Full-Text Articles

The New York Times

When New Means No: Picky Eating as a Normal Toddler Phase

By Perri Klass, M.D. June 4, 2018 The New York Times

It's normal for toddlers to go through a picky eating phase, but experts say parents can help them learn to handle new sensations and avoid a battle of wills.

Hildy S. Lipner, chief of pediatric speech pathology at Joseph M. Sanzari Children's Hospital in Hackensack, N.J., said that by the time she sees children with picky eating problems, they are usually between 18 months and 3 years old and already have their patterns well established. And while those patterns reflect children's different temperaments, they may also go back to the way parents and children navigated that normally picky toddler phase.

Establishing Habits

So at 6 months or so, which is when the American Academy of Pediatrics recommends introducing solid foods into a baby's diet, parents should be aware that babies are already establishing habits. "The best time to transition kids as you go up the textural pyramid is when their oral motor development is ready for the next transition," Ms. Lipner said.

Some of the children referred for poor eating turn out to have other developmental issues — children on the autism spectrum may have sensory issues around food and rigid eating patterns. These families will need additional expert help. Other children turn out to have medical problems and may be feeling discomfort when they eat — anything from gastroesophageal reflux to celiac disease to food allergy.

Use teething toys

When there isn't another issue, picky patterns may go back to the first solid foods. Even before that, parents can help children get used to different sensations in their mouths by offering textured teething toys, Ms. Lipner said. Look for toys (certified as safe for the baby's age) with parts that can fit inside the baby's mouth (without detaching) and "touch where the spoon is going to touch," she said, with little bumps or other textures.

Later, you can dip the teething toy into a food to introduce a new taste, she said, adding a second sensory experience to the one they already know: "Food is texture, food is temperature, food is multisensory."

Be patient

In offering food on a spoon to a baby, be patient, she said, and let the baby lean forward and taste. It may be counterintuitive, but don't choose the moment when a baby is hungry to offer an unfamiliar food. "It's the worst time to introduce something new, when you're hungry and you're irritable and you're looking for the thing that will make you feel better," Ms. Lipner said.





Instead, offer new foods between feedings, when the baby is not hungry, so the child can explore them for fun. Gradually, she said, a baby will learn that eating these foods also alleviates hunger and fills the belly.

What parents feed their babies reflects their own backgrounds and cultures. Although American parents often use commercial baby food, the <u>baby-led weaning</u> approach suggests skipping the puréed-food stage altogether, instead offering soft chunks of food for the baby to explore and eat. <u>Research</u> on how this affects children's growth is still limited; it's important for parents to make sure that no foods that constitute <u>choking hazards</u> are included.

Avoid a battle

Between 6 and 12 months, babies are more open to new foods — and new experiences — than they will be later on as toddlers, when a certain amount of "neophobia" or "new means no" is developmentally normal, Ms. Lipner said. "Normal kids transition through a normal pickiness phase," around 18 months, she said, when "they're also learning autonomy and control." At that point, "the more a parent gives direct pressure, the more a parent pushes, the more likely it becomes this battle of control."

Parents desperate to get a little food into a picky eater may encourage a child to graze constantly, which is not a good pattern. Instead, offer food every three to four hours, with three meals and two snacks built into the day. Take advantage of children's interest in dipping, but keep the food as nutritious as possible (dipping vegetables into yogurt or hummus, for example). Expect it to be messy, Ms. Lipner said, and give them the illusion of choice: Which vegetable do you want today?

Provide exposure

"We sit down and come up with three to five foods parents would like to see them eat, something that comes up in their home," Ms. Lipner said. Meals involve three or four foods, one new, and the new foods get rotated through every few days, becoming familiar. The only rule, she said, is no throwing: "Food stays on the table." They can manipulate it, but they don't have to eat it. Consistent repeated exposure is the key.

Tracking Pickiness

In an abstract presented in May at the Pediatric Academic Societies meeting in Toronto, researchers looked more closely at whether picky eaters coming out of those toddler years stay picky, and at how they grow. The study used a cohort of low-income families in Michigan, tracking 189 children from the age of 4 to 8 and a half, looking at feeding and eating behaviors, and at the children's growth.

Dr. Megan Pesch, a clinical lecturer in developmental and behavioral pediatrics at the University of Michigan Medical School C.S. Mott Children's Hospital, who was the senior author on the abstract, said that in her training as a pediatrician, she was taught mostly to reassure parents of picky eaters that their children would grow out of it.

Instead, "we found three stable trajectories," she said, the children who scored as high, medium and low on the picky eating scale. And the children stayed in their groups. "By 4 years, the





parent perception of picky eating was established, and did not change over the next four and a half years."

The children were given two kinds of vegetables, one familiar (string beans), one less familiar (artichokes), and their reactions were videotaped — how much they ate, whether they made negative comments, how they rated the foods on a yummy-yucky scale. And it turned out that the parent reports "were totally valid," Dr. Pesch said. "This is not just moms overreacting." As other studies have found, there were certain attributes that were associated with a higher likelihood of being in the high-picky-eater group: firstborn children, older mothers, families with fewer routines around mealtime, which includes everything from a specific time and place and even such practices as saying grace or having a specific seat for the child and a habitual way of serving food. On the other hand, being female, having a younger mother, and having more mealtime routines was associated with a higher probability of being in the low-picky-eating group.

The study also looked at weight gain and found that the heavier children tended to be less picky. Most of the pickiest children were actually in the middle weight group, though a few were underweight and a few were overweight.

There are many unanswered questions, Dr. Pesch said, but these findings may be reassuring for some parents: "We're not finding really negative consequences with regard to growth." Weight gain, of course, doesn't tell you everything; in figuring out whether (and how) to intervene, she said, "We need further studies to look at dietary variety, nutrient intake, family stress," which can be considerable in children with particularly limited diets or very marked food preferences. With toddlers, "the less pressure we put on kids, the more likely they are to change their behavior," Ms. Lipner said. Parents should remember that children need, above all, to know that "you like them no matter what, you love them whether they ate or not." For the most part, young children "can balance their hunger and satiation, and there is help when they can't." It can be helpful for parents of picky eaters to be reassured that "they haven't failed as parents," she said. But "it's not a bad thing to get some guidance."

(top)



New developments changing transgender health care

Staff Article June 2, 2018 Healio

As transgender medicine continues to grow as a subspecialty, new research is rapidly changing the treatment landscape. Today, more adolescents are comfortable visiting an endocrinologist to discuss the initiation of cross-sex hormone therapy — some before reaching puberty — raising





new questions and considerations about therapies that have not been studied long-term. Additionally, midlife transgender patients considering gender-affirming HT or gender-confirmation surgeries must also confront a host of issues, including the potential side effects of estrogen or testosterone and the importance of continuing cancer screenings.

Recently, new studies with longer follow-up have demonstrated that long-term estrogen plus spironolactone therapy in transgender women and testosterone therapy in transgender men does not affect prolactin or estradiol levels, respectively, suggesting that the therapies are safe in these populations. For transgender adolescents, new research reveals that many patients are willing to forego fertility preservation to begin HT as soon as possible.

As a courtesy to its readers, *Endocrine Today* compiled a list of the latest news in transgender health care posted on Healio.com.

Few transgender teens opt to delay HT to preserve fertility

Most transgender and gender-nonconforming adolescents do not consider fertility preservation an important reason to delay the start of hormone therapy, but some cite parental attitudes regarding biological offspring as influencing any decision regarding treatment, according to survey data presented at the Pediatric Academic Societies Meeting.

(top)

lifehacker

Why Picture Books Are Perfect Bedtime Stories

By Patrick Allan June 1, 2018 Lifehacker – Offspring

It's time to put the little one to bed. What do you do? Put on an audiobook, read them a bedtime story with fun pictures, or turn on some cartoons? A new study suggests the old standby of an illustrated bedtime story is best for developing your children's brain.

The study, presented at the 2018 Pediatric Academic Societies Meeting, was lead by Dr. John Hutton, a researcher and pediatrician at Cincinnati Children's Hospital. To see how children's brains reacted to different forms of storytelling, Hutton had 27 children around age 4 hooked up to an fMRI machine, which looked for activity in different regions of the brain, as well as connectivity between the regions. Each were presented stories from children's author Robert Munsch in three different forms: audio only, an animated cartoon, and illustrated pages with audio voiceover.





For the audio-only stories, language regions were activated in their brains, but there wasn't much connectivity between them. As Hutton puts it, the kids seemed to be straining to understand what they were hearing. The animated cartoon, however, was almost the exact opposite. The kids' brains had too much activity in the audio and visual perception regions, but still no connectivity. Basically, a lot of information was coming in, but they don't have to do any of the work. Story comprehension was worst when it came to the cartoons.

But when it came to illustrated storybooks, Hutton said the conditions for neural activity and connectivity were just right, or what the researchers call a "Goldilocks Effect." Activity in the language region of the brain was less than the audio-only condition, and the same goes for the visual perception region when compared to the animation—but there was connectivity between all of the different neural networks. With picture books, Hutton says kids use the illustrations as clues to piece together and comprehend the story they're hearing.

You may be tired of reading the same picture books every night, but you're actually helping your child's brain develop (which will help them read on their own). Also, the study found that kids are even more engaged when they're read to while they sit with their mom or dad, especially if the parent engages their child with questions or the pointing out of words. It seems that type of closeness and interaction makes story time even better.

(top)

Pediatric News

Brief stress management training helps teens with mental health complaints

By Debra L. Beck
May 31, 2018
Pediatric News
Picked up by MDEdge/Family Practice News

REPORTING FROM PAS 2018

A brief stress management intervention left a lasting effect on adolescents referred for mental health–related complaints, significantly reducing perceived distress, and heart rate variability. The majority of recipients expressed interest in additional training at follow-up.

"This model can be easily implemented in a primary health care clinic to better reach adolescents who are unable or unwilling to seek mental health care," Elizabeth B. Mason, MD, and her colleagues from Rainbow Babies and Children's Hospital in Cleveland, reported in a poster presentation at the Pediatric Academic Societies annual meeting.

Participants included 86 adolescents referred to an urban adolescent medicine clinic for anxiety, somatic complaints, or difficulty managing mood. All completed preintervention questionnaires,





including a Subjective Units of Distress Scale (SUDS), Screen for Child Anxiety Related Disorders (SCARED), and the Patient Health Questionnaire–9 modified for adolescents (PHQ-A) Postintervention questionnaires included the SUDS and a satisfaction survey. The vast majority of participants (96.5%) were African American, mean age was 16 years, and 36% were male. Cutoff criteria for generalized anxiety on the SCARED was met by 35 (41%) participants, and 23 (27%) participants scored positive for depression on the PHQ-A.

Following completion of preintervention questionnaires, 50 of 86 (58%) participants received psychoeducation from an adolescent medicine fellow or a pediatric psychologist on the effect stress has on the body, training in diaphragmatic breathing and progressive muscle relaxation, and no-cost/low-cost exercise options. Study participants also engaged in a peripheral biofeedback program called Unyte that has been shown to improve heart rate variability. The remaining 36 participants received no training and served as controls.

Those in the intervention group had significantly lower SUDS scores postintervention than did the control group. Heart rate variability coherence rates also decreased significantly postintervention in those who received the intervention, compared with controls.

When reached by phone 1 week after the session, 92% of participants said they found the intervention helpful and felt more relaxed, and 44% expressed interest in additional relaxation training.

The investigators concluded that "the results of this study suggest that a brief stress management intervention in an urban adolescent medicine clinic is effective at decreasing subjective distress and improving heart rate variability coherence rates. Future studies should include a control group and longer-term follow-up."

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Pediatric News.

Simple Tool Improve Inpatient Influenza Vaccination Rates

By Doug Brunk
May 31, 2018
Pediatric News
Picked up by MDEdge/Chest Physician

Implementation of a simple screening tool improved the influenza vaccination status of hospitalized children, results from a single-center study showed.

"When we looked at the immunization status of children in New York City, we found that one of the vaccines most commonly missed was influenza vaccine, especially from 2011 through 2014," one of the study authors, Anmol Goyal, MD, of SUNY Downstate Medical Center, Brooklyn, N.Y., said in an interview at the Pediatric Academic Societies meeting.





"Given this year's epidemic of influenza and the increasing deaths, we decided to look back on interventions we had done in the past to see if any can be reimplemented to help improve the vaccination status for these children," he said. "The national goal is 80%, but if we look at the recent trend, even though we have been able to improve vaccination status, it is still below the national goal." For example, he said, according to New York Department of Health data, the 2012-2013 influenza vaccination rates in New York City were 65% among children 6 months to 5 years old, 47% among those 5-8 years old, and 31% among those 9-18 years old, which were well below the national goal.

In an effort to improve influenza vaccine access, lead author Stephan Kohlhoff, MD, a pediatric infectious disease specialist at the medical center, and his associates, implemented a simple vaccine screening tool to use in the inpatient setting as an opportunity to improve vaccination rates among children in New York City. It consisted of nursing staff assessing the patient's influenza immunization status on admission and conducting source verification using the citywide immunization registry, or with vaccine cards brought by parents or guardians during admission. Influenza vaccine was administered as a standing order before discharge, unless refused by the parents or guardians. The study population comprised 602 patients between the ages of 6 months and 21 years who were admitted to the inpatient unit during 2 months of the influenza season (November and December) from 2011 to 2013.

Dr. Goyal, a second-year pediatric resident at the medical center, reported that the influenza vaccination status on admission was positive in only 31% of children in 2011, 30% in 2012, and 34% in 2013. The vaccine screening tool was implemented in 64% of admitted children in 2012 and 70% in 2013. Following implementation, the researchers observed a 5% increase in immunization rates in 2012 and an 11% increase in 2013, with an overall increase of 8% over 2 years (P less than .001). He was quick to point out that the influenza rate could have been improved by an additional 22% had 77% of patients not refused vaccination.

"Unfortunately, as our primary objective was to assess the utility of our screening tool in improving inpatient immunization status, we had very limited data points toward refusal of vaccine," Dr. Goyal said. "Some of the reasons for refusal that were gathered during screening included preferred vaccination by their primary care provider after discharge. Or, maybe they don't want the vaccine because they feel that the vaccine will make their kids sick. We don't have enough data to point to any particular reason. This study provides information on acceptance rate of inpatient immunization, which may be useful for implementing additional educational initiatives to overcome potential barriers and help us reach our national goal."

The researchers reported having no financial disclosures.

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Pediatric News.

Patient adjustments needed for closed-loop insulin delivery





By Debra Beck

May 30, 2018
Pediatric News
Picked up by MDEdge/Clinical Endocrinology News

EXPERT ANALYSIS FROM PAS 2018

TORONTO – Closed-loop insulin delivery is expected to become the standard of care in type 1 diabetes mellitus (T1DM), but there are multiple barriers that patients need to overcome.

"Many people who are potentially going to be using closed-loop systems are enthusiastic but have unrealistic expectations of how the systems are going to perform, and there are many barriers to uptake and optimal use that we still haven't quite figured out," said Korey K. Hood, PhD, a professor in the departments of pediatrics and psychiatry & behavioral sciences at Stanford (Calif.) University.

In a session dedicated to all aspects of closed-loop automated insulin delivery at the Pediatric Academic Societies annual meeting, Dr. Hood offered comments on patient and family factors important to the uptake and use of closed-loop technologies. His research at Stanford is focused on understanding the psychosocial aspects of diabetes management and how these factors contribute to disease outcomes.

Closed-loop insulin delivery refers to technologies that combine automated glucose monitoring (AGM) with an algorithm to determine insulin needs and an insulin delivery device. Sometimes called an "artificial pancreas" or "bionic pancreas," closed-loop insulin delivery is considered a significant advance in the management of T1DM, relegating daily finger sticks and nighttime hypoglycemia to things of the past.

In a recent meta-analysis of randomized clinical trials, use of any automated device added nearly 2.5 hours of time in near normoglycemia over 24 hours in patients with TIDM, compared with any other type of insulin-based treatment (BMJ. 2018. doi: 10.1136/bmj.k1310). The benefit was primarily based on better glucose control in the overnight period.

In September 2016, the Food and Drug Administration approved the MiniMed 670G Insulin Pump System (Medtronic), the first hybrid automated insulin delivery device for T1DM and the only one approved in the United States. The system is intended for subcutaneous continuous glucose monitoring (CGM) and continuous delivery of basal insulin and administration of insulin for the management of T1DM in persons 14 years of age and older.

Barriers from different perspectives

Barriers to uptake and use are common for the devices that are components of closed-loop systems. In a survey of 1,503 adults with TIDM, Dr. Hood's group found a wide range of barriers to adoption of CGM or insulin pumps that could potentially also impact use of closed-loop systems (Diabetes Care. 2017;40:181-7). Some were nonmodifiable, like costs, but most were modifiable.





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How children learn: A tale of three media

May 29, 2018 Family Zone

Once upon a time, when the internet was just a twinkle in the eye of the US Department of Defense and a tablet was something you took for a headache, prophetic Canadian critic Marshall McLuhan announced that "the medium is the message."

In a world enthralled by "new media" like TV and LP records, it was a phrase that caught the popular imagination - even if no one was quite sure what it meant.

Today we could translate McLuhan's insight as "The device can make all difference."

Content that we consume on one platform, in other words, will be experienced in a very different way on another platform. It will be processed differently by our brains. And the implications of that for the way we learn - and specifically for the way children learn - may be profound.

Science has increasingly validated McLuhan's catch-phrase.

A study of pre-schoolers and storytelling, presented this month to the Pediatric Academic Societies (PAS) 2018 Meeting, is a perfect case in point.

The research looked at how children's brains processed the same story content delivered on three different media: an audiobook, an illustrated storybook with audio voiceover, and an animated cartoon.

Their aim? To discover which medium engaged kids' brains most fully, promoting comprehension and encouraging reading readiness.

Lead researcher Dr. John Hutton used the language of "The Three Little Bears" to summarise his team's results:

The audiobook was "too cold." The animation was "too hot." But the illustrated book was "just right!"

Researchers found that the audio-only version activated kids' language networks, but stimulated less overall connectivity. In other words, said Hutton, "there was more evidence the children were straining to understand."





The animation stimulated both audio and visual perception networks, but resulted in even poorer comprehension. "Our interpretation was that the animation was doing all the work for the child," Hutton said. "They were expending the most energy just figuring out what it means."

goldilocksAnimated stories may be too hot. Audiobooks may be too cold.

The "Goldilocks" situation - the one that was just right for the three- to five-year-olds subjects - was the illustrated book. The static pictures served as clues, or "scaffolding," for kids to make sense of the story's language. And the storybook was also the medium that promoted the highest integration of brain functions - which is a fancy way of saying "learning."

Storybooks develop children's cognitive muscle to create their own mental images - and encourage them to reflect on the meaning of a story.

Hutton warns that "kids who are exposed to too much animation are going to be at risk" when it comes to developing these vital literacy skills.

And in case you were wondering why researchers didn't look at a fourth "platform" - the old-school one of a caregiver reading a book to a child nestled in their lap - well, apparently you can't fit all that into an MRI machine.

But researchers were clear that the emotional bonding and physical closeness when parents read to their children builds in "a whole other layer" of enrichment. That's especially true when adults engage in what researchers call "dialogic reading" - prompting children with simple questions ("Can you see the mouse?" "Does that porridge look yummy?").

McLuhan, it turns out, had his story straight.

(top)



Research Shows What Books Do to Kids' Brains

By Mercy Pilkington May 27, 2018 Good e-Reader

The publishing industry has changed a lot for kids since the early days of Beatrix Potter's beloved animals and the Dick, Jane, and Spot books that plagued every primary school in the US. We've transitioned from calm books about very well behaved children to superheros who fly around in their underwear and protagonists who save the day with rancid flatulence. It might be confusing to some, but generally, anything that gets kids reading is a good thing.





Unfortunately, that was the thinking behind a lot of the enhanced ebooks that began to appear when the technology allowed. Startups appeared in the digital space, offering full bells and whistles app-based games that morphed children's books into veritable video games. These apps included read-alouds, coloring features, songs, mini-games, and more.

New research on developing brains, though, shows that those app books may be even less effective than just sitting a child in a corner and reading aloud. The study will be announced at an upcoming meeting of the Pediatric Academic Societies, but its early reports by Dr. John S. Hutton, one of the authors, already demonstrate the ineffectiveness of animated reading content: "Key findings suggest a 'Goldilocks Effect,' where audio may be 'too cold' at this age, requiring more cognitive strain to process the story, animation 'too hot,' fast-moving media rendering imagination and network integration less necessary, and illustration 'just right,' limited visual scaffolding assisting the child while still encouraging active imagery and reflection."

The basic finding is that children's brains are activated differently in emerging readers depending on how the content was fed to them. Audio-only had little brain activation, meaning just playing an audiobook or reading without letting the child see or hold the book is not highly effective. The opposite was true of full-on voice and animation, which left the child with very little to do in terms of activating their brains to understand the content. The middle ground, reading to a child while showing them static illustrations, required the most interaction in the brain and developed the most connection with the content.

There has long been a case for the "calmness" associated with e-ink e-readers for children's content. The easy-on-the-eyes display and the simple, monochromatic illustrations gave the reader a point of reference in the visual without distracting from the comprehension required for the content. E-ink may see a broader adoption once more parents and schools see the results.

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Illustrated story books are better for kids' brains than video or text, study finds

By Sarah Jackson May 25, 2018 CBC Radio "As It Happens"

Study used stories by Canadian author Robert Munsch to test how children respond to different media

Listen Read Story Transcript





While an educational audio book or cartoon may seem like the best option to entertain a curious four-year-old, researchers at the Cincinnati Children's Hospital say it's best to pick up an old-fashioned picture book.

In a recent study, researchers presented stories by Canadian author Robert Munsch to young children in three different formats — audio only, the picture book with audio, and an animated cartoon — to find out what happens in their brains.

Lead author Dr. John Hutton, a pediatrician and clinical researcher at the Cincinnati Children's Hospital, spoke with As It Happens Carol Off about the study.

Here is part of that conversation.

Dr. Hutton, what were you hoping to learn from this study?

Are there fundamental differences in how preschool-age children — which are right in, you know, that very rapid stage of brain development — process stories presented in different formats?

How did you do it? How did you study these children?

We brought a group of 27 kids that were in the preschool age range, three to five years old. They were all pre-kindergarten. They were not yet reading.

And it was roughly even mix of boys and girls.

They had FMRI done where we presented them in the scanner about a five-minute story, strictly audio, followed by a rest and then a five-minute story that had illustrated pictures accompanying it, followed by a rest and then a fully animated story for five minutes.

What were the differences in the way they took in those three kinds of storytelling?

We summarized them in what we call the Goldilocks effect.

In audio format, it seemed like the language network was having to work a little bit harder to keep up with the story and to really figure out what was going on, and there wasn't as much involvement of the visual networks.

The imagery network was definitely engaged but ... the way it looked was that the brain was having to work a little harder to figure out what was going on in the story.

Dr. John Hutton is the lead researcher on the study and a pediatrician and clinical researcher at the Cincinnati Children's Hospital. (Submitted by Dr. John Hutton)
So you called that ... too cold?



We call that a little too cold... likely because kids at that age don't have access to as many images. Like, they haven't seen as many things out in the world.

Probably at that stage if they hear Robert Munsch describe something they may be wondering, what is that? And they may have to work harder to sort of to figure it out.

In the illustrated version, which we described as just right, there with a really nice balanced integration of the visual networks and the default mode network and the language networks. They were off they all seemed to be co-operating a lot more.

Which is probably one of the reasons that picture books are so appealing [to] that age. ... If you have a picture, that gives the child something to start with and then they bring their imagination into play and they could bring the story to life in their mind.

In the animated format, it was like everything kind of came apart.

We called that too hot.

There are assumptions that you can give these tablets to kids and there's some interesting cartoons and animations on there and the kids are engaged in it ... that doesn't seem to be the case.

I think it's a little bit of a cautionary tale.

At that age, kids' ... brain networks develops gradually and in order to reinforce the connection they need practice.

We think it's really important for kids to have the opportunity to, you know, be given as much help as they need, but then still have the opportunity to practice applying their own imagination.

And then later on, as they become better readers, they may be better able to use those networks to see pictures in their mind's eye when the book doesn't have pictures anymore.

And possibly kids that have too much exposure to the animated content when they're young could underdevelop those networks and, as a consequence, not be as engaged during stories later on and they become somewhat addicted to just having the content fed to them.

Written by Sarah Jackson. Interview produced by Donya Ziaee. Q&A has been edited for length and clarity.

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<u>Tracking Eye Movement Can Help Assess Language Perception in Children With Neurodevelopmental Delays</u>

By Alice Melao May 25, 2018 Cerebral Palsy News Today

Tracking eye movement can be a viable approach to assessing language perception in children with normal development and those with neurodevelopmental delay.

The study, "Using Eye Tracking (ET) as a Tool to Assess Receptive Language (RL) in Typically Developing (TD) Children and Children at High Risk for Neurodevelopmental Delay (NDD)," was presented by Mary Vernov at the Pediatric Academic Societies 2018 Meeting in Toronto. Evaluation of neurodevelopmental delay during infancy can be challenging, particularly in children with significant motor delays — such as those with cerebral palsy — which often are associated with a difficulty in speaking. Researchers hope to find new ways to conduct this type of evaluation.

They evaluated the potential of eye tracking, a noninvasive tool that records eye movement patterns, in conducting a neurodevelopmental analysis. A Tobii Pro X3-120 eye tracker was used with specific software to trigger eye movement and collect response information in nine typically developing children and four with neurodevelopmental delays. Ages ranged from 18 months to 6 years.

