Breast Pumps: Katie Madden, RN, BSN, IBCLC

Intro

My name is Katie Madden. I'm a registered nurse, and an international board-certified lactation consultant, IBCLC. And I'm the owner here at the Balanced Breastfeeding Clinic and Clubhouse. I care for women both prenatally and postpartum from pregnancy through weaning. For women who have chosen to lactate. And more recently I'm expanding to parents who choose to lactate. So even parents who don't identify as female but have breasts and choose to lactate, I'm here to support them in that process.

What is IBCLC?

So IBCLC is considered the gold standard certification for lactation consultants. There's a number of different certifications out there, which is essentially completing coursework and taking an exam. An IBCLC is an international certification, which means the same test is given to care providers here in United States as is given to women in Ghana or people in Ghana. So what it essentially means is you have a certain number of contact hours in the field, and you've completed a certification exam. I first completed my certification in 2009, and we're required to recertified every five years, so I've recertified twice since I originally got my certification in 2009.

What is the stigma surrounding the use of a breast pump?

It's important to understand that when a lactating parent is choosing a pump, or needing to pump in place of nursing, that there's a long line of psychological judgement around the use of a pump. In the lactation field, in OB-GYN, in general childbirth realm, the norm is seen as the baby nursing directly on the breast. And over time as the lactating parent has changed, as mothers have returned to work earlier, as we have parents that don't identify as female, we're seeing more and more of a choice to move to pumping and an embracing of the need to pump at times. But the medical field and the breastfeeding field doesn't seem to be catching up with this desire of parents. So it's not uncommon for a pumping parent to feel stigma or judgment when people ask them how they're feeding their baby. And in fact, rarely do people ask it that way. I would prefer the question to be, “how are you feeding your baby?” And instead, healthcare providers or peers tend to say, “are you breastfeeding?” Or the pediatrician will say “breast or bottle?” And a mother who’s pumping, a parent who’s pumping, gets very caught up in that question because they want to claim a name that they are breastfeeding and they are, right, they’re producing milk for their baby, they're giving milk to their baby, they're lactating. But they have a hard time explaining that when they're pumping milk out and giving it to their baby in a bottle. And we don't leave space for that as healthcare providers. The open-ended question, “how are you feeding your baby” asks the parent to tell us how they're feeding their baby without any judgment. And as the 80 percent of parents are returning to work postpartum within 12 weeks, pumps are necessary. And if the Academy of Pediatrics, the World Health Organization, everybody wants a parent to be working, to be breastfeeding for year, we've gotta start embracing the use of these pumps, normalizing them, and giving some more specific medical guidance around how to use them. Because that negative space, that vacuum is leading parents to seek their own learning in a peer environment in a social media world, where they're very victim to incorrect and inappropriate use of these pumps.

Why would a person use a breast pump?

So a breast pump to express milk from the breast is, I put it into three different categories when we're pumping. The first is to protect the milk supply. The second is to promote the milk supply. And the third is to treat the breast problem. So when we talk about protecting first and foremost, lactation is a process that begins immediately at birth and the first two weeks are critically important that there's hormonal messaging to the brain that explains the baby is here and we need milk made. So if a parent chooses to

make milk, a breast pump can be critically important in those first, specifically two weeks to protect the milk supply if a newborn infant is unable to do that for them. So this may mean that the baby simply doesn't latch on at all to the breast after birth. It may mean that the baby is separated from the mother and in the intensive care unit, it may mean that the mother chooses to not latch the baby. And in that case, all of those situations, we can use the breast pump to mimic what the baby would do directly at the breast. We can also use this if there's a problem. So if the baby is not getting a comfortable latch with the mom, if the mom's experience and lot of pain, we can use the pump to protect if we need to replace a painful stimulation with a more comfortable stimulation. So in the early phases, sometimes we use it to protect if we need to pump in place of nursing. Later on, maybe after the first week or two, sometimes we figure out that mom isn't or the lactating parent is not making as much milk as they need to. We would use this to promote milk supply. So sometimes we use pumping in addition to nursing or strategically to ask the breast to make more milk. Sometimes this works and sometimes it doesn't, depending on that particular parent's breast anatomy. But we can strategically use it to send messaging above and beyond what the baby is asking for with the hopes that breast will respond by making more milk. And lastly, we can use the pump to treat. So if there is a breast problem such as a milk duct that isn't draining, an infection in one of the milk ducts, or as I mentioned before, pain in the nipples. We can use the pump as a therapeutic tool to protect milk supply, promote milk supply and in the same time treat that problem. So that may mean that in addition to antibiotics, if a mother has an infection, we may prescribe or recommend that the mother pump to remove that milk, which by the way, is actually still fine for the baby to drink. But sometimes it's a little hard for the baby to get it out and we can use a machine for that purpose. And I also want to add that when we're talking about protecting milk supply, this is whenever the mother or the parents cannot be with the baby. And so this includes when the parent goes back to work. So when the lactating parent returns to work and the baby is elsewhere, if the mother is directly nursing, they can choose to use a pump to replace that feeding to protect the milk supply while apart from the baby.

