and employers \$2 a week to provide paid leave for 12 weeks. And I don't know a single employer-I've never found an employer that I've said to them "would you unwilling to pay \$2 a week to ensure that your employees have that leave." And that leave needs to be for both men and women. When I had my first daughter, I was a congresswoman so I took my 12 weeks but my husband was still a soldier and he got 10 days. I needed him more than 10 days. And it needs to be for the birth or the adoption, fostering of a child and it should be for everyone because that child didn't choose whose family they went into. They didn't choose to belong to a family with two men, for example, but that child still needs their parent there to take care of them. So, we need to be egalitarian in how we do this and to provide on a nationwide basis.

And the other thing we need to do with employers is instill in them that they get money added back for supporting their working families especially when it comes to breastfeeding. There was just a story that just came out, I don't know if you've been watching... how employers are basically flaunting breastfeeding laws and not supporting them especially in the lower-income range, so people in the service industry may start off breastfeeding, but are basically driven from it because there is no support for it in restaurants, in big box stores and those kind of places and we need to certainly make that something we enforce as a nation that employers must provide support to employees to continue breastfeeding.

And then for me at the federal level, there are things we can do, we have funding for WIC, but all that -- that's good we have WIC money to help families to be able to support formula for their babies, but for many cases were actually pushing low-income families towards formula, because we don't have similar support for breast pump equipment and supplies. We don't have similar support for breast-feeding consultants. All of those things, yes, we have tax deductions for them if you happen to have a health savings account, but if you're

working three jobs at two fast food joints and a Walmart you don't have an HSA. You can't take advantage of those savings so where do you go, well you go to your WIC and that pushes them away from breastfeeding. So, there's gotta be things we can do with the business community and then also so in my job at the federal level more support for breastfeeding and in general family support.

Prof. Paula P. Meier

The approach to the economics of breastfeeding in the NICU came to us as an idea in probably the early 2000s. We began in 2008 enrolling into an NIH-funded research project. 430 very low birth-weight babies, that's babies under 1,500 grams and the focus of the study was looking at health outcomes and cost of mother's own milk for very low birth rate babies. It wasn't looking at donor milk, it was looking at mother's own milk and Dr. Patel was a clinical investigator on this study as well as our healthcare economist Dr. Tricia Johnson. And what we were focused on doing was to look at the risk reduction in the different complications that premature babies are prone to develop and the cost and the cost savings associated with that risk reduction. So, if we take the costliest complications in newborn intensive care -- that's infection necrotizing enterocolitis, bronchopulmonary dysplasia, which is like a chronic lung disease and then finally neuro developmental problems later in childhood.

Our team examined all of these, looking at the relationship between mother's own milk feeding and a reduction in those morbidities. We published four papers and the one that I can tell you this as probably a takeaway idea was on our necrotizing enterocolitis paper. And what we found was that for every additional milliliter, keep in mind a milliliter is basically a drop of milk, of mother's own milk, that the very low birth rate babies received in the first 14 days post-birth reduced the cost of the hospital stay \$565. So that's \$565 in that 1 ml a day per kilo is worth in terms of mother's own milk towards reducing those costs. Despite that even though our initiation rate for our families was 98% all of our babies got some mother's own milk and a lot of mother's own milk during the first month. Despite that, what we saw was a disparity that was black versus non-black mothers in going home still providing milk. And that benchmark of going home and getting milk all the way through NICU hospital stay right now is tied most heavily to neuro-development in babies and going home and not having mother's own milk fails to reduce the risk in those neural developmental problems.

Dr. Jenny Thomas

For those of you that are business leaders out there, can you not wait for the federal government and start applying for maternity leave and paternity leave now, that'd be great. And then can you make sure that there's a place for moms to pump that is a non-bathroom space that is lockable, so that people don't walk in on her, all right? Maybe you could even provide some multi-user pumps for your office so she doesn't have to carry it back and forth and worry whether it's going to get stolen or whatever is going to happen. I'd also like to encourage you to make sure there is some on-site breastfeeding friendly daycare so that maybe she doesn't have to pump and she can just go down and see her kids, so if there's a possibility that you can make this a mama friendly or family friendly business where moms can take a break, see their kid, breastfeed their baby, you're going to save money. There's no doubt about it. Every time that we've looked at this you're going to save money. They are your return on investment, are happier, more engaged, more dedicated families that are going to stay with your business so that you can retain and not retrain -- so that we can make sure that you save money in the process of us doing the right thing for our kids.

