S2E3 - Two Jumbo Jets

Narrator: [00:00:00] Welcome to part three of this season of *Patient*.

Johanna: [00:00:05] And the EU, where there's the best data on adverse drug reactions, the mortality from adverse drug reactions is higher than the mortality for many common cancers. And we have screening programs in place to detect these common cancers, but we have no screening program in place to detect adverse drug reactions. That's almost an invisible source of death and illness and the way we currently look at the system and the way we measure the quality. In the EU, for example, the deaths from adverse drug events are the same as of two jumbo jets full of people crashed every day and killed everybody on board. But there's not a general awareness of just the scale of this. It's almost on the scale of an epidemic.

Narrator: [00:01:02] Canadian Patient Safety Institute presents *Patient*, a nonfiction medical podcast about people trying to fix modern health care from the inside out. I'm your host, Jordan Bloemen. Listener note: we're doing things a little bit differently in this season of *Patient*. This is part three of a three-part series. If you haven't already, go check out parts one and two.

David: [00:01:40] Well, that's a problem, right?

Narrator: [00:01:41] You're listening to David Yoo, an adviser and former CEO of the Institute for Safe Medication Practices Canada.

David: [00:01:48] Obviously, one of the relating factors, you know, with all this is the whole issue of polypharmacy. Not necessarily some of the drugs that being prescribed that the prescriber should be aware of, and the one drug could interact with another. In Judith Maxwell's case, you know, she tried one drug, another, having a little bit of a side effect or reaction. You know, the doctor put her on another drug, and it's cascading into more problems. But then, you know, the whole issue of polypharmacy need to be addressed.

Narrator: [00:02:28] As David just said, in episodes one and two of this three-part season of *Patient*, we looked at the story of Judith Maxwell, who for eight years suffered symptom after inexplicable symptom. It wasn't until she discovered on her own that it was actually medications making her sick, specifically the piling up of medication on top of medication. Now, this is actually the story of two issues: polypharmacy, which is the taking of multiple drugs; and ADR or adverse drug reactions, which is an injury from taking a drug. But all of this feeds into a larger idea at the heart of patient safety: the idea of medication safety. Judith's story was a failure of medication safety. In the final part of this season, we are going to speak with other people who

face this issue, along with experts and activists, as to how people can keep safe on their medication. And the first of those stories belongs to Johanna.

Johanna: [00:03:23] My name is Johanna Trimble. I got involved with Patients for Patient Safety Canada in I think about in 2010.

Narrator: [00:03:30] Patients for Patient Safety Canada is a patient-led program of CPSI. They bring their safety experience to help improve patient safety.

Johanna: [00:03:38] I had recently experienced and our family had recently experienced a problem where my mother-in-law had suffered problems with prescription drugs; there was a drug interaction. And that was something that the family actually ended up figuring out rather than the care providers.

Narrator: [00:03:57] What can you tell me about her?

Johanna: [00:04:01] What can I tell you about her? Well, she was a pretty unusual woman, very much the matriarch of my husband's family and my family. She was in her eighties at the time this incident that we were talking about happened. She was living in a seniors complex, a multi-level care seniors complex. She also had a master's degree in education, which is almost unheard of for a woman from that era. She was living still in her independent living apartment. She did use a cane or a walker quite a bit, but she was able to get around just fine. And in fact, she had only given up her car, I think, maybe in the last two or three years before this incident happened.

Narrator: [00:04:54] So what happened when she started? She started getting sick.

Johanna: [00:04:57] With the wintertime, she had gotten the flu. So my sister-in-law came and took her to the emergency room where they found that she actually was dehydrated. So she was released, actually. They rehydrated her and she was released back home. And when she got back to her apartment, the doctor who kind of serviced that facility came to see her and said, "You seem to still be pretty weak. I think it would be a good idea if you went to the health centre and stayed there for a few days just so you can recuperate." A few days just so she regains her strength and then she'll be able to go back to her apartment. Instead of that happening, she got very much worse. And I'm not particularly talking so much about worse physically.