How do you define a successful pumping session?

So a successful pumping session would be comfortable and effective. And I could stop there because there's so many variables where a lot of times with success, we add efficiency. And I kind of side car efficiency because first and foremost, our machine needs to do the job without causing pain or trauma. So when we're approaching a breast pump and we're saying how do we know that this was successful? After the pumping session, the lactating parents should not be in pain and should not feel any residual discomfort from that pumping session. So comfort, first and foremost. And you'll hear me say this with direct nursing as well. Because in order to effectively remove milk, ideally, the lactating parent is not in a pain response cycle. So comfort and then effectiveness, not efficiency necessarily- we can get to efficiency eventually, but we can't measure success based upon efficiency if it's to the sacrifice of effectiveness.

So effectiveness would be that the lactating parent feels that their breasts are appropriately drained. Now that's a hard word to use because it is subjective. So we can't measure how much milk is in the breast before and after pumping to know that it was thoroughly drained. This is a felt experienced by mom. So most of the time, in order to know effectiveness, we just start with time. And we use an estimate of time, usually about 15 minutes, to start by hopefully removing the milk. And then at that 15 minute mark, that's where we really start to check in on effectiveness. Here's where the user or the lactating parent needs to be able to touch their own breasts, needs to be able to compare how much they've removed to another time during the day when they've pumped. And ultimately, they should feel evenly drained- even if they don't feel completely softened, there shouldn't be any sections that feel that they were firm or not drained. So that's how I would define success. As we get further along in pumping and mother gets comfortable and effective, it certainly can be added to have the benefits of efficiency, to have the benefits of volume output. But when we're first starting out, we can't put efficiency and idealistic output in front of comfort or effectiveness.

What are the different types of breast pumps?

There are a number of different types of breast pumps and different types of methods by which to remove milk mechanically. I'd actually put them into four categories. One is a passive removal. The popular product in the market is called a Haakaa, but it's simply all-in-one silicone device that provides constant passive suction. There's next a manual breast pump, which is operated by hand. It's a pump system, but the user operates it manually with their hand rather than electrically with the machine. But different from the passive pump as it does have a stimulation or repetitive suction element. Then there's what I would put as two different types of electric breast pumps now, what we will call the wearable pumps and then a standard electric breast pump. A standard electric breast pump is something that is most commonly used by lactating parents. It's tends to be effective and efficient for removing milk. And inside of that category, we have a lot of options and features that can be beneficial. But I want to put those separate from the newest pump that has joined the market, which is the wearable pump, which is like an electric pump, but there are two individual operating machines that go inside a parent's bra and there's no tubes. So this has really started to dominate the market and, and frankly confuse the pumping environment because we can't see a lot of what's going on in that pump. So primarily we're using electric breast pumps to do the work of early pumping to protect, promote, or treat. So I'm going to add a fourth, fifth. There's one more pump on the market which are the hospital grade electric pump. And that one is primarily used in a hospital setting and can be rented. So this will be like your top-of-the-line, most expensive, not usually used by one person at one time, personal use pumps.