The software presents a visual stimulus of a target image alongside a distracter, followed by audio instructions for an individual to look at the target. By determining the proportion of time a person looks at the target or the distracter, researchers can evaluate word comprehension.

Data showed that accuracy of eye movement improved with age in typically developing children. Infants ages 18 to 24 months had an accuracy of 59 percent, whereas children ages 3 to 4 years had a 71 percent accurate eye movement response. The capacity of these children to fixate the target also improved with age, with younger infants (18-24 months) able to stare at the target 54 percent of the time, and older children (3-4 years) 85 percent of the time.

In contrast, children ages 3 to 6 years with expressive language delay had 13 percent reduced accuracy compared to age-matched typically developing children. However, word comprehension, as measured by the target fixation proportion, revealed that they had similar responses, or were able to stare at the target 58 percent of the time.

These preliminary results suggest that eye tracking can represent a feasible option to measure receptive language in children with or without neurodevelopmental delays.

"This has important implications for evaluating children with developmental delays and may be used as an alternative form of communication in those with expressive language delays," Mary





Vernov, MD, a pediatrician at New York Presbyterian Hospital Weill Cornell Medical Center and one of the study's authors, said in a press release.

(top)



What's Going On In Your Child's Brain When You Read Them A Story?

By Anya Kamenetz May 24, 2018 NPR

"I want The Three Bears!"

These days parents, caregivers and teachers have lots of options when it comes to fulfilling that request. You can read a picture book, put on a cartoon, play an audiobook, or even ask Alexa.

A <u>newly published study</u> gives some insight into what may be happening inside young children's brains in each of those situations. And, says lead author Dr. John Hutton, there is an apparent "Goldilocks effect" — some kinds of storytelling may be "too cold" for children, while others are "too hot." And, of course, some are "just right."

Hutton is a researcher and pediatrician at Cincinnati Children's Hospital with a special interest in "emergent literacy" — the process of learning to read.

For the study, 27 children around age 4 went into an FMRI machine. They were presented with stories in three conditions: audio only; the illustrated pages of a storybook with an audio voiceover; and an animated cartoon. All three versions came from the Web site of Canadian author Robert Munsch.

While the children paid attention to the stories, the MRI, the machine scanned for activation within certain brain networks, and connectivity between the networks.

"We went into it with an idea in mind of what brain networks were likely to be influenced by the story," Hutton explains. One was language. One was visual perception. The third is called visual imagery. The fourth was the default mode network, which Hutton calls, "the seat of the soul, internal reflection — how something matters to you."

The default mode network includes regions of the brain that appear more active when someone is not actively concentrating on a designated mental task involving the outside world.

In terms of Hutton's "Goldilocks effect," here's what the researchers found:





In the audio-only condition (too cold): language networks were activated, but there was less connectivity overall. "There was more evidence the children were straining to understand."

In the animation condition (too hot): there was a lot of activity in the audio and visual perception networks, but not a lot of connectivity among the various brain networks. "The language network was working to keep up with the story," says Hutton. "Our interpretation was that the animation was doing all the work for the child. They were expending the most energy just figuring out what it means." The children's comprehension of the story was the worst in this condition.

The illustration condition was what Hutton called "just right".

When children could see illustrations, language-network activity dropped a bit compared to the audio condition. Instead of only paying attention to the words, Hutton says, the children's understanding of the story was "scaffolded" by having the images as clues.

"Give them a picture and they have a cookie to work with," he explains. "With animation it's all dumped on them all at once and they don't have to do any of the work."

Most importantly, in the illustrated book condition, researchers saw increased connectivity between — and among — all the networks they were looking at: visual perception, imagery, default mode and language.

"For 3- to 5-year-olds, the imagery and default mode networks mature late, and take practice to integrate with the rest of the brain," Hutton explains. "With animation you may be missing an opportunity to develop them."

When we read to our children, they are doing more work than meets the eye. "It's that muscle they're developing bringing the images to life in their minds."

Hutton's concern is that in the longer term, "kids who are exposed to too much animation are going to be at risk for developing not enough integration."

Overwhelmed by the demands of processing language, without enough practice, they may also be less skilled at forming mental pictures based on what they read, much less reflecting on the content of a story. This is the stereotype of a "reluctant reader" whose brain is not well-versed in getting the most out of a book.

One interesting note is that, because of the constraints of an MRI machine, which encloses and immobilizes your body, the story-with-illustrations condition wasn't actually as good as reading on Mom or Dad's lap.

The emotional bonding and physical closeness, Hutton says, were missing. So were the exchanges known as "dialogic reading," where caregivers point out specific words or prompt children to "show me the cat?" in a picture. "That's a whole other layer," of building reading Hutton says.



In an ideal world, you would always be there to read to your child. The results of this small, preliminary study also suggest that, when parents do turn to electronic devices for young children, they should gravitate toward the most stripped-down version of a narrated, illustrated ebook, as opposed to either audio-only or animation.

(top)



PreBirth SSRI Exposure May Affect Executive Function Years Later

By Jolyn Tumolo May 24, 2018 Psych Congress Network

A group of children exposed to selective serotonin reuptake inhibitors (SSRIs) before birth had better thinking and attention skills at age 12, compared with other children, according to a study presented at the Pediatric Academic Societies 2018 Meeting in Toronto, Canada.

The longitudinal cohort study, led by researchers from BC Children's Hospital and BC Women's Hospital and Health Centre in Vancouver, followed 51 children from 26 weeks of pregnancy to age 12. Researchers assessed the mother's mood during and after pregnancy and the child's executive functions, including creative problem-solving, the ability to focus, and self-control.

Even when controlling for the mother's mood during pregnancy and when the child was 12, children exposed to SSRIs in utero demonstrated better executive function at age 12, the study found. A previous study also identified better executive function in the same children at age 6. Unlike at age 6, though, at age 12 the improved executive function did not vary with the child's mood or verbal ability.

"These are important early findings and further research is needed to examine whether 'better' cognitive skills in children with antidepressant exposure reflect a developmental advantage in some ways but also perhaps a risk in other ways, such as perhaps increased anxiety," said researcher Tim Oberlander, MD.

"Our findings when the children were 3 and 6 years of age indicated increased anxiety, though the absence of this at 12 years might indicate that as executive functions improve further, children are able to use them to help calm themselves.

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The New York Times

Asthma Doesn't Take a Vacation
By Perri Klass, MD
May 21, 2018
The New York Times

I often look in the medical record and see that a child is listed as having asthma and taking one or two different medications, only to hear from the parents that the inhaler at home is empty and expired, and the prescription hasn't been filled in a couple of months. If we're all lucky, the next response is that the child is doing fine; if we're less lucky, there's a story about a bad few days of wheezing and an emergency room visit.

Many parents do know that they have to be especially vigilant about their child's medication in pollen season, when the air is thick with allergens. But some think they can take a vacation from the inhalers during the summer, and their children's doctors would really like to be consulted before the regimen is changed.

Asthma is a chronic disease, and a common one in children. Depending on their symptoms and severity, children with asthma may be on "rescue" medications that they use only when they are having asthma symptoms, usually delivered through inhalers, or they may also take "controller" medications like inhaled corticosteroids every day, whether they're feeling sick or well. More symptoms, more impairment, can mean more complex regimens, combining different kinds of drugs.

"Asthma is quite a variable disease; there's not a one-size-fits-all," said Dr. Stanley Szefler, the director of pediatric asthma research at Children's Hospital Colorado, and the author of a recent review of asthma across the life span. "It's a careful balance between symptoms and prevention and then the underlying things that may be going on."

The goal is to prevent the kinds of serious exacerbations that can land children in the emergency room or hospital. In addition to the dangers of respiratory distress, repeated exacerbations can lead to damaged lungs and worsened lung function over time, said Dr. Heather Hoch, a pediatric pulmonologist at Children's Hospital Colorado.

She presented research done with Dr. Szefler and other colleagues at the Pediatric Academic Societies meeting in early May looking at children with asthma in the Colorado area to see which were most at risk for exacerbations. They found that children from birth to age 4 were at higher risk than those over 5, and that poor children were at higher risk.

They also looked at a biologic marker for allergic activity called the eosinophil count; eosinophils are a type of white blood cell associated with allergies and with asthma. The study found that children with higher eosinophil counts were at greater risk for asthma exacerbations. Exacerbations were more common in spring and fall, so families with children in the higher risk groups should be especially careful at those times of the year. Earlier research had shown that





fall was a high risk time for children with severe asthma, but this study extended the work into a population with milder more common levels of illness.

"Spring and fall are just hard times for kids with asthma," Dr. Hoch said. "I tell families, be extra vigilant especially if their kids are allergic." You may not know your child's eosinophil count, she said, but if a child with asthma has had a positive allergy skin test, or reacts to pollen with nasal congestion and itchy watery eyes, that's a child whose family should take extra care in the spring and the fall, taking all the medications on schedule and avoiding possible triggers that can set off asthma.

But there are also risks as we move into the summer, which is generally an easier time for children with asthma, so much so that many families are tempted to take "holidays" from at least some parts of the medication regimen. Knowing which children are at highest risk for exacerbations may help doctors work with families around those decisions, Dr. Hoch said, and make sure that as the season changes to fall, children are as well protected as possible. "Parents should look at their child's asthma over the long haul, not just day to day or week to week," Dr. Szefler said.

Avoiding triggers can mean keeping the child away from tobacco smoke as much as possible, and reducing exposure to specific allergens, like cats and dogs, but it also means trying hard to reduce exposure to viral infections. "Viruses are a huge trigger for exacerbations, especially in these allergic kids," Dr. Hoch said. Prevention means vigilant hand hygiene, and of course, children should get their flu vaccines promptly in the fall.

According to the research literature, Dr. Hoch said, previous exacerbations are the most reliable predictor of future asthma exacerbations in children. And what's most important for prevention is "that the kids actually take the medications being prescribed," Dr. Hoch said. "Like any chronic disease, adherence is usually pretty poor."

Parents may feel reluctant to give medications every day to a child who doesn't look immediately ill, and they may have concerns about how the child will be affected by being on inhaled steroids for years. Given in the usually prescribed doses, Dr. Szefler said, the inhaled steroids have been shown to have an early effect on some but not all children's growth, reducing height by one centimeter. "It seems to be permanent but not progressive," he said, "one centimeter you may see in the first year." But continued use of the steroids doesn't mean that the cumulative effect gets larger.

Because of this impact on the child's growth, the recommendation is to use the lowest effective dose of inhaled steroids, with the goal of keeping the child healthy: "If you have a kid who has significant asthma, the bigger concern about growth and development is asthma, not inhaled steroids," Dr. Hoch said.

Families are often faced with changing regimens: "Every time I see a patient, I'm deciding where are they from a medication standpoint," she said. "Do I need to think about stepping them up, or are they doing great, and maybe I can talk about stepping them down?"





New technologies may make it possible in the future for the inhalers themselves to monitor whether the medications are being used correctly, but even without those tools, it's important for pediatricians to talk with families in detail about how regularly the children are getting their medicine.

Most children with asthma are managed by general pediatricians and family physicians; the children who get referred to pediatric pulmonologists are often those whose asthma has proved particularly difficult to control, so that they do keep getting "stepped up" and may end up on higher doses than usual, or multiple medications at the same time.

Avoiding exacerbations is important, but the overall goal of managing asthma in children is not just keeping them out of the hospital, but also keeping them in their full range of activities — they shouldn't be missing school, they shouldn't be sitting out the fun. "The vast majority of kids with asthma, if we treat them appropriately and they take their medications, they can do whatever they like," Dr. Hoch said. "I like to remind families we have Olympic athletes" with asthma.

When new families come in, she tells them, "If you take these medications and you avoid things that are going to make your asthma worse like tobacco smoke, you should be able to do anything in life you want to do, run and play on the soccer field, play football — you just have to take the medications to get your lungs back to the place everyone else is starting from."

(top)



Summer Camp Bummer: Smartphones, Not Bugs
By Robert Preidt
May 19, 2018
HealthDay

Picked up by multiple outlets, including <u>U.S. News & World Report</u>, <u>Health.com</u>

Along with flashlights, sleeping bags and bug repellent, many kids will take a smartphone to camp this summer.

But this could ruin their camp experience, a new study suggests.

Researchers surveyed 620 camp directors, nurses and other staff members at 331 camps in the United States and Canada. Many said campers were so fixated on their phones that they didn't fully engage in camp activities.

Children talked to their parents too often, the study found. Some parents retrieved their child early after getting a call from an upset child without camp staff knowing there was a problem.





Smartphones were also associated with kids being disruptive during instruction, cyberbullying and late bedtimes, the researchers said.

"Summer camps represent a unique opportunity for social-emotional development by allowing children to separate from their usual family and peer environment while learning new skills or spending time outdoors," said study lead author Dr. Ashley DeHudy.

"Parents should envision the kind of camp experience they hope their child will have, and find a camp with a similar culture and mission," advised DeHudy, a pediatrician at the University of Michigan C.S. Mott Children's Hospital.

"If you want your child to have an experience disconnected from social media, look for camps whose policies match that in order to establish the rustic experience you're looking for," DeHudy said in a university news release.

For some campers, the phone takes center stage. "More worried about their phone than the poison ivy bush they're about to step in," one survey respondent wrote.

In another twist, some kids were reluctant to take part in talent shows or other activities because they feared embarrassing videos could be posted on social media.

But cellphones at camp aren't necessarily all bad, the researchers said.

"If your child is attending a tech or science-themed (STEM) camp, then you may be more comfortable with fewer restrictions on device use," DeHudy noted. "As long as families determine what overall goals they have for their children, doing research ahead of time will help them achieve that mission."

The study was presented recently at the Pediatric Academic Societies meeting in Toronto, Canada. Research presented at meetings should be considered preliminary until published in a peer-reviewed medical journal.

(top)

HBV birth dose predicts vaccine adherence
By Doug Brunk
May 18, 2018

Pediatric News

AT PAS 2018





Infants who do not receive the hepatitis B vaccine birth dose are less likely to be up-to-date recipients of recommended vaccines by 19 months, based on results from a retrospective study of more than 9,000 infants.

"As pediatricians, we should be mindful of that when we are meeting families after the birth hospitalization and start a conversation at that point around vaccines," one of the study authors, Annika M. Hofstetter, MD, PhD, said in an interview at the Pediatric Academic Societies meeting.

Dr. Hofstetter, a pediatrician at the University of Washington and Seattle Children's Hospital, noted that, despite U.S. recommendations that newborns weighing at least 2,000 g should receive a birth dose of hepatitis B vaccine (HBV), nearly one-quarter of Washington State infants do not receive this first dose on time. In an effort to determine whether receipt of the HBV during the birth hospitalization is associated with completing the recommended seven-vaccine series by age 19 months, senior author Natalia Oster, MPH, Dr. Hofstetter, and their colleagues retrospectively reviewed hospital medical records and Washington State Immunization Information System data on 9,080 infants born weighing at least 2,000 g and receiving hospitalization care during Jan.1, 2008-Dec. 31, 2013. They used logistic regression to assess the association between HBV birth dose receipt and seven-vaccine series completion by age 19 months, after adjustment for demographic, clinical, and visit characteristics.

Of the 9,080 infants, 51% were male, 49% were non-Hispanic white, 56% were covered by public health insurance, and 47% stayed in the hospital for 48 hours or longer. The researchers reported that 76% infants received the HBV during the birth hospitalization, and 54% of subjects completed the seven-vaccine series by age 19 months. They also found that 60% of infants who received the HBV birth dose completed the seven-vaccine series by age 19 months, compared with 40% of those who were unvaccinated at discharge (P less than .001). Infants who received the HBV birth dose were 2.9 times more likely to complete the seven-vaccine series by age 19 months, compared with those who did not receive the HBV birth dose.

"Parents are making their first vaccine decision during that birth hospitalization," said Dr. Hofstetter, who also conducts immunization research studies at Seattle Children's Research Institute. "It's unclear what underlies this decision, such as specific parent concerns or the way in which we as providers in the hospital are communicating vaccine information to the families. It's telling, and it will be interesting to further explore the factors that are determining whether a family gets the vaccine during the birth hospitalization or not, and how we as a pediatric community can start having effective vaccine conversations earlier."

She acknowledged certain limitations of the study, including the potential for misclassification errors in vaccine reporting systems and the fact that no data were available on parental attitudes about vaccination. The researchers reported having no financial disclosures.

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Screening, referral at well-child visits improve family access to necessities

By Katherine Bortz May 16, 2018 Healio

Implementing a screening and referral process for families attending well-child care visits increased pediatrician knowledge of their patients' social determinants of health and increased the number of families referred to community resources, according to research presented at the Pediatric Academic Societies 2018 Meeting.

"In 2016, the AAP recommended pediatricians to screen for social determinants of health. Our prior efficacy trial demonstrated that a pediatric-based intervention 'WE CARE' increased parental receipt of community resources," Ariel Porto, from the Boston University School of Medicine, and colleagues wrote. "However, the impact of implementing universal social determinants of health screening and referral in a real-world pediatric clinical setting remains unknown."

To provide universal screening and referral for families with material needs, including child care and food, at child well-care visits, the researchers implemented an intervention focused on social determinants of health called WE CARE. This quality improvement intervention was implemented in an urban pediatric primary care clinic between July 2016 to July 2017, and consecutive plan-do-study-act cycles were performed by a multidisciplinary team.

Screening for this program was conducted by front desk personnel who were trained to provide this assessment for children between the ages of 0 and 11 years at well-child care visits. Training was also provided to medical assistants who were responsible for entering data into flowsheets located in electronic medical records and to pediatricians who offered resource information sheets relevant to their community. A total of six unmet needs were screened for, including child care, education to high school or an equivalent, employment, food, household heat and homelessness.

Once data were collected in electronic medical records, Porto and colleagues reviewed charts before and after the implementation of WE CARE and information from the screeners. Furthermore, the researchers expressed the process of identification and referral over time using statistical process control charts and descriptive statistics.

During baseline, 673 families were screened. Of these families, 1% reported that they had a need that was unmet. Less than 1% of these families were referred to resources in their community that could assist in meeting these needs, as reported in electronic medical records.

Once the study period began, the researchers observed data from 2,765 well-child care visits in 52 weeks. Within this time, 52% of families screened asked for help regarding unmet needs (weekly range: 0%-90%), with the most frequently reported unmet needs being employment (26%), child care (24%), utilities (18%), education (14%), food (10%) and shelter (7%). When





these requests were made, pediatricians appropriately referred more than 50% of families that visited the clinic when individual weekly feedback was received (weekly range: 27%-88%).

"The implementation of WE CARE was feasible in an urban pediatric clinic and significantly increased pediatrician identification of adverse social determinants of health and referrals to community resources for families at well-child care visits," Porto and colleagues wrote. "Further work, however, is needed to ensure that families receive services from requested referrals."

References:

Porto A, et al. Improving pediatricians' identification of and referrals for adverse social determinants of health at well-child care visits. Board 356. Presented at: The Pediatric Academic Societies 2018 Meeting; May 5-8, 208; Toronto.

(top)

Pediatric News.

Drug-related deaths continue to rise in United States

By Doug Brunk May 18, 2018 Pediatric News

EXPERT ANALYSIS FROM PAS 2018

Drug-related deaths in America are rising faster than ever.

Rear Adm. Wanda D. Barfield, MD shared recent data from the U.S. National Center for Health Statistics on people aged 15 years and older at the Pediatric Academic Societies annual meeting. Between 1999 and 2016, for example, the number of drug overdose deaths rose more than threefold, from 6.1/100,000 standard population in 1999 to 19.8/100,000 in 2016. For males, the rate increased from 8.2/100,000 in 1999 to 26.2/100,000 in 2016. For females, the rate increased from 3.9/100,000 in 1999 to 13.4/100,000 in 2016.

Dr. Barfield, director of the division of reproductive health at the Centers for Disease Control and Prevention, said that in 2016, the NCHS also found that 22 states and the District of Columbia had drug overdoses that were significantly higher than the national average. The states with the highest number of drug overdose deaths were the District of Columbia, New Hampshire, Pennsylvania, and West Virginia while the states with the lowest observed rates were Nebraska, North Dakota, South Dakota, and Texas.

"Many of these drug overdose deaths are linked to opioids, but not exclusively," Dr. Barfield said. "In the past, the overall opioid-related overdose deaths were mainly attributed to commonly





prescribed opioid medications. However, in recent years, we're seeing more deaths due to illicit drugs such as heroin and fentanyl."

The NCHS found that the age-adjusted rate for drug overdose deaths involving synthetic opioids other than methadone doubled from 2015 to 2016, and that drug overdose deaths involving synthetic opioids other than methadone increased from 0.3/100,000 in 1999 to 6.2/100,000 in 2016. The rate increased an average of 18% per year from 1999 to 2006, remained steady from 2006 to 2013, but increased by 88% per year from 2013 to 2016. At the same time, drug overdose deaths involving heroin increased from 0.7/100,000 in 1999 to 1/100,000 in 2010, to 4.9/100,000 in 2016.

According to Dr. Barfield, the spike in opioid use since 1999 stems directly from increased prescribing rates. "In 2015, the number of opioids prescribed was enough so that every American could be medicated around the clock for 3 weeks," she said. "In addition to the number of prescriptions, the average day's supply of prescription opioids increased from 2006 to 2015, from 13.3 days in 2006 to 17.7 days in 2015." What's more, a recent CDC Vital Signs found that the amount of opioids prescribed per person varied widely among U.S. counties in 2015. "The wide variation among counties suggests a lack of consistency among providers when prescribing opioids," Dr. Barfield said. "It's concerning, as higher opioid prescribing puts patients at risk for addiction."

At the same time, opioid overdose ED visits continue to rise. Data from the CDC's National Syndromic Surveillance Program found that from July 2016 to September 2017, opioid overdose ED visits increased by 30% for men, by 24% for women, and for all adult age groups (31% among those aged 25-34 years, 36% among those aged 35-54 years, and 32% among those aged 55 years and older).

There's a problem of prescription opioid use among pregnant women. Published estimates indicate that 14%-22% of women filled an opioid prescription during pregnancy, Dr. Barfield said. Among pregnant women, the prevalence of maternal opioid use or dependence during hospitalization for delivery has increased 127%, from 1.7 /1,000 delivery admissions in 1998 to 3.9/1,000 delivery admissions in 2011 (Anesthesiology 2014;121[6]:1158-65). There also has been a significant increase in neonatal abstinence syndrome (NAS), which is most commonly attributed to opioid exposure during pregnancy, from 1.2/1,000 U.S. hospital births in 2000 to 8/1,000 U.S. hospital births in 2014. "NAS is still on the rise," Dr. Barfield said. "In 2012, we saw one baby with NAS born every 25 minutes. In 2014, that number jumped to one baby born with NAS every 15 minutes. That means about 96 infants with NAS are born daily," she said. "Where do you think we're going to be when we look at 2018 data?"

Role for pediatricians

Dr. Barfield closed her presentation by underscoring the role pediatricians play in counseling patients about opioid abuse or dependence during pregnancy. "We know that providers have a tremendous impact on patients and their families," she said. "We also know that issues leading to a newborn having NAS are complex, so adopting a public health approach focused on prevention, expansion of treatment, and improvements in child welfare systems is vital." Specifically, she said, health care providers can "bridge the gap" between clinical care and public





health; lead in their communities, not just within their hospital or practice; work as a team member with colleagues in other fields of medicine such as obstetrics, family medicine, and addiction care when caring for infants with NAS, and by considering the social determinants of health.

"One way to adopt a public health perspective is to remember that the health of the fetus and baby rely on more than just prenatal care," Dr. Barfield said. "We're all part of a larger whole, surrounded by our families, communities, regions, state, and even our countries of origin. What's going on with the mom, her family, and the larger community impacts the baby's health. In other words, the social determinants of health matter, and are an important part of the conversation on NAS."

She reported having no financial disclosures.

(top)



<u>Top stories from endocrinology: canagliflozin superior to dapagliflozin in real-word</u> setting, insulin price gouge addressed

May 16, 2018 Healio

Among the top stories in endocrinology is that canagliflozin was superior to dapagliflozin in significantly reducing HbA1c levels. Stakeholders from the diabetes community addressed Congress and outlined the problems that contribute to the continuing increase of the price of insulin, severely limiting access for some patients. Other stories include most transgender and gender-nonconforming teens choosing to begin hormone therapy before preserving fertility, younger children appearing to have worse outcomes when it comes to the burden and treatment of differentiated thyroid carcinoma, and radiofrequency ablation emerging as potentially a more viable option of treatment among adults with symptomatic benign thyroid nodules.

Real-world efficacy differs among SGLT2 inhibitors

Adults with type 2 diabetes more often reached their glycemic goal and had greater reductions in HbA1c level when they were prescribed canagliflozin vs. dapagliflozin, according to an analysis of claims data for the SGLT2 inhibitors. Read More.

Senators, diabetes stakeholders seek transparency in insulin pricing
Stakeholders from the diabetes community brought their growing concerns regarding rising
insulin prices before Congress on Tuesday, outlining the complex problems that place a
lifesaving drug almost out of reach for some people with diabetes and seeking help from
legislators to demand more accountability in drug pricing. Read More.

Few transgender teens opt to delay HT to preserve fertility





Most transgender and gender-nonconforming adolescents do not consider fertility preservation an important reason to delay the start of hormone therapy, but some cite parental attitudes regarding biological offspring as influencing any decision regarding treatment, according to survey data presented at the Pediatric Academic Societies Meeting. Read More.

Poorer differentiated thyroid cancer outcomes seen in younger children vs. teens
The early disease burden and treatment of differentiated thyroid carcinoma is similar in younger
children and adolescents, but younger children appear to have worse outcomes, even without
nodal metastases, and this may necessitate therapy intensification or tumor monitoring,
according to recent findings. Read More.

