

Transcript

Episode 118

Pregnancy & Abortion Misconceptions We Can Fix in A&P

The A&P Professor Podcast

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Introduction

Kevin Patton (00:01):

In a recent article, Dr. Laura Sanders wrote, "Like most aspects of biology, early human development involves many complex processes. Despite the rhetoric around these issues, clear lines between having a heart and not having a heart or being able to survive outside of the uterus are scarce or nonexistent."

Aileen Park (00:28):

Welcome to The A&P Professor, a few minutes to focus on teaching human anatomy and physiology with a veteran educator and teaching mentor, your host, Kevin Patton.

Kevin Patton (00:41):

In this episode, I consider the role of anatomy and physiology faculty in clarifying the science needed to understand pregnancy, birth and abortion.

Why Address These Concepts?

Kevin Patton (00:56):

A few days before I'm recording this, the United States Supreme Court overturned that longstanding precedent stating that the right to abortion care derives from the privacy provisions of the United States Constitution. Now, this new decision permits states to enact and enforce laws to make abortion healthcare illegal within their borders, and many have done so or are preparing to do so. But the thing is the best evidence shows that the majority of opinion among Americans is to support a woman's right to choose abortion and other types of healthcare.

Kevin Patton (01:41):

Now, I know that this is a very controversial topic, and we often want to avoid controversial topics, especially in a professional setting, in a professional role. I want to avoid controversial topics sometimes, but sometimes I can't and I shouldn't, and I think this is one of those times. And I realize that I'm taking some personal and professional risks by bringing it up here in this podcast. It makes me think of my good friend, Judi Nath. She took some risks recently in her new book, *Sins Against Science: How Misinformation Affects Our Lives and Laws*.

Kevin Patton (02:27):

Now, you may recall my conversation with Judi about that book back in episode 110 of this podcast. She discusses the issue of abortion choice in chapter five of her book, and I strongly recommend that you read it. Of course, there's a link. I always have a link. There's a link to that episode and to Judi's book in the show notes so you can find them at theAPprofessor.org/118. That's the episode page.

Kevin Patton (03:00):

By the way, the HAPS Book Club, which includes Judi Nath, just started their summer series focusing on this book. They'll begin chapter five soon, and it's never too late to join in. Just go to theAPprofessor.org/haps. That's H-A-P-S. And click the contact us button at the top to find out how to join our book club. I'll have another briefer resource to help us all get started, rethinking and revising and evolving in a later segment too.

Kevin Patton (03:40):

Something that I appreciate more with each passing decade of work in teaching and writing about and podcasting about the teaching of human anatomy and physiology is that my understanding does evolve. I learn more. Misconceptions are slowly cleared away, if I'm lucky, and science moves on, providing us all with an increasingly clear view of what's going on inside our bodies. Of course, as an A&P educator, I'm a generalist. I cannot be a specialist in every part of the story of the human body, so I can never claim to be as familiar with current evidence and understanding as a specialist would. A specialist in reproduction, human development or any of the concepts related to pregnancy, birth and abortion care, it's just not possible to keep up with everything. It's not possible for any of us, unless you do happen to specialize beyond your world of A&P teaching. Most of us aren't in that situation though.

Kevin Patton (05:02):

It's not surprising then that my opinions about how to best apply my evolving understanding change how I view, how this understanding fits into my own life and into the lives of my family and my community. The more I know, the more informed and reliable my views and opinions are, and I believe the better decisions I make.

Kevin Patton (05:35):

Besides my central duty to my students to be as up to date as I can be on every aspect of A&P, even given that there are real limits to that, I also know that I must be especially up to date on my understanding of controversial topics such as reproduction and abortion. Why? Because my students will be looking to me while they're in my course to provide them with reliable information, so I have to work extra hard to find

and fix my weaknesses. That is, I need to find my gaps in knowledge and fill them in. I need to discover my misconceptions, either things I never did understand correctly or things that science has moved beyond since the time that I first learned them.

