

Katie Johnson: Good morning and welcome to Apple a Day, Lake Region Healthcare's Health and Wellness show where we feature news and information you can use to live a healthier life. I'm Katie Johnson, your host, and my guests today are Renee Lien and Sarah Brunn. Renee is the pharmacy director overseeing the pharmacy services both at Lake Region Healthcare and Prairie Ridge Hospital and Health Services and Sarah Brunn is our infection prevention coordinator. Good morning ladies.

Rena Lien: Good morning.

Sarah Brunn: Good morning.

Katie Johnson: Thank you for joining me today. We are here to talk about our Living Well series, which is back for, I think our fourth season now and the two of you are lucky enough to be the featured speakers next Tuesday, October 1st, for the October session, which is titled Myths and Facts About Antibiotics. This year's Living Well session has some new things we want to let our listeners know about. Number one is a new location. We've moved to the beautiful brand new library in Fergus Falls and our Living Well sessions are in their Community Room. We've also moved the date to the first Tuesday of every month, so September through May, the first Tuesday of the month, we'll have different speakers on different topics throughout the year. And as I mentioned, Renee and Sarah will be talking about antibiotics for us next Tuesday, October 1st, and it's good timing.

As we head into the fall and winter season, I've already had my first cold. Kids are bringing home germs from school and we start thinking about preventing those illnesses, and I think there's a lot of education to do around the whole topic of antibiotics. We'll maybe just preview the session this morning and touch on a couple of these myths. I know there'll be a lot more on Tuesday where attendees will get to ask their questions and learn a lot more in depth. But first let's set the stage for why we should even care about this topic. Why do you think this conversation, this topic, was chosen for the Living Well series?

Sarah Brunn: I really think that there's been the idea for many years that antibiotics are only helpful and they don't carry any risks. But the reality is we forget that these are really powerful medications and they potentially have very serious side effects. And so we have to remember that they're not just candy and our providers aren't going to hand them out like they're candy, because we do have concerns for your health and your safety that goes along with them.

And one of the biggest things that we're concerned about, and probably one of the biggest public health concerns in the United States right now is antibiotic resistance. The bugs that make us sick are really resilient and they're able to change and mutate in response to the things that are happening in their environment. And some of those bugs, when they're exposed to antibiotics, have developed resistance to antibiotics, meaning that when you do get sick with these bugs, the antibiotics that you take are less effective or they have to

use even more powerful antibiotics with potentially more side effects. And so we have to be really careful with how we prescribe antibiotics to our patients.

Katie Johnson: I've seen a statistic from the Centers for Disease Control that up to half of the antibiotics that are prescribed today are either unnecessary or ineffective. And to me, that really sets the stage for what do we need to do both as individuals and as a medical community to really change that trend, when you talk about the dangers involved. I think understanding some of the myths that we have about antibiotics is maybe a first step. So let's talk about a couple of them this morning. First, you kind of touched on this, Sarah. There's this idea that they can cure everything. Antibiotics are kind of the answer to everything. Myth or fact?

Renaë Lien: Myth.

Katie Johnson: Ding, ding, ding, ding, ding. Right.

Sarah Brunn: Antibiotics are not effective against viruses. So back to the CDC and the things that they report, they report that there are 47 million unnecessary antibiotic prescriptions written in the United States every year. That is a huge, huge number. And so thinking about that idea that 50% of antibiotic prescriptions are unnecessary or are written inappropriately, you just think that this is a horrible, horrible, awful opportunity for the different bacteria out there to get stronger and stronger.

Katie Johnson: But I think that when we do think, especially when you're sick, you feel crummy, you want a pill to make you feel better.

Renaë Lien: Well, and that's part of the way our society runs. We're very busy. Everybody's got lots of activities and work that they need to get to. And so it's hard to be run down and held back by not feeling well. Our society feels if we can go in, get a medication, take care of it, and we can move on.

Katie Johnson: When antibiotics are prescribed for an illness like that, you've gone to the doctor, the doctor prescribes the antibiotics. I think there's another myth that as soon as I start feeling better, I can stop taking the medication, and that maybe even that will help contribute to this antibiotic stewardship. I mean, I'm being a good steward. I'm not taking all the medication. Myth or fact?

Renaë Lien: Myth. I can understand where that feeling would come from. We want to most of the time minimize our prescription use and our drug use. However, when it comes to antibiotics, the way that they work is that as they get into your system and as you get them into your body, they start to kill the bacteria. However, first they kill the weak bacteria and you need to have a certain amount in your body or have them in there for a certain amount of time before you can get rid of all of the bacteria or what is causing your illness. So if you stop them early, you are allowing the stronger ones to grow back. And you may not be fully using the medication till it's effective.

