Ohio NAPNAP News

Fall 2018 Newsletter

Past President Gail Hornor

The Commercialized Sexual Exploitation of Children (CSEC) is a significant problem for teens in Ohio. Did you know that Ohio ranks fourth in the nation for calls to the National Human Trafficking Hotline? It is believed that 6316 Ohioans are at risk to be trafficked each year and 1861 are believed to be trafficked. Toledo ranks number four in the nation for recruitment into child trafficking. There are several reasons why Ohio is ripe with human trafficking. Ohio has a very extensive highway system, many truck stops and strip clubs, is close to an international border, has a large transient and migrant population, and a high number (24%) of Ohio children live in poverty. It is important that PNPs in Ohio develop practice behaviors to better identify potential CSEC victims.

We need to take a look at how teens are presenting for care. Are they presenting alone, with a peer, an older boyfriend, or an older relative or Godmother? Do you have difficulty reaching the parent? Does the teen have difficulty answering simple questions such as where they live, what school they attend, their birthdate, parents name or phone number, or who they live with? If the answer is yes to any of these questions you should have some concerns. Check for their name on the Ohio Attorney General's missing child and youth website.
https://www.ohioattorneygeneral.gov/MissingKids

There are certain chief complaints that should also raise concern: suicidal ideation/behavioral health; sexual assault; sexually transmitted infections and pregnancy; physical injury or assault; or drug/alcohol concerns. It is important that you are familiar with Ohio laws governing the age of sexual consent in Ohio. Basically at age 16 or above a teen can have sex with someone of any age unless they are in a position of power over them (father/uncle/mom/s boyfriend/teacher/minister/counselor/coach/etc), the teen is intoxicated and cannot give consent, the sex if forced, or cognitive abilities are limited. At age 13-15 a teen cannot have sex with anyone 18 years of age or older. 12 and younger cannot legally have sex. Ask teens questions about their sexual activity. How old were they when they first had sex? How old was the person they had sex with? Number of sexual partners? Ages of sexual partners? And of course condom and birth control use? Report to child protective services when a teen is having sex with legally inappropriate partners.

Ask teens basic CSEC screening questions such as: Has anyone ever asked you to have sex in exchange for something you needed (food/money/place to stay)? Has anyone ever asked you to have sex with someone else? Has anyone ever taken sexual pictures of you or posted them on the internet?

Screen all of your adolescent patients for the following CSEC risk factors: multiple sexual partners, history of sexually transmitted infections/pregnancy, history of psychiatric admissions, history of runaway behaviors, history of homelessness, history of juvenile court involvement, history of involvement with child protective services/foster care, drug concerns, history of child sexual abuse, and truancy. If a teen has four or more of these risk factors they are at high risk for CSEC involvement. They need linked with interventions to prevent entry into CSEC. Know your local resources. Contact

your regional state human trafficking taskforce or your local/regional children's hospital child abuse programs. Together we can make a difference for the teens of Ohio!!

Clinical Practice — Sharon Juszli

Head Lice Update

The kids are back in school, the weather is becoming brisk. Indoor close and cuddly play is sure to bring on calls from anxious parents for head lice treatment. Head lice have been human companions for centuries. These parasites do not carry disease, are seen in all socioeconomic groups and their presence is not an indication of poor hygiene. They cannot jump or hop, they can only crawl. They are not transmitted by pets and in most cases are spread by direct head to head contact. Personal belongings such as brushes, hats and pillow cases are much less likely to cause indirect spread as lice on these items are likely to be injured or dead. Head lice can only survive one day off the scalp and the eggs require close contact with the scalp for warmth to hatch.

Despite the fact lice do not process super hero qualities or cause illness (except for the rare skin infection secondary to scratching), they cause infestations worldwide and there is a huge "yuck factor" experienced by all affected by their presence. Children with head lice are often ostracized by friends and school personnel. Kids can be inappropriately isolated and excluded from school and social events. Parents are usually anxious and desperate to eradicate the lice. Teachers understandably, dread a lice outbreak in their classrooms.

Lice have an interesting life cycle that is also very unsettling. Lice inject their vasodilator/anticoagulation containing saliva into the scalp and feed on human blood every few hours. Sensitization can occur from this saliva after several weeks causing pruritus. Female lice live up to 4 weeks and can lay up to 10 eggs per day. The female louse attaches her eggs close to the hair shaft with a glue-like substance that camouflages the egg in the hair. Baby lice or nymphs hatch from the eggs in 8-12 days depending on ambient temperatures. Nymphs reach adulthood and begin to reproduce in 9-12 days. The adult louse is 2-3 mm long (the size of a sesame seed). Nits are the empty casings left after the eggs hatch but some people refer to nits as both the live egg and the empty casing.

