

Actually yet Tuesday this week I began thinking about how

did I end up with this topic for today?

And then I remember that one day I was really having way

too many opinions and I was sharing them with Dr Alexander,

and I think he had it with me that day, and he's like, You

know what?

You're presenting unsafe sleep this year at the conference

because you clearly have something to say.

So starting with that, I put in a lot of effort into this,

and Thankfully it worked out really well because my research

during fellowship was about child mortality, and I came into

the topic looking at abusive deaths or fatal death from physical

abuse as the number one killer because that's what I was

exposed to.

But during fellowship I began to see as I participated in

pediatric autopsies that more children were in fact, dying

from unsafe sleep circumstances and they were never getting

to the hospital.

So it finally make sense why I had that bias understanding

about child mortality.

I was seeing things in the hospital, but I was clearly not

getting to the medical Examiner offers.

So when I really honed in on that information, I found some

really great and some great details about the Jacksonville

community. And hopefully I'm able to convey that in a way

that is helpful to your everyday practice and also understanding

of how to talk to parents about unsafe sleep.

So you already know who I am and I have Unfortunately no

financial disclosures.

I continue to work really hard on having a disclosure, but
it doesn't happen.

Hopefully that will change too.

So some of the objectives that I really want to cover today,
the emphasis will be terminology.

The more I looked into this topic, the more I realized that
the importance of getting it right as you're talking to parents
and as you're reading the literature is just absolutely critical
to everything that we do when it comes to unsafe sleep or
sleep related deaths.

The other part I want to cover is what makes a sleep environment
unsafe for infants.

And the reason why we'll emphasize that as I talk to CPAs,
our case coordinators and other members of the community,
they understand why prone sleep well, they know that prone

sleep is dangerous or bed sharing is dangerous or co sleeping,
but they don't understand really the nuances or the mechanism
in the way that they will feel comfortable talking to parents
about it, especially that parent that has done a great deal
of reading about the topic, and I fighting back.

They don't feel like they're equipped with all the right
terminology to really have a counter argument, so we will
dig into that.

Also, we'll discuss some of the common issues with adherence
on safe sleep recommendations.

And the last thing is I'll highlight some ongoing research
and also the future direction of this topic, which, as you
will see, is going way beyond the medical field.

So the first part is early in fellowship.

I learned from Dr Alexander to digging a little deeper into
the history.

So that way you have some good Foundation about the topic.

So we'll start with the fact that sleep related desk were
talked about in the Bible actually several times.

But the one that I chose to share with you is on this.

King 3 18 19 I still know how to read those things, but there
is a statement that says, and this woman's child died in
the night because she overlaid it.

And how many of you are familiar with that picture at all
is the judgment of Solomon.

And is that story about the two moms that we're claiming
that the child was alive was stairs.

And then King James decided that they were going to cut the
baby in half, and then each mom will take half.

And then the true mom really came up when she said, no, I'd

rather my baby go with her as long as the baby is alive.

So the King said, No, you're really the mother because only

a mother would care that much about preserving life of her

child. Now I was King James when I was nine years old and

little did I know this was in the school play?

Not for real.

Little did I know that I was going to come back almost 30

years later and talk about the same case from a completely

different angle.

But at that time, the punishment for an unsafe lead death

was very much like what we do now to lose weight.

And after a really bad breakup, things like, you can only

eat bread and water for a year or you can't have wine or

six for 2 years.

So things have changed clearly.

But by the fourth century, this was a part forgivable son.

By the century, it was just an acceptable cost of death for children until this really cool guy Templeman in 892 started looking at a series of deaths that were very consistent with what we find in SIDS cases.

So we were looking at about he found or reported 258 infants with Sid characteristics, mail and during the winter.

But he also found that the majority of the deaths were happening on Saturday night while their parents were drunk and they had overlaying the child.

So look at how far back this really goes.

This is not a new issue.

Then his conclusions were a little bit more accusatory.

And I think that's when we started shifting away from the

reality of it, that these are a six year old ads and giving

it a much more complex entity like is you are trying to kind

of remove someone that guilt from their parents.

And you can see his conclusions is that this was done out

of ignorance, drunkenness, and that they were hoping to claim

life insurance, whether that's true or not.

I don't know, but it sounds pretty cruel, especially if you're

have had a loss of that magnitude, and he recommended prosecution.

And I can tell you as being part of a lot of our child death

reviews. As soon as we touch that topic, things start getting

sticky. If you start talking about prosecution under these

circumstances. Again, historically, people have pursued that

or have pursued a more aggressive approach to dealing with

these stats.

So Let's go into the terminology because I think I'll spend

a good amount of time in this.

So that way, the rest of the lesser goes a little smoother

or easier for you.

So we'll start with sudden, unexpected infant death.

And just by definition, is death of an infant that cannot

be predicted 24 hours ago.

In the simplest terms.

Now, it has gone through a series of changes, all very mild

in comparison to SIDS.

But you will find out that the most recent change that is

leading to how we organize these steps is that if you have

that unexpected death of an infinite home, it could turn

out to be a metabolic problem or a heart problem or something

else. But they're going to be a group of death that you just can figure out.

And at that point, those deaths are going to fall into the accidental suffocation strangulation in bed category, the ill defined category, or the six category.