So to come back to the personal use pumps, the electric pumps, we would use that to pump in place of a feeding, to treat a plugged duct or mastitis, or to promote a higher milk supply if we're trying to stimulate past what the baby's doing. When we use a manual pump, a hand pump- the benefits to using that over an electric pump are that it's virtually silent. So when we're talking about an electric pump, whether it's a wearable pump or a personal use pump, there's noise involved in it. Some of them are much louder than others. And aside from this being, you know, making it clear to everybody in earshot that mother is pumping, it can also sometimes be irritating to the parent to listen to the sound repeatedly, especially if they're not in a great headspace mentally. So the hand pump is nice because it's quite discrete and silent and can be titrated based upon how hard the parent feels like they want the suction to be. So they are in control of the vacuum simply by how hard they squeeze. A lot of parents will use the manual pump in a purse or in an emergency situation so that if they ever needed to like duck into the bathroom or if they're on a plane- anytime we need something discreet. There's a small subset of lactating parents that really love the manual pump because, essentially milking yourself with this manual pump, you can really get into a flow and know how your breasts drain and sometimes be the most efficient, comfortable, and effective with a hand pump. But it does take that finesse of knowing how to work it on your own body.

Along with wearable pumps, around the same time came out with the silicone Haakaa passive pump. And this one I think is actually a little bit confusing and I would almost say dangerous to the milk supply because the passive draining Haakaa doesn't stimulate milk supply. And I emphasize this with anybody who I hear is using this. It can be used for a specific purpose, but we cannot replace a pump session with a Haakaa. We cannot affix a passive tool to the breast and expect to drain everything out of it. What's confusing is that the Haakaa does remove milk. So oftentimes the Haakaa is best used to, I say- take the edge off. The Haakaa can let out a passive drain of milk- what the body naturally needs to release, but it does not step into the active removal phase. I often use this for lactating parents who are making too much milk. That's a great time to not be so uncomfortably full that you have to risk mastitis, plugged ducts, or discomfort, but not take all the milk out because breast milk is built on a supply and demand system. So if we were to remove that milk, she would just make more. So when we are strategically trying to decrease a milk supply or shift milk from nighttime into the daytime because baby wakes up or baby sleeps through the night and parent wakes up with large breasts but doesn't want to pump at that time because they want

to teach their body to go until morning time- the Haakaa can be a great way to take off just enough milk to get comfortable again, but not ask the body to replace it all.

The wearable pumps. So I reserve my recommendation for wearable pumps for the lactating parent that truly cannot stop to pump. And if they were to stop to pump, it would significantly impact their life or job. So when these first came out on the market, surgeons were using them and pumping while they were doing surgery. Midwives were using them and pumping during births. Not because their plan was to pump during those things, but because it was necessary. You get to a critical point where you have to remove milk from your breast. So these are wonderful because they're virtually silent. They're very quiet. They're pretty discrete. Inside of your bra or shirt. There's no tubing. You can read out how much milk you're pumping on your phone. So if we're going to use a wearable pump, this is particularly important one for someone who's in my opinion already pumping well with a personal use pump. If they are already pumping well with a personal use pump, and they're returning to an environment where it's prohibitive for them to sit down and pump, then they can use the wearable pump. But one of my concerns with a wearable pump is that we don't sit down to pump. So wearable pump enables a lactating parent to simply just go through their whole day and lactate at the same time, which is not how nature intended it to be. And so while we can play a game and make it work, we have to be extra cautious with wearable pumps that the lactating parent is still stopping to rest, stopping to drink fluids, to eat, to go to the bathroom. And those are the things that are often coupled with a pump break. However, technology is enabling lactating parents that could never manage to protect their milk supply before to continue to do so. So they can provide milk for their babies and continue to nurse at home if that's what they're doing.

What is the difference between hospital-grade and personal-use pumps?

The main difference between a hospital grade pump and personal use pumps is the number of times it can be used. And the longevity and durability of the machine. So it is designed to stay in a hospital setting. It's designed to be used thousands and thousands of times, and the milk doesn't get into the machine. What's interesting is as personal use breast pumps have gotten better and better, it feels as if the market and the draw to rent a hospital grade pump has become less necessary. It was often- still in the literature- that if a mother is pumping in place of breastfeeding, for instance, if the baby is in the NICU, and she can't nurse, that she begin with a hospital grade pump. That was probably one of the questions on my exam. And over the years as I've witnessed these amazing breast pumps hitting the market and every parent having them covered by their insurance company, the personal use pumps are really rivaling these hospital grade pumps. And so they feel much more obsolete than they used to be. However, they’re really wonderful to use in a hospital setting, especially if your baby is in the NICU because they are powerful pumps. So parents that maybe have their personal use pumps at home will sometimes pumps with the pumps in the NICU, those hospital grade pumps. And just like every other pump, some parents find that it works better for them. And so they pursue a rental of that so that they can drive up their milk supply, maybe even temporarily before returning to a personal use pump.