Radiofrequency ablation viable option for symptomatic benign thyroid nodules Adults with symptomatic benign thyroid nodules who underwent a single, monopolar radiofrequency ablation treatment in lieu of surgery experienced significant overall nodule volume reduction at 12 months with mostly minor, transient complications, according to findings from a single-center study conducted in Austria. Read More.

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Pediatric News.

Which infants with invasive bacterial infections are at risk for adverse outcomes?

By Doug Brunk May 16, 2018 Pediatric News Picked up by <u>The Hospitalist</u>

Among infants up to 60 days old with an invasive bacterial infection, adverse outcomes are associated with prematurity, ill appearance, and bacterial meningitis, a multicenter retrospective analysis found.

"Young infants are susceptible to serious bacterial infections, particularly when they're less than 60 days of age," Christopher Pruitt, MD, said at the annual Pediatric Academic Societies meeting. "Among these infants, bacteremia and bacterial meningitis, also referred to as invasive bacterial infections, are associated with higher rates of morbidity and mortality."

While many studies have reported the rates of serious bacterial infections in infants, few have examined clinical outcomes for infants with invasive bacterial infections who are initially evaluated in the ED, said Dr. Pruitt, who directs research for the division of pediatric emergency medicine at the University of Alabama at Birmingham. To this end, he and his associates at 11 children's hospital emergency departments in the United States set out to describe the outcomes of infants up to 60 days old with invasive bacterial infections and to identify factors associated with adverse outcomes. In this 5-year study, they included infants aged 60 days and younger who presented to the ED with pathogen growth in the blood and/or cerebrospinal fluid (CSF).





Subjects were excluded from analysis if their cultures were treated clinically as contaminants. "If there was bacterial growth only from CSF broth cultures, we excluded these infants if there was no associated CSF pleocytosis and if there was an associated negative blood culture," Dr. Pruitt explained. "If one of these criteria was absent, the infant was considered to have bacterial meningitis."

The primary outcome measure was occurrence of an adverse clinical outcome within 30 days following the index ED visit. Adverse outcomes were defined as use of mechanical ventilation, vasoactive medications, any neurologic sequelae, and death. The researchers used a mixed-effects logistic regression model and retained covariates with a P value of less than .10. Covariates analyzed included age less than 28 days, prematurity, presence or absence of a complex chronic condition, presence of fever, ill appearance, bacterial meningitis, and concordant empiric antimicrobial therapy.

Of the 442 infants included in the final analysis, the majority (80%) had bacteremia, 14% had bacterial meningitis plus bacteremia, and 6% had bacterial meningitis only. "For purposes of this study, patients with bacterial meningitis with or without bacteremia were categorized as having bacterial meningitis," Dr. Pruitt said. He and his associates found that 14.5% of infants had one or more adverse outcomes. Adverse outcomes occurred in 39% of infants with bacterial meningitis, compared with 8.2% of infants with isolated bacteremia. Need for mechanical ventilation, vasoactive medications, and neurologic disability also was more common among infants with bacterial meningitis than it was among children with isolated bacteremia. There were 10 deaths overall, which amounted to about 2% in both groups.

On multivariate analysis, the rate of adverse outcomes was significantly higher for patients with bacterial meningitis than it was for those with isolated bacteremia (adjusted odds ratio, 8.8), for premature versus term infants (AOR, 5.9), for infants who were ill appearing versus non-ill appearing (AOR, 3.9), and for infants with no fever versus those with fever (AOR, 2.4). No significant associations with 30-day adverse outcomes were seen in patients with a complex chronic condition, compared with those without a complex chronic condition (AOR, 2.0), nor in the those aged 29-60 days versus those younger than 29 days (15% vs. 14%, respectively; AOR 0.7).

"When looking at the most common scenario – a full-term infant without an ill appearance, and bacteremia as opposed to bacterial meningitis – 3 of these 219 infants, or 1.4%, had an adverse outcome," said Dr. Pruitt, who cares for patients in the ED at Children's of Alabama in Birmingham. "And there were no deaths." He also reported that 12 infants with invasive bacterial infections were discharged from the index ED visit without antimicrobial treatment. All had bacteremia and none had an adverse outcome.

Dr. Pruitt acknowledged certain limitations of the study, including its retrospective design, that the outcomes were limited to 30 days, and the fact that the findings may not be generalizable to nontertiary settings. "Our findings have important implications for the care of infants with invasive bacterial infections," he concluded. "In particular, the high rate of adverse outcomes for infants with bacterial meningitis can provide some context for clinicians in assessing the need for diagnostic evaluation for invasive bacterial infection and discussing testing and treatment with





parents. Our findings may also help to inform inpatient management for hospitalized infants with invasive bacterial infections, as well as anticipatory guidance for parents, particularly around follow-up. Further prospective studies evaluating the long-term outcomes of infants with invasive bacterial infections are needed."

The study was supported in part by a grant from the National Institutes of Health. Dr. Pruitt reported having no financial disclosures.

(top)

HealthZette

Priobiotics for Preemies and Other Infants: Smart or Not?

By Carly Wilson May 16, 2018 HealthZette

New parents and others can't dodge such products these days, but families need to choose carefully

Probiotics appear to be the latest health trend for Americans, with annual sales of such products at a whopping \$1.3 billion or so in 2016 (the most recent statistics available).

Many adults swear by probiotics (meaning a kind of live bacteria that can help balance the population of bacteria in the intestines). But are these products and supplements safe and effective for children?

Depends on whom you ask. Much of the evidence appears anecdotal right now.

Lauren Manaker of Charleston, South Carolina, gives her three-year-old a daily probiotic. A registered dietitian and certified lactation counselor, Manaker has not only worked in NICUs (neonatal infant care units) where probiotics are increasingly prescribed, but she has also sold infant probiotics for several years as a medical sales representative. So yes — she's biased. "My daughter does not consistently take in enough live bacteria in her diet, and I do not see any downside in prophylactically keeping her gut colonized, since she's a generally healthy child with no past medical history," Manaker told LifeZette.

"In the four years I worked in the NICU, I noticed a huge shift in the comfort level of doctors in [terms of] prescribing probiotics to infants and children," she said. "The research is emerging about how beneficial certain bacteria are to the health of the child or infant."

She said probiotics were used, with appropriate caution, even with premature babies.





Mark Underwood, chief of pediatric neonatology at University of California, Davis Children's Hospital, told NPR of preemies and probiotics, "If we give a probiotic, [a preemie's] chance of getting necrotizing enterocolitis [an illness affecting the intestines] goes down."

At his hospital, Underwood said, all newborn preemies under a certain birth weight are now given probiotics.

Many parents and providers choose to use probiotics because they occur naturally in breast milk, said Manaker. If a baby's gut is not colonized with beneficial bacteria, she explained, it may get colonized by pathogens and nonbeneficial bacteria (like E. coli), especially if the infant is receiving pasteurized breast milk or is on a formula without added probiotics.

"Providers are now recommending 'Take a probiotic' when an infant or child is on an antibiotic or having tummy issues," she noted.

Many probiotics are strain-specific and dose-specific, said Manaker, so the general advice to "take a probiotic" is not always the best approach. Some probiotics can help enhance the immune system, while others can reduce crying time in colicky infants, she said.

"Probiotics are generally considered safe, with little to no downside," Wendy Dahl, an associate professor of food science and human nutrition at the University of Florida in Gainesville, told LifeZette. Dahl said she is seeing them increasingly used in the treatment of preemies.

Other medical professionals aren't so sure about the efficacy of probiotics in kids — and they're asking for more research to back up claims that probiotics help reduce gastrointestinal discomfort, improve immune health, and relieve constipation. The results of several recent studies may support their skepticism.

Two studies done on two commonly used probiotic products were presented earlier this month at the Pediatric Academic Societies (PAS) annual meeting in Toronto. Researchers said neither product had any effect on acute gastroenteritis in both infants and toddlers.

Mark Underwood of UC Davis decided to see if probiotics would help healthy, normal-weight babies. Enter the pediatric company Evolve BioSystems, which is working on solutions to restore and maintain a healthy newborn gut microbiome. Evolve BioSystems funded a clinical study evaluating the probiotic "B. infantis EVC001" in breast-fed infants.

In its December 2017 press release, the company said the study showed that providing dietary B. infantis EVC001 resulted in "rapid, substantial, and persistent remodeling of the gut microbiome in breast-fed infants," and led to a reduction in potentially harmful bacteria.

"We found an increase in the number of good bacteria among the babies given the probiotic," Underwood told NPR. By measuring samples excreted by the babies, researchers documented a 79 percent increase in levels of bifidobacteria, a type of bacteria thought to be protective. At the same time, Underwood and his team also measured a decrease in potentially harmful bacteria, such as clostridium in the babies' guts.





With conflicting studies and a great deal of anecdotal evidence, it is up to parents and their pediatricians to decide if a probiotic is right for their children.

Dahl of UF Gainesville noted that if a parent believes a child with a health condition may benefit from a probiotic, it's best to consult the family's health care provider to ensure the best probiotic, in the correct dose, is chosen.

(top)



More Parents Are Smoking Weed Around Their Kids, Study Finds, & Here's What That Means

By Annamarya Scaccia May 14, 2018 Romper

Over the last 15 years, cigarette smoking among parents had decreased significantly, reducing the amount of harmful secondhand smoke kids are exposed to. But new research has suggested that the same can't be said for secondhand marijuana smoke. That's because researchers based in New York have found that more parents are smoking weed around their kids than they did more than a decade ago.

A new study published Monday in the journal Pediatrics found that fewer parents who have kids in the home are smoking cigarettes, but pot use among those parents that do smoke tobacco has seen an uptick, according to USA Today. Specifically, researchers behind the study found that among cigarette-smoking parents, the number of those who also smoke weed increased about 6 percent over a 13-year period — from 11 percent in 2002 to more than 17 percent in 2015, USA Today reported.

Incidentally, there was also a small rise in marijuana use among parents who didn't smoke cigarettes — from 2 percent in 2002 to 4 percent in 2015, according to the study. But, overall, the researchers found that using cannabis was nearly four times more common among tobaccousing parents than their counterparts, according to USA Today.

Lead researcher Renee Goodwin, a professor with the City University of New York, said of the findings, according to U.S. News & World Report:

As we are removing cigarette smoke — and that's a major public policy achievement — that success will be attenuated by increasing exposure to secondhand marijuana smoke. The kids who are already exposed to one thing, they're more likely to be exposed to both. It's even worse for them.





In fact, a Colorado study presented earlier this month at the Pediatric Academic Societies annual meeting found that kids are more likely to visit the emergency room or have an ear infection if they're exposed to both secondhand cigarette and marijuana smoke, according to HealthDay. In particular, the research showed that children living in homes with pot and cigarette smoke had an average of two-and-a-half ER visits in a year, while kids not exposed to smoke at all had an average of two visits per year, HealthDay reported. Children exposed to both were also 80 percent more likely to have an ear infection, the study's findings showed.

Lead research Dr. Adam Johnson, an assistant professor of emergency medicine at Wake Forest School of Medicine, told HealthDay:

Very similar compounds are being released in marijuana smoke as in tobacco smoke. You would theorize the same kind of chemicals the kids are breathing in to cause diseases from tobacco smoke should be very similar with marijuana.

Some early research on rats has shown that, on its own, inhaling secondhand marijuana smoke can have the same physiological effects as inhaling secondhand cigarette smoke, according to NPR. The animal study, conducted by biologist and professor Matthew Springer, found that the arterial walls in rats exposed to constant marijuana smoke became permanently damaged, which could lead to blood clots, stroke or heart attack, NPR reported. What's more: Their arteries took 90 minutes to recover, whereas it takes 30 minutes with tobacco products.

Of course, Goodwin notes, this isn't a case to keep marijuana illegal, according to HealthDay. After all, parents drink in front of their kids all the time, and that can have profound negative effects on a child's emotional and physical health. Instead, it's more of a matter of expanding the public messaging around the dangers of secondhand smoke to extend to marijuana smoke.

Goodwin said, according to HealthDay:

There is counseling and advice for folks on having their children avoid cigarette smoke, but no one is being advised on what to do about marijuana smoke.

(top)



More U.S. parents smoking pot around kids
By Dennis Thompson
May 14, 2018

HealthDay

Picked up by multiple outlets, including <u>UPI.com</u>, <u>U.S. News & World Report</u>, <u>Philly.com</u>, <u>WebMD</u>, <u>Health.com</u>





Progress made in limiting kids' exposure to secondhand smoke could be undermined by the increasing popularity of pot, a new study suggests.

"As we are removing cigarette smoke -- and that's a major public policy achievement -- that success will be attenuated by increasing exposure to secondhand marijuana smoke," said lead researcher Renee Goodwin.

The numbers confirm the trend.

Fewer parents are smoking cigarettes who have kids in the home these days -- about 20 percent in 2015 compared with more than 27 percent in 2002.

But marijuana use among cigarette-smoking parents increased dramatically during that same period, indicating that kids in those families could be exposed to more secondhand smoke than ever.

Among parents who smoke cigarettes, pot use increased from 11 percent in 2002 to over 17 percent in 2015, the researchers found.

"The kids who are already exposed to one thing, they're more likely to be exposed to both," said Goodwin, a professor with the City University of New York. "It's even worse for them."

Kids exposed to a combination of secondhand smoke from pot and tobacco are more likely to wind up in the emergency room or suffer an ear infection, according to another study presented earlier this month at the Pediatric Academic Societies annual meeting in Toronto.

In the latest study, Goodwin and her colleagues also found there's been an uptick in marijuana use among parents who don't smoke tobacco, from 2 percent to 4 percent during the same period.

However, marijuana use was nearly four times more common among cigarette smokers versus nonsmokers, the findings showed.

"Overall, cannabis use is much more common among cigarette-smoking parents versus nonsmokers, but it is increasing in both groups," Goodwin said.

The trend toward marijuana legalization prompted the research team to look at whether parents are smoking pot more often around their kids.

Goodwin explained that she has a friend who works with a government agency in Colorado who often encounters casual marijuana use in other people's homes.

"He knocks on people's doors, someone comes to the door, a puff of cannabis smoke comes out and there's nothing wrong with that. It's not illegal," Goodwin said. "That's fine. But it is secondhand smoke."





To investigate, the researchers evaluated data from the federal National Survey on Drug Use and Health, an annual and nationally representative survey.

There isn't a lot of evidence at hand about the health effects of secondhand marijuana smoke, Goodwin noted.

But what is available suggests that it is likely to be harmful, said Dr. Karen Wilson, division chief for general pediatrics at the Icahn School of Medicine at Mount Sinai, in New York City.

Wilson noted that a recent study in Colorado found about 16 percent of kids hospitalized for a lung infection called bronchiolitis had blood markers showing they'd been exposed to marijuana smoke.

Worse, about 46 percent of the kids had been exposed to both tobacco and pot smoke, Wilson said.

"This is a significant concern, and one we're hearing more about even in places like New York City, where smoking marijuana is still illegal," she added.

Nine states plus the District of Columbia have legalized marijuana for recreational use (Vermont's new law will take effect July 1), and 30 states plus the District of Columbia have approved medical marijuana. Goodwin noted that this could be leading to a culture where parents think it's OK to smoke pot in front of their children.

"People drink beer in front of their kids," Goodwin said. "If marijuana is legal in your state, are people more likely to use it around their children?"

Studies have shown that early marijuana use might alter a child's brain development and make them more susceptible to drug abuse.

Researchers are concerned that secondhand pot smoke might deliver a similar effect, Goodwin and Wilson said.

"We do suspect kids exposed to secondhand tobacco smoke, their nicotine receptors are primed to make them more susceptible to cigarette smoking," Wilson said. "It's too early to say whether the same is true for marijuana smoke, but we wouldn't want to ignore that as a possibility and then have that become the case. We want to protect children now."

Goodwin suggested that public messaging about the dangers of secondhand smoke be expanded to include pot smoke.

"There is counseling and advice for folks on having their children avoid cigarette smoke, but no one is being advised on what to do about marijuana smoke," Goodwin said.

The study was published online May 14 in the journal Pediatrics.





More information

The American Nonsmokers' Rights Foundation has more about secondhand marijuana smoke.

SOURCES: Renee Goodwin, Ph.D., psychologist and professor, City University of New York, New York City; Karen Wilson, M.D., division chief, general pediatrics, Icahn School of Medicine at Mount Sinai, New York City; May 14, 2018, Pediatrics, online

(top)

Medscape

Overdiagnosis Problematic in Pediatric Medicine

By Pam Harrison May 15, 2018 Medscape

In pediatric medicine, unnecessary testing can be eliminated without compromising outcomes if every physician simply asks how the test will benefit the patient, new data show.

Overtesting and overdiagnosis is prevalent in pediatrics, said Eric Coon, MD, from the University of Utah School of Medicine Primary Children's Hospital in Salt Lake City.

And the increasing incidence of disease might be directly related to overdiagnosis, he said during a special session here at the Pediatric Academic Societies 2018 Meeting.

An increase in the incidence of a disease without any change in morbidity or mortality from that disease is a sign that the abnormalities being detected are not that severe because they are not affecting patient outcomes, he explained.

For example, Kawasaki disease has long been treated with intravenous immunoglobulin to prevent the development of coronary artery abnormalities that can progress to adverse outcomes, such as thrombosis.

The most recent guidelines on the management of Kawasaki disease call for early and repetitive echocardiography — at diagnosis and 2 and 8 weeks after diagnosis, or more frequently if a coronary artery abnormality is detected — and the use of the z-score to lower the threshold at which physicians label a coronary artery "abnormal".

Kawasaki Disease

For their study, Coon and his colleagues set out to determine whether the practice of aggressively identifying coronary artery abnormalities has led to the overdiagnosis of those abnormalities in children with Kawasaki disease.





The team assessed 342 children with Kawasaki disease who experienced an adverse cardiac outcome. Over the 15-year study period, the rate of coronary artery abnormalities per 1000 Kawasaki patients doubled.

During the same period, "adverse outcomes related to coronary artery abnormalities remained very stable," Coon reported. "Together, these two trends fit the pattern of overdiagnosis."

This increase in the detection of coronary artery abnormalities was primarily driven by an increase in nonsevere coronary artery abnormalities, "further supporting the concept of overdiagnosis," he said.

Reversing the trend toward overdiagnosis will reduce the need for more frequent follow-up and more testing — both of which can be costly — and will reduce the stress parents can feel when they are told that their child has an abnormality in a vessel that is critical to the heart.

"As providers, we may think the abnormality is fairly benign," Coon explained. But studies have shown that parents can develop a persistent belief in their child's vulnerability despite full recovery from an illness.

This belief — called the vulnerable child syndrome — often results in parents restricting children from participation in physical activities later in life because of a "heart problem," he pointed out.

Overdiagnosis can also happen when a child with isolated head trauma presents to the emergency department.

Head Trauma

The physician must decide whether or not the child should undergo a CT scan "to find a fracture or bleed, particularly a slow bleed that, if missed, could extend to catastrophic consequences," Coon explained.

But the use of CT scans has been on the decline because of concerns that radiation overexposure can contribute to malignancies.

So Coon and his colleagues examined whether the decrease in CT scans was accompanied by a decrease in the detection of abnormalities and, if so, whether patient outcomes were affected.

The team assessed the records of 300,000 children treated for isolated head trauma at 34 children's hospitals in the United States from 2003 to 2015. The use of imaging, including CT scans, peaked at about 40% in 2008, but declined to 25% in 2015.

The incidence of skull fractures and bleeds both declined during the study period, especially after 2008. These declines were accompanied by a decrease in hospitalization rates and neurosurgery, again largely after 2008.





Rates of revisits to the hospital in the week after the index event were exceedingly low during the study period. And mortality and persistent neurologic impairment were very rare outcomes in these children.

"In other words, decreased imaging was accompanied by decreased detection of abnormalities and decreased intervention without measurable harm to the patient," Coon reported.

Although the use of bicycle helmets — and perhaps seatbelts and even the heightened awareness of concussion — could explain why children with less-severe head injuries were seen over time in the emergency department, "the trends we found were consistent across age groups, so increased use of bike helmets should not affect children under the age of 2 years," Coon observed.

"The implication here is that we can safely do less while decreasing radiation exposure and reduce overdiagnosis," he concluded.

Drivers of Overdiagnosis

Patient and family pressure to "do something" if a child is perceived to be ill is often cited as a common driver of overdiagnosis, as is peer pressure, or at least the fear of being judged incompetent if caught doing nothing.

Malpractice concerns are often thought to be a key driver of overtesting and overtreatment, although physicians at the meeting were divided on how influential the fear of litigation is in shaping physician behavior.

Other less-recognized influences of physician behavior might be as simple as being presented with an abnormal result.

A study on the use of vesicoureteral reflux imaging and prophylactic antibiotics was conducted by a team led by Alan Schroeder, MD, from the Stanford University School of Medicine in California.

Physicians were given a clinical vignette, asked whether or not imaging should be ordered, given either a normal result or a result indicating that the patient had grade 2 reflux, and then asked whether antibiotics should be prescribed (Hosp Pediatr. 2018;8:21-27).

The findings show that "we have a hard time not responding to abnormalities from tests, even if it is a test we wouldn't have ordered in the first place," he added.

Table. Physicians Who Would Prescribe Prophylactic Antibiotics

Results Provided Imaging Ordered, % Imaging Not Ordered, %

Normal 6 0 Grade 2 reflux 56 39

Guidelines themselves can sometimes drive what, on the surface, appears to be excessive testing.





For example, recommendations for dyslipidemia from the National Heart, Lung, and Blood Institute and the American Academy of Pediatrics suggest that every child 9 to 11 years of age be screened for abnormal lipids. They also recommend that pediatricians do at least two fasting lipid panels, beginning at 2 years.

Although experts here agreed that hardly any pediatricians follow these recommendations, they still exist.

An assessment of these guidelines was presented by Thomas Newman, MD, from the University of California, San Francisco.

If adult lipid guidelines were applied to young patients, practitioners would end up treating 78,000 patients 17 to 20 years of age; however, if pediatric treatment guidelines were followed, 483,000 patients 17 to 20 years would be treated (0.4% vs 2.5%).

And the risk—benefit ratio of treating children and adolescents with dyslipidemia is quite different than it is in adults.

"If you treat 100,000 high-risk adults and lower their risk of a cardiovascular event by 30% with statin therapy, you will prevent 3000 cardiovascular events but you will cause 100 to 200 excess cases of diabetes, which is a pretty good trade," Newman said.

"But in children, there is no heart disease to prevent," he said. "If you prevent even one cardiovascular event in children and adolescents, you can cause as many as 400 to 500 cases of diabetes."

Detection of an abnormality that does not benefit the patient is another definition of overdiagnosis, Newman explained.

The right question is, 'How will this test provide net benefit to my patient?'

Changing the mindset of residents in training might be a good place to start to reverse the drive to overtest and overtreat.

Residents are often asked to go through a diagnostic-dilemma exercise, in which they are presented with the most esoteric, most random, most fascinating disease their mentors can come up with, Schroeder explained.

"We go around the room and create this tremendous list of diseases that many of us have never seen before, and then the laundry list of tests starts. We don't give a lot of thought about how that test will help patients," he said.

Teachers should move away from asking what the patient has, he suggested, and simply ask, "How can the test help this particular patient?"





Many think that an evidence-based approach to testing is to ask whether test results will change management, "but I don't think that is the right question," Schroeder said. "We've shown that test results can change management without benefiting patients."

"The right question is, 'How will this test provide net benefit to my patient?" he pointed out. "This is one way to mitigate some of our concerns about overdiagnosis."

We have to learn to be comfortable with uncertainty, focus more on value and less on cost, and address clinician fears about underuse.

Physicians should engage patients and the public, wherever possible, by promoting campaigns such as Choosing Wisely, where doing less is among the key goals, said Virginia Moyer, MD, from the Baylor College of Medicine in Houston.

And physicians should be wary of expanding disease definitions, such as the recent change in the definition of hypertension, which increases the number of adults who will now be considered hypertensive, she cautioned.

"Most quality measures we use focus on underdiagnosis, but we need to think about quality measures that focus on overdiagnosis," said Moyer. "And we need to measure errors of commission, not only errors of omission."

Because the United States is one of the few countries in the world to allow the direct marketing of pharmaceutical and ancillary products to consumers, physicians need to warn patients against egregious enterprises, such as Life Line Screening, offered by companies with no medical expertise, she explained.

Tests are becoming increasingly sensitive and, as such, "if we apply the old guidelines to the new test, we will be misinterpreting test results," she stressed.

"We also have to critically evaluate standard practice," such as the practice of prescribing long courses of antibiotics when much shorter courses will do, she added.

We are taught to first do no harm, be we actually think, "first do something," Moyer said. "We have to learn to be comfortable with uncertainty, focus more on value and less on cost, and address clinician fears about underuse."

Coon, Schroeder, Newman, and Moyer have disclosed no relevant financial relationships.

Pediatric Academic Societies (PAS) 2018 Meeting. Presented May 7, 2018.

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Pediatric News.

Novel initiative aims to combat resident burnout

By Doug Brunk May 14, 2018 Pediatric News

REPORTING FROM PAS 2018

Studies have demonstrated that up to 50% of medical residents meet criteria for burnout, but a new initiative aims to change that worrisome trend.

At the Pediatric Academic Societies meeting, Michael Dolinger, MD, shared initial results from ResiLIEnCE (Resident-led Initiative to Empower a Change in Culture and Promote Resilience), a curriculum that is being carried out at Cohen Children's Medical Center, New York. "We know that medical residents are a prime target for work burnout," said Dr. Dolinger, one of the center's pediatric chief residents, in an interview. "We wanted to study what we can do to combat that burnout on a daily basis, a monthly basis, and a longitudinal basis. How specific can we get so it's portable, and that other programs can adapt what we are doing to help reduce this burnout?"