Diagnosis of head lice is made by visualizing eggs, nymphs or adult lice. Lice avoid light and can move fast so using a louse (fine tooth) comb may be helpful. Lubricating the hair with water or oil may also "slow down" the lice for easier inspection and prevent static electricity from ejecting the louse from the hair. Inspecting the nape of the neck close to the scalp can make spotting eggs easier. Empty egg casings, dandruff and other scalp debris should not be confused for a live infestation.

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When choosing **treatment** for your patients keep in mind the ideal product to treat lice would be one that is safe, non- toxic, easy to use, over the counter, inexpensive, effective and considers local patterns of resistance. Treatment for head lice has in most recent years been through the use of over the counter (OTC) products. Permethrin and Pyrethrin (Nix and Rid) products have been widely and intensely used in the United States over the years leading to lice becoming commonly **resistant** to these products.

OTC
Permethrin 1% (Nix) was approved for OTC use in 1990 after being introduced in the United States in 1986 as a prescription product. Permethrin is the least toxic to humans and if applied following a shampoo without conditioners or silicone-based additives. Permethrin leaves a residue designed to kill emerging nymphs. This product is nonovidcidal (does not kill eggs). It is safe to use in infants 2 months and older. It is applied to damp hair recently shampooed with a non-conditioning product. The product is rinsed after 10 minutes and should be reapplied at around day 9 to kill newly hatching nymphs. Cost is less than $25.00 a treatment.
Pyrethrums plus Piperonyl Butoxide (Rid) is also OTC with low human toxicity and is made from chrysanthemum extract. This product is neurotoxic to lice but nonovicidal as newly laid eggs do not have a nervous system for several days. This product must be repeated to kill newly emerged nymphs. This product is safe for children 2 years and older. It is applied to dry hair and rinsed after 10 minutes. Cost is less than $25.00 a treatment.

Prescription medications
Malathion 0.5% (Ovide) is ovicidal and pediculicidal (kills both eggs and live lice). This product has a higher cure rate compared to Permethrin & Pyrethrin but should be reapplied in 7-9 days if live lice are seen. This product also has a high alcohol content and is flammable. Hair should dry naturally and smoking near the child should be avoided. This product is approved for children 6 years and older. Cost of this product is around $200.00 a treatment.
Benzyl Alcohol 5% (Ulesfia) was approved in 2009 for children 6 months and older. This product kills lice by asphyxiation. Ulesfia is applied to dry hair saturating the scalp and entire head of hair and rinsed after 10 minutes. It is nonovicidal, requiring repeat treatment in about 9 days. Use of this product in neonates can cause neonatal gasping syndrome. The cost of this treatment is around $400.00 as each 8 ounce bottle costs $63.00-$81.00 dollars and depending on length if hair, may take up to 6 bottles for treatment.
Spinosad 0.9% suspension (Natroba) is a product derived from natural fermentation of the bacterium (Saccharopolyspora Spinoza) which has a broad spectrum of anti-insect activity. Spinosad is approved by the FDA for children 6 months and older. This product is both ovicidal and pediculicidal. It should be applied to dry hair first saturating the scalp then applied to the ends of the hair, rinsing after 10 minutes. This product should be reapplied in 10 days if live lice are seen. Treatment success rate rates have been reported at 84%-87% compared with Permethrin 43%-45%. The authorized generic is (Spinosad Topical Suspension, 0.9%). Natroba/Spinosad Topical solution have been added to the Ohio Medicaid Preferred Drug List and is now covered by most commercial insurance. Cost of Natroba per treatment is $263.00, Spinosad $213.00 per treatment. Please see www.Natroba.com and go to "Find Natroba near you" link then select "Ohio" to see which form of this product is preferred with each Ohio Medicaid plan.

Invermectin 5% lotion (Sklice) was approved in 2012 for children 6 months and older. This product works by causing paralysis and death of the lice. It has not been studied in pregnant woman (pregnancy C category) and can cause illness requiring medical intervention if accidentally ingested. This product is applied to dry hair and rinsed after 10 minutes. It is both ovicidal and pediculicidal and does not require reapplication. Successful treatment rate is reported at 73.8% on day 15 post treatment. Invermectin costs about $250.00-$300.00 a treatment.

