How to Read a Medication Label Nursing Skill - Medication Administration Pharmacology Review

(0:00 - 14:14)

Hey everyone, it's Sarah with RegisteredNurseRN.com and in this video I'm going to demonstrate how to read a medication label. And whenever you get done watching this YouTube video you can access the free quiz which will test you on this content. So let's get started.

As a nurse you want to be familiar with how to read a medication label because the medication label contains important information that you need to know in order to safely administer that drug to the patient. So what are some things that you can expect to find on most medication labels? You can expect to find the brand name followed by the generic name, the supplied form of the medication, the dosage strength, the route the medication should be administered, the total volume or amount of medication that's in that container or vial, the lot number and expiration date, medication instructions which are very helpful for telling you how to store the medication or reconstitute the medication if needed, the manufacturer and distributor's name and address, a barcode and the NDC number which is the National Drug Code Number. So now let's look at some medication label examples and look at where this information can be found.

So here's a mock medication label. First thing I want to cover is the brand name. Here the brand name of this medication is PretendMed and the brand name is the registered name given by the drug company who owns rights to it.

And you may notice next to this brand name a registered trademark symbol which is an R with a circle around it and that means it's registered. Now there are patent protection rights that are given to the company who will solely market this medication under its brand name. So there won't necessarily be a generic form of the drug available yet until this patent protection runs out.

Now once the patent runs out other companies can market the drug and may create different brand names for a medication, but you should always be able to see the generic name as well. And the brand name is usually a lot easier to pronounce and spell than the generic name. And the first letter is capitalised and it's usually the largest and boldest.

Now typically found very close by that brand name usually under it is the generic name and here in this example our generic name is Fofarmoide and the generic name represents the active ingredient in the drug which is why many times the generic name is a lot longer and it's harder to pronounce and spell because these names are chemicals. Now there is only one generic name for a drug. There can be multiple brand names but only one generic name and it will always be included on a medication label.

Now sometimes you may be looking at a label and you will just see a generic name and this will be used for medications that have been on the scene for decades and they're very well known by this name. These names will typically have the parentheses around them and will all be in lowercase letters. Now one thing that is helpful for us nurses is that the ending of most of the generic names tend to be similar for certain groups of medication which makes it easier to identify what medication we're giving to the patient.

For example, the generic names for ACE inhibitors typically end in pril like or beta blockers they tend to end in lol like labetalol. Now as a nurse it's very important to be aware of both the brand name and the generic name because the doctor or whoever's writing medications for this patient may write you an order for the brand name but pharmacy supplies you with the generic name. For instance, the physician orders Lasix but you're supplied with frosmide.

You would know that this is the same medication and the reason for this is because the generic form of the drug whenever it is available tends to be a lot cheaper than that brand name so it's saving your patient hundreds to even thousands of dollars and these medications work the same it's just cheaper for the patient. So one thing you want to keep in mind if your patient let's say is taking the brand name at home whenever you go to administer that drug and it's generic form they may look at the pill and say hey this doesn't look like my pill I take at home are you sure that this is the medication well after confirming it is you want to educate the patient generic and brand names those pills capsules tablets whatever they tend to look different. Now sometimes next to the generic name you may see the letters USP what does that mean what does it stand for that stands for United States Pharmacopoeia and this means that that medication has passed specific quality standards and has a seal of approval on it it doesn't represent a certain measurement of the drug or how the medication is released in the body which leads me to my next point if a medication is designed to be released in the body in a certain way this type of release will be listed to the drug's name and it will be specified on the label for example here with this medication label it says pretend med xr xr is not its brand name it is telling you that this is a different release of the medication so xr stands for extended release and that's even further specified a little bit lower on the label below the generic name it tells you that these are extended release capsules now there's different types of releases some examples would be like cr that stands for controlled release ir immediate release ec enteric coded cd controlled delivery and the reason i point this out is because it's very important the nurse looks at this part of the medication label to verify what type of release this medication has because depending on the form the medication may not be able to be crushed or chewed because if it was crushed or chewed and it was one of these special releases it could alter the rate which the medication works in the body and could be not very good for the patient another thing you want to be familiar with on the medication is the supplied form of the medication this tells the nurse how the medication is supplied for example here our label tells us that our medication is in capsules but you can also have medications in tablets or even solutions and suspensions and here you can see that this medication tells us that it is an oral solution but this label tells us that it is actually going to be an injection solution because we're

