LNP 154
Did the Pharmacy Really Fill Your Prescription Correctly?
Dr. James O'Donnell

Pat: This is Pat Iyer with Legal Nurse Podcasts and today I have with me Dr. James O'Donnell. Jim and I were just tracing back our relationship before we started this podcast. I know that I must have met Jim in 1990 or so, possibly 1994 when we met at an attorney conference. He introduced me to Lawyers and Judges Publishing Company and before I knew it I was an editor of a book on nursing malpractice.

Jim is an Associate Professor of Pharmacology at the Rush Medical College in Chicago. Jim is a diplomat of the American Board of Clinical Pharmacology and a fellow in the American College of Clinical Pharmacology.

Jim has been an editor of "Drug Injury" book. I think I've known you Jim, since the first edition. He's now the co-editor of the fourth edition and he's also the founding editor of "The Journal of Pharmacy Practice".

He consults and testifies. I know my company has used him as an expert witness. He estimates that he's testified in more than 400 trials. His experience is in malpractice cases and criminal cases. He has a lot of experience in pharmacy error cases. He's written extensively on that topic. We've decided today to focus on the allegations against pharmacist and just pick out of Jim's vast experience a subset of his areas of expertise.

Welcome to the show Jim. I'm so glad that you could be with us today.

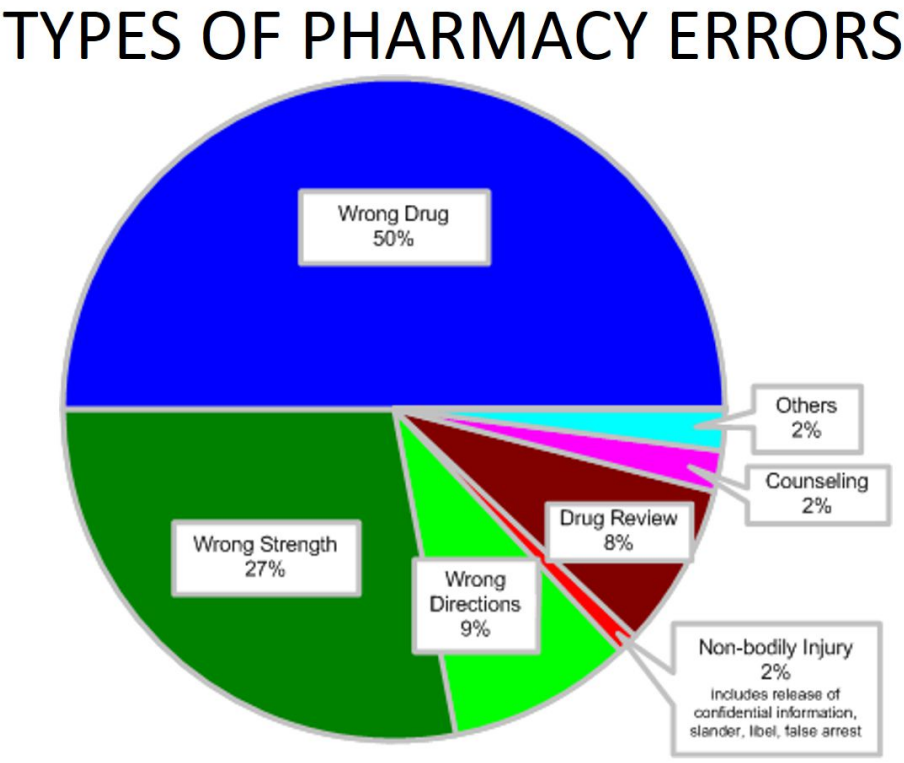
James: Thank you Pat and it was nice to get a brief history of how we came up in this type of practice.

Pat: I know that you have gotten quite a bit of experience looking at cases as an expert witness. What are some of the most common allegations against pharmacists?

James: Well, 75% are either the wrong drug, which represents 50%, or the wrong strength of the drug. Inderal is prescribed, and Lasix is given, or Inderal is prescribed as 10 mg and instead 40 mg is administered. The remaining 25% includes primarily the wrong directions. Someone is told to take one tablet every two hours instead of every 12 hours. I've seen that error because somebody covered up the one of the 12 with an auxiliary label.

The other area that pretty much fills out the rest of the pie is the drug review and counseling. By drug review there is a standard and the law of the OBRA. It requires that pharmacists perform a drug utilization review for safe dose, lack of interactions and lack of allergies. The counseling is explaining to the patient how the drug should be used, what is important that they should concerned about and what side-effects they can dismiss.