Non pharmacological therapies

Wet combing or nit picking can be used in addition to medication therapy or as mono therapy perhaps for families who wish to avoid pesticides. Limited peer reviewed literature regarding manual removal of head lice exists however one meta-analysis looking at 5 studies showed cure rates from 38% to 57% when performed every 3 to 4 days (Tebruegge & Runnacles, 2007). A randomized comparative study reported by Hill et al (2005) concluded using a wet comb kit repeated 4 times every 3 days was four times more effective than Premethrin 1% or Malathion 0.5%.

LouseBuster™ is a medical device developed at the University of Utah that uses heat to kill lice and eggs. Several studies have reviewed the use of this device which appears to be safe and effective but use may be limited due to local availability (Bohl, Evetts, McClain, Rosenauer & Stellitano, 2015). Goldbloom (2007) reports this device uses hot air and a comb and is effective in killing 100% of eggs and 80% hatched lice.

Treatment that is not recommended or currently lacking formal controlled clinical trials

- Lindane (Kwell) (not recommended by the American Academy of Pediatrics)
- Oral Ivermectin (not FDA approved)
- Oral Trimethoprim-sulfamethoxazole (not FDA approved)
- Essential oils: tea tree, eucalyptus, lavender (no formal clinical trials, therefore efficacy, toxicity, side effects unknown) Note: One recent study testing essential oils (Zingiberaceae Plants & Eucalyptus globus) at low and high concentrations showed high ovicidal effect and could be promising for head lice control (Soonwera, Wongnet & Sittichok, 2017).
- Permethrin 5% (Elimite) & Crotamiton (products used for scabies) (not FDA approved)
- Occlusive (suffocating) agents: mayonnaise, butter, petroleum, margarine, herbal oils, olive oil (no formal clinical trials)
- Cetaphil cleanser (not FDA approved)

Environmental control measures

- Check and treat all household contacts if live lice found
- Clean personal items and bedding of contact
- Wash items in temperature > 130 F (combs/brushes soaked for 10 minutes)
- Items can be placed in dryer in high for 40 minutes

- Vacuum furniture, car seats, carpeting
- Bag items that cannot be washed for 2weeks

Head lice control measures no longer recommended

- Routine classroom or school wide screening
- School exclusion due to no nit policy
- Children being sent home from school when active head lice discovered
- Pediculicidal spray for the environment

References

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Soonwera, M, Wongnet,O., & Sittichok, S.. (2018). Ovicidal effect of essential oils form Zingiberacea plant and Eucalytus globulus on eggs of head lice, *Pediculus Humanu capitus* De Greer. *Phytomedicine*,47, 93-104.

Health Policy/ Legislative — Mandi Cafasso

HB 726 was introduced by Rep. Gavarone over the summer. This bill is seeking removal of the mandatory collaborative agreement. The bill was introduced late so it did not follow the typical course (i.e asking for co-sponsors, proponent, opponent testimony, etc.). Because this is an election year, it is not expected that the bill will pass in this general assembly. The bill will likely be introduced again in the next general assembly- it will have a different bill number and maybe even a different sponsor. However, Gavarone has been very happy with the momentum and APRN support of the issue.