Dr. Maura Quinlan

I just want to thank Senator Duckworth for spearheading that legislation. One of the hard things we do, I have a patient and she had her first baby and she said "I'm going to take six months maternity leave" --I don't know how to break it to her that it's highly unlikely to happen. We all fought the fight. CPS was notorious back in the day, the Chicago Public Schools they would offer breastfeeding. They would allow their teachers come back in six weeks, your time to breastfeed is in your classroom at 2 p.m. Well she's got newborn twins, that's never going to fly. I talked to principals and they said that's the only time that things are a bit better but this sort of thought in the community that everybody gets 12 weeks is just not the reality.

Dr. Jenny Thomas

Yeah, there are kids going back to high school within 2 or 3 days. In the Milwaukee area, there's one or two high schools that have daycares in the high school's so that that moms can take care of their babies. It's just an easy answer. It's just an easier facilitation of breastfeeding and it acknowledges a reality in our community and we can support them that way. But the whole idea that anybody gets 12 weeks, I wasn't kidding when I said 7 seconds--we have a 7-second maternity leave policy here.

Dr. Aloka Patel

I think that problem becomes even more magnified for women who have babies in the NICU because these are infants who aren't able to feed at the breast. So, these women are entirely dependent, they are reliant upon having a breast pump serve as a baby. So many, myself included, had a full-term baby. I would have to pump a few times, a little bit at home, my milk supply was maintained because I had a child who was feeding. These women are 24/7 and if they're very low birth weight it may be 24/7 for 70 days...100 days and that's what we're seeing in our study. These women past a month, were rapidly dropping off--of all races and ethnicities. But that disparity between black and non-black - I think the highlight is the non-black--Hispanic, Latino women too--they are breastfeeding at higher rates than white women and why is that? I think that is part of what I'll talk about later is a study that we did looking and understanding why is there such a disparity that's focused on our black moms.

Prof. Paula P. Meier

And I want to add one point to what Aloka just said was that part of the study that I talked about we measured maternal goals in the NICU so we would ask the mothers over the course of the babies NICU stay "what's your goal for feeding your baby when you go home." And we didn't see a difference in the mother's goals. So, our black mothers had the same goals to continue breastfeeding, they were just less likely to achieve them. And this is in an environment that I think in terms of resources we're incredibly well resourced to help the mothers, but a big issue you're saying does come down to having the right breast pump to be able to succeed with this.

Dr. Ngozi Ezike

Thank you. So, we've heard - I think we've confirmed that breast milk is best, and we understand that we need assistance, not just in encouraging breastfeeding, but in making sure people initiate and continue breastfeeding. And we've given more power to the statement that milk is just gold, as we hear that one ml is worth \$565, so we really have to keep that going. So, we know that that's probably one of the determinants of infant mortality when we don't have that, so what areas - that you believe - and can I address this to you Dr. Patel - what are the areas that we can look at that are low-cost - of course breast milk is free - that would truly make a difference?

Dr. Aloka Patel

I think you just hit the nail on the head. Breast milk is not free. Breast milk is not free, that's the problem in the United States. We put a dollar amount on formula. We put a dollar amount on donor milk and we put no dollar amount on the work and effort that goes into making breast milk. It is not free, and I'll expand on that. So, in the study that we did, we looked at why are black women breastfeeding at lower rates in our own institution, where they receive - we think the same care (of course that is a separate conversation) but I do really think, do believe they do, and what we found were things -- low income is a major driver, maternal age, what their mothers were saying, so mothers actually worked against breastfeeding, grandmothers, how much they pumped, how often they pumped, what their volume was and when we looked at this, we said very few of these are modifiable. But we put low income in the modifiable because what happens right now at least in the NICU setting and I think in any setting is the mother does all the work -- making this milk, providing it, bringing it to the NICU. It's pumping 8 times a day for 70 days. It's freezing it, storing it, making sure it's clean, bringing it into the NICU, and still going back to work and doing all those things. We provide absolutely no resources to these women aside from pump kit. They have to rent the pump. And it might be subsidized, but very few get it for free and if they get it for free from healthcare it doesn't come in time. You need that pump right away when you don't have a baby breastfeeding. You can't wait a week for that pump to show up. You need it that day. So,