These two areas of the drug review and counseling allegations are the largest area of growth in the past 20 years. Clearly there are standards of practice and more-and-more companies have policies and procedures that require this. While it's not as large an issue as the wrong drug and the wrong strength, it is an important area of the pharmacist’s responsibilities for providing more than the correct drug to the patient but rather making sure there are no problems with other drugs and making sure that the patient understands how to use them.



Pat: I would assume if a person's getting all her prescriptions filled by one pharmacy chain, for example let's just pick CVS. The CVS computers are all connected to each other. They would show if she went into one CVS in one city and went into a different CVS in a different city or even within the same city.

What if she has prescriptions filled at Rite Aid, CVS, Eckerd and many chains? How does that pharmacist do the drug review if the prescriptions are spread out between competing companies?

James: They should ask the patient.

"Are you taking any medications that you're filling elsewhere?"

"What other medications are you taking?"

"Are you taking any over-the-counter medications?"

"Are you taking any dietary supplements?"

After there's a relationship established with that pharmacist each time they see the patient they should say, "Is there anything new that you're taking that you weren't taking the last time we filled your prescription?"

While there is an assumed reliance on integration of all the CVS profiles into one for the patient, they may not appear on the same page. The pharmacist may need to go to a different screen to see what else is there. Even under those circumstances it's always best for the pharmacist to just ask the questions.

"Do you have any allergies?"

"What other medications are you taking?"

That will provide the adequate and necessary information for the pharmacist to perform the drug utilization review. It also sets a basis for counseling.

Pat: I don't want us to lose sight of the fact that you said earlier filling a prescription with a wrong drug, which you shared with me is 50% of the pharmacy errors, and wrong strength is 27% combined they equal more than 75%. When we focus on the wrong drug, I would really like us to think about what happens in a typical community pharmacy. Somebody walks in with a prescription. Who fills that prescription?

James: Typically, it is received by a pharmacy technician who in most states is licensed by the state through the Board of Pharmacy. That person must make sure that the information on the prescription is complete. They get additional information such as date-of-birth, the address and phone number to verify if they're in the computer or not. That is then usually scanned and put into a pharmacy queue if you will. The scanned prescription is visible.

Part of that scanning process that technician types in gets the patient's information in there, selects a drug from a drop-down menu based upon a medical listing of drugs and enters the directions for use. What happens then is that on a command a filling document is generated by the pharmacy printer. That technician or another selects the medication from the pharmacy inventory, counts or pours out the prescribed quantity, puts the medication in a prescription vial or bottle and affixes the label.

At this point or even before a pharmacist looks at that screen and verifies that the information is adequate. A DUR (drug utilization review) is performed, a review for allergy cross sensitivities, a review of any drug interaction warnings and high or low dose warnings. After that, verification is done, and that step is sometimes done off-site in a different pharmacy which makes things a little bit more complicated.

Once the prescription medication is put in the prescription bottle and a label is attached then a pharmacist needs to do a final check. The pharmacist should unscrew or unlatch the cap on the prescription vial and view the medication in the bottle. The computer screen that was generated with an image of the prescription also provides an image of the dosage form, the blue tablets, the marking and some may indeed have an image of the manufacturer's container. It provides the pharmacist with a visualization of what the medication should look like so when they're looking at the prescription in the vial that's prepared for the patient they have a secondary visual source.

Many pharmacists keep what we call the stock container as part of that final check by the pharmacist. Some companies remove the stock container and the pharmacist verifying or checking the prescription based only on the image on the screen. Almost universally the pharmacist is the only person who bags and seals the prescription label.

There are some safety factors that are built into the filling process. Most systems now have barcode readers where the technician when they're selecting the drug will do a barcode on the manufacturer's container, and that should match the barcode that's generated by the system in the entered prescription. That's a safety factor. For those without that level of technology, there is another safety factor of reviewing a unique national drug code number that's on every prescription container and writing that number down on the front or back of the prescription document. It's an additional way of verifying that the drug that's ordered in the computer is indeed the drug that's selected.

I've worked with both systems and they both work. The barcode is certainly one that is becoming universal in hospitals now, so any nurses would be familiar with that. It's becoming very common in dispensing pharmacies as well.