Kevin Patton (06:34):

The thing is I can't do that passively. We all know that osmosis, as wonderful and magical as it may be, does not work for learning. Learning takes action. It's not passive. It not only takes action. It takes hard work and fruitful frustration and rinsing and repeating. Of course, it has no end. So when I'm thinking that, hey, I've got a PhD in biology. I've taught the human story for decades. I write textbooks about these topics. I don't need to brush up. I know enough. Well, when I do that, I'm being wrongheaded. How could I know at all without doing the work? Even doing the work, I cannot know and understand it all.

Kevin Patton (07:34):

So yeah, I've got some work ahead of me, don't I? Because when I hear and read the overwhelming flood of public conversation debate, and yeah, even discord and strife and violence about abortion and other reproductive issues, I hear a lot of misinformation. Some of it I recognize as misinformation. Some of it though is misinformation that I think might be correct. So I've got to work on sorting that out so that I can identify what's accurate and what's not. But as a society, we have to sort that all out.

Kevin Patton (08:28):

One issue with getting it all accurate and reasonable so that we can make good decisions about law and policy is that as individuals and groups, we seem to increasingly be willing to set knowledge aside and instead pledge loyalty to a position without caring about the actual truth or falsity of that position. We all do that to some extent, all of us, maybe even a lot, and I'm not sure what to do about that, but there's another issue that I can do something about. And that is to make sure that my students going into healthcare and related professions have information that is as close to true and complete as I can offer them. Besides accuracy, that part about completeness is a sticky issue. As beginners, I can't expect my students to develop a depth and breadth of knowledge in my course that really does take much more time and study than they can do in my course.

Kevin Patton (09:46):

So there's that ever present issue of how to be concise without leaving out concepts that are important for that public conversation that I just mentioned. Yeah, good luck with that. I've got no magic formula for that. And despite claims to the contrary, I don't think

anyone else has a magical formula either. Even for osmosis, nobody really knows how that works, do they, osmosis, because it's magic, right? Okay. I don't want to go down the osmosis rabbit hole. I've been there. It's pretty freaky.

Kevin Patton (10:26):

So bringing us back to the public conversation about abortion, it's important that we attend to doing this well in our A&P course for more than the obvious reason that it's important in society, and it's our role to teach at least some of the science surrounding it, but there's another reason too. Most of our students will become patient educators. Many of my students over the years have become nurses, and nurses have a greater role than many of us realize in educating patients. If they don't have accurate information as a basis, how can they help patients understand what's going on? How can they provide the nursing care their patients need?

Kevin Patton (11:20):

But beyond their professional scope of practice as nurses or other healthcare providers, nearly every health professional that I know gets asked personal health questions all the time in their outside of work lives. You probably do too, even if you're not trained as a health professional. Just because of the fact that you're teaching A&P puts you in that position in the minds of the people in your world, friends, family, even strangers in the checkout line at the store. I'm talking about the general information type questions, not necessarily the "do you think this is rational" serious kind of question. Do we really have a solid, accurate answer to how long a pregnancy lasts or when exactly a pregnancy begins? Well, I say no, none of us do, not in any precise sense, but why is that? And how does that affect abortion restricting laws and policies?

Kevin Patton (12:28):

Before I wrap up this part of the conversation, I need to mention that there's another dimension that extends beyond the beginning A&P course, and that is clinical practice. The situations that abortion providers and related clinicians see in the real world are far more varied and often far more tragic and convoluted than you or I could imagine. Things are not simple in real life, especially in the human experience, in human biology, but in public conversation and in A&P teaching, we have to start with simple concepts and simple scenarios and simple explanations, but we can't leave it there. We also need to find a way to help our students understand there are many complexities and they're important in the conversation too. Oh, not an easy thing. I know. Believe me, I know.