we've designed a study that currently, hopefully -- we're waiting for a funding announcement to see what the decision is from NIH, but it's a trial and what we've proposed is a pump pick up and pay. We provide free pumps, we get transportation to bring the milk to the NICU and we pay these women minimum wage for the time they spend pumping. It's not free.

Prof. Paula P. Meier

But we still think it's going to be a lot less expensive than what we pay for donor milk which is the alternative if mothers do not have their own milk. And just again the important thing to remember about donor milk --oh well we think the babies have their mother's milk or have human milk. Donor reduces the risk of a serious intestinal disease in premature babies. It does not do anything with infection, chronic lung disease, and neurodevelopmental outcomes, so there really isn't a substitute for mother's own milk in this population of premature babies in terms of reducing these potential preventable morbidities and their costs.

Dr. Ngozi Ezike

And Professor Meier, if I can stay with you. You work in the NICU, around assisting new mothers to provide human milk for their infants. Can you speak more about the specific benefits to the premature infants?

Prof. Paula P. Meier

I've already done that a little bit so we know that high-dose, so in other words, as exclusive as possible, mother's own milk significantly reduces necrotizing enterocolitis which is a serious often fatal disease of the bowel, that's common or not common, but occurs in premature babies especially the smaller babies. Infections because of the underdeveloped immune system, chronic lung disease because the lung is immature and goes through such insult.

But if I could spend a second I think the most exciting new evidence in this field with respect to the premature baby is that at 24 weeks of gestation or so the babies brain at that point is about 30% of the weight that it will be full term. The baby's brain development is under the hands of us in the NICU in terms of nutrition and not all areas of the brain develop equally. There's a special area in the brain that's highly associated with neural developmental outcome that grows the most rapidly. All of the evidence to date is that there isn't a substitute for mother's own milk in terms of providing the nutrition for that brain to grow appropriately as well as something that we call neuroprotection. Because that brain is growing so rapidly in a very small baby who's in a basically noxious environment exposed to oxygen, exposed to antigens, milk reduces the potential inflammation or infection of that developing area of the brain. So. the new areas of this field show a difference in brain connectivity in premature babies as a function of whether they receive 75% of their milk as mother's own milk or 90% of their milk as mother's own milk during the NICU stay. So, the human milk at discharge or mother's own milk at discharge takes on a new meaning because it is linked I think most closely to what we see in terms of optimization of brain growth development and protection.

Dr. Ngozi Ezike

Can I stay with you and can you talk about what we need to do to promote and support breastfeeding in the African American population that you say has the lower rates?

Prof. Paula P. Meier

Those of you who know our program The Rush Mother's Milk Club we have had no difference really in the rates of initiation of mother's own milk feeding with our African-American, Latina, Caucasian populations really since about 2000. And that was through giving the evidence to mother of why it's so important. So, as a neonatologist Doctor Patel would use the words "your milk is a medicine for your baby" "I need your milk for your baby." The mothers all want to do what's healthy for their baby -- they changed the decision for formula and they start pumping. Well the next scenario that we have right now that is almost unspeakable is that all of the studies show that when the mother is pumping milk for her baby she can't use a pump that is like the pump that the mother uses to go back to work, she might use two or three times a day. It isn't effective at getting the

milk out, it takes a long time, and it's not comfortable. So, mothers don't have access to the pump that they need. All of our research shows that the milk volume a mother makes at 14 days post-birth which we call "coming to volume." If that volume isn't 500 milliliters or more, the chances the mother is going to go home and still be providing milk is very limited. So, it's that critical first 14 days that we have to have interventions in place and key among those is an adequate breast pump that mothers can use in the home as well as very targeted lactation advice for mothers in the NICU. And we of course accompany that in our program with our breastfeeding peer counselors who have all been mothers of babies in that NICU who work directly with the mothers. I think that the fall off and I'll let Dr. Patel speak to this is really the economics because the mothers have to self-pay for the pump. They have to get the milk to the NICU and they forgo especially they may not even get paid leave but it may be that you're taking care of the child in the family you're taking care of the sister's children so the pumping has an opportunity cost as well so those are the things we're trying to offset with the research Dr. Patel described.

