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Hello, I'm Donna Mazyck, executive director of the National Association of School Nurses. Welcome to School Nurse Chat. On today's podcast, we're talking with school nurse leader and educator, Eileen Moss, and pharmacist, Sunny Ro, about evidence-based best practice for home and school storage, carry, and disposal of over-the-counter or OTC medications. This episode is part of a three-part series on safe use of OTC medications. Thank you both for being here.

Thank you so much for having me.

I'm happy to join in.

I'd like to begin our podcast with hearing a little bit about your career journey to the work that you're doing presently. Eileen, would you share about your career journey?

I'd be happy to, Donna. Thank you. I've been a nurse for 40-plus years and a school nurse for 20 years. I began in a kindergarten center and have progressed into special needs buildings, and at junior high currently. So I also serve as the lead nurse in my school district. I'm responsible for over 5,000 students in 12 schools, and I supervise 13 school nurses. In addition to that, I have been fortunate enough to serve as a clinical instructor for the University of Illinois at Chicago School Nurse Certificate Program. So I am mentoring school nurses to become certified and gain expertise in their field. And I'm so happy to join today with this very important work that you're doing.

Thank you so much, Eileen. Sunny, would you share a little bit about your career journey?

Currently, I am the International Medication Safety Management Fellow at Institute for Safe Medication Practices, also known as ISMP. And I had my pharmacist training before this. And actually before I pursued a career in pharmacy altogether, I was a special education master teacher in Baltimore. And how I became a pharmacist is that I realized that pharmacists and educators have a lot in common. First, there's education obviously, where you're out there teaching and advocating for students. And as a pharmacist, really, a lot of your job revolves around education and advocacy as well. And as a pharmacist in the community, in the hospital, or wherever you are, a really big component of what you do is educating in people on what the new medications are, how to use medications, collaborating with different healthcare providers.
across disciplines, and really advocating for the patients. So I really found a lot of joy and sense of fulfillment in kind of crossing those two together and marrying them. So that’s why I’m here, and very happy and excited to be here with you today and promote safe practices and storage, carry, and disposal of OTC medications with you.

Donna Mazyck: Thank you, Sunny. We’re glad to begin this conversation with you and Eileen on this topic that is of great interest to school nurses. Sunny, I’ll start with the question. Students and parents often think that just because something is sold over the counter, it’s always safe, but OTC medicine is medicine. What can be done to correct the misunderstanding?

Sunny Ro: You’re absolutely right, Donna. Medications fall into two categories, over-the-counter, also known as OTC medicines. And these medicines are the ones that are bought in a drugstore or supermarket without the need for a prescription. Prescription medicine, on the other hand, is ordered by a doctor or another healthcare provider and is only available from a pharmacist. And OTC medications, just like the prescription counterparts, come with their own safety concerns. And one of these concerns with OTC medication is a duplication of ingredients. This means that the same active ingredient that is often found can be both in prescription and in OTC products. For instance, take acetaminophen, which is commonly marketed as Tylenol. It’s a common pain reliever and a fever reducer that’s found in a lot of OTC products such as cough and cold medications, sleep aids, and in combination of other pain relievers. Duplicating on active ingredient like acetaminophen can result in an accidental overdose and can lead to serious and dangerous consequences.

And so that’s why it’s important for patients and parents to seek guidance whenever they have a question and consult with a professional before using any new product, and read the label. It is so important to read the label and know how to read the label. For example, where to look for active ingredients, the uses and purposes, warnings, directions, inactive ingredients like preservatives or flavorings that could cause allergic reactions, and as well as storage information, and also know how to give it, or what the proper dose is, especially for little kids. And if they're not sure how to read the label or how to take the medication or if it is right in the first place, then ask your nurse or your pharmacist and also let your doctors and nurses know of all the medications that you're taking, again, to avoid duplication in therapy, and so that the providers are aware of all the medications that you're taking.

Donna Mazyck: Now we know that every school and school districts are different across the nation. So Eileen, in your school, what's the policy for over-the-counter medication?

Eileen Moss: I work in an elementary school setting that serves grades pre-K to eight. And the district policy is that no medications, including over-the-counter medications, can be administered without an order from a physician and advanced practice nurse or a physician's assistant. Medications must be brought to the health
office by the parent or guardian in the original container with the student's name on it. That is an alignment with NASN's medication guidelines that just were recently released. So it is best practice. It is also important for families to realize that any medication that is administered by a nurse, whether it be prescription or over-the-counter, must have an order. And that is best practice in the school setting as well as in the clinical setting. So we are in alignment with what happens in the clinical setting.

Donna Mazyck: That's true. And I appreciate you, Eileen, mentioning the NASN medication administration clinical guidelines for school nurses that were released recently. Well, Sunny, for convenience, we know that caregivers, be they parents or guardians or others, they may be tempted to keep OTC meds in an easy to reach location, like on a bedside table or in a countertop, sometimes in a bag or in the car. We know that this isn't a safe way to store medication. Can you go into why that is?

Sunny Ro: Absolutely. In terms of environmental factors and keeping medications stored in your car, medications can be broken down by heat, light exposure, and even excess air. And these environmental factors can make the medications become less effective or go bad before the expiration date. And to help your medications last as long as possible, you should avoid temperature extremes and not leave them in a car or a hot car or a glove box or in freezing weather. And some other locations that may not be appropriate for storing medications might be bathroom or kitchen where there's a lot of humidity and heat exposure. Both prescription and OTC medications should be stored in a cool, dry, dark locations like a closet shelf, cabinet, drawer or storage box, unless otherwise instructed on the labeling. And also important thing is the medication should be kept up and away, and out of sight, and out of reach of children and pets. And look at your package insert for proper storage instruction, and ask for pharmacist for any special storage instruction such as refrigeration and freezing.