Kevin Patton (13:45):

In this episode, I want to use my little space in the world of A&P teaching to encourage, exhort and beg you, please, please, please, I want to beg you to join me in my own renewed quest to find and fix my gaps and misconceptions and find a way of telling the story of human pregnancy and birth that is both compassionate and accurate. And it's not just me asking. Recently, I've seen many opinions from student groups and individual students and researchers in the health professions, all wanting more information and wanting an update in the accuracy of the information they already have. Human lives are at stake after all. Now I'll be back shortly with some specific strategies and specific concepts that we should be looking at as we begin that quest.

Sponsored by AAA

Kevin Patton (14:53):

You may already know that there's a searchable transcript and a caption audiogram of this episode available, and it's funded by AAA, the American Association for Anatomy. One of my favorite resources from AAA is their journal for teaching and learning anatomy and physiology. It's called Anatomical Sciences Education. And I recently ran across this article in there by Rosalyn Jurjus and coauthors called, Anatomical Knowledge Retention in Third-Year Medical Students Prior to Obstetrics and Gynecology and Surgery Rotations. They found that many students don't remember things about pelvic anatomy, pregnancy and other topics by the time they get to the clinical experiences later in their studies. And they proposed a way to fill that gap. I have a link to the article in the show notes or just go to anatomy.org and find the Anatomical Sciences Education link. Don't forget to check out the related articles that ASE always provides alongside each article.

Strategies

Kevin Patton (16:15):

I've been talking about why it's important for us to actively renew and refresh our understanding of concepts and details surrounding human development, pregnancy, labor, birth and abortion care. The next issue is how do we do that? Now, I'm not going to spend a lot of time on this because I think we all already know most of the strategies. Right? It's really a matter of committing to really implement them soon, now, yesterday, last week.

Kevin Patton (16:51):

Let me just quickly run down four quick tips for getting started. Tip number one, read, read, read Science News items, journal articles, especially review articles. Those are

great and they'll lead you to other places if you feel like you need more detail, but also relevant science research articles, clinical case study summaries and reviews, teaching articles related to these topics or to dealing with controversial topics in general. Read books such as Dr. Nath's Sins Against Science that I mentioned in an earlier segment and also in episode 110. If you know of another good book, please tell us something about it and I'll try to add it to The A&P Professor Book Club. Scan the popular press. See what's being said. If we don't know the misinformation or the misinterpretations or the questions that are hanging out there, how can we find ways to counteract or answer it? So that was tip number one, read, read, read.

Kevin Patton (18:04):

Tip number two, take a course. This was the feature topic. This was a focus of episode 117. Take an actual course, even if it's a course you've already taken or taught in the past. This will help you see things from a different perspective and possibly give you a new updated set of information and understandings and insights from people outside your own head. I can always use some of that, some perspective from outside my own head. And besides, it's just fun taking courses, right? Again, if you have a course to recommend, please let us know, even if it's your own course that you're teaching. So that was tip number two, take a course.

Kevin Patton (18:58):

Tip number three is listen. Hey, you're already a podcast listener so listening to podcasts is something you do. So this isn't a stretch for you, right? Let's get some recommendations for podcasts or episodes from podcast that'll help us get better informed about the concepts and the questions related to abortion care.

Kevin Patton (19:26):

And then my fourth tip is talk. Try to get connected to professionals closely related to abortion care. Ask them about their concerns and what they think our students should be learning about and other tips or insights they can give us to help us prepare well for teaching our students. At conferences, go to sessions related to abortion care and pregnancy and birth. Again, even if that's not your specialty, it'll help us as generalists. In this day and age, this is going to be an important point of conversation within our courses, I think, so we need to be prepared. Another way to implement the talking strategy is go to presentations, attend webinars, community meetings and get information and find out what people are talking about.

Kevin Patton (20:29):

So those are my four quick tips. Number one, read, read, read. Number two, take a course. Number three, listen. Number four, talk. I know that you know these things are ready. I know that you know how to learn. You're in academia, right? But it reminds us and nudges us of the kind of work that I and I hope you will be starting right away.