Once the prescription is checked, closed and stapled, and the patient information sheets and receipts are printed up those are usually now put in the bag because of HIPAA. You know whether the patient is waiting for the prescription. Then the pharmacist should take the prescription to the patient and counsel the patient. If the patient is not waiting, then it's put in a final prescription storage area for pickup by the patient or a family member the next time they're in the store.

That's the process, the hands on. There are two definite processes for the pharmacists involved. There's a very heavy reliance on pharmacy technicians to do what we call the non-judgmental work, rather the clerical work, and inventory handling and selection.

That's the process and it's universal since we've had computers and of course I started working in drug stores when we only had typewriters.

Before I continue with the rest of the show, I want to share information about a resource I have for you that gives you vital information about medical errors.

I have a one-hour audio training called ***Killer Cure***. Listen in as I interview Elizabeth Bewley, a safety expert as she exposes the sources of errors in the healthcare system. Health care kills more than 600,000 people every year, the equivalent of the population of Boston. Elizabeth defines our hidden assumptions about health care, medications, and treatments and why these assumptions put you in danger.

Elizabeth L. Bewley is President & CEO of Pario Health Institute and the author of *Killer Cure: Why Health Care is the Second Leading Cause of Death in America And How to Ensure That It's Not Yours*. She was an executive with Johnson & Johnson for 20 years. She became interested in patient safety after she had personal experiences with health care that almost led to her death.

Order this audio training at http://LNC.tips/KillerCure and use the coupon code listened to get a 25% discount on the price.

Pat: Do you still get involved in cases where there are handwritten prescriptions?

James: Yes. Right now, the e-prescriptions represent I think 50%, so there are still handwritten prescriptions and then a lot of prescriptions continue to be faxed. What I described was the written prescription, but the

process is the same except for an e-prescription is in the computer and the technician works from that as a source document. A faxed prescription is handled just like a handwritten prescription. Indeed, we still get calls from doctors' offices where they dictate a prescription over the telephone just as they would in a hospital where they are giving a verbal order to a nurse.

We're getting more-and-more electronic and technical. The number of written prescriptions predictably will shrink as there is wider utilization of e-prescribing.

Pat: You're describing a system that sounds like there are many steps involved. I'm impressed with the fact that the pharmacist has a computer screen to be able to look at to say, "This Coumadin 5 mg pill should look like this image on the screen" and yet you have shared with us that 50% of the pharmacy errors are involved in the wrong drug being handed to the patient. Where does the system break down?

James: The technician may select the wrong drug from the selection of the drop-down menu when they're looking it up. The technician may select the wrong drug taking it off the shelf and they're not using a barcode system. Those are two ways that happens.

It's the same thing with the wrong strength. We're still relying on people and people sometimes make mistakes or don't follow policies that are in place to enhance safety and detect errors before they're dispensed to the patient.

Pat: I've been standing in a pharmacy area of a store and I've seen people driving up to the window. I've seen somebody answering the phone and taking information on the phone. I've seen lines of people waiting at the cash register to pay for prescriptions, drop off prescriptions or pick them up. How do all those simultaneous demands factor into these types of errors?

James: It's certainly challenging. There are many distractions. The pharmacist needs to grow blinders and try to stay focused on one prescription at a time, which is difficult with telephone calls, questions and the process of filling the prescription. With a large high-volume store, in my opinion the risk for errors increases.

I was once interviewed for CNN on the issue of pharmacy errors. They asked me the question "What do we tell the public about how to avoid prescription errors?" I described a picture like you did of 10 women and there could be some men there too clasping onto their day-timers, a little bit dated, but now their cell phones and their purse glaring at the pharmacist. As a pharmacist I want to say to you, "Which if you wants the mistake?" In other words, we can't be rushed.

There is some type of urgency that is expected by the public and it's expected by management. Some pharmacists seem to have that urgency.