What are the main components of a breast pump?

So there's two main components of a breast pump in terms of how the machine works. There's what we call the cycling, how fast the turnaround is on the sucking. And then there's the vacuum, how hard it sucks. This is, I would say in general, a poorly understood concept by pump users. And there are certain pumps that have digital readouts of this. So there's like numbers. Spectra is a popular pump on the market and it has a really nice digital readout that gives you time and it gives you the levels of vacuum, so it'll say three or four as opposed to Medela that has a dial that you turn up, so it's really based upon perception. And I don't know if I can tell you which one's better or worse, but I do find that it's helpful to know if a parent is pumping on, let's say like eight or 12 and telling me she's having nipple pain, that that's particularly the higher setting. It goes up to 12 on a Spectra. But I can't really know that on the Medela- it's hard to understand that.

What advice do you have for choosing a pump?

So when a pregnant couple is deciding whether or not they will breastfeed, one of the decisions they make is which pump will I purchase, or which pump will I choose for my insurance company. So just over the past 10 to 15 years since the Affordable Care Act was passed, every single insurance company, including Medicaid and including military TRICARE, covers a personal use double electric breast pump for a pregnant couple, pregnant parent. It's been interesting over the years to see how parents are interacting with choosing a breast pump. Because it almost seems like it's a much more passive decision-making process because they're presented with a limited number of pumps to choose from. And they have to make this decision in the third trimester of their pregnancy. Oftentimes, this is their first baby, and so they've never breastfed before. And it's a very foreign concept to be choosing a boob sucking machine. So often they look at features like, does it come with a cooler? Does it have bottles? Right? As consumers, we tend to be distracted by bells and whistles. And most parents really don't know what they're looking for when they're choosing a pump. And most of them look pretty similar. So when I'm working, ideally, I start meeting with parents during their pregnancy and we start talking about this. We start looking at number one, have you looked into which pumps are covered by your insurance company? And from there, I really recommend at this point in time that they take one take the pump from their insurance company, and we see how it works. So that's usually like the mid-level hospital or excuse me, the mid-level personal use pumps. And from there it may or may not work well for them. So the tricky part is that we really can't practice using breast pumps until the baby arrives, with the exception of some cautious use of the pump once the mother is full term. So sometimes we can experiment with a little bit of pump work in the 38-39th week. But nipple stimulation can bring on uterine contractions. It's actually something that can help mothers get into labor, so we can't do too much pumping early on because we don't want to send mother into early labor if that's not the time, if she's not ready. So oftentimes we're flying pretty blind. And we have whatever pump they got from insurance. From there, most of the time the parents that come to me have a pump and I work with whatever pump they have. If they have the choice ahead of time, the way I help them choose is truly what's the highest quality pump that their insurance company offers? And most of that is based upon my understanding of how pumps are playing out in real life in real time with other mothers. So this changes every six months to a year. Sometimes the insurance companies shift how they are producing the pump and I see it my office and I don’t like it anymore. And so I change my mind and recommended a different one. Once they actually get into my office with their pump, then we're going through the troubleshooting of is this pump the right pump for you, which is not ideal because they've already chosen this pump from their insurance company and they can't choose a different one. And oftentimes we're having a conversation, that is, you need to buy a different pump even though this pump was covered by your insurance company, which is not a great conversation to have, but ultimately, we're looking for the most comfortable and effective pump.

Aside from that, not just the machine- So what we have to understand about breast pumps is that the pump machine, the device is one piece of it. But what's critically important is all the attachment pieces. And this is where the standard insurance-provided tools sometimes are what moms need and sometimes we need to modify. So all pumps are coming with a standard 24 millimeter flange. The flange is what draws the nipple in. And it's really important that that fit is correct. These pumps are coming without any sort of pre-assessments of nipple shape, size, diameter. And these parents get these pumps and just assume that it's for them. So the damage comes less from the machine and more from the attachment pieces. And what we've seen over the past years is customizable pieces that can now be used for pumps that are not made by the manufacturer. So once we get the actual machine in place, then we have to start working with the attachment pieces. And that's very personalized based upon mom’s anatomy and how it feels when she's pumping once her milk is in and once she's here in my office.

How do you know if your pump is working correctly?