Dr. Ngozi Ezike

*Dr. Quinlan, can I turn to you? Knowing that Medical advances have dramatically improved the odds of survival. Yet, it has been said that the **heart of the problem lies outside of the NICU and may be addressed even before a woman becomes pregnant. Can you provide some insight around that?***

Dr. Maura Quinlan

Yes, there are two concrete areas and I'm really excited about that's happening in our state that address the two outsider pregnancy issues that can really help maternal mortality and infant care. The first is covering and addressing medical complications prior to pregnancy and we see all the time -- really sick women in pregnancy complicated delivery, and at six weeks, especially women in poverty, at six weeks there Medicaid stops. We try to cobble together some care that they can get for these complicated issues often with really not much success so there was a push in our state that was successful in the budget for Illinois starting in January is a 12-month postpartum coverage for Medicaid which is massive for our day today. It was a fascinating introduction for me to the world of politics and how all this happened, it just went in the budget and however it happened, it doesn't matter, it's there so I feel our jobs as obstetricians is to know this and to share with our endocrinologist and cardiologist and everybody -- that this woman is covered. She's covered for substance abuse issues, for mental health issues all the way through 12 months postpartum.

So, optimizing her medical care prior to the next pregnancy is huge and I think in Illinois that is going to be more likely to happen because of this expansion of Medicaid. And we're being looked at in other states as a state that's doing this right thing for the women in our state. The second thing is birth spacing that has been mentioned. Women who breastfeed tend to have their children further apart so supporting breastfeeding will help and just making sure that women have access to contraception. Thankfully again, in our state the threat to Title 10 funding which is public funds to support contraception -- there's been lots of discussion other states have had drops in or elimination of their Title 10 funding which supplies contraception, particularly to low-income women. In Illinois, there's a pledge and financial support to keep Title 10 funding in our state. So, women who have a plan for their birth spacing will be more likely to do it so I think optimizing care, postpartum, and access to contraception are huge in this cause.

Dr. Ngozi Ezike

*And I want to bring you into the breastfeeding conversation--**Can you tell me what resources are needed for OB physicians to support breastfeeding?***

Dr. Maura Quinlan

Right, as was mentioned, I often have 15 minutes for a prenatal visit, so we try to cover a lot. And I can certainly talk about the benefits of breastfeeding but it's so helpful to have lactation support, lactation consultants in the prenatal setting. To have free or low-cost classes on breastfeeding that both parents can go to. At Northwestern we're lucky that we have two lactation consultants on our floor and that's in the outpatient

setting to get her ready and the tools that she needs to breastfeed. To support her with the lactation consultant setting, in the hospital. So, all birthing hospitals need to have that support together on the OB side for sure.

Dr. Jenny Thomas

It's important to realize that the risk factors for maternal mortality and morbidity are some of the same risk factors for low milk supply. That this pregnancy and lactation seem to be one of the only times in a woman's life where she is ready to make a big lifestyle changes and is willing to make some of these changes. And so, we've seen very successful programs for smoking cessation and working on things like hypertension because she is really now saying "I am taking care of a life" and this is a good time to start talking to her about some of these changes that she needs to make. But a lot of what we are suggesting continues to be on the individual level and I can't tell you how important it is to find Dad and to find Grandma and to find her support system and get them into these conversations because they can be important inhibitors of getting good information to the mom. And they can also be the biggest cheerleaders. So, we've had some fun in Wisconsin inviting dads to our state breastfeeding coalition to talk about what you can do to get dads involved. In Milwaukee, we have a big dad's breastfeeding support group -- they can sit around and talk about how great their wives are while they're breastfeeding but at least some ideas about what we can do to involve the father in this process, because it's very, very difficult obviously to do this journey alone.