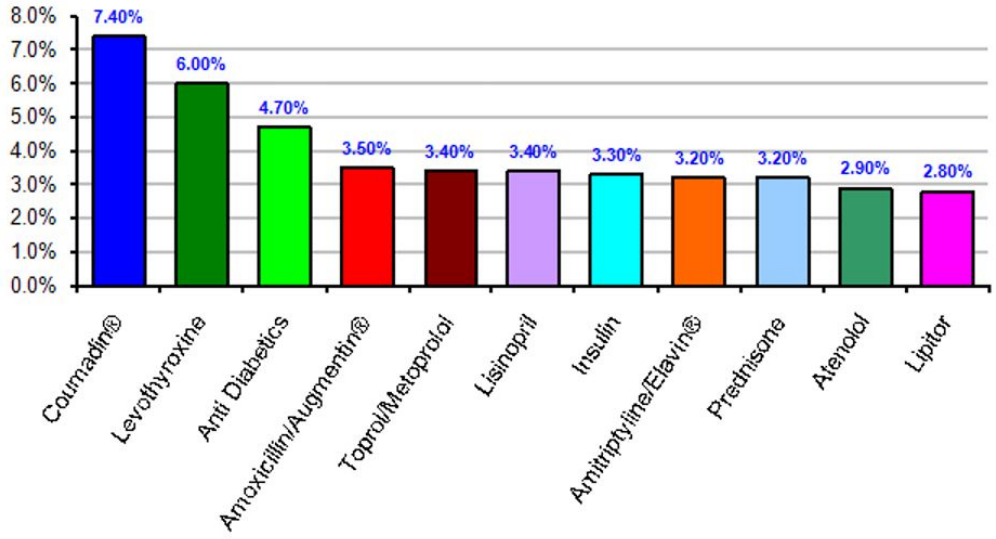
I remember the first day I worked in a chain store on a Saturday morning and it was busy. The prescriptions started backing up and my technician said, "We need to move faster." I said, "It's going as fast as it goes." She said, "We need to get these prescriptions out in 20 minutes." I said, "That's not going to happen." She says, "Then I have to tell the manager that we need cash certificates to give patients who wait more than 20 minutes." I said, "Well, you better tell the manager to get a bunch of them. By the way have you ever heard of Domino's Pizza with promising an on-time delivery that ended up in a hundred-million-dollar punitive damage lawsuit?"

You cannot rush certain things. If there's a great volume and not adequate time to work, then it's going to create a perfect storm for an error, a mistake or an oversight.

One of the issues that I hear about from pharmacists and is discussed in some of the pharmacy literature is a metric evaluation of when the prescription hits the window, and when it is finished on the other end of the pharmacy. In other words, it's the time it takes to fill the prescription and check it. If a pharmacist is on duty and they don't make that metric and they take longer than the average, then their manager talks to them about moving filling faster. I say that is a prescription for disaster.

Pat: Can you tell us about some of the drugs that are commonly involved in errors? Are there certain ones that are deadlier or more prevalent than others?

DRUGS INVOLVED IN ERRORS



James: Yes, there are, and I call them the *usual suspects*. It's a factor of two things. We know which ones are commonly involved in claims. The data that I provided to you is claims experience by the Pharmacists Mutual Insurance Company. There are other drugs that are involved in errors, but they don't result in claims because if you're taking a Cipro pill and you get 500 mg instead of 250 mg or vice-versa it's not likely that you're going to be injured.

The drugs that we see in claims are high volume drugs that have the potential for injury. They are high volume drugs that if you're not giving the correct drug to the patient or you're giving the wrong strength like too low a dose then the patient has a significant adverse event.

What I listed from my usual suspects are anticoagulants. You give too much, and people bleed. When people bleed there could be a brain bleed. It could be a GI bleed, or it could be a nose bleed. If someone needs an anticoagulant and they get the wrong drug, or they get too low a dose, they stroke, or they have a heart attack.

The high alert Fentanyl drugs have a narrow therapeutic index, meaning that the intended effect is within a certain window.

Another class that's commonly involved are of course insulin and all hypoglycemics. With insulin if you give too much patients get hypoglycemic, seize and have brain damage. It's the same thing with oral hypoglycemics like Glipizide.

Synthroid errors are common. Synthroid has about 12 different dosage forms in all very small minute fractions of milligrams.

We see penicillin allergic reactions especially cross-allergy among the penicillins and the synthetic penicillins like Amoxicillin, the cephalosporins, and the old Keflex which is still used. That's one reason why it's so extremely important that every time every patient sees a pharmacist their pharmacist should be asking the question "What drugs are you allergic to?"

Opioids we see if the patients get too much that it could cause respiratory depression. I've seen emergency room prescriptions given with Fentanyl patches or OxyContin pills to patients who are opioid naive. Opioid naivety or lack of tolerance is a contraindication. A pharmacist getting a prescription for a chronic high dose opioid should see evidence of opioid use that would justify a high dose opioid.