To develop the wellness/resiliency curriculum and assessment tools for ResiLIEnCe, Dr. Dolinger and his associates drew from the Accreditation Council for Graduate Medical Education's Clinical Leadership Environment Review program, which states that residency programs should measure burnout and educate residents about burnout yearly. They framed interventions around the American Medical Association's six key aspects of personal well-being: nutrition; fitness; emotional health; preventative care; financial health; and mindset, behavior, and adaptability.

Interventions were enacted during traditional pediatric resident work hours to improve attendance. These included a resident-led wellness committee with faculty leadership and wellness champions, a longitudinal noon conference lecture series on nutrition (with topics such as how to eat on a budget and quick meal options), financial health (with topics such as student loan repayment, budgeting on a resident's salary, and retirement planning), mindfulness, and resiliency. Optional activities after work included personal fitness boot camps, a book club, a minority support group, and other peer interest groups. Maslach Burnout Inventories were distributed to residents before implementation of the curriculum and at 3-month intervals. Surveys at the completion of activities assessed the effectiveness of sessions.

A total of 100 pediatric residents were surveyed. Dr. Dolinger reported that before implementation of the curriculum, 41.0% of third-year residents admitted to "feeling burned out from my work" and to "feeling more callous since I took this job," while 8.8% of rising first-year residents admitted to feeling burned out prior to starting residency. In addition, 3 months after the curriculum began, 48.0% of first-year, 23.5% of second-year, and 83.3% of third-year residents reported believing that residency interfered with their personal wellness.





Analysis of the curriculum's impact is ongoing, but Dr. Dolinger reported that among those who attended a nutrition series, 80% of residents planned to eat healthier, while only 15% reported eating healthy prior to the session. Among those who attended a financial series, 50% of those who did not previously contribute to their retirement planned to do so. In addition, 80% of residents who attended a resident fitness workshop joined a local fitness center, compared with only 20% of residents prior. Among those who attended a lecture series on resiliency, 90% of residents indicated that they were able to reflect on a negative patient experience and learn something valuable.

"Hopefully this curriculum helps reduce the overall burnout in our residents over time, by increasing their aspects of well-being and promoting resilience for them individually," Dr. Dolinger said.

The initiative was funded by the Association of Pediatric Program Directors via the Harvey Aiges Memorial Trainee Investigator Award. Dr. Dolinger reported having no financial disclosures.

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Pediatric News.

Multiple analgesia options for kids with acute pain

By Doug Brunk May 14, 2018 Pediatric News Picked up by The Hospitalist

EXPERT ANALYSIS FROM PAS 2018

Many clinicians don't hesitate to administer analgesia in kids who present with acute pain, but nonpharmacologic therapies suffice for some patients, according to Naveen Poonai, MD, FRCPC.

"Too many times, nonpharmacologic therapies are relegated to the very last paragraph of recommendations or to the very bottom of a URL," he said at the Pediatric Academic Societies meeting. "Nonpharmacologic therapies are things that our grandparents told us to do: common sense things that can be done at triage. They don't require memorization of dosing, and most importantly, they don't have side effects."

Dr. Poonai, research director in the division of pediatric emergency medicine at the University of Western Ontario, London, characterized pain in children as "a very personalized experience. You really cannot separate out pharmacologic from nonpharmacologic therapies when you're dealing with pain in the ED setting – and certainly in any other acute setting. For example,





immobilization, ice, child-life specialists, and distraction all have been found to benefit kids with musculoskeletal injuries."

When analgesia is indicated, clinicians can choose from a variety of agents in the postcodeine era. Dr. Poonai said that musculoskeletal injuries constitute 10-20% of pediatric emergency department visits, yet fewer than 60% of children receive adequate analgesia. "That's what's really important for patient and caregiver satisfaction," he said.

Mounting evidence supports the use of ibuprofen as a go-to agent for mild to moderate pain in patients with musculoskeletal injuries, including results from a randomized, controlled multicenter trial of 500 youth (Canadian J Emerg Med. 2016:18:S29). "We know that ibuprofen is superior to acetaminophen or codeine and that it's as good or better than oral opioids and with fewer side effects," Dr. Poonai said, adding that it provides a 25 mm visual analog score (VAS) reduction in pain at 60 minutes. Another study that compared ibuprofen with codeine for acute pediatric arm fracture pain found that ibuprofen was associated with improved functioning and was at least as effective as acetaminophen plus codeine (Ann Emerg Med. 2009 Oct;54[4]:553-60).

A number of oral opioids have gained favor for use in children who present with acute pain. However, in a randomized trial, Dr. Poonai and his associates found no significant difference in analgesic efficacy between orally administered morphine and ibuprofen for the management of postfracture pain in 134 children (CMAJ. 2014 Dec 9;186[18]:1358-63). Oral morphine was also associated with more side effects. At the same time, tramadol and hydromorphone have not been well studied in children with musculoskeletal pain. "Currently, the use of hydromorphone is limited to children with sickle cell disease, but the use is branching out," he said. "Oxycodone and oral morphine pose the greatest risk of side effects. The bottom line here is that opioids should be added to ibuprofen and acetaminophen rather than replacing them for mild to moderate pain."

In 2014, a study from the Cochrane Database of Systematic Reviews concluded that intranasal fentanyl can be effective for the management of moderate to severe pain in children. A dose of 1.0-1.5 mcg/kg is associated with a 40-mm pain reduction in VAS at 10 minutes. "The benefits are that it is not an invasive approach, it's been rigorously studied, and it is equivalent to IV morphine for moderate to severe pain," said Dr. Poonai, who was not part of the Cochrane review. "It lasts about 60 minutes, with minimal side effects."

A separate analysis found that intranasal fentanyl and ketamine were associated with similar pain reduction in children with moderate to severe pain from limb injury (Ann Emerg Med. 2015 Mar;65[3]:248-54.e1). Ketamine was associated with more minor adverse events. An intranasal dose of 1 mg/kg can cause a 40- to 45-mm reduction in VAS at 30 minutes.

Dr. Poonai went on to discuss treatment options for abdominal pain, noting that fewer than two-thirds of children with suspected appendicitis receive analgesia. "If they are receiving it, it's often not until after the ultrasound is performed," he said. "There is a still a reluctance toward providing opioid analgesia for a child with suspected appendicitis for fear of masking a diagnosis or leading to complications." A systematic review led by Dr. Poonai found that the use of opioids in undifferentiated acute abdominal pain in children is associated with no difference in pain





scores and an increased risk of mild side effects (Acad Emerg Med. 2014 21[11]:1183-92). However, there was no increased risk of perforation or abscess. "We found that single-dose IV opioids were actually beneficial," he said.

Dr. Poonai characterized most of the current evidence on IV morphine for suspected appendicitis as being of low to moderate quality, "but they are generally favorable for the indication," he said. "It is titratable to effect, and triage-initiated protocols improve timing and consistency of analgesia." He reported having no financial disclosures. (top)



Physiological immaturity plays primary role in late preterm infant morbidities

By Bruce Thiel May 11, 2018 Healio

Younger gestational age in late preterm infants was more likely to contribute to morbidities resulting in hospital stay compared with causes of preterm delivery, according to research presented at the Pediatric Academic Societies 2018 Meeting.

"Our study investigated if common neonatal complications in late preterm infants are related to the reasons for preterm birth," Melissa Lorenzo, MD, of Queen's University, Kingston, Ontario, told Infectious Diseases in Children. "We examined the three most common causes of preterm birth. including medically indicated reasons, preterm premature rupture of membranes and threated preterm labor."

"Our results demonstrated that younger infants were significantly more likely to suffer complications such as jaundice, respiratory distress and requirement for respiratory support (babies born at 34 weeks [are] more likely to suffer complications [than] those at 35, or 36 weeks)," Lorenzo continued. "Surprisingly, the reasons for preterm delivery did not impact the risk of developing neonatal complications."

Lorenzo and colleagues noted that the preterm population consists of 70% late preterm infants (LPTs), with higher neonatal morbidities compared with term infants.

"Although this increased risk is attributed to physiological immaturity, recent studies indicate that immaturity itself may not be the sole cause of morbidity as all premature infants experience this risk but suffer different outcomes," the researchers wrote. "Some studies demonstrate the risk of morbidities is determined by the causes of preterm delivery with immaturity acting as a modulator."

The researchers conducted a retrospective cohort study of LPTs who were between 34 0/7 weeks' and 36 6/7 weeks' gestation and born from April 2014 to February 2016 at a single tertiary care center. Threatened preterm labor (TPTL), preterm premature rupture of membranes





(PPROM) and medically indicated deliveries, including maternal and fetal pathologies were categorized as implications of birth.

Unadjusted and adjusted age risk ratios were calculated by multiple regression analysis, with PPROM as a reference category. This estimated hypoglycemia, hyperbilirubinemia, use of continuous positive air pressure and apnea of prematurity in LPT.

The researchers studied 279 infants. They found that 38.4% of deliveries resulted from PPROM, 22.8% from TPTL and 39.1% from obstetric and fetal indications.

The most common reasons for medically indicated preterm deliveries were pre-eclampsia and intrauterine growth.

Most infants born through medically indicated deliveries (67.6%) were classified small for gestational age (P = .001), delivered via cesarean section (62.9%; P = .001) and received antenatal steroids (53.3%; P = .02). Almost half were boys (49.5%), and the length of hospital stay averaged 9.39 ± 7.7 days.

Increased risk of morbidities showed significance in relation to lowered gestational age. Hypoglycemia was the exception, with the highest incidence at 36 weeks (66.7%) compared with much smaller percentage of incidence at 35 weeks (28.5%) and 34 weeks.

"However, none of the morbidities were significantly associated with any indication of birth with or without adjustment of age," the researchers wrote.

"Our study demonstrated that immaturity related to gestational age, rather than the reasons for preterm delivery, is the primary contributor in the development of late preterm complications.," Lorenzo said.

References:

Lorenzo M, et al. Morbidity risk among late preterm infants: Immaturity vs. indication of delivery. Presented at: The Pediatric Academic Societies 2018 Meeting; May 5-8, 2018; Toronto.

Disclosure: The researchers report no relevant financial disclosures.

(top)

Medscape

Digital Device Use Rampant Among Preschoolers
By Pam Harrison
May 11, 2018
Medscape





More than 90% of toddlers younger than 3 years interact with at least one digital device at home, new research shows.

Although the cumulative time spent with those devices over the course of a day has not been precisely determined, the duration of an individual session and the frequency of those sessions suggests that toddlers are spending far more time than is recommended by the American Academy of Pediatrics (AAP) for a healthy "media diet."

"In our clinics, we see a lot of children coming in with devices," said Ruth Milanaik, DO, director of the neonatal follow-up program at the Cohen Children's Medical Center in New York City.

We should ask whether the device is being used to keep a child occupied in a stressful situation, like a physician's office, or whether it is a regular occurrence, she told Medscape Medical News.

When she and her team asked parents how often children are using these devices and how many different devices are they using, "we found there was an alarming tendency for a cumulative digital device usage time far higher than current recommendations," Milanaik reported here at the Pediatric Academic Societies 2018 Meeting.

In 2016, the AAP revised its policy on a healthy media diet, recommending that no child younger than 18 months be exposed to any type of screen media other than video chatting, as reported by Medscape Medical News.

We found there was an alarming tendency for a cumulative digital device usage time far higher than current recommendations.

After that, parents are advised to introduce high-quality programming that they can "cowatch" with children 18 to 24 months of age. No specific time was set for this by the AAP, but Milanaik said she recommends that parents keep it under 30 minutes a day.

Children 2 to 5 years of age should be restricted to less than an hour a day of high-quality programming, again cowatched with a parent.

For their study, Milanaik and her colleagues distributed a survey on Amazon Mechanical Turk. They received anonymous responses from 637 parents of children younger than 3 years (mean age, 29.7 months).

The survey asked about the types of digital devices in the home, the types of devices used by the child, the frequency of use, and the duration of each session with a digital device.

Close to three-quarters of the respondents reported that their child watched television, and almost half of those watched TV multiple times a day.

And 71% of respondents reported tablet use, with about 30% reporting use multiple times a day.

About half of the children used a smartphone, and about one-quarter used it multiple times a day.





Only about 10% of children used a laptop or a desktop computer, and about 15% used a gaming system. However, a not inconsequential proportion of respondents reported use of these devices multiple times a day.

Although very few children used any device for more than 3 hours a day, 1 to 2 hours a day was relatively common.

(top)



After-School Programs a Blessing for Kids With ADHD

By Maureen Salamon
May 10, 2018
HealthDay
Picked up by multiple outlets, including <u>U.S. News & World Report</u>, <u>Health.com</u>, <u>UPI.com</u>,
<u>Philly.com</u>

After-school activities might be just what the doctor ordered for kids with attention-deficit/hyperactivity disorder (ADHD), researchers suggest.

After analyzing records on more than 4,000 children with ADHD, the investigators found that nearly 72 percent of them took part in one or more after-school activities. And if they did, they missed fewer days of school and had less severe symptoms of the disorder.

"Anecdotally, we've heard that having a diagnosis of ADHD can sometimes be a deterrent for participating in after-school activity programs," explained study co-author Dr. Nicole Brown. She's a pediatrician at Children's Hospital at Montefiore in New York City.

"So, I was surprised to see that high prevalence of participation" among children with ADHD, Brown added. "I thought it would be lower, and it's encouraging that it's that high."

A syndrome affecting more than 11 million Americans, ADHD is marked by problems with restlessness, paying attention and controlling impulses, according to the Attention Deficit Disorder Association. The condition is typically diagnosed among children in grade school, and medications and/or behavioral therapy are popular treatment options.

Prior research found that children with ADHD are at higher risk for missing school more often, and disruptive school behaviors. The new research set out to determine not only how many kids with ADHD take part in after-school activities, but also the link between doing so and the number of missed school days and calls home from school.





Brown and her colleagues identified 4,185 children aged 5 to 17 with ADHD. Their parents had also reported the severity of their child's condition; the number of school days missed in the prior 12 months due to illness or injury; and the number of calls home from school for a problem in the prior year.

The analysis showed that children with ADHD who participated in after-school activities had nearly 40 percent lower odds of parents reporting them having a moderate or severe case. Additionally, after-school activity participation was also associated with 60 percent lower odds of missing seven or more school days in a year. But the study did not prove a cause-and-effect relationship.

No significant associations were found between taking part in after-school activities and receiving calls home from school.

Study co-author Dr. Yonit Lax, a pediatrician at Maimonides Medical Center in New York City, said her team has several ideas why the results indicated kids with ADHD benefit from after-school activities. Prior research has established that increased physical activity and less screen time among these children are both linked to less severe cases, she said.

"Looking at those two factors, it really reinforces what we're thinking -- that those placed in a more structured environment, outside screen time, have lower odds of moderate or severe ADHD," Lax said.

Dr. Daniel Glasstetter Jr. is a pediatrician at Christiana Care Health System in Wilmington, Del. He said he was encouraged by the finding that more than seven in 10 children with ADHD took part in after-school programs.

"Intuitively, to me, that seems like a high number, which is good," he said. "But not having a comparison to a control group [of children without ADHD], I'm not sure that's higher or lower than what the student population would be doing."

Glasstetter added that more research is needed to determine why after-school programs would lessen the likelihood of moderate or severe cases of ADHD.

Lax said she hoped the research would encourage pediatricians to consider promoting afterschool activities to parents as part of a larger strategy to benefit children with ADHD.

"It's part of our clinical toolbox when thinking of treating the whole patient," she said.

Brown said the findings suggest that strategies to treat ADHD shouldn't just consist of medication and behavioral therapy.

"There are a lot of other resources in the community that can potentially lower symptom severity and improve outcome," she said. "This is one potential strategy to think of at a community level."





The study was presented Saturday at the Pediatric Academic Societies annual meeting in Toronto. Research presented at meetings should be viewed as preliminary until published in a peer-reviewed journal.

(top)

Pediatric News

Analysis finds inconsistent uptake of meningococcal B vaccines

By Doug Brunk May 10, 2018 Pediatric News

Uptake of the meningococcal B vaccine among 16- to 18-year-olds in Philadelphia County, Pa., varied by provider type and by sociodemographic characteristics, results from a large analysis showed.

"In 2015, two meningococcal B (MenB) vaccines were given a Category B recommendation by the Advisory Committee on Immunization Practices with a preferred vaccination window of 16-18 years," researchers led by Kristen A. Feemster, MD, MPH, wrote in an abstract presented at the Pediatric Academic Societies meeting. "Factors that may influence provider recommendation and subsequent uptake of a Category B vaccine are unknown."

In an effort to identify sociodemographic and provider factors associated with MenB vaccine receipt, Dr. Feemster and her associates conducted a cross-sectional study of 85,789 Philadelphia youth aged 16-18 years who had a record in the KIDS Plus II Philadelphia database between Oct. 31, 2015 and July 31, 2017. They acquired neighborhood-level data from the 2016 U.S. Census American Community Survey. Next, the researchers used multivariate logistic regression to assess the association between MenB series initiation and individual- and neighborhood-level sociodemographic, clinical, and provider characteristics.

Of the 85,789 youth, only 16% received at least one MenB dose, while just 5% completed the series, reported Dr. Feemster, who is medical director of the Immunization Program and Acute Communicable Diseases at the Philadelphia department of public health in the division of disease control. Nearly half of youth (49%) were black or African-American, 25% were white, 5.5% were Asian, while the remainder were from "other" or "unknown" races. A private pediatrician was listed as the provider for 70% of the youth, followed by a community health center (11%), the Philadelphia District Center (7%), and hospitals (2%), while the remaining providers were "other" or "unknown." The proportion of MenB recipients varied significantly by provider type, from 0.67% to 20%.

On multivariate logistic regression, MenB recipients were more likely to be female (adjusted odds ratio, 1.07; P = .0006); they were also more likely to be up-to-date on human





papillomavirus vaccines (AOR, 1.65; P less than .0001) and measles-containing vaccines (AOR, 9.90; P less than .0001).

MenB recipients were more likely to be of "unknown" or "other" reported race, compared with those who were Black/African-American (AOR, 1.36 and 1.24, respectively; P less than .0001) or non-Hispanic/Latino (AOR, 1.21; P less than .0001); they were also more likely to reside in a neighborhood with median household income of greater than \$100,000, compared with those who lived in a neighborhood where the median household income is less than \$20,000 (AOR, 1.63; P less than .0001). Asian teens (AOR, 0.87; P = .0062) and teens who received care in community (AOR, 0.52; P less than .0001) or district health centers (AOR, 0.03; P less than .0001) also were less likely to receive the MenB vaccine, reported Dr. Feemster, who is also director of research for Children's Hospital of Philadelphia's Vaccine Education Center, and her colleagues.

"Variation in uptake by race, ethnicity, and neighborhood socioeconomic status suggest potential sociodemographic disparities in MenB receipt, [while] variation by neighborhood socioeconomic status may also suggest financial barriers related to access to care," the researchers wrote in their abstract. They also speculated that variation in MenB receipt across different providers "may reflect different recommendation practices, perceived need for MenB vaccines in a provider's patient population, or clinic-level purchasing decisions."

(top)



Teen Sexting Often Tied to Past Sexual Abuse

By Alan Mozes May 9, 2018 HealthDay

Picked up by multiple outlets, including <u>U.S. News & World Report</u>, <u>WebMD</u>, <u>Health.com</u>, <u>UPI.com</u>, <u>Philly.com</u>

Teens who share sexually explicit texts or emails -- "sexters" -- are more likely to have suffered sexual abuse than their peers, new survey results suggest.

For some teenagers, "sexting may be a part of normal sexual development," said study lead author Dr. Kanani Titchen.

But for others, it "may be an indicator of an unhealthy romantic relationship or a history of sexual abuse," said Titchen, a postdoctoral fellow at the Children's Hospital at Montefiore in New York City.

The research team surveyed nearly 600 teens living in a high-poverty area of the Bronx in New York City.





"We found that approximately 25 percent of girls and 20 percent of boys between the ages of 14 and 17 years old had ever sent a sexually suggestive or naked picture by text or email," Titchen said.

Teens who sexted were also more likely to have had sex, she added.

"These two findings were not surprising, and are consistent with findings from previous studies of sexting among teens," Titchen said.

But girls who said they'd been sexually abused or victimized by an intimate partner were four and three times more likely, respectively, to have sexted than other girls, she said.

And boys who had been sexually abused or victimized were twice as likely to say they'd exchanged sexual messages or images.

The study also indicated that while girls and boys send sexts at similar rates, girls are about three times more likely to feel pressured to sext.

The findings "suggest that in urban, high-poverty communities like the Bronx, teen sexting may be part of a continuum of abusive and exploitative sexual experience for both girls and boys," Titchen said.

Participants were recruited in hospital clinic waiting rooms. Just over a third were boys. Almost 60 percent were Hispanic, and more than one-quarter were black.

Among the other findings:

About 45 percent of boys and girls said they had already had sex.

About 15 percent of girls and 7 percent of boys said they'd been subjected to violence by a sexual partner. The numbers were similar for sexual abuse.

Girls were almost twice as likely as boys (33 versus 17 percent) to struggle with moderate-to-severe depression, the researchers noted.

What can concerned parents do?

Titchen advised initiating a frank discussion as soon as teens get a smartphone.

"Parents need to talk about the permanency of images posted online or sent electronically," she said.

They should also "discuss with their teens that it is not OK to pressure people to send sexts nor to share sexts with others," she added.

However, Titchen cautioned that it's important to broach the subject "in an open and non-judgmental manner."





Sarah Feuerbacher is director of the Southern Methodist University Center for Family Counseling in Plano, Texas.

For parents, "reaching out and talking to a child/teen we think is engaging in inappropriate and risky behaviors is truly an act of kindness, though it may seem like the hardest thing you can do," said Feuerbacher, who wasn't involved with the study.

"Remember that your child is probably feeling very isolated and alone," she said. "Let your child know you are there for them whenever they need to talk, and that you are worried about them."

It's important to listen, be patient and to offer comfort and support, Feuerbacher said.

She suggested that parents also offer guidance on how to foster healthy and safe relationships. This includes getting to know someone in person or on the phone before taking things further.

"Social media connections don't count as getting to know a real person," Feuerbacher said.

The findings were presented this week in Toronto at a meeting of the Pediatric Academic Societies. Studies released at meetings are usually considered preliminary until published in a peer-reviewed medical journal.

More information

The American Academy of Pediatrics has tips for parents who want to talk to their teens about sexting.

SOURCES: Kanani E. Titchen, M.D., postdoctoral fellow, adolescent medicine, The Children's Hospital at Montefiore, New York City; Sarah Feuerbacher, Ph.D., clinic director, Southern Methodist University Center for Family Counseling, Plano, Texas; Pediatric Academic Societies meeting, Toronto, May 5-8, 2018

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Medscape

Obesity Is a Disease, Not a Choice, Experts Advise
Pam Harrison
May 9, 2018
Medscape

Effective weight management is going to require a paradigm shift in they way healthcare professionals think about obesity, a leading expert in the field suggests.

Otherwise, patients are doomed to failure and blame, despite the fact the medical community should be shouldering some of the responsibility for not having developed more effective





interventions, said Lee Kaplan, MD, PhD, director of the Obesity, Metabolism and Nutrition Institute at Massachusetts General Hospital in Boston.

"My colleagues and I believe — and the Obesity Society and other professional organizations agree — that obesity is a disease," Kaplan told delegates here at the Pediatric Academic Societies 2018 meeting.

As such, obesity must be driven by pathophysiologic processes, just like type 2 diabetes and other chronic diseases, stressed Kaplan.

Like diabetes, obesity is also never "cured," although a patient's body mass index (BMI) can be under excellent control. Patients "still have the disease of obesity, even though they no longer meet the definition of obesity by our measurements," Kaplan explained.

If obesity is, in fact, a chronic disease, then physicians need to treat it as a chronic disease. And there are many good reasons to do so, he pointed out. First, obesity carries substantial adverse health risks. Type 2 diabetes, for example, is common in the setting of obesity, as are hypertension, dyslipidemia, sleep apnea, and fatty liver disease.

People on the Mediterranean diet did better in terms of cardiovascular risk reduction if they had obesity, but they did so despite an average weight loss of less than one pound. Common treatable comorbidities typically dictate the treatment that patients with obesity receive, but treatment for obesity itself is often overlooked. In addition, treatments known to improve the comorbidities of obesity are often incorrectly assumed to help obesity itself. A salient example is the oft-recommended Mediterranean diet to promote weight loss in patients with obesity.

Results from several large trials have shown that the Mediterranean diet has little effect on body weight, despite frequent claims to the contrary. In one landmark study (N Engl J Med. 2013;368:1279-1290), people who followed the Mediterranean diet reduced their risk for cardiovascular disease significantly, but the diet had no appreciable effect on body weight.

"We have to be careful about what we tell our patients because if we tell them they are going to lose weight or prevent weight gain on a particular diet and it doesn't work out, then patients and parents themselves will say, 'they don't know what they are talking about' and give up," he said.

Paradigm Shift

Perhaps the most powerful argument for shifting away from thinking that obesity is a lifestyle choice comes from a global study in which researchers tracked trends in BMI from 1980 to 2013 (Lancet. 2014;384:766-781). In that study, the proportion of adults with a BMI of 25 kg/m² or greater relentlessly increased over time in both developed and developing countries.