So as you will see, what is there's a specific criteria that has to be done or a specific approach to be able to group that child into the six category?

But one of the things that I want to make sure that I address before we move forward is that in the past Sewed stood for sudden, unexplained infant death.

This is the same thing as SIDS.

So it's not surprising that seat and sit can be confused

at time of why do we struggle with this terminology even

to this day?

It's just has gone through a lot of different changes at

the present time.

Sewage stands for sudden unexpected infant death.

So it's not that it's not explained.

It's just that we haven't gathered enough information to

figure out what explained that death.

Then the next thing that you'll come across in the literature

now is leap related infant Dev, and that's a seat or an unexpected

at that occurred during the time of observed or unobserved

sleep period.

And a lot of the literature, especially with the journals

and sleep of medicine.

And also more from the anthropology side, you're seeing that

they're using that terminology more and more and clearly,

you're seeing it in the pediatric world as well.

So Let's go into a common issue that we're having in terms

of terminology and in terms of getting to the information

accurately to parents is the term cosleeping.

So typically you'll find that co sleeping is being used commonly,

and it's unclear whether that when you use that term, if

you meaning that the child is in the room with the parents

or they're sharing the bed with the parents.

Now, it seems like a simple thing, but it turns out that

when you look at mommy blogs, most of their complaints about

us about professionals in the field is that we use cosleeping,

meaning different things, and our accountability suffers

as a result of that, they'll say, Well, one Doc told me that

cosleeping is good for my kid and they'll prevent sits.

And then another one said that it'll kill my kid.

I wish they would just get their Act together.

And you'll notice some of the blogs.

I actually took some of those pictures.

So that way you would see how really mean some of these statements

are. So if you're looking at cost sleeping, I would really

like to challenge you to start separating that term or become

more precise about what you're trying to convey to the other

person and refer to it as either room sharing or bed sharing

and room sharing, as I said, is just sharing the same room.

But you're not in the same surface.

The parent and the child are not in the same sleeping surface.

So clearly that would be a much safer environment.

The next part is if you look at this, for instance, is this

Coast leaping?

Yes.

Who said no, you are co sleeping.

You're in the same room with the parents.

You see how troublesome that is.

How about this one?

Is that Co sleeping?

Yes.

Right.

Which one is safe?

Is is safer than the other one.

Which 1 is more dangerous?

The first one or the second one?

The first one is more dangerous or less than less dangerous.

Right.

So look at all the ambiguity with using these terms.

Meanwhile, if you say best sharing, which is the next one

that we will talk about parent and infants leaping together

on a surface bed, couch or chair, is that bed Sharon and

a death trap.

And I'm surprised that they're sleeping.

Is that bad sharing?

Is that dangerous?

Is that best sharing?

Is that dangerous?

You see, there is no doubt everyone in the room is on the

same page.

This is dangerous.

It's the same concept.

There's no wiggle room there.

So if you refer to what it's best sharing, there's no question

as to what your what you're trying to convey to that other

agency or to that other person that you're trying to help

and clearing up some of these cases.

So continuing with a sleep related terminology when we look

at is, as I mentioned to you, you have to go through a rigorous

process to find out an explanation for this death.

So in 1969 that's when first six was defined by the NIH

Consensus panel, and they defined it as just a sudden death

of an instant.

Oh, don't get over zealous sudden death of an infant or a

young child, which was unexpected by history, and that after

an autopsy it failed to demonstrate an adequate cost.

Pretty straightforward, but then in 1986, they found out

that when you don't do a dating investigation, you missed out on a lot of really critical information.

And they use a lot of that information from 19 86 to 19 91 to sort of redefine or adjust some of the things that they had stated in the Sits initial definition.

And again, there are tons of different changes, and you'll notice in terms of sits and how we define it.

But the one that really gave a little bit more information was sudden death of an infant that remains on explained after a complete autopsy and no real autopsy.

Now just looking at the mouth and the anus, as they had been done in some States, a dad scene investigation and also review of the clinical history, meaning looking at what family history, medical history, birth history, a really floral and methodical approach to figuring out why this child died.

And most of the time, when you go through that rigorous method,

you end up with an explanation for that death.

And if you don't, then that's appropriately categorized as

it. And we move forward to here and look at the year for

this is 2,007.

They're still writing about a functional approach to sudden

unexplained death.

And what the authors are talking about here is that all of

these debts, if you look at this is a diagnosis of exclusion,

but it frustrates diagnosis and research objectives because

again, there's just so much information missing everywhere.

It is helpful in death certificate.

So it's not that we need to abandon it.

There is a value to it within our community and the way in

which we track mortality.

And I can tell you from looking at this topic carefully,

I can attest to that, and it's also helpful in parental grief

counseling. So clearly there's a value to having sit.

We shouldn't do away with it, but we should just be a lot

more precise and meticulous about how we look at these debts.

And you can see here on the right the basis for recommendations.

I like this picture because it actually shows how many different

changes have been made to it.

And this is just a summary.

This is just what they use for this paper.

But all of these things that you see here are just modifications

to SIDS.

So clearly it's not a very easy topic or very easy medical

entity to approach.

And then you'll see about the triple risk hypothesis.