Dr. Ngozi Ezike

*So, I will speak to you Dr. Thomas. I know we talked about **SIDS and sudden unexplained infant death syndrome. It is the third most prevalent cause of infant mortality and of course occurs more in African American male babies. So, is there anything else you wanted to talk about, maybe that we didn't cover in terms of what we could do to help address it? I know that what you said about involving the whole family....?***

Dr. Jenny Thomas

It's involving the family. I think is a big thing, because we can do all the education that we want to say "this is the way baby is supposed to sleep" and somebody will say "well you slept fine on your belly and you're alive" and something happens. And you know, you had these conversations, right? It's amazing you all got out of grade school, you know? And so, it's really important to involve the support system and I love bringing people in and I know in my visits when I've said something that will upset that Grandma -- because she shows up the next visit -- and I love it because then we can have a discussion and see where she's coming from so that we can be on the same page. Nothing messes up medicine more than mixed messages, so we need to all be on the same page. I'll be saying the same thing and making sure that everyone who is going to be talking to that mom and supporting her that mom is on that same page as well.

Dr. Ngozi Ezike

*I think we've covered a lot. **Is there anything else that we need to talk about to more broadly raise it as a standard in the medical community -- the importance of lactation?***

Dr. Jenny Thomas

Can I just...I have the great fortune to travel all over the world, talk to doctors and lactation consultants and nurses about breastfeeding. And I just returned from a trip to the Philippines where they have a 105 days of lactation support. They have maternity leave and they have two 45 minute breaks every day that are paid, all right? And I am just like "but my families at home have a better initiation rate, duration rate, exclusivity rate then you guys with maternity leave." I will tell you these women we're working with they are inspirational. American women have just overcome so many things to get to the point where they are listening to our medical recommendations and I just think we should be all inspired by the fact that we said breastfeed and they said this is not supportive but we'll do it anyway!

Dr. Aloka Patel

I want to add one thing. I think I want to broaden it. We're talking about how to improve the education of the medical community. I think that's too late. When we're talking to these women and prenatal care, they've

already had their life experiences. They've seen what their mothers have done, their friends have done, their aunts have done, their grandmothers have done. I did a pilot study that I'm hoping I can expand -- where we put together lactation curriculum in science class for 4th and 5th graders. They need to make it normal. It should not be tied to sex. It should not be tied to adolescence or think it's gross or whatever. It should just become normal. And if we don't start young, it's hard to change opinions and it's hard to get buy-in. So, I think that we are just coming at it way too late.

Dr. Ngozi Ezike

That's a great addition. Can we talk a little bit about policy initiative? Can each of you maybe give us one or two policy initiatives that you think could help move the needle in Illinois as a whole? As we think of the areas that are hardest hit -- the rural areas as well as the African American community.

Dr. Jenny Thomas

I would like to see that there's some teeth to the bill, that if you don't support these women and give them adequate break time, non-bathroom place to pump, that there's actually consequences to these businesses. There's nothing right now, so as the New York Times piece pointed out, they're flaunting the law, forcing women to stop breastfeeding, and there's no penalty. I'd like to see a penalty.

Senator Tammy Duckworth

There will be soon. I'm writing it.

Prof. Paula P. Meier

And I've spoken-- when we began our NIH Grant thinking about it in 2004, 2005 what I said at the time is I can retire when our mothers who have babies in the NICU have access to a breast pump that is going to help them be successful in providing milk for their babies. And we're still not there, despite having shown the cost-effectiveness of mother's own milk. So, for me it would be that next step is acting on all of this evidence and assuring that mothers who are breast pump dependent -- meaning they don't have a baby to breastfeed -- they are dependent on the pump -- have access to a pump to use in the home that is effective, efficient, and comfortable, just the same as if they were to go home with the baby. The next best thing is the pump that can feed like a baby.

END OF PANEL DISCUSSION

Note: Minor edits have been made to transcript for readability purposes.