- Katie Johnson: You're probably more likely to have a recurrence of your illness and you're actually contributing by letting all those strong bugs just get even stronger. That's really interesting.
- Rena Lien: Exactly. We think about our physicians are prescribing antibiotics in a very, very specific way. They take a lot of things into consideration. Things like the specific infection that you have, how the antibiotic itself is broken down in the body, how old you are, how much you weigh. All of those things go into their antibiotic prescribing and stopping taking an antibiotic, like you said, is one of those things that does contribute to antibiotic resistance because you are allowing those opportunistic bugs to get stronger.
- Katie Johnson: Right. To build on that one, when we stop taking antibiotics early, I've heard some people might think that it's a perfect opportunity to build my own little pharmacy in my medicine cabinet so that next time I get sick I've already got some antibiotics I can take. Good idea?
- Sarah Brunn: No, and we can build off of the last question where you need to take all of your medications or all of your antibiotics throughout the time period that they are prescribed. However, keeping them and giving them to somebody else can contribute to the problem the same way. If the next person is taking the medication, it may not be for the right infection. They may have side effects and usually your provider is watching for those types of things and their provider may not know to be watching for those. Again, you're creating resistance because they are using this medication and killing the weak bugs, but then some of those stronger ones are going to survive.
- Katie Johnson: And I think like you mentioned, Sarah, that prescription was written for you for your specific instance at the time, right? Not for what you might get next time.
- Sarah Brunn: Right. Absolutely. And an additional thing to think about is our very intelligent medical providers. They have current tools and knowledge about actually what antibiotics work best against different bugs in our own facility. So they have an antibiogram that they can look at that says our cultures that we run are typically resistant to these certain antibiotics. So we know specifically what antibiotics in our own community work the best against different infections and those things change over time. They shift over the years and so you have to remember that just because that worked for you for that type of infection a few years ago, it might not work this time.
- Katie Johnson: Right. Really good point. How about this idea of taking antibiotics just in case, like I do feel really crummy and maybe the doctor thinks, well, the antibiotic might help. Number one, who am I to question my provider or number two if it might help, I think it's worth a try. What do you think about this Just in case? Truth or myth?

- Sarah Brunn: Right, so we would say that's a myth again. When you think about the different types of illnesses that are out there, antibiotics only work for bacterial infections, so if you don't have that going on, it's definitely not going to work. And then there's a lot of different infections that even though they are bacterial, antibiotics might not always be appropriate for them because they probably will clear relatively quickly on their own. Things like bronchitis or sinus infections, those types of things that even though, yes, we could give you an antibiotic, it probably isn't going to make any difference in how long you're sick.
- Renaë Lien: We also have to remember that aside from not necessarily needing one because it won't treat a virus, antibiotics often come with side effects. So we are exposing ourselves to side effects that we might not otherwise experience. And we also, our bodies have good bacteria in them and so we have to keep that balance, and antibiotics can kill the good bacteria just as easily as they can kill the bad or the disease-causing bacteria. We don't want to kill the good ones. And if we're taking them unnecessarily, we run that risk.
- Katie Johnson: Sure. There might be some listeners who can relate to this scenario. My kid has some kind of miserable cold or sickness and I've gone to Dr. Google and determined, I'm sure it's a sinus infection and he needs a Z-Pak, and I'm just going to try and call my provider's nurse or get in right away and pressure for that prescription because he's got a big game tomorrow night. A good idea?
- Renaë Lien: No.
- Katie Johnson: Sound familiar?
- Renaë Lien: I see a trend here. And we can go back to what Sarah has said already, is that the providers and the doctors at Lake Region and Prairie Ridge are looking at the specific bugs in our area and treating them appropriately. Dr. Google doesn't necessarily know that information, so it's difficult to diagnose first of all, from the internet.
- Sarah Brunn: I will say, too, it's really hard from a provider's standpoint to continually have to say no. It is really difficult when your patients are always coming in with high expectations that they're going to get a medication that's going to make them feel better right away. And sometimes that's just not the case. Some sickness we get just really do need to run their course. And I know that's not popular in our current culture in that we want to get right back at what we're doing and we're very busy, but sometimes that's really what you need to do is just take it easy and let your body heal.
- Katie Johnson: Right. And to kind of build on that one more concern, if antibiotics aren't going to be effective, I think we have this perception that we're just left to suffer with the symptoms that we do have. But it's a really good idea to talk to your provider about some alternatives that can give you symptom relief, right?

- Renaë Lien: Absolutely. You can talk to your provider or you can actually go to one of the local pharmacies and talk to a pharmacist. There are some medication and non-medication ways that you can make yourself feel better. And so whether it be soups or drinking lots of water, just resting, there's many ways that you can make yourself feel better without taking antibiotics.
- Sarah Brunn: The reality is there aren't antibiotics to treat viral infections, but there are lots of things that you can do to help yourself feel better. So again, like Renee said, lots of fluids and rest are probably your two best friends when you're really sick, but also humidity in your air. That is one thing that is found to be really helpful, with both sinus symptoms and with your cough that you might get. And then there's different over-the-counter medications that you can talk to your provider or to a pharmacist about that might be helpful.
- Katie Johnson: All great tips and I know that you'll have so much more information, both from a prevention and education standpoint at the Living Well series next week. Anything else you want our listeners to know before we wrap up?
- Renaë Lien: No, but we're looking forward to seeing you next Tuesday.
- Sarah Brunn: Yeah, absolutely.
- Renaë Lien: Agreed.
- Katie Johnson: Renee Lien, pharmacy director, and Sarah Brunn, infection prevention coordinator, both speaking on a panel October 1st, next Tuesday, at our monthly Living Well series. Starts at 5:45 p.m. at the public library in Fergus Falls in their beautiful new community room. We would like you to RSVP if you'd like to come in order to help us plan for the delicious healthy refreshments that are always served. You can do that by sending an email to livingwell@lrhc.org or by calling our voicemail line to RSVP at 218-736-8699. Of course, if you don't RSVP and last minute you decide to show up, please do. We would love to have you there and love to share this information and spread this education as far and wide throughout our community as possible.
- Renee and Sarah, thank you for being on the show today and for speaking at the session next week. We're really looking forward to learning more from you then.
- Renaë Lien: Thanks Katie.
- Sarah Brunn: Thank you.
- Katie Johnson: Renee Lien, Sarah Brunn and Katie Johnson on Apple a Day today reminding you there is so much to do here. Stay healthy for it. Have a great day.