And the only reason why I want to point this out is that

it gives you really fancy names, the critical developmental

period, vulnerable infant and exogenous stressors, and then

sit. And then when we get into unsafe sleep, you'll see what

somebody else said in terms of fix your depth using the same

model. So across the nation, when you look at SIDS carefully,

you start noticing some patterns, and I hope that you all

can see that from the picture in 1992 is the first part

here where it says that the EAP established the Safe Sleep

campaign, and you see a dip in the combined seat rate that

death and then 1994 the Back to sleep campaign.

Again, another dip in those deaths.

And then in 1996, this Sewed investigation piece was added.

And another if we see, but what you can see at the very bottom

line here, those are accidental suffocation and strangulation

in bed.

And what you notice those are not changing very much.

In fact, as the time goes on, we'll see that it increases.

And it's not because we're seeing more of those deaths because

we're really categorizing them appropriately.

Then we look at this as early as 2,015.

And you're still seeing that of these deaths are ending up

in the site category.

But I'll share with you that the Duval County Medical Examiner's

Office is not a standard on every single death that we will

be able to do a define investigation.

And I had to use that information to carry out my research

and be able to show that these debts I can't group them as

SIDS because we didn't complete that rigorous method.

They're really seed, and we need to look into more details.

And that's exactly what I did for my work.

Then you can see this is just another graph showing you how

with Tom starting with 19 90, the rate went from 135 kids

per hundred thousand all the way down to about 39 by 2,015.

Meanwhile, we're seeing more and more of suffocation debt

or a fix debt coming up.

So clearly there has been a decrease, but we're also categorizing

them appropriately, and they're no longer this really obscure

medical entity.

They are what they are.

They're as fix our deaths.

And Here's how we're doing in Florida.

Actually, I grabbed this query from a recent presentation

by the US residence in which they queried the infant mortality

system in Florida.

And what you can see is that the rates.

Remember what I just mentioned before the rates came down

to about 39.1% per hundred thousand kids.

Look at where Duval County is 55, a little bit over 55.

And look at where Orange County is.

And again, this is just a very rudimentary query.

But this is as early as 2,017 when you look at the different

counties that the Jacksonville CPT group oversees some of

these, we don't, but a lot of these are part of our jurisdiction,

if you will.

But look at where Duval County lies as well.

Then if you look at this picture, there's a correlation this

red zone here, there's a correlation between poverty and

also on safe sleep deaths.

And this is again directly from that query.

So Here's what we decided to do, Dr Resistor, and I added

the Pic and the Jacksonville CPT.

What we decided to do is we wanted to find out what's truly

killing kids in Jacksonville.

And as I was sharing with the Er group here.

We had this exposure in the PICU and in the Er that was predominantly

fatal child abuse, physical abuse.

So it kind of created this bias that what was killing kids

and our community was physical abuse.

And I came into fellowship thinking that way.

But then when we put this together, I started noticing that

they pick you information and Er information was just not sufficient. It was not giving me enough capture of children for me to make any conclusion about what's killing our kids.

So I decided to talk to Dr Rao, who's a director for the medical examiner's office in District four, and she was kind enough to share their data with me for the same period of time. And when I combine the data, what we have to do is we have to create these criteria, exclusion criteria and inclusion criteria.

So that way, we could really hone it into the problem.

And what we decided to do is we decided to look at the two week period any child that was born within a two week period and died within a two week period.

We didn't include in this study because we had to assume that they have some kind of congenital issue that really

didn't allow them to live any longer.

And then anyone that was past the 13 years of age gets into

more suicidality issues.

So that would also kind of contaminate our data.

So we wanted to really hone in to that child.

And after that, the other part that we did is that since

that seen investigations are not the standard on all deaths,

we started looking at that carefully.

And if they were not done, we just took them out and converted

that into a sea death.

Yeah.

This is a very intense picture that was on purpose.

And Here's what we found when we looked at all these deaths

over a 10 year period, you can see that seat or sudden unexpected

infant desk.

There were 322 of them.

Look at how different our initial conclusion or assumption

was. The non accidental trauma was the number one killer.

It was only 68 and look at drowning.

And then we decided within this seat, I had to do a chart

review of EMS nodes and er nodes and pretty much the entire

medical chart.

And it actually led me to see that out of those seated 142

children die from an unsafe sleep environment.

I really fed the true category because of I guess we were

able to do destine investigations for those in 73 cases,

and we were still left with that ill defined group of 107.

But then when you look specifically at the unsafe sleep environment,

this is what we found.

88 kids had been dying from bed sharing 31 died from prone

position. And then you can read the rest.

Not as many, but they're clearly dying.

And I wonder how many from this undetermined section from

this undetermined bar really fit into all these deaths that

we know are equally dangerous.

But we didn't capture those.

And again, that's the value of precision when you're talking

about these cases and doing a thorough define investigation.

So now we'll leave and we'll pick up some speed.

I just wanted to make sure that at least that Foundation

you were able to go home with.

So when we go into unsafely bed sharing, this is a hotly

debated topic.

And you'll see me referred to this paper again, this one

right here from the Sleep Medicine reviews.

Is it dangerous?

Yes, everybody in this room will agree with that.

But it's still a very controversial topic.

Everyone is arguing within their field.

And this paper is truly great in that it looked at the literature

in a really rigorous way.

And what they found out is that it is polarized.

There are lots of questions.

There are a lot of really cute or creative methodology, and

there's often insufficient evidence.

No wonder parents fight us back then.