Kevin Patton (20:53):

By the way, along with the scientific and medical concepts at play here, I think we should also be learning more about how to facilitate and moderate controversial discussions in ways that promote learning and openness to intellectual growth, while at the same time, managing potentially disruptive and destructive fights and other kinds of fallout. There are skills to be learned there, and if we walk into a fight without fighting skills or we walk in as a referee without refereeing skills, things could get ugly, and we don't want that to happen. I don't want that to happen for me or for you. I did mention that I have a few concepts that we can start with, and I'll be back with those specific concepts shortly.

Sponsored by HAPI

Kevin Patton (21:45):

The free distribution of this podcast is sponsored by the Master of Science in Human Anatomy and Physiology Instruction, the HAPI degree. I've been on the faculty of this program at Northeast College of Health Sciences from the beginning, just over 10 years ago, and I'm still excited about all the evidence-based teaching strategies and updated content that our learners apply directly to all the major topics in the typical anatomy and physiology course. Want to discuss with your trusted peers some of the current opinions on what and how to teach about evidence behind the controversies of the day? Check out this online graduate program at northeastcollege.edu/hapi, that's H-A-P-I, or click the link in the show notes or episode page.

Concepts & Misconceptions

Kevin Patton (22:44):

In previous segments, I promised you two things and here I am to deliver on those promises. You knew I would, right? And they're both wrapped up together. One promise was that I would give you a resource and article to start with, and the second promise was that I would go through some specific concepts about the biology of pregnancy and labor and delivery and so on that we can start with in our own review and refreshing of this very important information. And I'm going to wrap that up all into one thing. It's an article from Science News written by Laura Sanders, and it's titled, "The 5

misunderstandings of pregnancy biology that could cloud the abortion debate." So isn't that a great place to start if we want to try and clear up misconception so that our students can really have informed opinions about what's going on with the abortion debates that are happening right now? This is a good place to start.

Kevin Patton (23:42):

And one of the things that, I'm not going to go through the entire article and all of her points, I'll mention her concepts, but I really strongly invite you to go in there, and I'll have a link in the show notes and at the episode page for you to go in and explore not only that article but she has a lot of good links to resources and references that she has listed in her article. And I'll put some of those in my show notes as well.

Kevin Patton (24:09):

One of the things that she points out that is a very good point, I think, and that is that a lot of the laws and policies being formed in our governments invoke medical and scientific language as to when life begins, and that's not something that we can really do biologically. When you invoke a medical and scientific language, it adds a power to them. It adds a flavor to them that really shouldn't be there, so they're being pulled out inappropriately, and of course that mess things up when you put in there these scientific terms to make it sound like these are known things when in fact they're not. And this idea of bright lines or clear lines is an important one because for many of these concepts from the article that I'm going to list here, remember she has five concepts, when we're looking at these, these are all about making clear lines or bright lines in laws or policies, but in biology, those clear lines are scarce or most often, they just don't exist. There are no clear lines in biology for some of this.

Kevin Patton (25:19):

So the first one that she has is the early timeline of a pregnancy is easy to misunderstand. Well, yeah, that's true. There's at least two commonly used ways to count out the days of a pregnancy. One is from the moment of fertilization marching forward. And if you're studying embryology or something like that, that's a useful place to start. But if you're a physician, how do you know when that day is? And you're trying to help a woman manage her pregnancy, and she wants to know what's the timing of this, and he or she doesn't know when fertilization happened, which really pretty much tend to be known in any practical way. They instead count from when her last menstrual period was missed, and, oh, that's not the day of fertilization, the day that fertilization happened, but it's useful. It works out. And so that causes all kinds of confusion, even among scientists and so on, unless you know the context in which the person talking to you is operating. Which system are they using for counting? And I'll get back to that. I'm going to read you a small passage about that in just a minute.

Kevin Patton (26:41):

But the thing is that sometimes when it's embedded in these laws, what we end up with is a situation where a so-called six-week ban on abortions. No abortions after the sixth week of pregnancy actually ends up being just two weeks of pregnancy, or I should say just two weeks from the point at which a woman can know that she's pregnant. She might not know it, but she could possibly know it. And then she's got two weeks to get an abortion. And with waiting periods that are embedded in some laws, whoa, that makes it nearly impossible to get an abortion.