Narrator: [00:05:50] Worse in what way?

Johanna: [00:05:50] She started to have all these cognitive problems. Sometimes she was delirious, she was hallucinating at times. She was seeing people who were obviously not there because one was her husband, who had died.

Narrator: [00:06:05] She was experiencing physical symptoms as well. Doctors thought that it was a urinary tract infection, which they tried to treat with different medications, antibiotics.

Johanna: [00:06:15] It didn't really do anything. She was the same. She was either really out of it. She could occasionally, when she was lucid, she could get up and get around a bit with her walker. But she was finding that she had coordination problems. Sometimes she was making a strange movement with her arm that we'd never seen her do before. So there was all these really puzzling symptoms. The family was just completely like, "What is happening?" This doesn't make sense in light of the fact that she just came in here with the flu. So it wasn't like it happened instantly, but it did progress. It got worse. We thought she was going to die. You know, my sister-in-law started writing the obituary. We felt like, "This does not make any sense. These symptoms don't make any sense to us."

Narrator: [00:07:12] When did you start suspecting it had something to do with her medication?

Johanna: [00:07:15] So one of the things we started doing – now, my other sister-in-law is a retired nurse and she had the legal authority to find out what drugs Fervet [ph] was on. She sent us the list of drugs.

Narrator: [00:07:28] And they found out that Fervet had been put on to new drugs, some of which they didn't even know about.

Johanna: [00:07:34] But when we looked at the drugs, we found that she also had her pain drug changed. She had been on one that had been taken off the market called Vioxx. So they switched her off that and they put her on something called Tramadol. And it also affects serotonin. And when we started looking at the fact that she was on two drugs that affected serotonin, and we looked at the symptoms that she was having, and then we compared them against something that is called serotonin syndrome, which is caused by having too much serotonin, it's like they were the same. There are ten symptoms they say these are the symptoms you should look for if you suspect serotonin syndrome. And Fervet had, like, six of them.

Narrator: [00:08:26] So they decided to sit down for a meeting with the hospital and Fervet's medical team to see if they couldn't figure this thing out.

Johanna: [00:08:35] My husband, who is a therapist and also has done conflict resolution, led the meeting with the medical staff because we thought, "Oh, maybe they're just going to say, 'oh, you guys are crazy. This is not what the problem is." And then my sister-in-law, of course, had a lot of credibility having been a nurse. But we had to initiate that medication review. They reviewed all her medications. By the time we got that review, she'd been bedridden for about two or three months before we could actually get anyone to listen to us. The longer you leave it, the more frail and the less mobility and the less ability to recover your loved one will have. So if you're suspecting a medication problem, try and deal with it right away.

Narrator: [00:09:27] This story of another person experiencing what Judith experienced was not hard for us to find because medication errors are not particularly rare. We wanted to sit down with someone to try and get a sense of exactly how common they really are.

Dee: [00:09:43] So my name is Dee Mangan and I work at McMaster University.

Narrator: [00:09:49] Dee, who we heard at the top of the show, worked as a part of a group that wrote an extremely important text in the world of patient safety, a punchily named document called "The International Group for Reducing Inappropriate Medication Use and Polypharmacy Position Statement and Ten Recommendations for Action." Long title short, it's a document that paints a picture of a rising number in drug prescriptions, leading to rising rates of adverse drug reactions, like those experienced by Joanna and Judith. It's a document that starts to try to figure out what we can do about this problem.

Dee: [00:10:21] So it was really an assessment of the current situation, a call to action, trying to highlight the seriousness of the problem, and then an agreed series of actions that we believe will help to address it, and a set of research priorities or knowledge gaps which will really help to move this along.

Narrator: [00:10:44] After the break, we're going to look at what people like Dee recommend people on multiple medications do to stay safe, how people can take responsibility for their own medication safety while holding their providers accountable. We're going to talk about asking hard questions. Up next.