Remember that triple risk that I was pointing out before

for SIDS, I found this one that they really did not sugar

coat this at all.

Infant parent bad death just vary to the point.

There's no sugar coating whatsoever, no fancy words.

They're trying to get their point across.

And then when we look at perceptions from parents and best

sharing, look at the laundry list of things that they point

out breastfeeding.

And that's a recurrent theme here.

And you'll see me address it further comfort for the mother

and the baby.

They don't have a crib.

It's warmer for the baby.

Again, just a multitude of excuses or just explanations.

Maybe they're not excuses.

This is what they believe in.

And I think we have to respect that.

We just have to circumvent that approach.

Then breastfeeding is the number one reason that research continues to find.

And it's such a strong correlation that Dr Moon, who has been writing about sleep related deaths for decades, now, has to come out and say, No, the AP really wants you to breastfeed.

Don't back away from this because the Lactation consultant were saying, no, you still need to be share in order for

you to do the breastfeeding that I think you're trying to

do. So there was a lot of really antagonistic statements

that were made that gave the impression that the AP was not supportive of breastfeeding.

So the main part that I want you to take from this is that

one of the questions that we need to address when we're trying

to teach families about safe sleep is we want to find out

are they breastfeeding?

Because then we should really sort of redirect or really

include a lot more information in what we're trying to teach

them and trying to give them alternatives about how safe

they need to be doing this practice.

This is more information from another paper, and there's

a bunch of references at the end that you'll come across.

But the part that I find confusing is that no one ever talked

about exhaustion, and no one just said that.

Well, I'm just not informed or misinformed.

No one owned up to these really important things.

So you want to make sure that exhaustion you keep in the

back of your mind.

Anyone that's had a baby here can relate to that feeling

of I'm just exhausted.

If this kid would just sit right here and we can just all

get some sleep, it would be amazing.

So if we can all relate to that, bring that into that conversation

with that parent who's clearly just trying to get some sleep

look just like we were.

But just like we are in my case, I have a four month old,

and the other part is best.

Sharing can also be reactive.

And by that, I mean that the parent really never wanted to

bed share.

It's says that the child has reflux.

The child clearly is uncomfortable when they're in their

crib and the parent feels cold and detach if they don't intervene.

So even though they excuse me, they understand that it's

an unsafe practice.

They're trying to do the best they can as a parent.

So they bring the child in in those parents on every single

survey will tell you that they don't feel comfortable with

the practice, but they want to do it because they want to

be a good parent.

So you can imagine how your narrative has to change for that

particular scenario.

And unless you dig deeper into why this is happening, you

will never be able to educate them and really reassure them

and take care of the anxieties that are leading to that practice.

So Here's what the AP safe sleep recommendations are at the

very top, and that paper is out there and you can read it

on your own.

So the three things that I decided to share with you or to,

I guess, repeat here is they should sleep with the parents

in the same room.

So room sharing is a good thing, because if you hear the

child is struggling in any way you can provide care.

But that is not bad sharing.

So room sharing is good.

Best sharing is not ideally the first year or the first six

months and safe sleep for every sleep.

And here are other recommendations.

I was gonna say Emanuel's recommendations, but I should probably

not claim anything first.

Learn common reasons for bed sharing, as we already discussed,

understand the terminology, ask why they had share.

So that way, your teaching can be a lot more effective.

And more individualized discussions about should be caregiver

specific. And if I think we really need to start asking if

the family is traveling, moving or there's family visiting

because it turns out that a lot of deaths that were reported

as sits at one point happened during these scenarios, the

parent is going somewhere or their family in the home and

they have to rearrange sleeping are they have to rearrange

sleeping spaces and the child ends up in the same bed with

a parent or in the prone position or with excess bedding

that they wouldn't have had in the regular environment or

the regular circumstances.

So I think it's important for us to really look into that

a little more closely if we're going to provide effective,
safe sleep recommendations.

Prone sleeping is another one.

I get a lot of questions about why did they die?

So I figured I would spend a little bit of time.

So Here's some pictures as to why prone sleeping would be

a problem in terms of reducing the amount of oxygen available
for the baby.

So here you see a fix death or a position that can lead to
us fix you.

If the baby has the obstructed nose and mouth, then there's
really not going to be any useful oxygen coming in.

The other part is diaphragmatic splinting, and as you can
remember, or may remember when infants don't really have
strong ABS, even when they try with all that positioning

that they do, so their belly contents or the abdominal contents

really move all over the place.

So imagine if you have a baby in the prone position with

soft bedding that doesn't allow for these organs to move

freely. You may limit the amount of diaphragm expansion or

contraction, and that will limit the amount of oxygen they

can bring in.

So again, these are some of the things that have been presented

as possibilities.

The other part is that they go into a really deep sleep.

And I would love to look like that right now, but they go

into a really deep sleep.

And unlike us, if they have an increase in carbon dioxide,

they're not going to wake up like we would trying to gasp

for air.

They actually will just stay in that way, especially if they're

less than four months.

Less than three months of that brain is still developing.

And the other part is, look at that.

The heat.

Apparently the amount of heat or the amount of warmth for

a baby will really keep them in that deep sleep, and it will

blunt some other gasping reflex.

So that is something to keep in mind in terms of the totality

of prone sleeping.