Kevin Patton (27:20):

So what seems like a clear line, we don't even know which line they're using, much less is it clear or not? Now this issue has come up in my own textbook writing, as well as in my own teaching where different people, including A&P instructors and reviewers, will challenge the timing, that I have put in various editions of my book, will say, "Well, no, that's not right. This is the number of days of a pregnancy or gestation. No, that's not right. This is."

Kevin Patton (27:51):

And so in order to address that and the fact that different people are coming from different contexts when they make those statements or ask those questions, and to clarify the fact that there are more than one system, we, to some of our textbooks, we've added a little boxed aside, which is titled, how long does pregnancy last? So I'll quote it to you, at least the latest version of it.

Kevin Patton (28:16):

This seems a silly question to most of us. The answer is nine months, isn't it? Actually, the length of gestation, the amount of time one is pregnant, is defined in different ways in different situations and can vary from one pregnancy to another. The average gestation in humans is 266 days, starting at the day of conception, but physicians instead usually count them from the beginning of the woman's last menstrual period for an average of 280 days. But these are only averages. There's a lot of variability. In practice, any pregnancy of less than 37 weeks, that's 259 days, is said to be premature, and any lasting more than 42 weeks, 294 days, is said to be postmature. So as with many statistics regarding human function, length of pregnancy can be spoken of only in generalities and averages.

Kevin Patton (29:26):

Well, there you go. If you can only speak in generalities and averages about the length of pregnancy, which is true of so many other things in human biology, then there isn't a clear line. There's not a sharp or bright line that can be used in biology, and yet, we're trying to do that in some of these laws and policies. So yeah, things get messed up.

Kevin Patton (29:48):

I also want to mention that the author, Laura Sanders, has a really nice little graph in her article called By the Numbers, and it shows the rate of abortions per week of pregnancy in a recent year in the United States. And it clearly shows that fewer than 5% of abortions are done at or after week 16 of pregnancy. So when we think of abortions happening in these very late stages, that hardly ever happens. I'm going to circle back to that again in a minute because she does bring it up later in her article.

Kevin Patton (30:29):

But item number two in her article says that pregnancy takes more than sperm meeting egg. Well, we know that, right? Yeah. Well, just getting the sperm and egg together successfully is pretty complicated. We're finding out, nearly every week, we're making new discoveries in science about how complex a process that is, and it's no wonder that researchers have been estimating for a while now that up to 50% of fertilized eggs don't ever implant in the uterus. So yeah, there goes that sharp line, right? And some lawmakers, in some states, they're looking at embedding the language of fertilized egg in there as their bright line, not length of pregnancy or time in the pregnancy or whatever. It's about a fertilized egg, whether it has protections or not. Oklahoma already has a law like that from what I understand.

Kevin Patton (31:28):

And that also includes fertilized eggs that end up in the wrong spot, not embedded in the uterus but ectopic pregnancies that are embedded somewhere else, like the uterine tube, for example. And ectopic pregnancies, they cannot really become a healthy pregnancy. So by removing the pregnancy part of the equation, we're now including circumstances where pregnancy cannot have a successful outcome. So that creates some issues.

Kevin Patton (32:00):

The third item that Sanders lists in our article is heartbeat laws are not what they seem. We'll come back to that one after this.

Sponsored by HAPS

Kevin Patton (32:15):

Marketing support for this podcast is provided by HAPS, the Human Anatomy & Physiology Society. In all the years that I've been active in HAPS, one thing that really strikes me is whenever we communicate with one another, whether it's at a face to face meeting or a virtual meeting or even in between sessions go out and have a sandwich or something, one of the things that we always get around to discussing is what each of us is doing in our course. What topics do we cover? What learning outcomes are important to us? What strategies are we using in the lecture part of our course and in the lab part of our course? Questions like that. We want to know what our peers are doing because that can help inform us to be better instructors ourselves.