When we're assessing for the proper attachments and connections and suction on a pump, how we assemble it and how we take it apart- This is where we start first and foremost with manufacturer recommendations, which not a lot of people are doing these days, but of course, that's how the machine works- is by manufacturer. So we have to be careful to make sure all the fittings are tight, make sure the diaphragms are in correctly. There's straight up like a diagram of how this goes together. And then we start to look for leaks in suction or seal. So this is a vacuum machine. So if we hear any leakage of air or strange sounds, we start looking to see if there's a loose attachment piece. It's quite simple. The pieces are fairly simple, but we should be able to tell if there's like a misfitted piece that can quickly be fixed. So once we know that assembly is correct, then we start looking at the vacuum. And again, this is hard because we don't really have a way to measure the vacuum or to know that the pump's working effectively other than the user perception of feeling. So sometimes I'll hear a mother say, “this doesn't feel as strong as it usually is,” or “I've been turning it up a lot.” Now, that could actually be that the suction isn't turning up or it can be that her experience of that suction is changing. So again, we don't really know. But her experience of it is very important. So if she feels it isn't as strong, then we need to take a look at that, and even if the pump is working correctly, that might be grounds for a different method of removing milk or different pump. Something I, in particular, am looking at for proper fit is how does the nipple move in the flange? So from my outside perspective, since I can't feel, what I see is proper movement of the nipple inside of the flange. Both of them working evenly. The suction should be distributed evenly between the breasts so I shouldn't see one nipple getting pulled more than the other. And then how the machine fits on the breast is that next component of effectiveness of suction. So if there's gapping in the flange against the skin, we could lose vacuum there. So a lot of this is done in real time. I sit with a lactating parent. I let her set up her pump the way she needs to. I double-check behind her. I'll even ask her to give me some prompting like, why do you do that? What is that for? So she can articulate to me which is doing. And then I observe and I ask a lot of questions about how it feels. And this will bring us into the usability of the pump, and all the different cycles and settings. Because once we get to I think this seal is good, I think we have good vacuum, then we start to adjust how fast it sucks and how hard it sucks.

What are some features and differences among brands?

The other big difference that's coming to the market specifically with the Spectra pump, which is currently my favorite pump on the market. And it used to be Medela. Spectra has the ability to adjust cycling or speed. Now when Medela hit the market with the Pump in Style, it was mimicking a baby's nursing. So it has two cycles. It has a stimulation cycle and a collection cycle. And so it was very exciting when it came out because at that time, it very much was the case that pumps were there to sometimes replace direct nursing. And so pumps originally were born of the assumption that a lactating parent was going to directly nurse their baby. And then sometimes if they had to remove milk. So the Medela pump was made with two speeds and you can switch from slow to fast and back and forth, but that’s it. And what I realized over the years was we're not necessarily just trying to mimic nursing. We're trying to effectively remove milk from breasts, independent of what's going on with nursing. And the more speed control we have, the more we're able to manipulate the way it pulls on the nipple, how fast, how comfortable stimulating another let down. So I have found that the pumps that have more control over cycling- the speed- we have more control over how we remove milk most effectively. And then when you think about digital readouts, just in general, it's really nice to have a record of how long you've been pumping. The Spectra automatically shuts off at 30 minutes. And so when we talk about a feature like that, that's really in tune to what lactating parents are experiencing. Because oftentimes parents fall asleep while they’re pumping, and a Medela would just keep going and the Spectra has an emergency stop and will shut off at 30 minutes. So she doesn't wake up after an hour and is having raw nipples from pumping all that time. So the vacuum and the cycling are the two main components you'll see in any pump. And how much you can adjust those, how high the vacuum goes and what type of cycling is really what makes each individual pump unique.

What complaints do users have with breast pumps?

The common complaints and discomforts that users have with breast pumps are pain, first and foremost. I think the biggest hurdle to using a machine in general on your body is making sure that it's comfortable. So when we're talking about pain with pumping, we are looking to get really keyed into why is this hurting? Is this a fit of the flange? Do we need lubricant? So this is where we get into tips and tricks that can make a machine more comfortable and more effective. So pain in the nipple or sometimes deep breast pain- and these are often user error in the sense that they're overzealous. So we can kind of in general assume that someone using a breast pump is going to be overzealous, heavy-handed, push harder on their body than maybe they would in another circumstance.