So why prone sleeping parents will tell you things like the

baby will choke if you put him on her back or his back.

The baby sleeps longer on his stomach.

There's family influence.

I don't see a problem.

This is protective.

Health care professionals will tell you that there's a concern

for aspiration diminished sleep quality while supplying.

And you can see they're telling you things the same thing

and just fancier vocabulary and is selling you in the home

VocaliD. I want to sell you medical, but they're the same

ideas. And remember this Lady right here who seems threatening

because she will come back later on.

Side positioning is another issue that we have, and it's

because of the reflux and also because I played acephala

abnormal head shape.

So now they're advertising the side positioners.

So that way you don't have to use prone sleeping at all.

You can just have this one in which the parental anxiety for reflux or aspirations can be taken care of, and the baby just looks more comfortable.

The problem is in some of these cases, if the baby has developmentally reached that milestone of going into the prone position, this is just one step away, so they'll end up in the prone position, and now they're limited by two little mountains on each side so they can't go back into the supine position.

So you just put them in a death trap.

So these are not recommended at all.

Even though the FDA has approved them.

The AP doesn't find this to be a useful tool in any way, especially because it doesn't truly prevent reflux or any kind of or SIDS.

Over the past 13 years, they actually have looked at this

carefully, and there is one death per year according to what

they reported under these circumstances.

So now we'll move on to in terms of the safe sleep recommendations

I think everyone here would understand is back to sleep.

We need them to be under back.

But the other recommendations aka manuals recommendations

or understand why prone position and is unsafe for sleeping.

If you're able to share that with a parent and explain clearly

and in the way that they really can relate to you, why this

is dangerous, your accountability goes up and they're more

likely to at least consider that information and compare

it with the Mommy blog that completely goes against everything

we set.

Also learn about their reasons for prone sleeping.

Ask why are they doing that?

And try to address that issue and also ask about the severity

of reflux because if they're telling you that it's because

of reflux, you want to figure out.

Is that's really something that I need to spend more time

addressing and also figure out how much are they feeding

this baby?

Because maybe that reflux will really be taken care of if

you just don't overfeed them.

So this is a minor modification in their behavior.

That could mean a completely different safety initiative.

Yeah, initiative is so some sleeping devices.

This is all over the place.

I can tell you they are expensive and you only use them for

about three months and just the cost benefit is just not

really great to me.

But when you look at Cribs and invest sleepers, make sure

that one of the things I tell you is make sure that none

of these products have been recalled.

That is not easy.

I've gone to do a few of these things for the products I

bought from my children, and it's not easy to navigate through

this website at all.

So imagine if I'm having trouble with it.

And I pretty much Unfortunately brief this topic.

Imagine the parent that doesn't really have the time where

it's not nearly as engaged about this.

Don't use Crip that are broken, but you can see multiple

scenarios in which this is the ideal setup.

Here are some alternatives, if you still want to room share
and not have the baby in the same room, and if you're really
desperate for bad sharing, Here's an alternative, and you
think most of you are familiar with is the baby box.

This is just a variation of that.

So the consumers, the Safety Commission has no standards
for embed sleepers for these for the baby box, and it's because
they don't have enough data on it in the United States.

So they're not going to give you recommendations.

But what I want you to take, at least from these pictures
is that this is not a foolproof method.

You can still have a baby here with excess bedding, and they
can also be in the prone position.

So even though you created a barrier between the parent and
the baby, you can still set up an unsafe sleeping environment.

And there's no way that you would know that they're doing

that unless you ask, the sitting device is also the look

at this neck.

If I did that, I would never come back into a trade position

again. But there is about one to a deck per year in a car

seat. And what they've noticed is that usually it's a baby

that has other medical conditions, premature babies with

other issues.

And we have one of those last year actually in Jacksonville,

or they're using the car seat incorrectly.

The other part that they're using is the swing.

And the rare case report about this.

The risk of suffocation here is because of the positioning.

They're more in that arch or flesh neck position, and that's

going to lead to an obstruction of their airway.

So if you're going to use it, you need to make sure that

it's not for a long period of time and also that the baby

has their face and nose open carrying devices.

These are, as you know, very popular.

And again, if you use these for carrying, there is no problem

is when you go to sleep for eight hours with a child right

there in an environment that is not safe or you leave them

from a prolonged period of time, they just don't have the

strength, the next strength to straighten up and be able

to clear their airway.

Okay, the sofa and couch and arm chairs.

I think everyone in this room knows at this point that if

you go with a couch, you're more likely to call than than

if you're in bed.

So I'm not going to go over that again.

But what I want to bring attention to is approach and teach fathers about this.

Look at all the pictures that I have fathers for some odd reason are notorious for doing this, at least in my clinical practice. And I think it's really adorable, actually, when you see the pictures from your friends on Facebook in which the father is spending quality time with that baby on the couch, on their chest, in the prone position, with a lot of clothes and a lot of bedding.

So look at this one.

It's like 3,000 things that could kill this baby.

He's prone cushion.

The father is bringing his neck on top of his head so he

might not be able to straighten out his snack.

It's just horrible.

This one.

There's not even a baby in sight.

I don't know if the baby.

I wish I could Zoom in on it, but I did not find a baby,

so I hope there's not one in there.

I and then look at this one.

Dad is really sound asleep.