Beta blockers and ACE inhibitors are high volume or fast movers as they're called. Too high a dose or too low a dose you get too much effect and someone's blood pressure drops. They faint. They hit their head. The damage is hitting the head. The drug doesn't cause any organic damage.

We see a lot of Amitriptyline errors. Amitriptyline is a tricyclic antidepressant. It was used for 30 years as the primary antidepressant. That use was replaced by the Prozac, and a long line of SSRIs like Zoloft and Paxil. It's commonly used in pediatrics for enuresis as a low dose and in geriatrics as a low dose to help people sleep because it causes drowsiness.

The most common error with Amitriptyline is 10 mg is prescribed and 100 mg is dispensed. When they do that, they're not considering the dose. They're asleep at the switch. It may be written wrong by the

doctor or maybe entered or selected wrong by the technician. The pharmacist is not thinking why my 80-year-old lady is who's on Digoxin, Cardizem and Coumadin getting 100 mg of Amitriptyline.

Prednisone and corticosteroids: we see dosage errors where commonly 50 mg tablets are dispensed in place of 5 mg. The patient gets psychotic if they're on it long enough. They develop osteoporosis and fractured hips.

Lipitor and statins: it's primarily because of the volume. It's almost the right of passage once you pass the age of 40 or 50 everybody gets put on Lipitor or some other statin.

Those are the usual suspects and of course then there are other drugs that pop-up. Just about every drug that's prescribed could result in a claim.

I'm giving a lecture next week to a reproductive immunology group on some forensic drug matters in obstetrics and gynecology. I was reflecting on the fact that we have significant amount of advanced immunotherapy and chemotherapy, but from my viewpoint as an expert who reviews drug injury cases we don't see reports of errors with the high priced highly technical drugs. We see the reports of errors and injuries with these drugs that have been around even longer than I have just because our systems are not adequate. It's more to blame on our people not doing the job right or they have too much work to do and they can't do it safely.

Pat: Well Jim you have listed drugs that probably many of our listeners are on and it certainly is sobering. I appreciate you sharing your expertise. How can our listeners learn more about what you offer?

James: I do have a webpage. I'm in practice with my partner who is also my son. It's www.pharmaconsultantinc.com or www.jamestodonnell.com. We also have on the website our curriculum, a list of the types of cases that we consult in and references to the books that we published, especially the latest "O'Donnell Drug Injury" book. In fact, we will have two new books coming out in the next three years that we're working on now. Our telephone numbers and emails are listed on that www.jamestodonnell.com website.

Pat: Thank you Jim. It's been a pleasure talking with you. I appreciate your attention and your expertise. You have made me think about some aspects of getting prescriptions filled that I took for granted. If any of our listeners are saved from a medication error because they recognize they have been given the wrong drug, we will have a side benefit from our time together today.

James: Let me make one final comment or recommendation. Even though pharmacists by law and by policy are supposed to counsel patients what I see happen too often is the technician brings the prescription out and says, "Do you have any questions for the pharmacist?" If you do, that prompts counseling and my answer to them is, "I don't know what this is, so how can I have any questions since I don't know what it is." My recommendation to every patient is to say, "Yes of course I do. I want the pharmacist to talk to me about this drug."

Michael Cohen who published the "Medication Errors" books and is president and founder of the Institute for Safe Medication Practices has written that 95% of errors can be caught in this counseling process. If you don't do the counseling, you're missing an opportunity for error.

For example, this drug here is for your stomach and the patient says "What do you mean stomach? I went there because I was depressed." They were dispensing Prilosec instead of Prozac, so don't take that. Answer the question as "Yes, I want to talk to the pharmacist."

Thanks again for the opportunity, Pat.

Pat: All right Jim thank you and for our listeners please be sure to listen next week when we have a new interview. Give us a review on iTunes, that would be great. Sign up to receive the transcripts so that you can go back and refer to this information. Jim has given me a couple of slides that I'm going to include in the transcript that will give you some key concepts that you can refer to.

Thanks for being a part of our show.

James: You're welcome. Goodbye.

After you stop listening, check out http://LNC.tips/killercure for the details of Elizabeth Bewley's training about medical errors.

Check out the webinars, teleseminars, courses and books at legalnursebusiness.com. Expand your LNC skills with our resources.

Explore coaching with Pat Iyer at LNCAcademy.com to get more clients, make more money and avoid expensive mistakes.

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