"In fact, no country has experienced a decrease in obesity rates over essentially the past 40 years, which is a pretty sobering statistic," Kaplan observed.





"We may disagree over what the primary cause of obesity is, but the final pathway, by its nature, has to be pathophysiological, not merely voluntary control of energy balance," he said.

Why this shift in thinking is so pivotal comes down to understanding what drives people to overeat and gain weight, Kaplan continued.

Physicians who treat obesity naturally take a history to identify triggers for eating, exercise patterns, stress levels, sleep patterns and related circadian rhythm imbalances, and any drugs that can promote obesity.

"We take that history in detail and then we say to the patient, 'eat less and exercise more'," Kaplan quipped. But this statement reveals little understanding of the biologic basis of obesity or its heterogeneity.

The body defends a fat mass just like it defends a mass of red blood cells, he explained.

"If you try to perturb your red blood cells by donating blood, your body will bring it back to where it was before you gave blood," he pointed out. Similarly, if a patient undergoes liposuction to remove fat, the fat will grow back to where it was before removal, and it will grow back "lumpier and bumpier" than before.

"If there is a pathophysiology that maintains extra body fat beyond what is normal or healthy, then that pathophysiology will drive us to overeat in the case of obesity," Kaplan said.

"Overeating does not cause obesity, obesity causes overeating. Analogously, undereating does not cure or solve the problem of obesity, effective treatment of obesity causes undereating," he stressed.

This brings physicians to an important question: What works in obesity management and what, predictably, does not.

What Might Work in Weight Loss

If obesity is a pathophysiologic state, then the treatments used to modify this state need to be physiologic in nature to drive down the elevated fat-mass set point that propels people to overeat, Kaplan explained.

The obesity treatment arsenal includes a healthy diet, exercise, stress reduction, improved sleep health and the re-establishment of normal circadian rhythms, antiobesity medications (such as metformin and liraglutide) that promote weight loss, and bariatric surgery.

Interventions that don't usually work, at least over the long term, include calorie restriction on a diet chemically unchanged from what patients were eating before (what Kaplan jokingly referred to as the half-Twinkie diet); malabsorptive drugs like orlistat (Xenical, Roche), the only antiobesity drug currently approved by the US Food and Drug Administration specifically for the treatment of pediatric obesity; and devices like the intragastric balloon that restrict food intake or cause malabsorption.





More exercise, if patients are already exercising regularly, is unlikely to promote significant long-term weight loss, Kaplan added.

Each antiobesity intervention "works well in only a small subgroup of patients. There is an enormous variability in response to these interventions," he cautioned.

This suggests that there are multiple subtypes of obesity, which, if defined better, could be used to predict how well a patient might respond to a particular intervention. But accurate predictive models have not yet been developed.

In the meantime, Kaplan and his team are exploring the potential of a genetic risk score to help determine the likelihood of an individual's response to a particular therapy.

"The power of genetics to help guide treatment of obesity is largely untapped," Kaplan said. "But as we learn more about the heterogeneity of obesity, I anticipate that we will be able to provide more individualized and effective treatments, which ultimately will lead to more effective obesity-prevention strategies."

Individualized Treatment

The concept of obesity as a physiologically driven chronic illness that requires treatment with physiologic-based interventions makes sense, said Amy Fleischman, MD, director of the Optimal Weight for Life Program at Boston's Children's Hospital. And she agrees with Kaplan that treatment must be individualized to maximize the chance of success.

"We have a variety of offerings in our clinical program," Fleischman told Medscape Medical News. "We offer individual visits, group visits, exercise programming, and nutritional groups because we believe that different things work for different children and families."

"We also focus on treating the whole family," she added.

Another key element for success is to identify small steps that patients and their families feel are doable, rather than imposing larger goals that they might not be able to sustain.

"In growing kids, the goal is sometimes not weight loss at all," she explained. "Even in our tertiary care center, where we see extreme obesity, we initially focus on slowing the acceleration of weight gain."

The first goal in a growing child is stabilization of the BMI percentile. When kids are still getting taller, their BMI will improve over time with a slowing in the acceleration of weight gain," Fleischman added.

Kaplan serves as a scientific consultant to AMAG, Gelesis, GI Dynamics, Johnson & Johnson, Novartis, Novo Nordisk, Rhythm, Sanofi, and Zafgen. Fleischman has disclosed no relevant financial relationships.





Pediatric Academic Societies (PAS) 2018 Meeting. Presented May 5, 2018.

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MEDPAGE TODAY

Antibiotics Questioned in Preemies Without Confirmed Sepsis

By Michael Smith May 9, 2018 MedPage Today

Physicians should be cautious about prolonged use of antibiotics in premature babies who don't have proven sepsis, researchers said here.

Antibiotics are appropriate for culture-proven sepsis but are also widely used when no pathogen can be isolated, according to Karen Puopolo, MD, PhD, of the Children's Hospital of Philadelphia (CHOP).

But late-onset sepsis and late onset culture-negative infection -- LOS and LOCNI -- are not the same thing, Puopolo reported at the Pediatric Academic Societies (PAS) annual meeting.

An analysis of 3,940 infants with either condition, or neither, showed markedly different risks of death and neurodevelopmental impairment, suggesting that treating LOS and LOCNI in the same way is wrong, she stated.

"We should be increasingly thoughtful about the way we treat these infants," she said. "They might just need more from us than empiric administration of antibiotics."

A related study of infants with LOCNI by the same authors, found wide variation in how they were treated, but outcomes were not different regardless of whether they were given antibiotics.

In 5,807 infants born prematurely from 2006 to 2014 in 24 centers affiliated with the Neonatal Research Network, deaths and neurodevelopmental impairment rates in the wake of LOCNI were the same regardless of antibiotic use, according to Sagori Mukhopadhyay, MD, also of CHOP.

But "in the absence of benefit," there is nothing to counterbalance the "potential risks of antibiotic exposure," she said.

The studies underline the knowledge gap around culture-negative disease, commented PAS session co-moderator Paul Spearman, MD, of Cincinnati Children's Hospital Medical Center.





"The main take-away is that we need to understand better what they're calling culture-negative infections because the outcome is very, very different -- it's much better than proven sepsis," he told MedPage Today. "It's very likely that in most of those cases there's an alternate cause that's not bacterial sepsis. "It's showing that we need better markers ... and to understand what looks like an infection when it's not bacterial sepsis."

The second study, he noted, adds to the need for better understanding, if only because it suggests the clinical practice varies widely from place to place. "A long duration of antibiotics that differs from center to another is not necessarily a good thing," he said, "but they didn't show it was a bad thing."

It might be that LOS and LOCNI are the same thing but for some reason a pathogen simply can't be found in patients with the latter condition. In that case, serious outcomes ought to be the same, Puopolo's group hypothesized.

They analyzed records of the 24 centers affiliated with the Neonatal Research Network, and found data on 3,940 infants born prematurely between 2006 and 2014 who had LOS, LOCNI, or neither. They specifically excluded many children with both conditions or with other serious infections such as necrotizing enterocolitis.

The primary endpoint was the composite of death and neurodevelopmental impairment at 18 to 26 months of corrected age. The investigators also looked at those endpoints separately.

For the primary endpoint, they found statistically significant differences for:

Adjusted relative risk for babies with LOS vs those with neither condition: 1.29

Babies with LOCNI vs neither condition: 1.13

LOS vs LOCNI: 1.14

When they looked at the components of the endpoint separately, they found that infants with LOS had a significantly higher risk of death but not of neurological impairment compared with babies who had neither condition. The pattern was reversed for LOCNI compared with neither -- a significant risk of impairment but no difference in the risk of death.

And finally, babies with LOS had a greater risk of death than those with LOCNI, but there was no difference in the risk of impairment.

The findings suggest that "LOCNI is not simply LOS in which cultures failed to identify an infecting organism." Puopolo said. Yet her group estimated that about 70% of the antibiotics used in the study cohort were given to babies with LOCNI.

Possible etiologies for the outcomes need more study, Puopolo said, noting that "dysbiosis" caused by the antibiotics themselves might be responsible or the drugs might be replacing a more appropriate therapy.

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MEDPAGE TODAY

Algorithm Helps Manage Fever

By Michael Smith May 8, 2018 MedPage Today

A simple algorithm can help manage pediatric cancer patients with non-neutropenic fever, a researcher said here.

In a retrospective analysis, the five-step guideline accurately classified patients as being at high, medium, and low risk of serious infections, according to Pat Gavigan, MD, of St. Jude Children's Research Hospital in Memphis.

Such an approach could improve recognition and guide initial therapy in cases of non-neutropenic fever, Gavigan said at the annual meeting of the Pediatric Academic Societies.

Pediatric cancer patients frequently have fever and are at risk of bacterial infection because they are immunosuppressed, with impaired mucosal surfaces from chemotherapy and often central venous catheters, he noted.

Febrile neutropenia is associated with about a 20% risk of serious bacterial infection and there are guidelines for risk stratification and management when such episodes take place, Gavigan said.

But no similar guidelines exist for non-neutropenic fever, in which invasive bloodstream infections have been reported in 6%- 10% of cases, he added, and even in a single institution there are a range of management strategies.

To help fill the gap, he and colleagues tried to devise a tool that would be pragmatic, stratify risk, and include practical management considerations.

The five-step algorithm they came up with begins with the recognition of fever, the suspicion of infection, and collection of blood cultures and serum lactate, as well as a complete blood count.

Patients are at the highest risk if they have signs of sepsis, including such things as septic shock, toxic appearances and rigors, organ dysfunction, or neurological dysfunction. These patients would be treated in the ICU with vancomycin, meropenem, and amikacin or on the ward with vancomycin, cefepime, and amikacin.

If there's no sepsis, Gavigan said, patients could have high-risk features, such as recent chemotherapy or be under treatment for leukemia in induction, re-induction or treatment for relapsed and refractory disease. Treatment would be cefepime, plus vancomycin or meropenem if indicated.





If there are no high-risk features, patients still might be at elevated risk if they have any of several individual characteristics, including age under 3, recent surgery, a CSF shunt, signs and symptoms of a bacterial infection, new fever while on antibiotics, and fever for more than 48 hours. Treatment should be individualized after consulting an infectious disease specialist.

Finally, patients would be considered at low risk for serious infection if they appear well, have a maximum temperature of less than 39°C, have a port with no past bloodstream infection, or have some obvious cause for the fever, such as an upper respiratory infection or drug. No antibiotics are indicated, but parents should be informed, and the patient should be reviewed within 24 hours.

Any patient who doesn't fit those categories but still has fever would be classified as standard risk and should be given ceftriaxone and reviewed within a day, Gavigan said.

To evaluate the algorithm, he and colleagues looked at back at the records of 1,049 patients who had 2,224 episodes of non-neutropenic fever, defined as a temperature of at least 38°C and an absolute neutrophil count of at least 500, from Jan. 1, 2012 to Jan. 16, 2017.

They tested the guideline in the 304 episodes (in 158 patients) where there was a positive blood culture, ICU admission or death, and found that:

88 met criteria for sepsis, including 47 admitted to the ICU

64 had high-risk features

33 had individual features suggesting elevated risk

None of the cases would have been classified as low-risk, but 120 had simple uncomplicated courses

120 were classified as standard risk

Gavigan said the guideline appears to be able to identify high-risk patients well but needs to be validated in other settings and in a prospective manner.

"They know that these patients are at higher risk and they're trying to kind of codify the response to that and then evaluate if that algorithm is actually better than just plain old clinical judgment," commented Paul Spearman, MD, of Cincinnati Children's Hospital Medical Center, who was not part of the study but who co-moderated the session at which it was presented.

But he cautioned that the study was "purely observational. They're going to have to test it in larger, multi-center kind of way" before it becomes widely accepted.

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MEDPAGE TODAY

Drug Choices Safe in Pediatric Gut Infections

By Michael Smith





May 8, 2018 MedPage Today

Three broad-spectrum antibiotic combinations commonly used to treat complicated intraabdominal infections (cIAIs) in premature infants are equally safe, a researcher said here.

In a partly randomized multi-center trial, the three combinations were well tolerated with no unexpected safety signals, according to Michael Smith, MD, of Duke University in Durham, N.C.

They also had much the same efficacy, Smith reported at the annual meeting of the Pediatric Academic Societies.

"These data do not support one regimen over another," Smith concluded.

That outcome was "initially kind of disappointing, because I wanted to see if one was better than the other," commented Paul Spearman, MD, of Cincinnati Children's Hospital Medical Center, who was not part of the study but who co-moderated the session at which it was presented.

But what the study does, he told MedPage Today, is "validate" the choices that clinicians have been making and give them some reassurance. "They're all going to be safe," he said, and that's a key consideration in the pediatric setting.

Complicated intra-abdominal infections -- such as necrotizing enterocolitis (NEC) or spontaneous intestinal perforation -- are a leading cause of morbidity and mortality in premature infants. Smith noted.

But the best antimicrobial regimen is not known, there have been safety concerns with some of the medications, and the most commonly used drugs are not labeled by the FDA for premature babies, he noted.

To help fill the gap, he and colleagues designed a partly randomized trial of the three combinations: ampicillin, gentamicin, and metronidazole; ampicillin, gentamicin, and clindamycin; or piperacillin-tazobactam and gentamicin.

Infants with a cIAI were randomly assigned to one of the three combinations within 48 hours of diagnosis, he said. Participating centers were also allowed to contribute safety data from infants who were on one of the study combinations outside of the trial protocol.

All told, 127 infants were randomized and an additional 49 babies were entered on a non-randomized basis. Some 62 babies (45 randomized) got ampicillin, gentamicin, and metronidazole; 46 (40 randomized) got ampicillin, gentamicin, and clindamycin; and 70 (42 randomized) got piperacillin-tazobactam and gentamicin.

The most common diagnosis was NEC, in 53%-66% of patients depending on the group.





Safety, defined as death within 30 days, was the primary endpoint. But the investigators also had a long list of "outcomes of special interest" that they were following, including gastrointestinal surgeries, progression to a higher stage of NEC, intestinal stricture or perforation, positive blood culture, short bowel syndrome, seizures, death, intraventricular hemorrhage (grade 3 or 4), and feeding intolerance.

Efficacy, a secondary outcome, was assessed at 30 days, with overall therapeutic success being defined as the baby being alive, with negative blood cultures, and a clinical cure score of more than 4.

Mortality on the three regimens was similar, Smith reported: 8.1% for ampicillin, gentamicin, and metronidazole; 11% for ampicillin, gentamicin, and clindamycin; and 10% for piperacillin-tazobactam and gentamicin.

In each group, about half of the infants had at least one adverse event, but the proportion of serious events was lower, ranging from 16% to 23% over the three groups. Events considered related to the study drugs were rarer still, occurring in 1.4%-2.2% of the infants.

Most of the babies had at least one of the outcomes of special interest, Smith said, with rates ranging from 59% to 73%, but none of the events was significantly more or less common in any group.

Overall therapeutic success was high -- 81% for ampicillin, gentamicin, and metronidazole; 87% for ampicillin, gentamicin, and clindamycin; and 80% for piperacillin-tazobactam and gentamicin.

(top)



ACA improved access to pediatricians for Medicaid-insured children

May 7, 2018 Healio

Pediatric patients insured through Medicaid were more likely to be seen by pediatricians after the Affordable Care Act was enacted, especially in states that underwent Medicaid expansion, according to research presented at the Pediatric Academic Societies 2018 Meeting.

"Although Medicaid is the safety net insurance policy for children, many children on Medicaid have difficulty finding primary care providers because some physicians either do not accept Medicaid or cap the proportion of Medicaid patients they will accept," Sean O'Leary, MD, from the University of Colorado, Aurora, and colleagues wrote. "The Affordable Care Act had several provisions designed to incentivize physicians to accept more Medicaid patients."





To examine how the Affordable Care Act (ACA) impacted the number of patients insured through Medicaid who were accepted for treatment at pediatricians' offices, and additional factors related to increased reporting of the acceptance of these patients because of the ACA, the researchers conducted a survey that included a nationally representative sample of pediatricians. The survey was conducted between June and September 2017.

Once responses were collected, O'Leary and colleagues used a multivariable analysis to explore the reported factors that were related to increased acceptance of Medicaid patients by pediatricians because of the ACA. The researchers considered the setting of the practice (private, public or hospital, HMO) and its location. Additionally, O'Leary and colleagues assessed how the practices made decisions, whether a cap was in place for Medicaid patient acceptance and whether the state in which the practice was located had undergone ACA Medicaid Expansion.

Of those who were contacted for the survey, 79% responded (n = 372). Most pediatricians reported that they had accepted patients insured by Medicaid within the past 10 years (92%), with 44% of these pediatricians reporting that they increased the number of Medicaid-insured patients because of the ACA; however, 54% of pediatricians reported that they observed no change in the number of Medicaid patients, and 2% reported a decrease.

A percentage cap was used for 21% of participants' practices before the implementation of the ACA. After implementation, 54% kept the same cap and 23% reported having no cap. A decrease in percentage cap was reported by 5% of pediatricians, and an increase was reported by 11% of respondents. The status of the practice's cap was unknown by 8%.

According to O'Leary and colleagues, multivariable analysis revealed that pediatricians who practiced within a state that underwent Medicaid expansion were linked to reports that the ACA had increased the number of patients insured through Medicaid that were accepted for treatment (RR = 1.37; 95% CI, 1.03-1.83).

"Policy makers should continue to incentivize physicians to accept Medicaid patients," the researchers concluded. – by Katherine Bortz

(top)

ChronicleHerald

Study ties cannabis, tobacco smoke to emergency room visits

May 7, 2018

The Chronicle Herald

Children exposed to the combination of marijuana and tobacco smoke go to the emergency department more often than those with no smoke exposure, according to a new study presented at the Pediatric Academic Societies annual meeting in Toronto over the weekend.





It found the children with exposure to both types of smoke also had more middle ear infections.

The study said the results were not seen in children exposed only to one or the other of marijuana smoke or tobacco smoke.

The research came from a survey of 1,500 caregivers of children taken to the emergency department of a children's hospital in Colorado.

The survey found that overall, 140 caregivers, or 9.2 per cent, reported regularly smoking marijuana, and 285, or 19 per cent, reported regularly smoking tobacco.

Of the children seen, 4.1 per cent were exposed to marijuana smoke, 14.2 per cent were exposed to tobacco smoke, five per cent were exposed to both, and 76.6 per cent were exposed to neither.

The study found that when compared against each other, children in all groups had a similar rate of emergency room visits, except those exposed to both marijuana and tobacco group. The mean number of visits in a 12-month period for children with no smoke exposure was 1.97, compared to 2.09 for tobacco smoke only, 2.19 for marijuana smoke only, and 2.48 for both.

The study was conducted by Adam B. Johnson, an assistant professor of emergency medicine at Wake Forest University Baptist Health, in Winston-Salem, North Carolina, and Rakesh D. Mistry, an associate professor of pediatrics at Children's Hospital Colorado/University of Colorado School of Medicine in Aurora, Colorado

(top)



Teens with depression less likely to use Facebook as outlet as they age

May 7, 2018 Healio

Teenagers diagnosed with depression were less likely to discuss their condition on Facebook as they grew older, according to findings presented at the Pediatric Academic Societies meeting.

"Social media use can provide important information on the mental health of adolescents, including their own descriptions of their experiences," a press release stated.

Researchers looked at Facebook posts of 85 study participants, noting verbiage such as 'Feeling the worst right now, just wanting to cry,' 'Basically at the point of giving up' and other posts consistent with the Diagnostic and Statistical Manual's definition of depression.





The number of such posts were measured and labeled as time 1 for adolescents and as time 2 for young adults.

Authors found the average number of depression references among those showing signs of depression was 9.39 at time 1 and 4.94 at time 2. However, average number of references to depression among all participants was 5.37 at time 1 and 2.25 at time 2.

"[These findings] may be related to the development of the prefrontal cortex which plays a role in inhibiting impulsive decisions," Kathleen K. Miller, one of the authors of the abstract, said in the press release.

Researchers also found that sleep was the only symptom that increased in frequency between the two periods, stating that this suggests the disbursement of symptoms may differ by age. – by Janel Miller

(top)



Extending maternity leave leads to longer breastfeeding time

May 7, 2018 Healio

Extending maternity leave to 12 weeks resulted in a significant increase in breastfeeding duration and exclusivity through 9 months for active duty mothers, according to findings presented at the Pediatric Academic Societies meeting.

No previous study had examined the impact of breastfeeding habits before and after the military implemented its extended maternity leave policies for active duty mothers from 6 weeks in 2014 to 12 weeks in 2016, according to a press release.

Researchers analyzed electronic health records of infants born during 2014 and 2016. They found a significant increase in breastfeeding establishment at the 2-month (8.3%; P = .013), 4-month (12.7%; P = .001), 6-month (14%; P = .001), and 9-month (12.4%; P = .002) visits in the group that had 12 weeks of maternity leave. Exclusive breastfeeding also significantly increased at 2 months (8.1%; P = .043), 4 months (9.6% P = .015), and 6 months (7.5%; P = .046) months and trended toward significance at 9 months (6.1%; P = .052).

There was no significant change in breastfeeding initiation between the 2014 and 2016 groups, according to researchers.

"Similar to civilian studies, we found that longer duration of maternity leave increases breastfeeding success throughout the first year of life in a military population," Andrew Delle Donne, DO, of the department of pediatrics at Brooke Army Medical Center, said in the release.





"The conclusions are important to justify increased maternity leave in the military population and provide additional support to conclusions made in civilian studies." – by Janel Miller

(top)



If Kids Exposed to Pot, Tobacco Smoke, ER Visits Rise

By Dennis Thompson May 7, 2018 HealthDay

Picked up by multiple outlets, including <u>U.S. News & World Report</u>, <u>WebMD</u>, <u>Philly.com</u>, Drugs.com

Clouds of pot and cigarette smoke in a home make it more likely a young child will visit the emergency room or have an ear infection, researchers say.

Secondhand smoke from marijuana and tobacco increases a kid's odds of going to the ER, according to preliminary findings from a Colorado study.

"Those kids have an average of two-and-a-half ER visits in the prior year, whereas kids who were not exposed at all had an average of two visits per year," said lead researcher Dr. Adam Johnson. He's an assistant professor of emergency medicine at Wake Forest School of Medicine in Winston-Salem, N.C.

Kids exposed to the combination of cigarette and pot smoke in a home were also 80 percent more likely to develop ear infections, Johnson and his colleagues found.

Homes where people use both pot and tobacco are likely to have larger amounts of secondhand smoke, Johnson explained.

"Very similar compounds are being released in marijuana smoke as in tobacco smoke," he said. "You would theorize the same kind of chemicals the kids are breathing in to cause diseases from tobacco smoke should be very similar with marijuana."

Secondhand tobacco smoke has been linked to a number of health problems in children, including upper respiratory infections, ear infections and asthma, Johnson said.

"I think there's this perception that marijuana smoke and marijuana use in general is not as harmful as tobacco," Johnson continued. "I don't know where that came from."





For this study, researchers surveyed 1,500 parents and caregivers who took their children to the emergency room at Children's Hospital Colorado, in Aurora. The kids' average age was 4 years, and the average age of the parent was 32.

About 9 percent of parents reported regularly smoking marijuana, and 19 percent said they regularly smoke cigarettes.

Kids were about 24 percent more likely to have visited an emergency room within the past year if they lived in a home where people smoked both pot and tobacco, the findings showed.

Those kids also had nearly double the rate of ear infections for the past year, the researcher said.

However, the investigators found no statistically significant correlation between either tobacco or pot smoking individually and the risk of ER visits or ear infections.

Dr. Norman Edelman, senior scientific advisor to the American Lung Association, said that that finding is "a little disappointing because there's lots of data to show that kids who live with parents who just smoke cigarettes have an increased number of ear infections. I don't know why they didn't find that."

At the same time, it makes sense that homes where both pot and tobacco are smoked would pose a worse health risk for kids, Edelman continued.

"It tells us the more bad stuff kids are exposed to, the more likely they are to get ear infections," Edelman said. "But I don't want the public to think it's OK to smoke cigarettes, your kids won't get ear infections, because the bulk of existing data contradict that."

Johnson said the researchers will continue to track the health of some of these kids for the next year to gather more data about the risks of secondhand smoke.

"I think it's going to get more and more prevalent as more states across the country start legalizing [marijuana], because it's a big business, and there's a lot of push to legalize recreational marijuana use," Johnson said.

The study findings were presented Saturday at the Pediatric Academic Societies annual meeting in Toronto. Research and conclusions presented at meetings should be considered preliminary if they haven't been published in a peer-reviewed medical journal.

(top)



<u>Cuando la conversación es sobre el sexo, los adolescentes y los padres no están en la misma</u> onda





May 7, 2018 HealthDay

DOMINGO, 6 de mayo de 2018 (HealthDay News) -- Cuando se trata de hablar sobre sexo, muchos adolescentes admiten que no se comunican con sus padres ni con sus médicos sobre el tema, revela una investigación reciente.

"Los adolescentes y los adultos jóvenes conforman más casos de ITS [infecciones de transmisión sexual] que todos los demás grupos de edad combinados", advirtió la coautora del estudio, la Dra. Kari Schneider, profesora asistente en el departamento de pediatría de la Universidad de Minnesota.

"Los pediatras y los padres tienen un papel vital respecto a hablar sobre las ITS y sobre unas prácticas sexuales más seguras con los adolescentes", añadió en un comunicado de prensa de las Sociedades Académicas de Pediatría (Pediatric Academic Societies).

En el nuevo estudio, los investigadores preguntaron a casi 600 adolescentes de 13 a 17 años de edad con qué frecuencia hablaban con sus padres sobre el sexo.