Bicycle Helmets/Community Advocacy Beth Bish

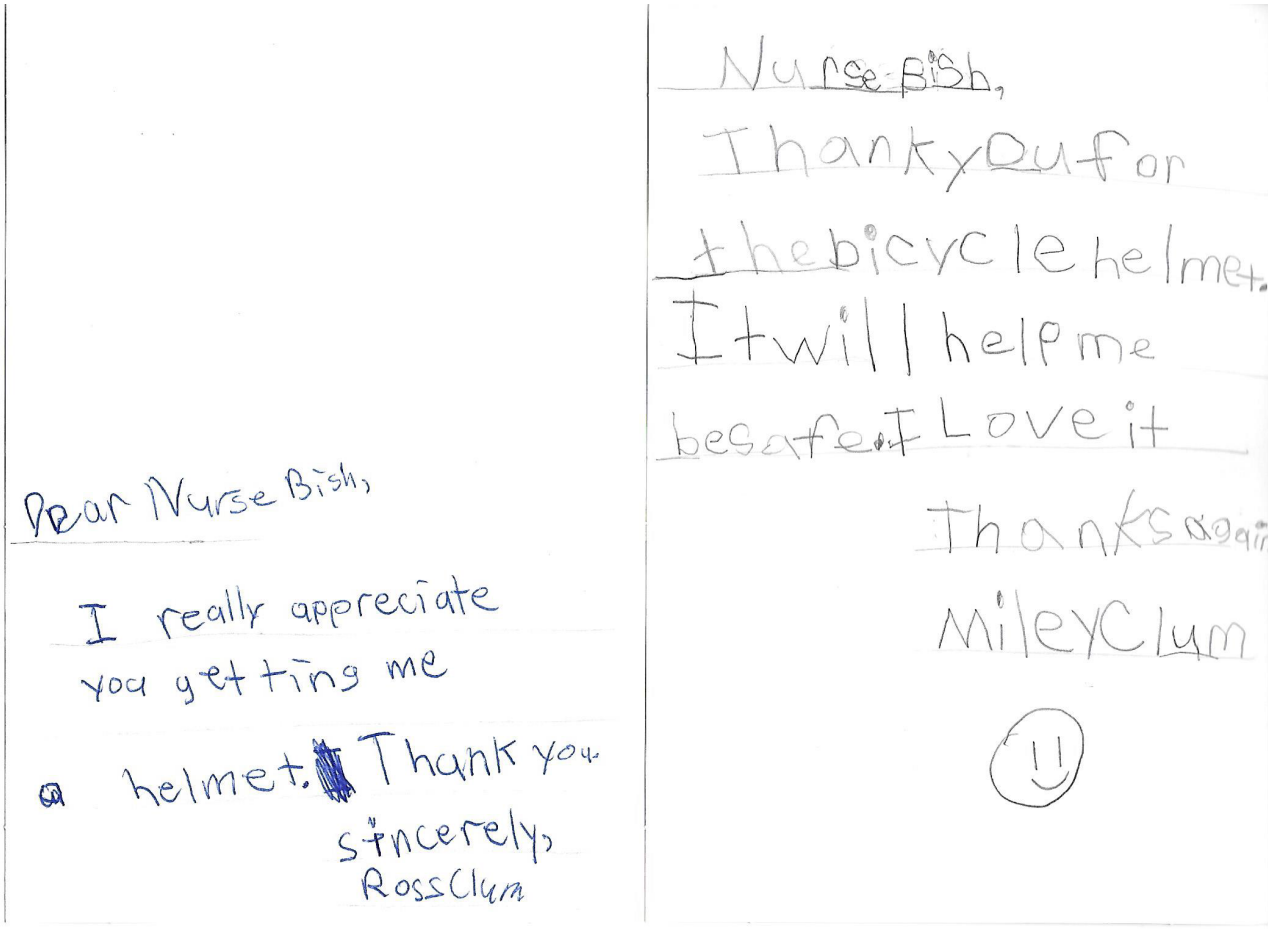
This year I received bicycle helmets through the Ohio NAPNAP Bicycle Helmet program.

In concert with an officer from our local police department and owners of the village bike shop, we conducted a bike rodeo on June 30th.

I have tagged Ohio NAPNAP on my Bluffton Pediatrics Facebook page in order to recognize the organization's generous contribution of bicycle helmet's for area children who come to the Bluffton Bicycle Rodeo. We live in a rural area, and families come from a 4 + county area.

https://www.facebook.com/BlufftonPediatrics/photos/a.956818867822584.1073741837.344126269091850/956820324489105/?type=3&theater

The Clum kids received the first 2 helmets when during their annual Well Child Checks.
As we were talking about health and safety, they said they no longer had helmets that fit; therefore, they were not wearing any protective head gear. Because of Ohio NAPNAPs generous donation, we corrected the problem ASAP.I received lovely handwritten letters from Ross and Miley; see attached.



Dear Nurse Bish,

I really appreciate you getting me a helmet. Thank you sincerely, Ross Clum

Nurse Bish,

Thank you for the bicycle helmet. It will help me be safe. I Love it

Thanks again

Miley Clum

Education Advisor **Jill Smith**

SAVE THE DATE
SPRING 2019 OHIO NAPNAP PHARMACOLOGY UPDATE/ LAW CE

MARCH 29-30, 2019
EMBASSY SUITES COLUMBUS
10 PHARMACOLOGY HOURS AND ONE LAW CE

FALL 2019 CONFERENCE NEEDS A PLANNING COMMITTEE

If you and your colleagues are interested, please contact Jill Smith Jillpnp@yahoo.com/ jsmith2@akronchildrens.org
We offer plenty of help and guidance.

If you have a topic that you would like to see presented, or have a speaker that you recommend, feel free to contact us and we will try to include both in future conferences.

Newsletter — Kathleen Cox

If you have any ideas for the newsletter, please feel free to contact me at virginia.cox@nationwidechildrens.org

Ohio NAPNAP Board Roster 2018-2020

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