[0:11:03] *Patient* is brought to you by the Canadian Patient Safety Institute. Established by Health Canada in 2003, the Canadian Patient Safety Institute works with governments, health organizations, leaders, and health care providers to engage the public and to inspire

extraordinary improvement in patient safety. To learn more about CPSI, visit PatientSafetyInstitute.ca

Chris: [00:11:31] So, you know, when you think about taking many medications – and we know that two out of three Canadians – that's 66% of people – over the age of 65 – take at least five different prescription medications.

Narrator: [00:11:44] Chris Power, CEO of Canadian Patient Safety Institute.

Chris: [00:11:47] And one in four Canadians – so over a quarter – over the age of 65, take at least ten different prescription medications. So that's huge if you think about that. And then you need to think about the risks of having multiple medications. And there are tremendous risks for that of, you know, different interactions happening that weren't intended. And so we're really putting a push on this for people to be thinking about that. When you are prescribed medication, when you go to your pharmacy, ask the pharmacist, talk to your pharmacist about your medications. See if they could do perhaps a review. When you're starting medications, when you're stopping medications, when you're changing, talk to your pharmacist, talk to your doctor, your nurse practitioner, whoever is prescribing and working with you on that. You want to have a review so that you can see: Are these medications, are they supposed to be taken together? Are there interactions here that I need to be thinking about? Are there side effects that I need to know about? What are those moments that matter? Like, what are those kinds of things I really need to be thinking about when I'm taking these medications? Because it's just hugely important. And again, it's that we have such reverence for physicians particularly, but for health care providers in the health care system, and we often just... whatever they say, we don't question enough. So question, "Is this medication safe to take with the others that I'm taking?" And ask people to review your medications to keep yourself safe.

Narrator: [00:13:24] Talk to your doctor or physician, your health care provider, and your pharmacist. So we decided to do just that. This is Sandra Hanna. Sandra is a practising pharmacist and the vice president of Pharmacy Affairs for Neighbourhood Pharmacy Association of Canada.

Sandra: [00:13:37] We all know that medications have their pros and cons. Every medication fixes a problem, and it also has potential side effects. Ultimately, with every health care decision, we're always weighing risks and benefits. So, you know, that's ultimately the art of medicine and pharmacy. We can weigh out those risks and benefits. And that's why, as much as we have access to all this information today – we're living in an era of information overload, which is really a double-edged sword, because you can get all the information you're ever

looking for, but it's that weighing of the risks and benefits and the individualization and customization of how those impact each individual patient; that is where the role of the pharmacist and the physician comes into play. And that's why it's really, really important when talking about medication safety to not only understand the safety of each medication individually, because that is obviously a very important piece, but to speak with a health care provider – a pharmacist, a physician – you know, to make sure that those medications are safe for you and that they're appropriate for you. Because even though there may be some side effects, they may be outweighed by the benefits of that medication for you. And in another situation, although the side effects may not be all that great or may seem fairly insignificant, if the benefits are not outweighing those risks, then that medication may not be appropriate for you. And I think it's really, really important from that perspective to make sure that you speak with a pharmacist when you're evaluating those risks and benefits of the medications. Because what pharmacists do and the unique role that pharmacists bring to medication management is really being able to look at that sort of whole holistic picture.

Narrator: [00:15:24] And if you could give one piece of advice to someone who's on multiple medications who's concerned about their medication safety, what would it be?

Sandra: [00:15:33] It's a great question. Well, first of all, we have to determine if it actually is an adverse drug reaction due to the drug. The way we figure that out is identifying when did it start and could there have been a causative link between taking the medication and this adverse drug reaction? And then also asking the question, "Is it something we would expect to see out of this drug?" Because typically, drugs do have, based on their mechanism and based on how they work in the body, they have some predictable side effects.

Narrator: [00:16:04] Can you tell me a little bit about the five questions? There was, like, 30 when you guys started.