También se preguntó a los adolescentes si habían ido al médico el año anterior, si habían hablado con un médico sobre el sexo, y si les habían hecho pruebas de una enfermedad de transmisión sexual.

Además, los investigadores encuestaron a 516 padres de adolescentes, y las preguntaron con qué frecuencia hablaban sobre el sexo con sus hijos y si eran conscientes de las conversaciones que sus hijos tenían con el médico sobre el sexo.

La encuesta mostró que los médicos no preguntaban sobre el sexo de forma rutinaria a un 45 por ciento de los adolescentes. Y les ofrecieron pruebas de las enfermedades de transmisión sexual a apenas un 13 por ciento de ellos.

Algo interesante es que solo un 39 por ciento de los adolescentes dijeron que hablaban con sus padres sobre el sexo, mientras que un 90 por ciento de los padres reportaron haber tenido una conversación de ese tipo con sus hijos adolescentes.

Los investigadores anotaron que se preguntaba con más frecuencia sobre el sexo a las chicas adolescentes que a los chicos. Y las mamás eran más propensas a hablar sobre el sexo con sus hijos.

La raza también tuvo un rol. Los padres blancos eran más propensos a hablar sobre el sexo con sus hijos adolescentes, pero era menos probable que les ofrecieran pruebas de enfermedades de transmisión sexual a los adolescentes blancos, encontró la encuesta.

Según el informe, los adolescentes mayores eran más propensos a haber tenido conversaciones sobre el sexo y a que les ofrecieran las pruebas.





Los investigadores apuntaron que casi la mitad de los padres encuestados eran conscientes de sus hijos adolescentes y sus médicos habían hablado sobre las relacionas sexuales, pero un 25 por ciento de los padres del estudio no creían que esas conversaciones deberían ocurrir.

Los hallazgos fueron presentados el domingo en la reunión anual de las Sociedades Académicas de Pediatría, en Toronto. Las investigaciones presentadas en reuniones se deben considerar preliminares porque no se han publicado en una revista revisada por profesionales.

(top)

Great Lakes Ledger

<u>Children Exposed to Cannabis and Tobacco Smoke Get More Often to the Emergency Department</u>

By Rex Austin May 7, 2018 Great Lakes Ledger

A new study was presented over the weekend at the Pediatric Academic Societies (PAS) 2018 Meeting (Toronto). It claims that children exposed to both marijuana and tobacco smoke get to the emergency department more often than those who aren't exposed to any smoke.

The name of the study is "Correlation between secondhand marijuana and tobacco smoke exposure and children ED visits". After researching the link between smoke and ED visits, researchers found out that only children exposed to both types of smoke had an increased chance of getting into an Emergency Room.

The study contained a survey of 1,500 caregivers of children. The caregivers completed the survey at the emergency department in a Colorado Children's hospital. Results showed that 140 caregivers (9.2%) smoked marijuana regularly, while 285 (19%) smoked tobacco regularly.

Among all children arriving at the emergency room, 4.1% were exposed to marijuana smoke, 14.2% to tobacco smoke, and 5% were exposed to both marijuana and tobacco smoke. The rest of 76.6% were not exposed to any smoke.

Children Visit ED More Often When Exposed to Both Marijuana and Tobacco Smoke Comparing the surveys with the rate of emergency room visits, researchers found that a single group was different. The group of children exposed to both types of smoke had an increased rate of emergency room visits, while the others were at similar rates.

Over a year, children not exposed to smoke went to the emergency room for 1.97 times. Children exposed to tobacco smoke went 2.09 times, while those exposed to marijuana smoke went 2.19. The group of children exposed to both types of smoke had 2.48 visits.





The study was conducted by two professors: Adam B. Johnson, an assistant professor of emergency medicine at Wake Forest University Baptist Health (Winston – Salem, North Carolina), and Rakesh D. Mistry, an associate professor of pediatrics at Children's Hospital Colorado / University of Colorado School of Medicine (Aurora, Colorado).

(top)

Civilized.

<u>Children Exposed To Second Hand Smoke Are More Likely To Make Emergency Room Visits Says Pediatric Academic Societies</u>

By Calvin Hughes May 7, 2018 Civilized

A new study has found that children who are exposed to second-hand smoke are more likely to wind up in the emergency room. But that situation only occurs under certain circumstances.

Children exposed to a combination of both second-hand cannabis and tobacco smoke are more likely to visit the emergency department than children who were not exposed, or only exposed to one or the other.

"This association was not seen in children exposed to only marijuana smoke or to only tobacco smoke. This is the first study to demonstrate the notable impact between second hand marijuana smoke exposure and child health," the Pediatric Academic Societies - who are publishing the study - said in a statement.

Their research also looked for which group were most likely to develop conditions that can be agitated by smoke, such as asthma, otitis media (inflammatory diseases of the middle ear) and viral respiratory infections. The findings were similar, with the statistics showing that children exposed to both tobacco and cannabis suffered higher rates of otitis media.

Potential health issues like this are the exact reason that states like Colorado have been receiving opposition to social cannabis use from parents who are worried about the effect marijuana smoke could have on their children. The study also lends credence to Vermont Governor Phil Scott's decision to impose strict penalties on people caught smoking up around minors.

(top)

GIZMODO

The Stricter a State's Gun Laws, the Fewer Children Die From Guns, Study Finds By Ed Cara





May 7, 2018 Gizmodo

Picked up by multiple outlets, including MSN.com

State laws that mandate universal background checks for buying guns and ammunition may save young lives, suggests new research presented this week at the annual meeting of the Pediatric Academic Societies. The study found that states with stricter gun laws had lower rates of gunrelated deaths among children compared to states without such laws.

Researchers, primarily at the Children's National Health System in Washington DC, first examined gun injury data collected by the Centers for Disease Control and Prevention. They specifically looked at reported firearm deaths of people under the age of 21 that took place in 2015. Then they matched each state's child mortality rate to a rating of their gun control laws and policies, based on a scorecard established by the Brady Campaign, a non-profit organization that advocates for gun violence prevention.

There were a total of 4,528 reported child deaths from guns in 2015. The state-by-state firearm mortality rate ranged from 0 deaths per 100,000 children to 18 deaths per 100,000 children.

The researchers found that the median mortality rate for the 12 states with universal background laws for all gun sales—including Washington, Colorado, and Connecticut—was 3.8 deaths per 100,000 children. But for states that didn't require background checks, the median mortality rate was 5.7 per 100,000 children. The same relationship was true when looking at background checks for ammo: The median mortality of the five states with these laws was 2.3 deaths per 100,000 children, while it was 5.6 deaths per 100,000 children in states with no background checks.

The study's findings are preliminary, since they've yet to be published in a peer-reviewed journal, and they don't directly show that gun laws prevent children's deaths. But the authors says their study is one of the first to look at how gun laws can specifically influence child deaths. Other research has similarly shown that stricter state gun laws can reduce the rate of gun-related suicides and homicides.

"Injuries due to firearms are the nation's third-leading cause of pediatric death," said lead author Monika Goyal, director of research in the Division of Emergency Medicine and Trauma Services at Children's National Health System, in a statement. "Firearm legislation at the state level varies significantly. Our findings underscore the need for further investigation of which types of state-level firearm legislation most strongly correlates with reduction in pediatric injuries and deaths."

Accidental shootings, suicides, and homicides committed by people the victims know account for the majority of gun-related deaths among children. Goyal added that mass shootings are only a small reason of why these deaths happen.





"While these tragedies often are covered heavily by the news media, they represent a subset of overall pediatric injuries and deaths due to firearms," Goyal said. "Pediatric firearm-related injuries are a critical public health issue across the US."

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MEDPAGE TODAY

Shift in U.S. Pediatric Care Patterns
By Michael Smith
May 7, 2018

MedPage Today

Patterns of pediatric medical care in the U.S. are changing, researchers said here.

A study of commercially insured children found that they're seeing caregivers less often, while a separate analysis found that pediatric visits to the clinic are becoming more complicated. Both studies were presented at Pediatric Academic Societies (PAS) annual meeting.

"The take-home message is that trends in pediatric care are changing a lot," commented PAS session co-moderator Christopher Stille, MD, of the University of Colorado in Aurora.

But exactly what is driving the changes remains up in the air. "I don't think we know that yet," he told MedPage Today.

Over an 8-year period, children in a large commercial insurance program used less and less healthcare in almost all diagnostic groupings, with the decline driven by a marked drop in acute care visits, according to Kristin Ray, MD, of the University of Pittsburgh, and colleagues.

She said that in recent years, there have been changes in access to care. For instance, fewer children are uninsured, according to the National Health Interview Survey, and more are getting preventive care visits. On the other hand, out-of-pocket costs for the parents of insured children have been rising and after-hours access has been falling, according to the Agency for Healthcare Research and Quality.

To examine the issue, Ray's group looked at claims data from a large national insurer from 2008 through 2016. The cohort had 3,457,180 person years of data in 2008, which fell to 3,048,568 person years in 2016.

Per 100 person years, they found, the number of visits to a primary care provider (a pediatrician, an internist, or a family practitioner) fell by 14% over the 8 years -- the result of a 23% fall in acute care visits and a 9% increase in preventive care visits.





The decline in visits was seen across almost all diagnostic groupings, with the largest declines (>30%) for respiratory diseases, skin and soft tissue issues, urinary tract illness, and ear, dental, and mouth diseases. The only diagnostic grouping for which visits rose was psychiatric, behavioral, and substance abuse problems.

The investigators also found that patients weren't simply going elsewhere -- visits to specialists remained steady, emergency department calls fell by 4%, and while urgent care visits rose by 106%, the absolute numbers remained small.

Age also didn't appear to play a role, Ray said.

One possible explanation is that the preventive visits are doing their jobs and there is simply less need for acute care, she told MedPage Today, adding that parents might have a better understanding of how to care for the child at home.

More worrisome, she said, is the possibility that "perhaps kids are missing out on care they need."

The interactions between doctors and children have been perceived as becoming increasingly complex but there has been little study of the issue, according to Suk-fong Tang, PhD, of the American Academy of Pediatrics in Elk Grove Village, Illinois.

Her group turned to data from the National Ambulatory Medical Care Survey (NAMCS) for 1997 through 2015 and looked at changes in the proportion of Medicaid/CHIP-paid visits, trends in patient age, the well (versus problem-focused) visit mix, diagnosis of mental health conditions, referral rates, and prescription rates.

To enable comparisons, they broke the data into four cohorts: 1997-2001, 2002-2006, 2007-2011, and 2012-2015. From cohort one to cohort four, they found:

- Medicaid/CHIP-paid visits rose 91%
- Visits by patients, ages 13-21 years, rose 53%
- The proportion of well-child visits rose 28%
- Visits coded for mental health issues rose 127% (although the proportion of all visits remained low)
- Referral rates rose 37%
- Visits requiring a prescription rose 19%

Tang cautioned that the study was visit-based and doesn't give population estimates. As well, there's no community health center data and only office-based visits were included.

She said the evidence suggests that the perception of increasing complexity is correct, but the study doesn't offer any clues as to why the changes are taking place.

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MEDPAGE TODAY

Pediatric Assault Raises Early Death Risk

By Michael Smith May 7, 2018 MedPage Today

Being shot or otherwise assaulted as a child is associated with a greater risk of early mortality than accidental trauma, a researcher said here.

In particular, 3.9% of gunshot victims who survive the incident died within a few years, compared with 3.2% of those who suffered other forms of assault and just 0.7% of those who fell victim to other forms of trauma, according to Ashkon Shaahinfar, MD, of UCSF Benioff Children's Hospital Oakland in Oakland, Calif.

And between 75% and 85% of the deaths of childhood assault victims are homicide, compared with less than 60% of the deaths of other trauma victims, Shaahinfar told delegates to the annual meeting of the Pediatric Academic Societies.

Firearm mortality among children is high, he said, with more than 53,000 pediatric fatalities from 2000 through 2014. And among adults, he added, it's known that five-year mortality after either gunshot or other assault is about 5%, higher than is seen among victims of motor vehicle accidents.

But it hasn't been clear how younger patients fare if they live through the initial event, he said.

To find out, he and colleagues conducted a multi-center, retrospective cohort study of patients 16 or younger who were seen at three trauma centers in Oakland and San Francisco between January 2000 and December 2009.

Of the 8,251 patients, he reported, 7,373 had suffered unintentional trauma, 461 had been shot, and 417 had suffered another form of assault. Importantly, 10.3% of the gunshot victims died in hospital, compared with 1.2% and 1.3%, respectively, of the non-firearm assault and trauma victims.

After excluding those who died of their injuries, as well as those who might have been victims of child abuse or had attempted suicide, 97.3% of the patients had adequate identifying information for long-term follow-up, using data from the Social Security Death Master File and the California Department of Public Health Vital Statistics through Dec. 31, 2014, Shaahinfar reported.

At the time of the original injury, he and colleagues found, the median age of those injured in either form of assault was 15.5, compared with 7.9 for those who had unintentional trauma. As might be expected, he reported, those who were victims of gunshots tended to live in areas with a



higher violent crime index than those simply assaulted, who in turn lived in more violent areas than those who had unintentional trauma.

Injury severity scores were higher for gunshot victims than for those in the other two categories - an average of 13.8 versus 6.7 and 7.0 respectively.

Shaahinfar said long-term outcomes were worse for the assault victims:

After a median follow-up of 8.2 years, 3.9% of gunshot victims had died, and in 75% of those cases the cause was homicide.

After a median follow-up of 9 years, 3.2% of other assault victims had died, and in 84.6% of those cases the cause was homicide.

After a median follow-up of 9.3 years, 0.7% of the unintentional trauma victims had died, and in 58.7% of those cases the cause was homicide.

A Cox proportional hazards regression analysis showed that black race, male sex, age from 12 through 16, and having public health insurance were all significant risks for death, he reported, but neither mode of assault reached significance.

But when the researchers considered assault as a single category, it became a significant factor, with a hazard ratio of 1.86, he said.

Shaahinfar pointed out that the analysis almost certainly has some unmeasured confounding having to do with neighborhood factors. Its retrospective nature makes it hard to determine the intention behind some of the injuries, he added, and it's possible that some deaths were not in the California databases the researchers used.

The study "points to the need for community interventions to prevent those secondary outcomes," commented Melissa Langhan, MD, of Yale University in New Haven, Conn., who co-moderated the session but was not part of the study.

Such interventions are starting, she said, "but whether they will affect outcomes, I think, is the next step" in the research.

"It makes logical sense that someone who is shot is at greater risk of being shot [again] and dying but we didn't necessarily have the data to show it," commented co-moderator Jennifer Trainor, MD, of Northwestern University in Chicago, who was also not part of the study.

"If you don't know what the baseline rate is," she added, "you can't know if your interventions are moving the needle."

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Could Mom-to-Be's Antidepressants Have an Upside for Baby's Brain?

By Amy Norton May 7, 2018 HealthDay

Picked up by multiple outlets, including <u>U.S. News & World Report</u>, <u>Philly.com</u>, <u>Health.com</u>, Drugs.com

Children who were exposed to antidepressants in the womb may score higher on certain tests of mental abilities at the age of 12, a small, preliminary study suggests.

Among the 51 kids the researchers analyzed, those whose mothers used antidepressants during pregnancy typically scored higher on tests of "executive function" than kids with no prenatal exposure to the medications.

Executive function refers to a set of mental skills that essentially help you get things done -- including focus and attention, self-control and flexible thinking.

The new study is one of the latest to look at whether kids with prenatal exposure to antidepressants -- specifically, selective serotonin reuptake inhibitors (SSRIs) -- are different from other kids.

SSRIs are the most commonly prescribed antidepressants, and include drugs like fluoxetine (Prozac), paroxetine (Paxil) and sertraline (Zoloft).

Some studies have hinted that when moms-to-be take SSRIs during pregnancy, their children have a slightly higher risk of psychiatric diagnoses -- such as autism and attention-deficit/hyperactivity disorder.

Other studies, however, have found no such connections.

The question of whether prenatal SSRI use has any effects on children's development is a critical one, according to Dr. James Murrough. He is director of the mood and anxiety disorders program at Mount Sinai, in New York City.

"Depression is common, it's more common in women, and it's prevalent during women's childbearing years," said Murrough, who was not involved in the new study. "You put all of that together, and depression during pregnancy is a major public health issue."

But, he said, it's also very difficult to disentangle any effects of SSRIs, themselves, on children's brain development.

"How many factors would affect how well a 12-year-old performs on a cognitive task?" Murrough said. The answer is, a lot.





A huge array of genes would be involved, he explained, along with a broad range of environmental factors -- including the mom's depression.

While the new findings sound like positive news for kids who were exposed to SSRIs, it's not really clear what to make of them. For one, Murrough said, the study is too small to draw firm conclusions.

The study researchers agreed.

Children in the study performed a series of computerized tasks that target executive function. And those exposed to SSRIs in the womb scored a bit higher, in general.

But children's scores on those "highly structured" tasks do not necessarily reflect their mental skills in daily life, explained researcher Sarah Hutchison, of British Columbia Children's Hospital, in Vancouver, Canada.

The researchers are continuing to follow a larger group of 120 children, and parents' reports on their kids' thinking skills will be examined, too, according to Hutchison.

She presented the findings Sunday at the Pediatric Academic Societies meeting, in Toronto. Research presented at meetings is considered preliminary until published in a peer-reviewed journal.

Between 15 percent and 20 percent of women will have a "clinically significant" mood disorder during pregnancy, said senior researcher Dr. Tim Oberlander.

Like Murrough, he said that understanding how these women and their children fare is critical, and complicated.

Because brain development is so complex, Oberlander explained, there is no "simple cause-and-effect" relationship between prenatal antidepressant exposure and children's long-term outcomes.

This study does not address the question of whether SSRIs are "safe" for pregnant women, Oberlander added.

For any one woman, he said, the decision on how to treat depression during pregnancy is a personal one.

Oberlander stressed that women should discuss all of the options with their health care provider.

And, he said, everyone from providers to family members should consider ways to help women support their mental health during pregnancy. Stress reduction, regular exercise and adequate sleep are a few key steps.





What is clear, Murrough said, is that depression during pregnancy needs treatment -- whether that means antidepressants, "talk therapy" or other options.

Untreated depression has risks for mothers and babies, he explained.

Depression can make it harder for moms-to-be to take care of themselves, or to bond with their newborn, Murrough noted. And some studies have linked untreated depression to higher risks of premature delivery and low birth weight, according to the March of Dimes.

Murrough suggested that if a woman is being treated for depression and might become pregnant, she should talk to her doctor about any therapy adjustments that could be appropriate. Women who are already taking an antidepressant, he said, should not simply stop the drug on their own.

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TECH TIMES

States With Stricter Gun-Laws Have Lower Death Rates Among Young Adults, Study Suggests

By Elyse Johnson May 7, 2018 Tech Times

From the Virginia Tech shooting to the Columbine massacre, some of the worst shootings in the history of the United States, unfortunately, occurred at a school. Majority of those who got injured or lost their lives in these tragedies were young adults.

A new study that was conducted in Washington DC showed that stricter gun laws saved the lives of young Americans. The states that make it more difficult to bear arms have a lower death rate among young adults.

The study was conducted by Dr. Monika Goyal, the director of research in the division of emergency medicine and trauma services at Children's National Health System in Washington, D.C. Goyal states gun-related injuries are America's third-leading cause of pediatric deaths.

Gun Control

The study showed that more than 4,500 people under the age of 21 died from gun-related injuries in 2015. About 87 percent of those who died were male, and 44 percent were black. The average age was 18 years-old. Pertaining to deaths from gun injuries in states, the numbers ranged from zero per 100,000 youths to 18 per 100,000 youths.

The researchers found that the median mortality rate for the 12 states which require a background check for obtaining a gun resulted in 3.8 deaths per 100,000 children, whereas the ones that did not require a background check had 5.7 deaths per 100,000 children.





For obtaining ammo, the five states that require a background check had a lower median death rate than the ones that did not, the study stated.

Saving Young Americans

The study's findings are yet to be published and still need more investigation. Goyal, however, stated that mass shootings, which have occurred recently, are only a small reason of why these deaths keep occurring.

Accidental shootings, suicides, and homicides committed by young adults account for the majority of gun-related deaths.

"Newtown. Orlando. Las Vegas. Parkland. Those are among the mass shootings that have occurred across the nation in recent years. While these tragedies often are covered heavily by the news media, they represent a subset of overall pediatric injuries and deaths due to firearms," Goyal stated.

Goyal continued that pediatric gun-related injuries are a "critical" public health issue across the United States. The study will be presented during the Pediatric Academic Societies (PAS) 2018 annual meeting.

(top)

Pediatric News.

About sex, adults aren't talking or kids aren't listening

By Debra L. Beck May 7, 2018 Pediatric News

AT PAS 2018

Almost half of adolescents (45%) reported that their primary care providers (PCPs) do not routinely ask them about sex, and only 13% report they've been offered screening for sexually transmitted infections (STIs), according to a survey study presented at the Pediatric Academic Societies meeting.

And it appears the teenagers aren't even listening to much of what their parents are saying on the subject: The survey also found that 90% of parents reported that they talk to their adolescents about sex, but only 39% of adolescents reported the same.

"Teens and young adults account for more STIs than all other ages combined," senior author Kari Schneider, MD, said in a press release, which makes PCP participation on the subject





important. Dr. Schneider and the study's other authors all hail from the University of Minnesota, Minneapolis.

Regarding the discrepancy between the parents' and adolescents' responses, "Our best guess is that parents may have mentioned sex with their adolescents at some point, but the conversation was not meaningful enough to register on the adolescents' radars! That type of discussion is probably best had more than once and in more than one way," she said in an interview.

The adolescents, aged 13-17 years, and parents of adolescents attending the 2017 Minnesota State Fair were invited to complete an 18-question anonymous survey. The teens were queried whether they had seen a PCP in the last year and asked about their discussions about sexual activity and STIs with their physicians and parents. Parents were asked about their knowledge of discussions the teens had with their PCPs and their own discussions with their children. A total of 582 adolescents and 516 parents completed the survey.

Older adolescents were significantly more likely to be queried about sex by their PCPs than younger adolescents – and to be offered STI testing. Females reported more often being asked about sex than males, and whites were less likely than other ethnicities to be offered screening. One-quarter of parents who completed the survey felt that PCPs should not discuss sex with their teens.

(top)

Pediatric News.

Reduce referrals: Skip eye chart with automated vision checker for kids

By Debra L. Beck May 7, 2018 Pediatric News

AT PAS 2018

Using an automated photorefractor-based vision screening in preschool-age children reduced referrals to ophthalmologists and optometrists by one-third, compared with standard chart-based screening, according to a nonrandomized trial conducted in Boston. The handheld device that was used requires minimal cooperation from the child and also checks ocular alignment.

"This device requires almost zero cooperation from the child. The nurse or assistant holds the device and the child has to look at it for about two seconds, as opposed to several minutes to do a chart-based test," reported Louis Vernacchio, MD, at the 2018 Pediatric Academic Societies meeting.

Dr. Vernacchio and colleagues at Boston Children's Hospital tested the effect of this change on referrals to eye care specialists during a 6-month period in 12 pediatric primary care practices





that are part of the Pediatric Physicians' Organization at Children's. Each of these practices had previously participated in a quality improvement project to optimize chart-based vision screening.

They found a 33.7% decline in initial ophthalmology and optometry visits after practices switched from chart-based vision screening to the hand-held screening device.

"Optometry and ophthalmology is the No. 1 specialist to whom our patients of all ages are referred to in our pediatric network, and the No. 1 diagnosis was normal vision, so in most cases, there's nothing wrong, and they're clogging up the system."

Instrument-based vision screening has been shown to have high sensitivity and specificity, compared with ophthalmic vision screening, and has much better testability in young children than traditional eye chart—based screening.

In previously reported data, Dr. Vernacchio's group showed that, with instrument-based vision screening, completed screening rates among children aged 3-5 years improved. The most marked improvement was in the 3-year-olds, among whom completed screening rates increased from 39% with chart-based screening to 87% with instrument screening.

(top)



Strict Gun Laws Spare Young Lives: Study

May 7, 2018

HealthDay

Picked up by multiple outlets, including Philly.com, U.S. News and World Report, Health.com

Fewer young Americans are killed by guns in states with stricter gun laws, a new study finds.

"Injuries due to firearms are the nation's third-leading cause of pediatric death," said study author Dr. Monika Goyal. She is director of research in the division of emergency medicine and trauma services at Children's National Health System in Washington, D.C.

"Firearm legislation at the state level varies significantly," Goyal said in a health system news release. "Our findings underscore the need for further investigation of which types of state-level firearm legislation are most strongly correlated with reducing pediatric injuries and deaths."

In the study, more than 4,500 people aged 21 and younger died from firearm-related injuries in 2015. Eighty-seven percent were male, 44 percent were black and their mean age was 18.

State rates of gun-related deaths among young people ranged from as low as zero per 100,000 youths to as high as 18 per 100,000 youths. Median rates were lower among the 12 states that





require universal background checks for gun purchases (3.8 per 100,000) than in states that did not require background checks (5.7 per 100,000), the researchers said.

The five states that require background checks before buying ammunition also had a lower median rate (2.3 per 100,000 youths) than states that did not require such background checks (5.6 per 100,000), according to the study.

The study was scheduled for presentation Saturday at the annual meeting of the Pediatric Academic Societies, in Toronto. Research presented at meetings should be considered preliminary until published in a peer-reviewed journal.

"Newtown. Orlando. Las Vegas. Parkland. Those are among the mass shootings that have occurred across the nation in recent years," Goyal said.

"While these tragedies often are covered heavily by the news media, they represent a subset of overall pediatric injuries and deaths due to firearms," she added. "Pediatric firearm-related injuries are a critical public health issue across the U.S."