Kevin Patton (33:05):

And one of the really cool projects of HAPS over many years has been a lab survey. What are you doing in your lab? What is everybody doing in their A&P labs? And in order for that to work, we need to update it occasionally because things change. So every three years, HAPS sponsors a survey, and then they do a detailed analysis of that survey and publish it and let us know what everybody else is doing. That's great.

Kevin Patton (33:40):

The thing is it doesn't work unless we all participate every three years. So even if you've done this before, this is a new iteration of it. This is a new questionnaire, and it's really important for your peers and for you in the long run to participate in it. So I'm asking you, please participate in the lab survey. The direct link to the form is hard to read in a podcast episode and you're not going to remember it, so I'm going to put that in the show notes at the episode page at theAPprofessor.org/118, but you can also use this one which will direct you to the correct form, and that is theAPprofessor.org/hapslabsurvey, all one word, small case, hapslabsurvey.

More Concepts & Misconceptions

Kevin Patton (34:39):

The third item that Sanders lists in our article is heartbeat laws are not what they seem. And that's something that I didn't really appreciate in this context, in this conversation before this article. I knew the facts, but I hadn't put the facts together in quite this way before. When a woman goes in for her ultrasound, and we are told that she heard a heartbeat so you can imagine that situation. I've been in that situation as a father, been

in there when a sonogram is done, and you hear this rhythmic beating sound, and the sonographer or physician will answer the question, is that my baby's heartbeat? Yes, that's your baby's heartbeat. And that's okay in that situation, even though it's not technically accurate because that cannot possibly be a heartbeat because the heart doesn't exist yet. There is a primitive heart tube or a primitive tube that will become a heart and there is some electrical fluctuation going on there, but it's not a heartbeat. You know what a heartbeat is. We can teach this in our sleep, can't we?

Kevin Patton (36:05):

We know that it involves an electrical conduction system that's very complex and highly coordinated that is triggering the rhythmic contraction of the heart or actually harnessing the autorhythmicity of the cardiac muscles within the myocardium of the heart to produce a pumping cycle. So each one of those pumping cycles is a heartbeat, and that's signaled by the electrical activity of the conduction system that is triggering that coordinated rhythm of the pumping cycle. But there aren't any chambers. There aren't any valves. There's no pumping of blood. That's not a heart, and that's not like anything you could call a heartbeat. It's not like an EKG and it's not like the pumping cycle. It's just something that precedes that, and it's actually mostly just how the sonogram works. It's picking up vibrations and transducing them into audible sounds for us. And because it's rhythmic and because it has to do with that developing embryonic cardiac tissue then yeah, that's great in a medical office to think of that as the heartbeat.

Kevin Patton (37:22):

But the problem is when you take it out of that situation and make it as if it's a physiological concept of heartbeat, which it's not, and then you embed that in a law, that can really mess things up. That's not at all what's going on, and that can be tragic, I think. So you're not going to hear any lubb-dupps when you are listening to a sonogram of fetal heartbeat. So that's a problem.

Kevin Patton (37:52):

Another problem is number four in her list, and that is fetal pain is difficult to define. Fetal pain is often used as a clear line or bright line about whether it's an appropriate time to terminate a pregnancy or not. If the fetus can suffer pain, then maybe therefore that should be the time at which we no longer surgically terminate a pregnancy. Well, the thing is when is that time? Pain is something that's perceived. That's not something you can say, oh, look pain. It's a very difficult thing to get to, and we're learning more and more about how to get at it and how it works, but that's been a slow time coming and we're still not quite there yet. There have been some studies that show ... Well, let me backtrack for just a moment.

Kevin Patton (38:43):

In order to perceive pain, you have to have certain connections to the cerebral cortex. So you have to have a cerebral cortex that's functioning. You have to have certain connections to that cerebral cortex and the ability to perceive something as painful, not just have a reaction to it, like we might react to bright light or touch or something like that. If somebody touches me and I move away, that doesn't mean it has pained me. It just means I've had a reaction to it. So reactions alone are not enough. We have to really understand whether pain is happening.