This is a father that was clearly working two shifts, and

this is their version of quality time because that's just

life. So you need to make sure that you address is particularly

with fathers, figure out who is the caregiver.

And if dad plays a role in any of the sleeping circumstances,

which is most likely going to be the case, they should be

getting this information as well.

It should not be restricted to Mom.

Oh, Yeah, I can mix it.

I can Zoom in on you see?

No baby, no baby.

The baby is fully rested and then room environment.

I'll go a little faster here.

We already talked about soft bedding smoking, smoking to

me right now.

I looked carefully into the relationship of smoking and sit

that. And to be honest with you, I'm starting to think that

smoking or cigarette is just like that unwanted family member

that you just blame anything on them because you don't want

them in your life.

But as of right now, there's nothing experimentally that shows a direct.

I mean, there's some correlations there, but there's not like that smoking gun about smoking and say it's just we know that it's bad and it should not be exposed to this.

But I could not find any paper that would really give me something that I said.

Okay, I can go to a parent and argue this particular point and they're going to take it.

So Unfortunately.

But there's a lot being done, as you can imagine, to find that relationship and the temperature.

And this is looking at how if you have overheating of the baby in many different ways, especially this one right here that's covered.

I think you can only see his eyes looks like a little Ninja.

But if you look at this, there is no specific temperature

that they tell us that we need to stay away from or in any

specific measure.

So it's a pretty broad description of overheating with maybe

insufficient information that the parents can use and be

able to apply and teach others and other family members.

So we'll look at challenges and modifying behavior because

I think that's what I'm I'm hoping that you'll enjoy the

most when we look at social.

Some of the challenges is instance, this book *Sleeping With*

Your Baby, was written by James McKenna, his anthropologist.

I read about half of this book at the beginning of my research,

and I swear after this book I wanted to have a uterus, have

babies and best share with them like he truly sells this

in a way that it is almost impossible for you to not want

to best share.

And the only reason why I knew about this book is because

I went into a mommy blog and they talk about this book over

and over and the same thing with Dr Sears.

So if you want to or if you need to talk to parents about

this on a daily basis as part of your job, you want to read

this book is a lot of the information that they're bringing

here or bring into your conversation with them is coming

from there and you want to know that and you want to be able

to relate to them and show them that you've done your homework,

this particular blog, you're not going to be able to read

this, so I'll read it to you.

It's only two lines that I want you to take from here, and

this is a BB blog and this is a mom that said her starting

line was I lied to my pediatrician, not a reassuring statement

when I read it, but then she said, But the truth is where

my baby sleeps is not really a medical problem and therefore

not something a pediatrician is trained to discuss.

I hurt my feelings a little bit, but whatever we're moving

on, we'll find an opportunity to teach her.

But you can imagine if you're having this out on the internet.

Parents are reading this and parents will take this seriously,

especially if they're passionate about bed sharing and all

these different practices.

And then when you look at specific papers about safe sleep

recommendations, look at about almost a quarter of caregivers.

Do not agree with it.

Back to sleep recommendation about the same number did not agree with no soft bedding recommendations.

Half of them do not agree with the use of the Pacifier as leave in over 60% of them.

Disagree with the AP recommendations to avoid swaddling and lower income families actually seem to be a lot more receptive to new information, which goes against some of the things that we have some of the perspectives we have during our discussions. Now I told you I did warn you about Grandma coming back, and here she is.

She can see her.

I thought it was a great paper or a great article to emphasize really beliefs of grandmothers because as we know, they do have a significant impact unsafe sleep in many different ways. So this paper as early as 2,016 this is what they reported.

They looked at grandmothers ranging from 30 to 70.

I thought that the 30 was Yikes.

I did not even have my first one at that point.

So they looked at this population and they looked at specifically

demographics and beliefs about infants.

Ly pretty straightforward study just gives you just a basis

to say, you know what?

Someone has looked into this.

And there are conclusions where the grandmothers do not universally

observe safe sleep recommendations, particularly if the infant

is not sleeping at the mother's home.

So if Grandma took that takes that baby to take care of that

baby at her home, she's less likely to implement safe sleep

recommendations or safe sleep interventions.

So find that out.

Find out who takes care of the baby and then be able to say,

Okay, if the baby spending more time with Grandma outside

of there, then you have a heightened awareness to teach them

about. No, I need to talk to Grandma as well.

So now you have Dad and Grandma really getting all the information

that I think as of right now, as a clinician, I'm embarrassed

to say I have honed in on Mom, and I have neglected to educate

everybody else, and I think it behooves us to really expand

our length a little bit more into all caregivers and understand

the nuances of every family.

So we can address these things specifically.

And all of them had this perceived choking risk in discomfort

in the supine position that sounds familiar, right?

Everybody keeps telling us that.

So here I just wanted to point out, look at the age group.

Look at the group is why Caucasian was some College with

74%. So this is not a lack of access to education.

I mean, there's some they can read if you give them those

pamphlets that we like to give them that clearly they're

not reading.

There's enough literacy there to at least get through those

through those pamphlets because I think enough people have

put a lot of thought into these.

So that way it can be read by anyone.

Maybe look at the household income greater than 30,000 so

that's above the poverty line lives with a grandchild and

look at these different homes or a different house at all

times. So again, this is just hopefully this will kind of

give you a view of how maybe some of our perspectives or

some of our views are a little biased by our experiences

and not necessarily driven by what the rest of the population

is seen.