BECKER'S —	
HOSPITAL	REVIEW

40% of new parents show depressive symptoms at newborns' discharge

By Anuja Vaidya May 7, 2018 Becker's Hospital Review

(top)

New parents who have low education levels and more than one child are more likely to experience depression in the first six months after their newborn is discharged from a neonatal intensive care unit, according to research presented at the Pediatric Academic Societies 2018 annual meeting, May 5 to May 8, in Toronto.

The study is a spinoff of the "Giving Parents Support (GPS) after NICU discharge" clinical trial and involves 125 GPS trial participants. Researchers assessed depressive symptoms among patients using a 10-item, validated screening tool — the Center for Epidemiological Studies Depression Scale. The mean age of the participants ranged from 26.5 to 30.6 years old.

The study shows that the median length of time the participants' newborns remained in the NICU was 18 days. When the newborns were discharged, 40 percent of parents had elevated CES-D scores. Six months post-discharge, 14 percent of the parents had elevated scores.

"It's reassuring that, for many parents, these depressive symptoms ease over time. However for a select group of parents, depression symptoms persisted six months after discharge. Our findings





help to ensure that we target mental health screening and services to these more vulnerable parents," Karen Fratantoni, MD, lead study author and a pediatrician at Washington, D.C.-based Children's National Health System, said in a May 5 statement.

(top)



Influenza Vaccine Delays are a Problem for Pediatricians

May 7, 2018 Infection Control Today

Pediatricians report influenza vaccine delivery delays as a significant problem, particularly for the Vaccines For Children (VFC) program vaccines, leading to many missed opportunities for vaccination, according to a new survey being presented at the Pediatric Academic Societies (PAS) 2018 meeting.

A nationally representative survey among pediatricians was conducted from June 2017 through September 2017 to assess the extent to which delays in receipt of influenza vaccine from private and VFC program stocks pose problems and provider contingency plans in the event of influenza vaccine delays.

For private stock influenza vaccine, considering the last three influenza vaccination seasons, three percent reported delays in receipt of influenza vaccine as a major problem, 18 percent a moderate problem, 32 percent a minor problem, and 48 percent as not a problem. In contrast, for VFC influenza vaccine, 15 percent reported delays as a major problem, 32 percent a moderate problem, 33 percent a minor problem, and 20 percent as not a problem.

When either VFC or private influenza vaccine is out of stock, 56 percent reported delaying vaccination for patients whose vaccine is out of stock, 19 percent referred these patients elsewhere, seven percent postponed vaccination for all patients, and 18 percent borrowed vaccine between stocks. Among the 50 respondents who reported borrowing between stocks, almost all (98 percent) borrowed for individual patient visits while only 30 percent borrowed for influenza vaccination clinics.

Uptake of influenza vaccine among children is low compared to other childhood vaccines, and missed opportunities for vaccination play an important role in this low uptake. Problems with receiving influenza vaccine in a timely manner within pediatric practices are an important cause of missed opportunities, but little is known about pediatricians' experiences and practices related to influenza vaccine delivery delays. Providers use a variety of strategies for addressing these delays, but in most cases, children either must go elsewhere or return to the clinic to receive influenza vaccine. To increase uptake of influenza vaccine among children, systematic changes are needed to address these delays.





Pediatric Academic Societies (PAS)

(top)



MRI evaluates effectiveness of nutrition for preemies' brain growth

By Melissa Rohman May 7, 2018 Health Imaging

Despite extensive nutritional support for preterm infants in the neonatal intensive care unit (NICU), their brain growth lags behind that of full-term newborns, which can pose a risk for neurocognitive impairment.

According to a Children's National Health System press release, researchers set out to find how effective early nutritional support administered in the NICU can be in improving brain volume and white matter development in preterm infants.

Their research was presented at the Pediatric Academic Societies 2018 annual meeting on May 6.

"Few studies have investigated the impact of early macronutrient and caloric intake on microstructural brain development in vulnerable pre-term infants," said lead author Katherine Ottolini, MD, in a prepared statement. "Advanced quantitative MRI techniques may help to fill that data gap in order to better direct targeted interventions to newborns who are most in need."

Ottolini and colleagues enrolled 69 infants born younger than 32 gestational weeks and weighing less than an average of 2.1 pounds. At 40 weeks gestation, the infants underwent brain MRIs.

Researchers then generated parametric maps for fractional anisotropy of the cerebrum and cerebellum to measure brain connectivity and white matter tract integrity, according to the press release. Nutritional data were also tracked specifically for carbohydrates, proteins, lipids and overall caloric intake.

According to senior author Catherine Limperopoulos, PhD, director of Children's Developing Brain Research Laboratory, researchers found a negative association between fractional anisotropy and cumulative macronutrient/caloric intake, which may demonstrate the increased amount of time the premature infants relied on nutritional support in the NICU.





"Curiously, we also find significantly negative association between macronutrient/caloric intake and regional brain volume in the cortical and deep gray matter, cerebellum and brainstem," Limperopoulos said in a prepared statement.

(top)

HEALTHCARE FINANCE

Reduction in federal funding could reduce quality of specialized pediatric care, says upcoming study

By Jeff Lagasse May 7, 2018 Healthcare Finance

Hospitals caring for children with serious, chronic illness are highly dependent on public payers, according to an as-yet published study by the Pediatric Academic Societies.

From research released from the study, the findings show that proposals to dramatically reduce federal expenditures on the Medicaid and Children's Health Insurance Program (CHIP) could destabilize current specialty care referral networks serving all children, including the majority of privately-insured children in need of specialized care.

Although Medicaid and CHIP are directed at providing health services for low-income children, the potential impact of reduced Medicaid and CHIP spending on regionalized systems of hospital care for seriously ill children hasn't been explored in-depth before.

The objectives of the study were to assess the role of Medicaid and CHIP in regional hospitals serving large numbers of seriously ill children; to assess the importance of those regional hospitals to privately-insured, seriously ill children; and to assess the characteristics of the hospitals with the highest patient volume and Medicaid and CHIP dependence.

Researchers conducted a retrospective analysis between the 2012 national Kids' Inpatient Database, or KID, and the 2012 California confidential, unmasked Patient Discharge Database from the Office of Statewide Health Planning and Development. Public payers were defined as Medicaid and CHIP, and major pediatric hospitals as those with more than 500 discharges of children 18 and younger with a serious, chronic illness -- prematurity, congenital heart disease and cancer among them.

Nationally, major pediatric hospitals reported more than half of bed days covered by public payers with the 10 highest-volume hospitals ranging from 36 percent to 100 percent. Similarly in California, 69 percent of bed days were covered by public payers with the six highest-volume hospitals reporting more than 50 percent public payers. One in three privately-insured children were discharged from major hospitals with more than 50 percent public payers.





The characteristics of hospitals in the top quintile of Medicaid bed days had more than 50 percent publicly insured discharges. Of these, 63 percent were urban, most often in the south (36 percent) and least often in the northeast (12 percent), 21 percent were urban teaching hospitals, and 70 percent were children's hospitals.

(top)

THE VANCOUVER SUN

Study of anti-depressants taken by pregnant moms shows benefits to 12-year-old children

By Kevin Griffin
May 7, 2018
The Vancouver Sun
(Ran in both print and online)

Children whose mothers took a class of anti-depressant drugs while they were pregnant scored higher on computerized tests to measure thinking and memory, according to the initial results of a study.

In other words, the anti-depressants taken by pregnant mothers seem to make their 12-year-old children smarter.

"We're very cautious about making any firm conclusions at this point," said Dr. Sarah Hutchison, study leader and senior author.

"These are still preliminary results. We want to be careful about making the message clear to the general public.

"There is evidence both from animal models and human studies that SSRI exposure does potentially change brain development. We don't know what the long-term impact of what will be."

The study abstract was presented at the Pediatric Academic Societies meeting in Toronto on Sunday. Results have yet to be published in a peer-reviewed journal.

The results are part of an ongoing longitudinal study that followed 51 children from 26 weeks of pregnancy to 12 years of age. Investigators looked at mom's mood during and after pregnancy and at children's executive functions (higher-level thinking skills such as planning and problem solving).

The mothers were all taking selective serotonin reuptake inhibitor (SSRI) antidepressants during their pregnancy.





Serotonin is a neurotransmitter that regulates mood and emotion. By making more of the neurotransmitter serotonin available in the brain, SSRIs improve the mood of people suffering from depression.

Hutchison said the higher-level brain functions are measured using standardized computerized tests.

"When we look at the percentage of number correct, the children who had the pre-natal SSRI exposure did significantly better on the task," she said.

Hutchison said it's up to each woman to decide on what form of treatment is best for her.

"We want to make sure that mothers get the treatment that they need," she said. "That's the big take home message."

She said that in some cases "with some women, it is more beneficial" to take SSRIs than to remain "very, very depressed during pregnancy."

The 51 children in the study were followed by Dr. Tim Oberlander and Dr. Adele Diamond, University of B.C. professor.

Oberlander, developmental pediatrician at B.C. Children's Hospital, said that the results parallel what was found among the same cohorts at age six.

"We found that children with pre-natal exposure to anti-depressants had improved or better results," he said by phone. "This is quite surprising."

Oberlander said more research is needed to determine whether improved cognitive skills among children exposed to antidepressants in the womb is associated with risks such as increased anxiety.

"The impact of prenatal antidepressant exposure is not cause and effect," Oberlander said in a news release.

"When it comes to assessing the long-term impact of SSRI exposure before birth, genes and family life play a powerful role in influencing how a child will be affected."

Oberlander said researchers will now study the remaining children in the cohort of 120. They're part of his research program examining the effects of maternal depression on babies and children.

"What are we doing is working to improve optimal outcomes for mothers and for children," he said.





"At the core it is not just about antidepressants. It is about recognizing and managing mental health during pregnancy and childbirth."

(top)

CARLISLE WELLNESS NETWORK

Exposure In Utero to SSRIs May Impact Cognitive Skills 12 years later May 7, 2018
Carlisle Wellness Network

A new study shows that selective serotonin reuptake (SSRI) antidepressant treatment in utero is associated with better performance on a computerized task to measure cognitive skills in 12-year-olds.

For the study, presented during the Pediatric Academic Societies (PAS) 2018 meeting, researchers followed 51 children from 26 weeks of pregnancy to 12 years old.

The researchers assessed mom's mood during and after pregnancy and the child's executive functions (EFs) at 12 years of age. EFs consist of a series of skills that help kids thrive in the classroom and workplace, including flexible, creative problem solving, the ability to focus and pay attention, and self-control, researchers said.

The researchers found that children's performance varied depending on whether they were exposed to SSRIs before birth. Children with SSRI exposure had better EF skills, even when controlling for mother's mood during pregnancy and when the child was 12 years old.

Better EFs were also observed in the same children at 6 years, researchers noted.

At 12 years though, unlike at 6 years, differences in SSRI exposure while in utero and differences in the child's EFs did not vary with measures of the child's mood (anxiety or depression) or verbal ability, researchers add.

"These are important early findings and further research is needed to examine whether 'better' cognitive skills in children with antidepressant exposure reflect a developmental advantage in some ways but also perhaps a risk in other ways, such as perhaps increased anxiety," said senior author Dr. Tim Oberlander, a developmental pediatrician and investigator at BC Children's Hospital and BC Women's Hospital + Health Centre, and a professor in the University of British Columbia Department of Pediatrics.

"Our findings when the children were 3 and 6 years of age indicated increased anxiety, though the absence of this at 12 years might indicate that as EFs improve further, children are able to use them to help calm themselves."





Researchers are continuing to study these outcomes in a larger cohort of 120 children where they will be able to further examine links between EFs, mood and early development.

"The impact of prenatal antidepressant exposure is not a simple cause and effect," says Oberlander. "When it comes to assessing the long-term impact of SSRI exposure before birth, genes and family life play a powerful role in influencing how a child will be affected."

"Depression during pregnancy and beyond is a major public health problem for mothers and their children," he added. "Non-treatment is never an option. It is really important that pregnant women discuss all treatment options with their physicians or midwives."

(top)



Teens, Parents Aren't on Same Page When Talk Turns to Sex

May 6, 2018

HeathDay

Picked up by multiple outlets, including <u>U.S. News & World Report</u>, <u>Health.com</u>, <u>Philly.com</u>

SUNDAY, May 6, 2018 (HealthDay News) -- When it comes to having "the talk," many teens admit they're not communicating with their parents or their doctors about sex, new research reveals.

"Teens and young adults account for more STIs [sexually transmitted infections] than all other ages combined," said study co-author Dr. Kari Schneider, an assistant professor in the department of pediatrics at the University of Minnesota.

"Pediatricians and parents play a vital role in discussing STIs and safer sex practices with adolescents," she added in a news release from the Pediatric Academic Societies.

For the new study, researchers asked close to 600 teens, aged 13 to 17, how often they talked to their parents about sex.

The teens were also asked if they'd seen a doctor in the past year, if they had talked to a doctor about sex, and if they had been screened for a sexually transmitted disease.

In addition, the researchers polled 516 parents of teens, asking them how often they talked about sex with their children and if they were aware of discussions their child had with a doctor about sex.

The poll showed that 45 percent of the teens were not routinely asked about sex by their doctor. And sexually transmitted disease screening was offered to only 13 percent of them.





Interestingly, just 39 percent of the teens said they talked to their parents about sex, while 90 percent of the parents reported having such a discussion with their teens.

The researchers noted that teen girls were asked about sex more often than boys. And mothers were more likely to talk about sex with their children.

Race also played a role. White parents were more likely to discuss sex with their teenage children, but white teens were less likely to be offered screening for sexually transmitted diseases, the poll found.

According to the report, older teens were more likely to have discussions about sex and be offered screening.

The researchers pointed out that nearly half of the parents polled were aware of discussions about sex between their teen and a doctor, but 25 percent of the parents in the study didn't think these conversations should take place.

These findings were to be presented on Sunday at the annual meeting of the Pediatric Academic Societies, in Toronto. Research presented at meetings should be considered preliminary because it hasn't been published in a peer-reviewed journal.

(top)

ROMPER

Your Maternity Leave Can Affect How You Breastfeed, According To This New Study

By Karen Fratti May 6, 2018 Romper Picked up by <u>Lady Click</u>

There are so many benefits to paid parental leave, especially for new moms. Just this week, a new study found that the length of a woman's maternity leave can even affect how she breastfeeds. There have been previous studies on the health impacts of maternity leave, but this one in particular examined women in the military and their infants.

Back in 2014, active duty women were only allowed six weeks of maternity leave and in 2016 it was extended to 12. The study, which was presented at the Pediatric Academic Societies (PAS) 2018 Meeting, found that women started breastfeeding at the same time, despite their maternity leave. But those who were allowed 12 weeks ended up breastfeeding for longer and reported better experiences overall, which is really useful data when it comes to crafting parental leave policies.





According to the Centers for Disease Control and Prevention, breastfeeding has health benefits for both the baby and the mother. In infants, exclusive breastfeeding has been linked to a reduced risk of allergies, diabetes, and obesity, among other things. For moms, breastfeeding can also reduce the risk of chronic health conditions. The American Academy of Pediatrics (AAP) recommends that a mom exclusively breastfeeds for the first six months of a baby's life, and then introduce "complementary foods" along with breastfeeding for as long as she and her newborn want.

Basically, if a woman can and wants to breastfeed, there are a ton of great reasons to do it. But it's not easy, which is why women who struggle with breastfeeding end up quitting when they don't have enough support, the CDC reported. But having paid time off from work can change that.

This is not entirely new information to medical experts. Andrew Delle Donne, one of the authors of the study, said in a Eureka Alert statement:

This study was conducted to evaluate and validate existing knowledge about breastfeeding success in a military population. Similar to civilian studies, we found that longer duration of maternity leave increases breastfeeding success throughout the first year of life in a military population. The conclusions are important to justify increased maternity leave in the military population and provide additional support to conclusions made in civilian studies. The study found that there was a large increase of breastfeeding at the two-month mark, which is also when many women report giving it up entirely. That makes sense if you think about it — having to return to work, pump, and keep a feeding schedule is not easy. In fact, the AAP found in another study of civilian moms in California that paid parental leave especially helps women who hold non-managerial positions, "lack job flexibility," or have high levels of stress. It concluded:

Pediatricians should encourage patients to take maternity leave and advocate for extending paid postpartum leave and flexibility in working conditions for breastfeeding women. Although the Family and Medical Leave Act ensures that some workers get twelve weeks of paid leave from their job and benefits, not everyone has that luxury, whether it's because they haven't worked at a place long enough or work at a small company that isn't legally required to offer it. Even women who do have jobs that allow for parental leave tend to return to work as soon as they can, usually because they're stressed about money or their job security, according to Breastmilk Counts.

New moms are placed in a tricky position by our society. Everyone around them, from their primary care doctor to next door neighbor, encourages breastfeeding for as long as possible and even shames them in some cases when they give it all up and switch to a bottle. But no one exactly makes breastfeeding simple, whether it's making public breastfeeding difficult, forcing a woman to pump in some closet in the office, or not providing support from the start.

This study, along with others, suggests that giving new moms some financial security and freedom from some arbitrary time constraints at work can help them do what most medical





experts suggest is best for both babies and moms. Hopefully legislators and employers get the message.

(top)



Presented by Current Psychiatry® and Clinical Psychiatry News®

Safety and support experiences of transgender and gender nonconforming youth explored

By Doug Brunk May 5, 2018 MD Edge Psychiatry

Youth with nonbinary identities – those that are beyond or outside of the categories of male/man and female/woman – feel significantly safer and more supported at school, compared with their transgender and gender nonconforming peers with binary identities, results from a survey of more than 300 youth showed.

"There has been little research specifically about the experiences of transgender and gender nonconforming youth that have nonbinary identities," lead study author Brittany Allen, MD, said in an interview in advance of the Pediatric Academic Societies meeting.

Dr. Brittany Allen

"Some research has shown that youth with nonbinary identities have increased risk for mental health concerns, including self-harm, and increased mental health risk, which have correlated with negative school experiences in other studies of LGBTQ+ youth. In this study, we compared experiences of transgender and gender nonconforming youth with nonbinary identities with those with binary identities to assess risk and support in school settings."

Dr. Allen, a pediatrician at the University of Wisconsin–Madison, and her associates conducted an online survey of 311 transgender, nonbinary, and gender nonconforming youth in the state who ranged aged 12-22 years. Study participants were asked about their school safety and support experiences, and the researchers used Wilcoxon rank-sum tests to compare Likert scale responses among youth who reported nonbinary identities with those who reported binary identities. On the 1-5 scale, 1 meant "strongly agree" while 5 meant "strongly disagree."

Dr. Allen, who is also comedical director of the Pediatric and Adolescent Transgender Health Clinic at American Family Children's Hospital, Madison, reported that 311 young people completed more than 70% of the survey. Of those, 287 identified as having either binary (164; 57%) or nonbinary (123; 43%) gender identities. That percentage of those reporting nonbinary identities "is striking," she said, and is "a much higher percentage than seen in adult studies of transgender and gender nonconforming people."





Compared with respondents with binary identities, those with nonbinary identities were more often Caucasian/White (81% vs. 65% for those with binary identities; P = .003) and less likely to qualify for free lunch (28% vs. 55%; P = .001). Both binary and nonbinary groups reported similar school attendance and belonging. However, compared with the binary group, the nonbinary group reported significantly higher ratings of school safety (Likert score of 2.62 vs. 2.96, respectively; P = .0078) and peer support (Likert score of 2.54 vs. 2.87; P = .0139) and also were more likely to report being able to access adult support at school if needed (Likert score of 2.31 vs. 2.66; P = .0085).

(top)



Age, education of new parents can intensify depression risk, claims study

May 6, 2018 The Health Site

Less educated young parents are more prone to newborn baby blues, according to a study.

"Using a validated screening tool, we found that 40 percent of parents in our analyses were positive for depression at the time their newborn was discharged from the neonatal intensive care unit (NICU)," said Karen Fratantoni, lead study author.

"It's reassuring that, for many parents, these depressive symptoms ease over time. However, for a select group of parents, depression symptoms persisted six months after discharge. Our findings help to ensure that we target mental health screening and services to these more vulnerable parents," Dr. Fratantoni added.

The study is an offshoot from "Giving Parents Support (GPS) after NICU discharge," a large, randomized clinical trial exploring whether providing peer-to-peer parental support after NICU discharge improves babies' overall health as well as their parents' mental health. Here's all that you should do to put your baby to sleep, safely!

Mothers of preterm and full-term infants who are hospitalized in NICUs are at risk for peripartum mood disorders, including postpartum depression. The Children's research team sought to determine how many parents of NICU graduates experience depression and which characteristics are shared by parents with elevated depression scores.

They included 125 parents who had enrolled in the GPS clinical trial in their exploratory analyses and assessed depressive symptoms using a 10-item, validated screening tool, the Center for Epidemiological Studies Depression Scale (CES-D).





"Parents of NICU graduates who are young, have less education and are caring for other children are at higher risk for persistent symptoms of depression," said Dr. Fratantoni. Read: Are you a depressed parent?

"We know that peripartum mood disorders can persist for one year or more after childbirth so these findings will help us to better match mental health care services to parents who are most in need."

The study was presented at the Pediatric Academic Societies 2018 annual meeting.

(top)

Chronicle

Age, education of new parents can intensify depression risk

May 6, 2018
Deccan Chronicle
Picked up by GDOnline

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Influenza Vaccine Delays A Problem For Pediatricians

May 6, 2018 Eurasia Review

Pediatricians report influenza vaccine delivery delays as a significant problem, particularly for the Vaccines For Children (VFC) program vaccines, leading to many missed opportunities for vaccination, according to a new survey being presented at the Pediatric Academic Societies (PAS) 2018 Meeting.

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Uptake of influenza vaccine among children is low compared to other childhood vaccines, and missed opportunities for vaccination play an important role in this low uptake. Problems with receiving influenza vaccine in a timely manner within pediatric practices are an important cause of missed opportunities, but little is known about pediatricians' experiences and practices related to influenza vaccine delivery delays. Providers use a variety of strategies for addressing these delays, but in most cases, children either must go elsewhere or return to the clinic to receive influenza vaccine. To increase uptake of influenza vaccine among children, systematic changes are needed to address these delays.

(top)



Scientists Proper Diet Will Accelerate The Brain Development Of A Premature Baby

By Jan Hartman May 6, 2018 The Silver Telegram

Studies show that children born prematurely need to develop a separate power supply. The correct proportion of proteins, fats and carbohydrates will accelerate the development and growth of the brain. They talked about it at the annual meeting of the pediatric academic societies.

Experts note that the greatest development of the brain is associated with the last weeks of pregnancy. Shortly before the birth he receives a large amount of power is complicated in structure and increased in volume. However, for children born prematurely, it may be a problem.

Experts have told that on average every tenth child is born during 37 weeks of pregnancy. They examined the brains of these children using magnetic resonance imaging to measure white matter integrity and structure. Subsequently, they were tested as the effect on children of food, noting the proportion between proteins, fats and carbohydrates, and total calories.

Member of the group of researchers Katherine Limperopoulos told that some previously considered correct, methods have a negative impact on brain development. Now they can not with accuracy to say what kind of nutrition is necessary for maximum development, but plan to explore in the future.

(top)

Business Standard

Do at-risk adolescents show depressive symptoms on social media?





May 6, 2018 Business Standard Picked up by <u>The Siasat Daily</u>, <u>The Health Site</u>

At-risk adolescents are less likely to exhibit depressive symptoms on social media as they age, finds a study.

The research suggests that adolescents with a diagnosis of depression may feel less stigmatized describing depressed mood on social media than previously hypothesized.

Social media use can provide important information on the mental health of adolescents, including their own descriptions of their experiences. The purpose of this study was to analyze the patterns of social media posting describing depressive symptoms among an at-risk cohort of adolescents at two time points.

The study measured Facebook posts by participants at two time periods, labeled Time 1 as adolescents and Time 2 as young adults. Content analysis applied the Diagnoses and Statistical Manual (DSM) criteria for depression to identify displayed depression symptoms on Facebook.

The study found that the average number of references to depression among displayers was 9.30 at Time 1 and 4.94 at Time 2, showing a dramatic decrease in posts between adolescents and young adults.

"Considering differences between posts in Time 1 and Time 2, it is suggested that as teens develop, the likelihood to express depressive symptoms is lowered," said Dr. Kathleen Miller, one of the authors of the study.

"This may be related to the development of the prefrontal cortex which plays a role in inhibiting impulsive decisions."

Examples of posts referencing depression included "Basically at the point of giving up" and "Feeling the worst right now, just wanting to cry." The average number of references to suicide or self-harm was .34 at Time 1 and .08 at Time 2.

The research was presented during the Pediatric Academic Societies (PAS) 2018 Meeting in Toronto.

(top)



Adolescents still shy away from seeking sex-related guidance

May 6, 2018





Live India

A staggering number of adolescents are still not talking to their doctors and parents about sex, a research has claimed.

According to the study conducted by the Pediatric Academic Societies, nearly half of adolescents (45 percent) reported that they were not routinely asked about sex by their primary care providers (PCPs) and only 13 percent were offered sexually transmitted infection (STI) screening

The survey also found that 90 percent of parents reported that they talk to their adolescents about sex but only 39 percent of adolescents reported the same.

The objective of the survey was to assess the rate at which adolescents discuss sex with their parents and PCPs and the frequency at which they receive screening for STIs.

In this study, 582 adolescents, aged 13-17, and 516 parents of adolescents attending the 2017 Minnesota State Fair were surveyed.