Kevin Patton (39:17):

So the current knowledge we have from research so far is that those connections don't exist until at least week 24 or 25 of pregnancy. So that's pretty far down the line, the timeline of a pregnancy. And there's actually been some additional research that shows that maybe it's week 28 or 29 when we can potentially have the ability to perceive pain in our cortex. One of the researchers was quoted as saying, "We can say with really, really good confidence that no sooner than 28 weeks is pain even possible," but the vast majority of abortions they say, over 90% of them happen in the first trimester, before week 13 in pregnancy. And remember that graph I mentioned? Fewer than 5% of abortions are done at or after week 16 in pregnancy, so that's way before pain can be experienced, at least based on our current knowledge. So that bright line just disappears, right?

Kevin Patton (40:28):

And then the fifth of five points that Laura Sanders makes in our article is that when a fetus could survive on its own is a complex medical calculation. That term viability, we want to use that as a bright line for abortion decisions, especially in legal situations. At what point is the fetus viable that is able to live outside the womb? And the problem there is that's not clear either. There's no clear cutoff of when that is. It's changed over times. The better we've gotten at medical care, what we usually call premature infants, the viability has increased ... The point of viability has actually decreased I should say because now babies that are born earlier than typical can survive at ages that they couldn't decades ago.

Kevin Patton (41:27):

Okay. So let's look at what the current situation is. Well, currently on average, according to this article, babies born around 22 to 24 weeks of gestation either don't survive or they survive with major and maybe even deadly health problems. And then there's the question of whether the fetus will survive if delivered. Okay, if we could just magically transport this fetus outside of the uterus then it's got a good chance of survival, but

maybe the process of delivery, whether it's a vaginal birth or a cesarean birth, that carries risks and stresses that may play into that calculation.

Kevin Patton (42:06):

According to the article, the American College of Obstetricians and Gynecologists recently removed mentions of that word, viability, in their guidance on abortion care. Yeah, boy, that's really unclear. That's really fuzzy. So to use that as a bright line and say there is a definable point of viability that operates in every case just doesn't work out biologically.

Kevin Patton (42:34):

Now there are many other concepts and practical applications for us A&P teachers to explore. For example, a woman in the process of natural pregnancy loss or miscarriage may not be able to access healthcare to avoid serious complications. A woman completing pregnancy loss on her own maybe at home may get investigated and prosecuted in some cases. So there are all kinds of potentially unintended consequences by misapplying biological concepts into our laws and policies. So this gets us started, doesn't it? There are some concepts we have here that we can start with so that we can learn more and be prepared to teach our students and answer the questions that they will have for us.

Staying Connected

Kevin Patton (43:31):

Well, in this episode, I talked about the role of A&P faculty in keeping future healthcare providers and related professionals informed about current biological understanding of pregnancy, birth and abortion care. This is something you probably want to share with a colleague. I really hope you do. You and me and, well, all of us need to be thinking about this right now and reviewing what we do and how current and useful our course content is. To share this episode, simply go to theAPprofessor.org/refer to get a personalized share link that will get your friend all set up to listen to this episode.

Kevin Patton (44:25):

And as usual, I have a few links to get you started on your journey of review and discovery. If you don't see links in your podcast player, go to the show notes at the episode page at theAPprofessor.org/118. And while you're there, you can claim your digital credential for listening to this episode. And you're always encouraged to call in with your suggestions, your questions, your comments and ideas at the podcast hotline.

That's 1-833-LION-DEN.com or 1-833-546-6336 or send a recording or written message to podcast@theAPprofessor.org. You're invited to join my private A&P teaching community way off the social platforms at theAPprofessor.org/community. I'll see you down the road.

Aileen Park (45:33):

The A&P Professor is hosted by Dr. Kevin Patton, an award-winning professor and textbook author in human anatomy and physiology.

Kevin Patton (45:47):

Please watch out for falling rocks.