

Featured Speaker

Scott Hurd, DVM, PhD

Host

Sarah Probst Miller, DVM



Dr. SARAH

I'm sitting here in beautiful Vancouver at IPVS with Dr. Scott Hurd. We just listened to him talk here and I have a few questions for him. Scott, you left us with a call to action and from the perspective of the pig veterinarian, the person who is out in the barn working with farmers, working with producers trying to make the best decisions for the pig and so that's what we are going to talk about in our next edition of P's in a Pod. Scott, could you start by explaining the hypothesis that you brought forward in your talk.

Dr. HURD

Well, Sarah, what I wanted to do is help pig veterinarians understand that careful and correct use of antibiotics is really an ethical responsibility. Not just from the standpoint of not using too much, but from the standpoint of using enough. Point being, that they have a responsibility to raise food, to raise safe food, and antibiotics are an important part and tool to make that happen.

Dr. SARAH

As a pig vet, I feel deeply that I want to do the right thing. I want to make the right choices both for from the food safety perspective and for my producers so that I am making a wise decision for them and the best decision for the pigs. You challenged us to have a "clean house" when we are making decisions in regards to antibiotics. Can you explain how that connects with our ethical decision as well?

Dr. HURD

The importance of having, as I said, keeping your house in perfect order when it comes to antibiotic use is in order for us to maintain the right to use antibiotics. We need to be able to convince the consumer groups and the medical community that we know what we are doing. We need to be able to prove it with good records, with justifications for all uses even if they may be production uses or growth promoting uses. So, that's important for us to help people understand and for them to be confident still that we are in charge when it comes to antibiotic use.

Dr. SARAH

In your talk today, your hypothesis that you stated that we went through step-by-step was that full utilization of antimicrobials is a vet's ethical responsibility.

Dr. HURD

Well, that's correct and the first off it started out we tested a number of "if" questions and a couple of the key ones were, if the risk of antibiotic use public health risk, is minimal, than we can still use them without guilt and that was the first point, and as I said in that all the

published risk assessments where we connect the dots from the farm to the clinic have shown that the risk to public health of on farm antimicrobial use is very, very low and then the question becomes, well, what is the benefit? Well now, of course, is the flip side that we talked about. The benefit is healthy livestock. We went through a bit of data showing that as the livestock health goes down, as measured by lesions and that sort of thing, the carcass contamination goes up. So, we have, I think, a bigger role in food safety maybe than we realized before.

Dr. SARAH

Right, and can you explain a little bit more of what you meant by the term, full utilization.

Dr. HURD

Well, when I say full I use that term as opposed to judicious. Not that it really is contrary, but judicious people tend to think of just minimize it, just minimize it. What I wanted people to think about is, no, it may be time when maximizing it is important. The point is that you carefully evaluate when you are using it, why you are using it, and that you use it fully when it's needed. So, that was the real charge that I wanted people to have and also somewhat to remove the guilt that every time you use antibiotics that you are doing something wrong because that is just not the case.

Dr. SARAH

Yeah, so as a pig vet when I am approaching a herd let's say, I have quantitatively evaluated disease in a situation, I have determined that 15 percent of the pigs have diarrhea. I have a diagnosis; I have cultures and sensitivities that I shouldn't feel guilty for treating those animals should they need it. I mean, that is the general summary, right.

Dr. HURD

That is exactly right, you shouldn't feel guilty even if it preventive uses. I mean, treatment generally society is comfortable with that, but I was very pleased to see that FDA in their recent guidance 209 has made a strong stand that preventive antibiotics are something that they are comfortable with. So, yes, we should feel good about using products when and how they are needed and people, society really depends on us to do that.

Dr. SARAH

Yeah, when speaking of making that decision and you know that associated guilt that we want to avoid, but inevitably happens on occasion, you spoke of risk and conditional probability and asking us to weigh decisions while understanding that. Did I interpret that charge correctly?

Dr. HURD

Yes, that is correct. And my point really is for people to understand that risk has to have two elements. One is the probability or the likelihood of that event and then the harm should the event occur. The reason that is important is in the debate about antibiotic resistance a lot of people are generally looking at one part of the story. You know, they find some resistant bacteria on the farm and they say, oh my gosh, we are creating a super bug that is going to kill

us all. That is not risk. What has to happen in order for that hazard, the resistant bacteria, it has to go through a number of steps before it can actually get to causing harm, which is consequence, which is the other part of the equation. So my point, to everyone including the decision makers in Congress and the government is that you have to think about it from the standpoint of risk not just concern. Sure, we all have concerns about it, but we need to measure the risk in real public health terms.

Dr. SARAH

Right, so, when I am a vet out there in the field trying to measure the risk of what I am doing practically I may not have immediate response, and sometimes I have to make decisions, and I need to have the ability to make that decision quickly so that the pigs are best treated and receive the best care possible. In your role on the political side, has that conversation occurred? Do they understand our need to be able to evaluate that risk and make the best decision from the diagnostics we have and that, you know, we might go back and evaluate and perhaps we might have made a decision differently when we have had all those facts. How do we balance that and communicate that when we have that opportunity?

Dr. HURD

Yeah, well, there is a number of different questions sort of inherent in that. I think that the first thing to keep in mind, in my way of thinking about it when you are on the farm and you are making decisions, you can't do a risk assessment.

Dr. SARAH

Right.