Donna Mazyck: Very helpful education tips for school nurses to share with caregivers and students. Eileen, at school, we know that school nurses keep medications safely locked away. At home, families need to take just as much care as we've been learning. What are some things schools can do to help educate the community on safe medication storage?

Eileen Moss: Well, Donna, school nurses often deliver health lessons on health topics to students. So this topic would be very appropriate and has the potential to start a conversation at home. I think in addition, school nurses could present over-the-counter medication safety as a topic in a newsletter that is distributed to families.

Donna Mazyck: Those are really wonderful tips. And we understand that, in the case of over-the-counter medications, again, there is maybe sometimes a more relaxed way of managing those in the home because they aren't prescription medications. But we understand from what we've been hearing today that they need to be handled as safely as the prescription meds. And so when you talk about the
disposal of OTC medicine, Sunny, when is the right time to dispose of those medicines?

Sunny Ro: The right time to dispose of medications, you can find on the label of the medications. They’re usually indicated by EXP in cases or bottles. Or with bottles or cartons or tube, the expiration date’s often stamped without the ink into the product container itself. And it's really up to you at home or the nurses to regularly clear out your cupboard and safely dispose of expired medications. And I know personally that some people keep unused medications around just in case. But with these expired medications, they may not be safe and effective anymore. And especially if you have little ones around, you don’t want these exposed to them.

Donna Mazyck: So true.

Sunny Ro: Past the expiration date, there’s really no guarantee that the medicine is still safe and effective. Generally, it’s a good practice to avoid taking any medications after their expiration date has passed. And this is because some medications still may work, and others won’t work, and others can even be dangerous to take. And if a medication is essential for chronic and potentially life threatening disease, for example, a heart condition, potential consequences of taking a gamble with an expired medications maybe just too great. And for these serious medical conditions, you want to make sure that your medications are 100% effective.

Donna Mazyck: That’s so important to know and a good tip for educating families. Thank you, Sunny.

Sunny Ro: Of course.

Donna Mazyck: Eileen, we know that older students often bring their own OTC meds to school. As a former high school nurse, I can remember the baggies with OTC meds in them. Those students may bring it for legitimate purposes and then self-administer, or even share those medications with friends. What risks does that carry, and what can be done about it to keep students safe?

Eileen Moss: This is a big concern in the school setting, Donna. I’m glad that you brought it up. I just had a student the other day bring in a bag of ibuprofen because he was having some back pain and just told me, "I’m going to take this right now." And so explaining to the parents that, although they see it as a low risk, it’s something that students and parents should be warned about. And this should be a great topic in a health class. Carrying medications that are unlabeled, it can present a danger if the bag were to be lost in the hallway or something like that.

Medication policies are often present in the parent-student handbook, so nurses should be sure that policies are clearly communicated to families in that mode or another form of communication at the beginning of the school year.
Parents are often required to sign off that they have received and acknowledged the information in the handbook. And so if the student is carrying medication that is not allowed according to district policy, parents should be referred to the appropriate resource so they can verify the information. It is a common problem in a school setting, and I just feel like there can never be enough education on this topic.

Donna Mazyck: I appreciate that. And the fact that that education has to happen over and over specifically with OTC medication because, at home, it doesn't seem like a big deal to take it. And I can see where students and families will think, "Well, it's no big deal to have it at school," but policies are there for safety. So thanks for that reminder and the role that school nurses have in educating in that and communicating. Do you have any final words on this incredibly important discussion on storage, carry, and disposal best practices for OTC medications?

Eileen Moss: I would like to add in that, I'll be honest, it takes a well-organized nurse to keep on top of the expiration dates and medications in the health office. I have not personally administered an expired over-the-counter medication. But if the situation arose, I would advise the nurse to check in with the parent to see if they want it administered even though it was expired and then just explain the risks that are involved. We have parents that often leave expired EpiPens in school and don't have the resources to replace them, or think that it's not important and that the EpiPen will still be good for use. That's just an example of a prescribed medication. But to just compound on what Sunny said, you don't know if it's effective or dangerous, so they should not be used even if they are expired.

Sunny Ro: And I would just like to agree. And in addition to not leaving medications out and about where it is accessible to children, it's also important to note that children should never be told that medicine is candy so that they'll take it. Don't tell the children that medication's liquid juice. And also be mindful of taking medications in front of children as adults because children like to mimic adults. And we should be teaching children what medicine is and why they can't take it unless you or another trusted adult gives it to them. And also, this should be relevant to any family members, visitors, or babysitters. And lastly, just in case of emergency, have the number for Poison Help saved in your phones and around the house. And call the Poison Help right away if you think the child may have taken a medication by accident and even in the case that you're not sure, just in case.

Donna Mazyck: This is great and very informative, especially with the amount of education and communication school nurses can have. Over-the-counter medications are medications and need to be safely stored, disposed of, and carried. Thank you so much, Sunny. Thank you, Eileen, for helping us amplify that message of safety today.

Sunny Ro: Thank you so much.
Eileen Moss: Thank you so much.

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