dealing with something that's going to go intravenous or intramuscular you can also have topical suppositories etc next is dosage strength this is the amount of drug that is in the specific dosage form supplied and you will see a number with the measurement unit beside it so let's look at this medication label of pretend med our dosage strength is 250 milligrammes so what does that mean well a lot of times you can go and look at the medication instructions and it will give you further details about this but what this means is that each capsule of this pretend med or faux pharmoide contains 250 milligrammes so let me test you here for a second let's say the doctor orders pretend med and they order 500 milligrammes po daily how many capsules are you going to give this patient with each dose well we know by looking at this label each capsule contains 250 milligrammes the ordered dose is 500 milligrammes so we are going to give two capsules to equal that dose but now let's look at this medication label we have the brand name medication imagine med has a generic name of fictitious omad it's an injection so we're dealing with a solution and it tells us that it has a dosage strength of five milligrammes per five mls or also equivalent one milligramme per one ml so what that is saying is that for every millilitre you draw up in that syringe of that medication out of this vial you are giving one milligramme so it's equivalent of drawing up five mls to give five milligrammes so let me test you again here let's say the doctor has ordered the patient to have a one-time dose of 2.5 milligrammes of this medication how much are you going to draw up well we know that one millilitre equals one milligramme so we are going to draw up 2.5 millilitres which will equal 2.5 milligrammes and then just to give you another example of looking at that dosage strength let's look at this medication label we have the brand name fake elixir with the generic name of mixtures all die fake eight and we know that it's an oral solution so it tells us that it has a dosage strength of 350 milligrammes per five mls so what that means is that for every five mls that you're measuring out you're pouring out you're giving the patient 350 milligrammes of fake elixir so let's say the doctor ordered the patient to have 700 milligrammes once a day of this medication how much would you pour out to give to the patient to equal that dose well we know for every five millilitres you're pouring in there there's 350 milligrammes so we need to give 700 350 plus 350 is 700 so we would give 10 millilitres next is the route on the medication label you want to look to see if it specifies what route this medication should be given here we have a medication in the form of capsules and generally speaking capsules and tablets are understood to be given orally unless it's specified directly because some medications may be supplied in a tablet form but they need to be taken sublingual or the buckle route for instance like nitroglycerin it's like these little tabs we give them to patients who are having chest pain that goes underneath the tongue and on a bottle of nitroglycerin it will actually say sublingual tablets so always look at that information now there's other routes that medications can be given for instance here our label tells us it's via injection and it says below that it says for intravenous or intramuscular use you could also with some labels it will tell you you can maybe give it subq so you can get subcutaneous in addition other medications can be given via the eyes the ears rectally vaginally they can be given via inhalation nasally transdermal so always double check that next is total amount or volume and this is the total amount or volume of that medication in that container bottle or vial whatever you have on hand and here it tells us that there are a total of 50 capsules in this bottle now with solutions the total amount will be written

like with a volume for instance this vial of imagine med it tells us that it has a total of five millilitres in it and over here with our fake lixer it tells us that this bottle has a total of 100 millilitres in it after reconstitution so once we have prepared it the way that the manufacturer wants us to prepare it it should have a total of 100 millilitres in it next is the lot number and expiration date so these two numbers are typically located together so the lot number is helpful in identifying a recalled medication and to help the manufacturer track the medication the expiration date tells you when the medication is expired so as a nurse you always want to check this especially the expiration date and you don't want to administer an expired medication to a patient but discard it according to your facility's protocols next is the medication instructions this is a section found on most labels that's going to give you some detailed instructions on the medication such as dosages how to prepare the medication reconstitute it storage details etc so let's look at this medication label of fake elixir so over here it tells us that this bottle contains a total of 7 grammes of mixed rizal difacate and that's just telling us that in this whole bottle of this medication there's 7 grammes of it and it's telling us that in each 5 ml there's 350 milligrammes of this medication so that further gives you information if you're a little unsure by looking at that front part of the label that confirms how much is in each little dosage that then it says the dosage c pamphlet included with the medication package a lot of times manufacturers will include this little fold out piece of paper that will tell you detailed information about the drug if you need to know that and then here this is one of those ones that need to be reconstituted so we have to prepare it in a specific way before we administer it right now as it is it's not ready to go so it's telling us to add 80 ml of water to the bottle to shake thoroughly and this is going to prepare our 100 ml oral solution so we want to do that before we give that to the patient now it's telling us that once we prepare this medication it's going to expire in 14 days so you definitely want to label this let other people know when this was made and when it expires then it goes into detail about storage it tells us that we need to keep it refrigerated between 35 to 46 degrees fahrenheit and to keep it away from light next you may see the manufacturer and the distributor's name and address who made this medication and who is distributing it it can be the same name or two different names and then you will find a barcode on it and this is used many times in the hospital setting to help identify the medication in the medication system and during administration and lastly we have the ndc number the national drug code number and this is the number the fda uses to identify drugs it has three sets of numbers that are hyphenated the first set of numbers are assigned by the fda and they are the labelers code the other numbers are given by the company and the middle numbers are the product code and the last numbers are the package code so if you ever see those numbers on a label you now know what they are okay so if you'd like to test your knowledge some more on how to read medication labels you can access the link in the youtube description below and thank you so much for watching