Dr. HURD

You can't ask the question, is this going to cause problems throughout the chain. In many ways that has already been done because the label and the approvals that the product went through are telling you this is safe use. So, if you are using those products according to the guidelines and if you have to go extra label you do that according to the guidelines that system is already there so you can be confident that it's not going to create a public health use. And, as I said, the consumers and the public are pretty comfortable with the concept of even preventive antibiotics in this country. Bottom line, really the only one they are worrying about is what they think is growth promotion. They imagine that we are just willy-nilly pouring this stuff in there so the pigs grow better. That's the one that at this point you have to think about whether it is judicious or not. I am not saying even that is creating a risk, but at this point the judgment of the public, the judgment of the FDA seems to be against that type of a use.

Dr. SARAH

Yeah. You said that you wanted us as veterinarians to provide you with a "clean house" so that you can stand in front of folks and be able to speak for us. How do, you know, I feel that the vast majority of us deeply care about what we are doing. Does that, I know that deeply caring doesn't necessarily translate into always making the right decisions. How do we give you the

“clean house” so that you can stand and represent us and feel confident that we are choosing to do the right thing?

Dr. HURD

That is a great question, Sarah, I am glad you asked that one. To me, the one big weakness if you will in an argument when I am standing up for the industry is I would like to have a lot better base of data on drug use. And we can get some from the companies, from the animal health institute, but I would like to have more specifics and if I had the ability to say that on average this is how much product is used for x, y, and z, this is for the disease, this is for the ages, and I realize there may be confidentiality concerns, but it's a lot easier for me to stand up in front of the public and say we know what is happening, we have it under control. When I can show them the raw data.

Dr. SARAH

Yeah.

Dr. HURD

And that is particularly sensitive because the main usage data that is currently discussed and published out there came from the union of concerned scientists quite a few years ago and there is a number of methodological errors in that data which has led to an enormous over estimate of the amount of product used. We need a response to that. We need those up to date usage data. So, that would be the number one thing that would help me.

Dr. SARAH

Right, well, it's a part of keeping that house clean, because if we want to keep the right to clean our own house. I mean, Lord knows at home I have to hire a housekeeper to help me out, running around, it makes my life a lot easier, but we don't necessarily, we as veterinarians we want the right to make the best decision for our farms, but we need to deserve that right.

Dr. HURD

Well, that's correct and to me the way you show you have maintained and reserve that right is that you are able to withstand a detailed audit should it occur, it doesn't happen much in this country, but you should be able to go back and say on this farm during this time period we recommended this product for this purpose and we even have some lab results to go with that. It is not occasionally that you could do that, but that you could do that for every farm and every time period. If every veterinarian in the country, food animal veterinarian, could do that, could provide those type of data and we would have our house in very good order and we would all be on a lot stronger ground.

Dr. SARAH

Sounds good. One thing that sometimes causes guilt from the consumer perspective back to us as veterinarians is the thought that we may be making decisions that cause our clients profitability and that that is a negative thing. You said something today that really struck home

for me and the sentence was is that, “Profitable farmers take better care of their livestock.” That is so true.

Dr. HURD

Yeah, and that is really true and the reason that kind of came to my mind is because in certain political circles the concept of profit is sometimes treated as negatively. Oh, they are just making a profit. They just do this to make a profit, da da da. And, from my experience in practice and still true today and I'm sure you and all of your swine veterinarian listeners can agree with that. I mean, if a producer is just barely hanging on he is not going to do the best that he can for the pigs. If he is making a profit than he is going to invest in the infrastructure and he is going to use the right products, he is going to prevent versus treat illness, you know, which are key elements. And I think the consumer has sort of disconnected that. They don't like to think of farming as a for profit activity. You know, maybe their grandma and grandpa used to do it because, just because. But, that is really not in the best interest of the animals quite honestly.

Dr. SARAH

Right. You left us with a call to action that you encouraged us to fight for risk based decision making, to keep our antibiotic house in order, to use according to label, and make the decision to use extra label and follow the right chain of thought when going through that, and you asked for vet oversight of antibiotic use on farm. Why don't we conclude by you speaking to that.

Dr. HURD

Yeah, I did. I guess I am asking really for more veterinary oversight, quite honestly. In that sense I am in agreement with the current Food and Drug Administration in their guideline who would like to see more veterinary oversight and I think that maybe it is going to require, quite honestly, I think some changes within veterinary practice. The FDA has laid out the guidelines with what they mean by oversight and that sort of thing. The bottom line that comes from the consumers who say and even the medical doctors who say, ok we are getting beat up about antibiotic use here. In the human side we are trying to do better, but how can the producers say we don't have a problem when you can buy over the counter antibiotics, over the counter feed antibiotics, which are used without any veterinary input and I think that would make the argument a lot stronger on our behalf if the veterinary becomes more involved in drugs even if they buy them from somewhere else, but at least they talk to a veterinarian before they use them.

Dr. SARAH

Does the world need more pork, Dr. Hurd?

Dr. HURD

Does the world need more pork? Well, there is going to be more people in the world and so far they have enjoyed eating pork. As their income increases around the world and it will continue, then to me an obvious connection that there will be more pork that needs to be produced on less land and so we need all the tools that we can to do that.

Dr. SARAH

All right. Well, I accept your challenge to try to work very hard to keep my house clean in regards to antibiotic use and for all of you that are out there driving I encourage you to accept that challenge on farm as well. Let's keep our house clean.

Dr. HURD

That's right. And we are going to go home and clean our regular house.

Dr. SARAH

(Laughing) That's right! You take care and have a wonderful day.

Dr. HURD

Thank you.