So the second is psychological distress. When we see the milk that comes out of our breasts, especially if you've been directly nursing, we start to make meaning of that milk. And lactating parents will often judge a direct nursing session where they didn't see the milk and how much milk went into the baby based upon a pumping session. And while we would argue that it should be about the same, we don't know how to make meaning out of the amount of milk that comes out of the breast when we're pumping. And in fact, the way that we tend to make meaning of it is through social comparison to what other people are pumping. And the volume of milk that comes out of your breasts is highly dependent on what stage of breastfeeding are you in? How much milk does your baby drink? How often are you pumping? It's so multifactorial, that seeing the milk come out with a breast pump can sometimes undermine the direct nursing relationship because the lactating parents start to question whether or not they're making enough milk. And they start to question whether or not they are doing it right. And for a postpartum parent, they start questioning whether they're good enough. And so this is where we start seeing a little bit of an intersection of mental health in postpartum and breastfeeding. Because whereas breastfeeding is touted as something that can be protective of postpartum depression, something that helps a mother and a baby bond, pumping can be quite isolating. It can be psychologically disturbing, and it can be painful. And it also is not with the baby. So if we imagine you can pump to protect your milk supply when your baby is in the NICU, when a parent is actually sitting there pumping, they're not with their baby and they're thinking about how their baby is struggling to survive. So yes, they're able to provide this milk for their baby, but they're also reminded of the absence of their baby. So the mental strain that comes along with pumping. I'll give you another example. It’s psychologically upsetting to be pumping at work and be in a rush when you're trying to get a pump in in the midst of a workday- the output can be distressful if it's not what you're expecting or if you miss it. So when we're talking about a product that is for the user to be using repeatedly and to be seeing the results, there's going to be judgment around it almost every time. As opposed to a medical device that's removing urine or removing stool and there isn't charge behind that collection- this is precious human milk, and there's almost always some sort of charge around it.

And then the last thing I'll say is a big complaint about pumping is the portability or just the general amount of things that go along with pumping. You have to remember that pumping goes along with flanges, connector pieces, valves, membranes, bottles. So we have all of this equipment that the milk moves through to collect and then that gets transferred over into bottles to feed to the baby. So machine aside, we have all these attachment pieces that then yields things that need to be washed. So not only is a pumping person toting their pump around everywhere that they go- they have their bag they bring with them, figuring out where to get an electrical outlet, if they can have a rechargeable option- they also have this aftermath of all the stuff to clean up afterwards. So there's a lot of work involved in pumping, even after the actual pumping session happens.

What improvements do you recommend?

If I could recommend improvements to breast pumps, I would like to see independently operating pump flanges on either breast. Occasionally, I will find that a parent is limited by one nipple for how high the vacuum can go up. And you're able to pump one breast at a time when you're pumping. But you have to

essentially stop pumping one side to focus on the other side. And so I would love to see a machine that independently operated on either side so that one breast could be pumped that a higher vacuum or different speed than the other. Think about twins. When twins nurse tandem, they're operating on their own system. So there'll be nursing, one will be nursing and drinking, the other one will be non-nutritively, sucking and resting, and then they'll switch. So breasts really do operate independently, so to put them on a machine where they're operating exactly the same, is not consistent with biology, essentially. Always quieter- the more quiet, the better. Probably my biggest complaint about pump flanges is that they're straight and not bent. So the physical position that a lactating parent needs to be in is often a hunched forward position. And along with just general baby holding, carrying a car seat, baby hip carrying- the upper body strain on a pumping parent is huge upper back stuff. So I'd like to see a better design where the user can be in a more comfortable position. And if anybody figures out how to invent a pump that can operate while a parent is sleeping- that would be amazing. Other than that, I generally also think and this is getting better that the flanges themselves need a lot of work. The pump companies don't seem to be focusing on flange fit. They seem to be leaving it to other fringe companies who are making aftermarket products. And we're seeing things like silicone flanges instead of hard plastic. Makes a lot of sense, right? To see more variability in sizes of flanges. To see lubricants being sold for pumps. And it's strange because it doesn't feel like the pump companies are taking the lead on this. It feels like after-market companies are, which leaves the user victim to a couple of, a number of problems. So we have the- using non-manufacturer products. We have parents falling victim to product promotion. And then they end up over purchasing and buying lots of different products that may or may not be what they need.