Alice: [00:16:09] Yeah. Well, we had started, Lisa Sever and myself, the pharmacists, we did a sort of a world-wide web search of all the tools and questions that are out there.

Narrator: [00:16:20] This is Alice Watt, medication safety specialist at the Institute for Safe Medication Practices Canada on, I guess, the origin story of the five questions that you're supposed to ask about your medications.

Alice: [00:16:31] And we kind of came across just so many questions that we could ask and we generated a list of three full pages of questions, what to do before you see the doctor, what questions to ask when you're at the doctor's office or when you pick up your prescriptions. But

when we showed it to the Patients for Patient Safety Canada group, they were very kind and generous with their comments, but it was just too much information. There's no way that we could have included all these questions in the short period of time that a patient sees their doctor.

Narrator: [00:17:03] So they cut them down to size. Here are those five questions. Question 1: changes. "Have any medications been added, stopped, or changed, and why?" Question number 2: continuation. "What medications do I need to keep taking and why?" Question number 3 to ask about your medications: proper use. "How do I take my medications for how long?" Question 4: monitoring. "How will I know if my medication is working and what side effects do I need to watch for?" And question 5: follow up. "Do I need any tests and when do I book my next visit?" As Alice mentioned, they make a handy printout-sized version of this that you can access pretty easily at PatientSafetyInstitute.ca. Throughout the story, we've heard the term "de-prescribing" used a couple of times. Can you tell me a little bit about what's involved in that process?

Female: [00:18:02] De-prescribing, really, it's a pretty complex service. A lot of people just think of de-prescribing as taking away a prescription, which in its simplest form, is true. However, a lot of medications can't be discontinued right away. A lot of medications, there's a much more systematic approach to actually removing a medication or discontinuing a medication that requires, you know, slowly decreasing the dose over specific periods of time. Sometimes those medications need to be replaced with other therapies, whether they're medicinal or not. And typically, that happens in collaboration with your pharmacist and your physician.

Narrator: [00:18:46] In Judith's story from episodes one and two, we kept coming back to this idea of puzzles. It's an apt metaphor in solving what was wrong with Judith, what ultimately turned out to be a medication safety issue. And yet in talking with Dee and David and Sandra, I'm struck by how solving a medication error, untangling which medications are harming more than they're helping, once you know that that's what's going on, is a complex puzzle in and of itself.

Female: [00:19:14] A lot of this information is available. I mean, you can find it, but it's, how do you put those puzzle pieces together and how do you solve that puzzle for that individual person? Because every single person is different.

Narrator: [00:19:28] Right now all over the country, there are people unknowingly facing adverse drug reactions, people caught in the midst of a puzzle like Joanna's and Judith's that they can't solve. The solution isn't necessarily a simple one, but the best way to start is to

establish a dialogue, open communication with your pharmacist, doctor, nurse, or other health care provider. Make sure they know every medication you're on, including over-the-counter ones, and encourage a medication review, and if necessary, discuss a de-prescribing regimen. For more information on all of this, you can and should visit PatientSafetyInstitute.ca.

[0:20:04] As we reach the end of this season, I'm reminded of something that Judith said to me during one of our conversations. It reminded me that one of the biggest things we can do to keep the people in our lives taking multiple medications safe is just to pay attention, to watch out for the people we love who might be at risk for polypharmacy and adverse drug reactions, and to arm them with the information that they need. This is Judith recounting a conversation with a young person who heard her story and saw some parallels with someone they love. I'm going to leave you with what she said.

Judith: [00:20:40] When I talked to her, she said to me, "That's really interesting. Really interesting. You know," she said, "I think I'd like to learn more about this and maybe I should do something for my grandfather who's getting older and I think they're on too many medications." When it came right down to it, the thing that happened was the fact that eventually, I gave her articles. She read up the articles and she's gone to do something about it for her grandparents and she's keeping an eye on her parents. But you are delightful to talk to. I have so enjoyed talking to you.