Adolescents were asked whether they had seen a PCP in the past year if they were asked about sexual activity and/or offered STI screening and whether they discuss sex with parents.

Parents were queried about their knowledge of discussions had by their child's PCP as well as discussions they personally have had with their adolescent about sex. Frequencies, Chi-square analyses, and logistic regression were used to evaluate the variables.

"Teens and young adults account for more STIs than all other ages combined," said Kari Schneider, one of the authors of the study. "Pediatricians and parents play a vital role in discussing STIs and safer sex practices with adolescents."

Additional findings include:

- Increased age was associated with greater likelihood of being asked about sex or offered STI testing.
- Females were more likely to be asked about sex.
- White adolescents were less likely than other ethnicities to be offered the testing.
- Regarding PCP/adolescent discussion of sexual activity, 49 percent of parents indicated awareness that such discussions occurred while 24 percent did not know.
- Twenty-five percent of parents felt that PCPs should not discuss sex.
- A female parent was more likely to discuss sex.





- Parents were less likely to report discussing sex if the teen was younger or if the parent's ethnicity was anything other than white.

The study is going to be presented at the Pediatric Academic Societies 2018 Meeting in Toronto.

(top)



Influenza vaccine delivery delays a significant problem, say pediatricians

May 6, 2018 The Siasat Daily Picked up by <u>Outlook India</u>

Washington: Influenza vaccine delivery delays are a problem for pediatricians, finds a study. A nationally representative survey among pediatricians was conducted from June 2017 through September 2017 to assess the extent to which delays in receipt of influenza vaccine from private and Vaccines For Children (VFC) program stocks pose problems and provider contingency plans in the event of influenza vaccine delays.

For private stock influenza vaccine, considering the last three influenza vaccination seasons, three percent reported delays in receipt of influenza vaccine as a major problem, 18 percent a moderate problem, 32 percent a minor problem, and 48 percent as not a problem. In contrast, for VFC influenza vaccine, 15 percent reported delays as a major problem, 32 percent a moderate problem, 33 percent a minor problem, and 20 percent as not a problem.

When either VFC or private influenza vaccine is out of stock, 56 percent reported delaying vaccination for patients whose vaccine is out of stock, 19 percent referred these patients elsewhere, seven percent postponed vaccination for all patients, and 18 percent borrowed vaccine between stocks. Among the 50 respondents who reported borrowing between stocks, almost all (98 percent) borrowed for individual patient visits while only 30 percent borrowed for influenza vaccination clinics.

Uptake of influenza vaccine among children is low compared to other childhood vaccines, and missed opportunities for vaccination play an important role in this low uptake.

Problems with receiving influenza vaccine in a timely manner within pediatric practices are an important cause of missed opportunities, but little is known about pediatricians' experiences and practices related to influenza vaccine delivery delays. Providers use a variety of strategies for addressing these delays, but in most cases, children either must go elsewhere or return to the clinic to receive influenza vaccine. To increase uptake of influenza vaccine among children, systematic changes are needed to address these delays.





(top)



Strict Gun Laws Spare Young Lives: Study

May 5, 2018 Healthday

Picked up by multiple outlets, including U.S. News & World Report, Health.com

Fewer young Americans are killed by guns in states with stricter gun laws, a new study finds.

"Injuries due to firearms are the nation's third-leading cause of pediatric death," said study author Dr. Monika Goyal. She is director of research in the division of emergency medicine and trauma services at Children's National Health System in Washington, D.C.

"Firearm legislation at the state level varies significantly," Goyal said in a health system news release. "Our findings underscore the need for further investigation of which types of state-level firearm legislation are most strongly correlated with reducing pediatric injuries and deaths."

In the study, more than 4,500 people aged 21 and younger died from firearm-related injuries in 2015. Eighty-seven percent were male, 44 percent were black and their mean age was 18.

State rates of gun-related deaths among young people ranged from as low as zero per 100,000 youths to as high as 18 per 100,000 youths. Median rates were lower among the 12 states that require universal background checks for gun purchases (3.8 per 100,000) than in states that did not require background checks (5.7 per 100,000), the researchers said.

The five states that require background checks before buying ammunition also had a lower median rate (2.3 per 100,000 youths) than states that did not require such background checks (5.6 per 100,000), according to the study.

The study was scheduled for presentation Saturday at the annual meeting of the Pediatric Academic Societies, in Toronto. Research presented at meetings should be considered preliminary until published in a peer-reviewed journal.

"Newtown. Orlando. Las Vegas. Parkland. Those are among the mass shootings that have occurred across the nation in recent years," Goyal said.

"While these tragedies often are covered heavily by the news media, they represent a subset of overall pediatric injuries and deaths due to firearms," she added. "Pediatric firearm-related injuries are a critical public health issue across the U.S."





More information

The Brady Center to Prevent Gun Violence has more on children and gun violence.

SOURCE: Children's National Health System, news release, May 5, 2018

(top)

Pediatric News

ED visits higher among pediatric asthma patients with comorbid depression, anxiety

By Doug Brunk
May 5, 2018
Pediatric News
Picked up by Internal Medicine News, MDEdge

AT PAS 2018

TORONTO – Children with asthma who have a comorbid diagnosis of anxiety or depression are significantly more likely to make asthma-related visits to the emergency department, compared with their peers who do not have a mental health condition, results from a large administrative data analysis showed.

"There has been a fair bit of research on how comorbid mental health conditions can affect health care utilization for asthma in adults, but few studies have examined how comorbid mental health conditions like anxiety or depression can affect children with asthma," one of the study authors, Caroline Neel, said in an interview in advance of the Pediatric Academic Societies meeting.

In an effort to assess whether anxiety or depression is associated with asthma-related ED usage in pediatric patients, Ms. Neel, a clinical research coordinator in the department of pediatrics at the University of California, San Francisco, and her associates evaluated data from the Massachusetts All Payer Claims Database for 2014-2015. They used the technical specifications from the Pediatric Quality Measures Program to measure the rate of asthma-related ED visits. This measure identifies patients aged 2-21 years with asthma using ICD 9 and 10 codes and tracks ED utilization over the measurement year. Next, the researchers conducted univariate and multivariate analyses to assess the relationship between ED visit rate and an established diagnosis of comorbid anxiety or depression.

In all, the researchers identified 71,326 patients with asthma, with an overall rate of 16.3 ED visits per 100 child-years. Among these, children with a diagnosis of depression had significantly higher rates of ED visits (21.5 visits per 100 child-years; P less than .01), as did those with a diagnosis of anxiety (19.5 ED visits per 100 child-years; P less than .01). Being enrolled in a Medicaid managed care plan or Medicaid fee-for-service plan also increased the rates of asthma-





related ED visits (20.3 and 21.5 ED visits per 100 child-years, respectively; P less than .01 for both associations.)

"We were surprised to see that anxiety and depression seemed to increase asthma emergency department visits as much as other medical chronic illnesses like cystic fibrosis or sickle cell disease, and that kids on Medicaid, who tend to be our poorer kids, also had an independent risk of going to the emergency department," Ms. Neel said. "Having Medicaid as well as anxiety or depression were independently related to going to the emergency room for asthma, so the study suggests that some of our highest-risk kids for asthma have multiple different contributors to getting sick and needing to go to the emergency room for an asthma attack."

She acknowledged certain limitations of the analysis, including its reliance on administrative claims data to identify whether or not children had a diagnosis of anxiety or depression. "This doesn't necessarily identify all the kids who may have these mental health conditions, since sometimes providers are less likely to document a diagnosis of a mental health conditions for children," she said. "However, we still saw a significant association between a comorbid mental health condition and emergency department use for asthma, despite the potential that mental health conditions may have been under reported."

The study's senior author was Naomi Bardach, MD. The researchers reported having no financial disclosures.

(top)

Pediatric News.

Poor parent-infant relationship may affect a child's motor skill development

By Doug Brunk May 5, 2018 Pediatric News

AT PAS 2018

In what is believed to be a landmark finding, researchers have shown than modifiable risk factors, such as parent-infant relationships, may play a role in preventing children from developing high motor problems during early life.

"Our findings suggest that early health and clinical problems, such as neonatal complications and abnormal neonatal neurological status, are useful indicators to help identify children at risk of poor motor development," lead study author Nicole Baumann said in an interview in advance of the Pediatric Academic Societies meeting. "Additionally, as a possible implication, children may benefit in motor development from early interventions that incorporate and focus on improving parent-infant relationships."





Nicole Baumann

According to Ms. Baumann, a PhD candidate in the department of psychology at the University of Warwick in Coventry, England, previous research has established perinatal risk factors, such as low birth weight, prematurity, and smallness for gestational age, as prominent predictors of poor motor development (Clin Orthop Relat Res. 2005 May;[434]:33-9). However, aspects of children's early social environment, such as family adversity or parent-child relationships, have seldom been considered. "Most cross-sectional studies have focused on testing differences between groups, often defined by child age or degree of prematurity," she said. "In contrast, longitudinal studies, with the advancement of being able to measure change of motor functioning, often test whether normative motor milestones have been reached or use group means. As far as we are aware, only two recent longitudinal studies have used a person-centred statistical approach (i.e., Latent Class Growth Analysis, LCGA) to measure motor functioning over time (Front Psychol. 2018 Jan 09. doi: 10.3389/fpsyg.2017.02314 and Phys Ther. 2017;97[3]:365-73). In contrast to other statistical techniques, LCGA is able to identify groups of children who 'grow' similarly or show similar patterns of change."

For the current study, she and her associates investigated motor development using data from two different cohorts: the Bavarian Longitudinal Study in Germany (BLS) and the Arvo Ylppö Longitudinal Study in Finland (AYLS). A total of 4,741 and 1,423 children, respectively, underwent assessment from birth to age 56 months. Motor functioning was evaluated via standard physical and neurological assessments at birth and at 5, 20, and 56 months. Perinatal, neonatal, and early environmental information was collected at birth and at 5 months via medical records and reports from parents and research nurses.

The researchers identified two distinct trajectories of motor development problems from birth to 56 months: low (94.3% of BLS and 97.3% of AYLS) and high (5.7% of BLS and 2.7% of AYLS) motor problems.

In the BLS cohort, high motor problem trajectory was predicted by poor parent-infant relationship, such as the mother feeling insecure when taking care of the infant at home (OR 1.52); abnormal neonatal neurological status (odds ratio, 1.16); neonatal complications (OR, 1.12); and duration of initial hospitalization (OR, 1.02).

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Health

Biological fertility: This could be why some transgender teens delay hormone therapy

May 5, 2018

The Health Site





According to a study conducted by Pediatric Academic Societies, fertility preservation is a major factor for only a minority of transgender teens and their parents in deciding to delay hormone therapy.

Fertility preservation is an important issue to address with transgender and gender non-conforming youth and their families, prior to undergoing hormone therapy. However, little is known about transgender teens' and their parents' attitudes on fertility preservation.

The authors surveyed 66 youth and 52 parents of youth receiving gender-affirming medical care at Children's Hospital of Philadelphia's Gender and Sexuality Development Clinic. The average age of youth participating in the study was 16 and the majority (63 percent) was assigned female sex at birth. Read: Here's all that you should know about conceiving.

Surveys were administered electronically and contained 36 items about knowledge of fertility preservation, desire to have biologic children and other factors that may influence the decision to pursue fertility preservation.

"While hormone therapy has drastically improved the lives of countless transgender and gender non-conforming youth, its impact on fertility can unfairly force individuals to decide at a very early age whether or not they should preserve the ability to be a biological parent one day," said Rebecca Persky, lead author on the study.

"These are difficult conversations for physicians to have with youth and families, and we hope our findings on how adolescents and parents approach these decisions will ultimately help providers counsel patients on hormone therapy with their fertility desires in mind", continued Persky.

While the majority of youth and parents were not willing to delay therapy to preserve biologic fertility, parents were significantly more likely to be willing to delay treatment and cited wanting more information as a major factor.

The study will be presented at the Pediatric Academic Societies 2018 Meeting.

Source: ANI

Image Source: Shutterstock

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AAP News

PAS 2018: Studies analyze children's use of screen-based media May 5, 2018 By Melissa Jenco

AAP News





Illustrated stories may provide optimal brain stimulation compared to audio and animated stories, according to new research being presented during the Pediatric Academic Societies meeting in Toronto.

The Academy recommends limits on screen-based media, so researchers set out to determine if a child's brain engages differently with audio, illustrated or animated stories.

They presented 27 children three different five-minute stories by the same author in different formats. Using functional magnetic resonance imaging, they looked at areas of the brain activated during each.

Results showed audio may require more cognitive strain, and animation may inhibit the imagination. Illustration seemed to provide a balance, encouraging imagination and reflection, according to the abstract "Goldilocks Effect? Illustrated Story Format Seems 'Just Right' and Animation 'Too Hot' for Integration of Functional Brain Networks in Preschool-Age Children."

The results "underscore the appeal of illustrated books at this age, raise important questions about the influence of media on early brain development, and provide novel context for AAP reading and screen time recommendations," study author John S. Hutton, M.D., M.S., said in a news release.

Dr. Hutton also will present findings of a pilot test of ScreenQ, a new tool to help pediatricians measure screen-based media use in children. The results are detailed in the abstract "Assessment of Screen-Based Media Use in Children: Development and Psychometric Refinement of the ScreenO."

"In a single generation, the explosion of screen-based media has transformed the experience of childhood, from TV and videos, to an unlimited range of content available at any time via portable devices that can be challenging to monitor," Dr. Hutton said in a news release. "The emergence of these technologies has far outpaced our ability to quantify its effects on child development, human relationships, learning and health, fueling controversies among parents, educators and clinical providers."

Researchers tested ScreenQ on 27 children with a median age of just under 5 years. The tool assesses when and how much screens are used, content (e.g., educational vs. violent) and whether children view media with an adult.

They determined that a 10-item version of the tool proved to be "an efficient, valid means to assess screen-based media use in children in the context of AAP guidelines and cognitive-behavioral risks, warranting further development."

For additional AAP News coverage of PAS, visit http://www.aappublications.org/collection/pasmeeting-updates.

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AAP News

PAS 2018: Studies find increasing gender dysphoria, need for provider training

May 5, 2018 By Melissa Jenco AAP News

More youths are seeking medical care for gender dysphoria (GD), but many health care providers say they need more training in caring for them, according to two new studies being presented at the Pediatric Academic Societies meeting in Toronto.

Researchers performed a retrospective analysis of medical administrative claims from 18.4 million youths ages 5-21 related to GD. They found the number of children and adolescents with such a claim increased from 113 to 464 between 2010-'14. During that period, total claims rose from 576 to 3,495.

Claims were lowest in the East and West South Central regions of the U.S., according to the abstract "Trends in Prevalence of Medical Claims Related to Gender Dysphoria Among Children and Adolescents in the US from 2010 to 2014."

"Our study revealed significant increases in the prevalence of insurance claims among children and adolescents related to GD across the U.S.," lead author Nadia Dowshen, M.D., M.S.H.P., said in a news release. "More studies like ours are needed to describe health care utilization by transgender youth and to inform the development of policies to ensure that providers are adequately trained and equipped with the resources they need to meet these youths' physical and mental health needs."

In another study, several of the same researchers found providers may not be prepared to care for these youths.

The team conducted a cross-sectional survey of pediatric primary care providers in 2017, asking about their knowledge and comfort in working with transgender patients. About 54% of the 161 respondents were not aware of professional guidelines on puberty blocking medications, according to the abstract "Pediatric Primary Care Provider Knowledge, Attitudes, and Skills in Caring for Transgender Youth."

Roughly 68% of providers with experience caring for lesbian, gay, bisexual or transgender youths said they knew where to refer patients compared to 23% of those with no experience. About 86% said they need more training.

"Pediatricians may be the first or only contact for many transgender youth in the health care system, and therefore it is essential that pediatric providers be knowledgeable and comfortable in caring for this population of youth with unique health care needs," lead author Siobhan





Gruschow, M.P.H., M.Ed., said in a news release. "The results of our research show that we critically need educational interventions to prepare pediatricians in supporting transgender youths' health, well-being and early development."

For additional AAP News coverage of PAS, visit http://www.aappublications.org/collection/pasmeeting-updates.

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AAP News

PAS 2018: Mothers of infants with NAS report higher postpartum depression, anxiety

By Melissa Jenco May 5, 2018 AAP News

Mothers of infants with neonatal abstinence syndrome (NAS) are more likely to have postpartum mental health issues than other mothers, according to a new study.

Researchers studied 338 mothers and their mental health issues in the 12 months after delivery. They will present their abstract "Mental Health Outcomes of Mothers with Infants Diagnosed with Neonatal Abstinence Syndrome" on Monday during the Pediatric Academic Societies meeting in Toronto.

The team used data from the Truven MarketScan Commercial Claims and Encounters database for 2005-'13 to match mothers of newborns with NAS to a control based on the mother's age, baby's gestational age, stay in the neonatal intensive care unit (NICU) and maternal mental health in the nine months before delivery.

Among mothers of an infant with NAS,

33% had major depression (compared to 11% of controls); 27% had anxiety (compared to 1% of controls); 9% had an adjustment reaction (compared to 4% of controls); and 7% had postpartum depression (compared to none of controls).

"In the presence of the ongoing opioid epidemic across North America and beyond, evaluation of the far-reaching consequences of this crisis is crucial," lead author Tammy Corr, D.O., FAAP, said in a news release. "For new mothers affected by substance use disorders, careful, repeated mental health screenings over the course of the first year of her baby's life may be beneficial to both the mother and her infant."

Authors called for programs to support these mothers as they may have difficulty coping with their child's health issues. About 73% of the infants with NAS spent time in the NICU.





For additional AAP News coverage of PAS, visit http://www.aappublications.org/collection/pasmeeting-updates.

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Young parents who have less education and care for more than one child are more likely to have persistent symptoms of depression.

According to a new study conducted by the Children's National Health System, young parents who have less education and care for more than one child are more likely to have persistent symptoms of depression that linger six months after their newborn is discharged from the neonatal intensive care unit (NICU).

"Using a validated screening tool, we found that 40 percent of parents in our analyses were positive for depression at the time their newborn was discharged from the NICU," said Karen Fratantoni, the lead study author.

"It's reassuring that, for many parents, these depressive symptoms ease over time. However, for a select group of parents, depression symptoms persisted six months after discharge. Our findings help to ensure that we target mental health screening and services to these more vulnerable parents", Fratantoni added

The study is a large, randomised clinical trial exploring whether providing peer-to-peer parental support after NICU discharge improves babies' overall health as well as their parents' mental health.

Mothers of preterm and full-term infants who are hospitalised in NICUs are at risk for peripartum mood disorders, including postpartum depression.

The research team sought to determine how many parents of NICU graduates experience depression and which characteristics are shared by parents with elevated depression scores.

They included 125 parents who had enrolled in the GPS clinical trial in their exploratory analyses and assessed depressive symptoms.





Eighty-four percent of the parents were women. Nearly 61 percent of their infants were male and were born at a median gestational age of 37.7 weeks and mean birth weight of 2,565 grams. The median length of time these newborns remained in the NICU was 18 days.

When the newborns were discharged, 50 parents (40 percent) had elevated CES-D scores. By six months after discharge, that number dropped to 17 parents (14 percent). Their mean age ranged from 26.5 to 30.6 years old.

"Parents of NICU graduates who are young, have less education and are caring for other children are at higher risk for persistent symptoms of depression," said Fratantoni.

"We know that peripartum mood disorders can persist for one year or more after childbirth so these findings will help us to better match mental health care services to parents who are most in need."

An American College of Obstetricians and Gynecologists' committee opinion called for all women to have contact with a maternal care provider within the first three weeks postpartum and to undergo a comprehensive postpartum visit no later than 12 weeks after birth that includes screening for postpartum depression and anxiety using a validated instrument.

The findings will be presented at the Pediatric Academic Societies 2018 annual meeting.

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Stanford Cuts to Medicaid hurt all kids, rich and poor By Beth Duff-Brown May 4, 2018 Stanford/Freeman Spogli Institute

Cuts to Medicaid hurt all children — rich and poor. Because hospitals that deal with serious childhood injuries and illnesses depend on the public funding as much as those poor families who get medical care under the government insurance program.

That's the message that Stanford Health Policy's Lisa Chamberlain, Olga Saynina and Paul Wise and will be presenting at the Pediatric Academic Societies meeting in Toronto later this week. The PAS conference is the leading event for academic pediatrics and child health research. Chamberlain and Wise are Stanford Medicine pediatricians and Saynina is a data research analyst with Stanford Health Policy.

New research by the Stanford team shows that proposals to dramatically reduce federal expenditures on Medicaid and CHIP — the Children's Health Insurance Program — could destabilize current specialty care referral networks for all children. This includes a large subset of privately-insured children in greatest need of high quality, specialized pediatric care.





"Most people think of Medicaid as a safety-net program, and to a certain extent it is," said Wise, a core faculty member at SHP and the Center on Democracy, Development, and the Rule of Law, as well as a senior fellow at the Freeman Spogli Institute for International Health.

"But it has become so important to child-health systems that rich kids — kids with good commercial insurance — are heavily dependent on specialized care if they really get sick, on facilities that are heavily dependent on Medicaid," he said.

Nearly one out of every five children live below the poverty line, according to the U.S. Census Bureau, yet few children need extensive health care. But of those who do, about 44 percent rely on Medicaid or other public insurance programs, regardless of their family's income.

"Caring for seriously ill children requires a wide range of services and specialists, from pediatric surgeons to speech therapists to hospital teachers who make sure kids don't fall behind," Chamberlain told SHP for this story last year. "In pediatrics, we work as a team — and cutting Medicaid will reduce our ability to do that."

The Stanford group analyzed two large datasets: the 2012 national Kids' Inpatient Databaseand the 2012 California Patient Discharge Database. They found that hospitals caring for children with serious, chronic illnesses — such as congenital heart disease, cancer and severe asthma — are highly dependent on public payers such as Medicaid.

Nationally, major pediatric hospitals reported 55 percent of bed-days were covered by public payers, with the 10-highest volume hospitals ranging from 36 to 100 percent. Overall, in California for all hospitals, 30 percent of net revenue is derived from Medicaid and for children's hospitals, Medicaid provides 56 percent of net revenue.

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THE BALTIMORE SUN

Child's behavior may be result of trauma, not ADHD

By Damion J. Cooper May 3, 2018 The Baltimore Sun

After a stressed-out mother called me several times recently to help deal with her 11-year-old son, who had been diagnosed with attention deficit hyperactivity disorder (ADHD) and accused of acting out at school, I set up a wrestling-as-therapy session.

In mentoring school-age boys, it helps to channel emotion and let it dissipate so clear thinking can take over. This particular 20-minute session at the Baltimore Police Academy seemed like forever. This boy had a lot of pent up rage, and as I pinned him down during our session, it broke





my heart to see him hold back tears and refuse with every twitching muscle to allow himself to be vulnerable.

And yet, I whispered in his ear that it was OK to feel. I refused to let him go.

Advocates aim to save Baltimore children from impact of violence As founder of Project Pneuma — where we teach young men the art of forgiveness, self-control and discipline — I see what our kids are going through on daily basis. What's being diagnosed as an attention deficit disorder is very likely to be a symptom of trauma, especially in the homes and communities of black children.

Black children nationwide are experiencing emotionally painful or distressing encounters that have lasting mental and physical effects. To name a few: socioeconomic hardship, divorce, family drug use, family mental illness, neighborhood violence, incarceration of a parent or guardian, death of parent or guardian, domestic violence, racial or ethnic discrimination. These are all conditions black youths are subjected to at an early age and can help explain why medication doesn't always alleviate attention deficit symptoms.

In Baltimore, young children have spoken of seeing people they loved being shot and killed. They may not know whether they would have a bed to sleep in or dinner that night, or they might be the only person in the household who gets up in the morning because everyone else is addicted to drugs.

Bridging the Divide: The struggle to move past segregated schools Racial discrimination, too, increases a child's likelihood of suffering anxiety and depression, which in turn makes them four times more likely to be diagnosed with ADHD, according to research from Dr. Ashaunta Anderson at the University of California, Riverside, School of Medicine. In presenting her findings last year at Pediatric Academic Societies meeting, Dr. Anderson suggested children affected by discrimination be given "developmentally appropriate coping strategies and systems of care."

With the right support, we can address trauma and help children recover.

When the session at the academy ended and all the other boys wolfed down their snacks and left to go home, the 11-year-old was still "hulking out." He wouldn't even calm down for his mother and eventually stormed out. I later saw him standing outside the door. I walked out, looked him in his face and told him I, along with all the other men in our program, loved him and wanted the best for him. We wouldn't say a word about his behavior. I asked him if he believed me, and he said, "Yes."

Mental health summit aims to help young black men, boys cope with trauma

So, I asked him again what was wrong. He proceeded to tell me he was afraid we were going to leave him like his father and stepfather. Then he told me some stuff no child should ever see or endure at the hands of people who are supposed to love and care for him. He cried and cried and cried, and I just hugged him. I could see the look of surprise on his mother's face as she sat in her





truck. I encouraged him to open up and give us the opportunity to help and support him. Then I told him to go apologize to his mother for storming off.

As I walked away, I could see him hugging his mother from my rearview mirror. Now, that broke me down. This is one example of the many black boys (and girls) who are experiencing this kind of pain and trauma, but it may be misdiagnosed as ADD and ADHD.

Unfortunately, an 11-year old boy doesn't know what trauma is or that it happened to him. Even children blame their ADHD diagnosis because they've been told that's the cause of their inexplicably rash actions.

Being quick to diagnose and medicate black youth may be masking the root cause of their challenges. We need to be willing to go to mat to address them and — with intention and resources — to set our children up to live and thrive.

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