And here are just some more numbers.

But since we have to wrap up soon.

So here are some of the medical issues that we're coming

across, so we already cover social parts.

Now we'll look into some of the medical barriers, and one

of the things that I've come across increasingly is the pathology

world is struggling with this topic as well.

They're looking at how to talk about this topic in a way

that is again precise.

So look at this paper, and this one is as early as 2,010.

I still trying to figure out how to classify as fix you,

because when you look at the literature, the use of overlay

entrapment, suffocation choke and strangulation, they're

poorly defined.

They're used across the board, but not really a standard

or a really clear criteria to when to apply that.

So they tried to move into the more descriptive axial death

terms like mechanical is possession Alisia.

But again, getting a consensus with this has been a challenge,

and they're continuing to work with that.

In fact, I spoke to a forensic pathologist last week and

one of his papers is coming out this summer.

That really hones in on some additional information here.

So clearly this is an ongoing issue from their end as well.

So now Let's look at the pediatric world.

There are pediatricians out there that look at what Doctor

Le Wax said.

This is as early as 2,012.

Pro sleep is a risk factor for SIDS, saying that sleeping

prone is by itself a risk of suffocation contradicts history

and say it's a real disease.

So if a parent reads this, I mean, everyone is entitled to

their opinion to a certain extent.

But if a parent reads this and listen to what I have to say,

and we're both bore certified pediatrician and we're both

coming at the same topic from a drastically different angle,

how does that make us accountable?

Why would they want to listen to us?

So clearly we have some work to do as well.

Look at this other paper, and this one was in 2,013.

Actually, 2,014 publication is best sharing, beneficial and

save during infancy.

And this is a systematic review.

And their conclusion is that there's not enough evidence.

And again, this is coming from the pediatric world.

So we're not all looking at the same thing.

We're all not on the same page.

Now Let's look at the nursing world the most important word.

Where are my nurses?

So Here's from the Pediatric Nursing Journal, and they did

a really fun study looking at two different hospitals, and

those two different hospitals were told we're going to do

a study on safe sleep.

But we're not going to tell you we're just going to observe

and look at behaviors and ask questions.

And they found some really great stuff overall of the nurses

believe that infant positioning was associated with it.

So that's good.

I would like 90 at least.

But 74 I'll take it indicated that they weren't sure if that

was the case when they looked at Hospital B, they found that

about half of the nurses ranked personal preferences as their

top three factor for not following state leaper recommendations.

And this are our nurses, and this is being published by other

nurses. So this is coming from their peers.

25% of the respondents stated that in their clinical experience,

the supply and position will increase risk of aspiration

cause the infant not to sleep well and decrease comfort of

the infant.

Again, the recurring topic of reflux, reflux, reflux.

I hate reflux for many reasons.

My reflux.

And now this reflux hospital a believed that there was no

Association between sleep or sits or 60% of the nurses include

proper position information at discharge, only 60% of them.

And again, maybe they're not reading it, as seems, but only

a little bit over half is really going home with the information

that they should and in hospital be 93 9% observed infants

did not meet the environment the environment guidelines.

So these are really, really eye opening in terms of research,

the things that are going on right now.

And I think what is most promising is the molecular autopsies.

And there you can imagine why this would be taking so long

to evolve.

And this is as early as 2,017.

And we're finding that iron deficiency is associated with genetic variants are the culprit for Sunrun explained death.

That's a hell of a mouth.

So at the end of the day, they're looking more carefully now. No longer is the autopsy restricted to just tissues to things that we can touch and look at the microscope.

But we're going at the molecular level.

We're going at the Nano level and figuring out is there a gene here that could have caused this issue, and they're finding out that is the case.

So these ions and all these things that we learned in chemistry that keep us alive and they keep our heart beating and our or brains functioning.

There are variations in genes that will make those areas

susceptible that could lead to an unexplained death.

But unless we get to the molecular level, we will never be

able to figure that out.

But now we're making that transition, Thankfully.

But wanted to include this picture because I want to show

you, look at all the different variations and all the different

chromosome locations and genes and proteins and lengths.

And I can tell you, for me, this is fascinating, especially

because I'm a molecular biologist before I went to medical

school. So this is what I did for years before moving into

the clinical world.

So to me, this is fascinating to somebody else that may be

extremely boring or confusing.

So why would a parent go into this death of information?

They wouldn't.

I would have to rely on this and teach them.

Here are some of the really fancy pictures that they use

again, incredibly difficult to get through what all of these

different things mean.

So no wonder is taking a while for a lot of this information

to be spread into a much broader community.

And this is just another bunch of variations that look specifically

are just heart variations or heart mutations that led to

death. And this is a small list.

So really impressive.

Here's another one that looks at the entire genome and looked

at different variations.

And look at what they found out.

They found out that 9% there was an iron Canelo Athy so it

could have been brain, or it could have been heart.

And then they looked at muscle.

There was something going on with the actual genes involving

the heart that led to that death.

But until you do molecular autopsy, we're not going to be

able to figure that out.

And you can see all these other ones.

80% was that a variant of unknown significance?

Meaning there is something off about these genes, but we

just can't really narrow it down into where they are.

So again, we're a long way from figuring out specifically

from a sits perspective.

And from a molecular perspective, what is the answer here?

And this is what I'm most excited about the psycho Anthro

Pediatrics. And this is something that's developing right

now, because finally, everyone is seeing that this is truly

not an isolated medical condition.

When you talk about vaccines, when you talk about autism,

you can see more of this almost directly medically controlled

topic. But when you're talking about same sleep or sleep

behaviors, you have to look at social.

You have to look at cultural.

You have to look at so many different variables.

And now that folks have looked at this more carefully, what

you find out is that you have to combine all these different

disciplines in order to really come up with effective interventions

that are family friendly or caregiver friendly.

So in this case, what they're suggesting in this paper, which

I mentioned to you that I used before and that I was going

to use again during the PowerPoint, what they're talking

about is that now there is this new field forming psycho

Anthro Pediatrics, which is looking at the psychological

developmental psychology impact of this because we talk so

much about attachment because of vet sharing is looking at

the anthropology part because that's just human behavior.

And it's looking at the Pediatrics part because we're able

to measure things with precision.

So when you put all the information together is really the

highest yield for what we can do for families.

So there is conclusive evidence is lacking based on this

paper in terms of what the medical world can say, what the

anthropology world can say and what the psychology world

can say.

But when we put our forces together, then we would be able

to make a change.

So pediatric research, they consider that because most of

the studies are retrospective, they're way too many limitations.

The anthropology research is just very small samples and

they're not replicated.

So again, you can make really hard conclusions on that.

And the developmental psychologists have not even contributed

very much to this, despite the fact that we talk about the

attachment issues.

So something that's in the pipeline and I think is really

gaining a lot of trash and and hopefully I'll end up doing

some of this work since I already have an interest in it

and was for here today.

So moving forward, some take home points, a caregiver experiences

should be explored before you teach them about safe sleep.

I think we have to evolve from that approach of Here's this

pamphlet, and I'm going to go over don't go sleep and don't

prone sleep and these really rigid ways without even asking

them about their behaviors and the reason why they engage

in that kind of behavior.

I think we need to be able to connect with them in the same

way that we do about everything else in order to get through

the information that they need to get home that applies to

them using the correct terminology.

Again, incredibly critical because you'll be able to get

a lot of respect from them.

And they'll see that what you're talking about.

You actually have done your research, and they have as well.

So you're not coming across a scenario in which they're clearly way better informed than you are you're really going to keep up with a vocabulary that McKenna gave them.

The other part that you want to make sure in terms of terminology is that a lot of the research is going to be coming out will use appropriate terminology and sometimes not.

And you need to be able to understand the quality of the paper by seeing immediately if they're using the right terms as defined by the general community, professional community.

And there's ongoing research and almost all the topics that we address and then some.

So you have to stay informed.

You have to stay on.

Stay tuned.

But you also have to scrutinize the information that's going to come out because everyone is still working within their field, and they're gonna give you a lot of stuff that sounds phenomenal but may not have enough bad evidence to back it up. So with that, I like to give special thanks to a series of people.

Some of them are here, like Vicky Woodfield, who has been worse Vicky, there she is.

Vicky has been incredible.

She has helped me tremendously throughout my research during this past three years in the eternally grateful to her, and she's always available, even when I think she doesn't want to be.

Also, Dr Rao, who was kind enough to share her data with

us and gave us a breath of understanding about the community

that I really did not have before I went to her and also

the Wilson Children's Hospital Group, who is incredibly supportive.

And every time that I ask for more data within about an hour,

I had another email with 10 more years of information that

were useful to the conclusions I've made.

These are my babies, and I have, I think three minutes for

questions and here are references.

Thank you so much.

So I'll repeat Dr McIntosh position question.

He asked if I had a position in terms of the use of the baby

boxes and my position on it is that if you were to ask parents

why they're bringing their baby to bed and to them, it's

really important to best share.

Then it creates a barrier that will prevent that rolling

over. Now the emphasis will be don't put the baby in the prone sleep position.

Don't have soft bedding, so I don't think it's something that I need a paper in order for me to recommend it or not.

I think, really, the the strategy is figuring out why they're using it and giving them tools to use it in the safest way possible. I think every little bit helps.

I saw something.

It.

Yeah, that is correct.

A lot of hospitals have taken that initiative.

But again, if you give the baby box and you don't talk about all the other forms of on save sleep, you could really be putting the child in a death trap if you're not careful.

So for those parents career here, you are really wanting
to a chair.

Is there a same page that you can tell them when a child
reaches this age, the activity as well.

If you look at the AP recommendations, don't, I would say,
personally, you want to avoid any situation in which a baby
less than 12 months of age, all 12 months.

I think it's a reasonable age that a baby can fight you back.

But again, if you have anything in your system, like some
grandparents that I've met that are having alcohol or having
marijuana, there's caregiver impairment going on there.

So even if you set up the most safe environment for that
sleeping period, you could potentially have an impaired caregiver
that will defile us in terms of age.

So, again, it's a very individual.

And what I usually tell us when the child is older than again,

if that works for you, I think that's a very reasonable approach

that way.

Clearly, in order for you to fit into the SIS category, you

have to be an infant, meaning less than 12 months after 12

months, and you're not really fitting into that.

You will fit into a different type of category.

We're good.

I got the thumbs meaning get out of the state.