Everything Leads Back to the ED: STIs, Diagnostics, and Public Education

PODCAST 39

SOUNDBITE:
Dr. Christopher Colbert
STIs are the hidden endemic of the United States.

00:07
Dr. Jane Caldwell
Welcome to the *On Medical Grounds* podcast, where you can find an authentic audible blend of timely scientific and medical knowledge.

Today *On Medical Grounds*, we will be speaking with Dr. Christopher Colbert. Dr. Colbert is Assistant Program Director of the Emergency Medical Residency Program at the University of Illinois at Chicago and an Associate Professor of Clinical Emergency Medicine. He's active with the American College of Osteopathic Emergency Physicians, working with their Virtual Grand Rounds program. He is also Chairperson of their Continuing Medical Education Division.

Dr. Colbert spoke to us back in 2022 about healthcare disparities. Today, we'll be discussing sexually transmitted infections, also known as STIs, in the emergency department. We'll also discuss diagnostics in the ED, including point of care tests, and we'll also go into medical disparities in the ED. We'll delve into the use of traditional media and social media to educate and raise public awareness about healthcare. Hi there, Dr. Colbert. So good to have you back at *On Medical Grounds*.

Dr. Christopher Colbert
You know, it is great to be here. I appreciate the invitation and I'm a big fan of your work. So, I appreciate the opportunity to provide insight and enlighten and reference to issues of public health.

01:36
Dr. Jane Caldwell
Oh, thank you very much. You know, before we jump into STIs and what you're seeing in emergency departments, tell me about the American College of Osteopathic Emergency Physicians (ACOEP), and in particular, their Virtual Grand Rounds program.

Dr. Christopher Colbert
The American College of Osteopathic Emergency Physicians is a national medical society, which was originally designed as a means of bringing together osteopathic emergency physicians to discuss updates and share ideas in medical management to enhance the patient outcome. And we are a large, fairly large organization, which not only has membership of both osteopathic physicians but also allopathic physicians.

So that's your MD and your DO, where osteopathic physicians are the DOs and the allopathic, MDs. We have two conferences a year, national conferences a year, and we also have what's called Virtual Grand Rounds. And with our Virtual Grand Rounds, which is held every other Thursday, it is an opportunity to attend virtually for some cutting-edge amazing conversation on various topics of emergency medicine, from toxicology, infectious disease, public health, trauma. There's a lot of really good medicine that is happening all over the world. It's a great place to have a really great forum and exchange ideas, and to not only change your practice but provide a positive contribution to society as a whole, starting with education. And then it kind of trickles down into management as well. And we offer that on a regular basis every other Thursday and just encourage anyone if you want to learn a little bit about medicine and your contribution to that and the role of that, please take a good listen.

03:37

Dr. Jane Caldwell

Good to know. So, you're very cutting edge. Things that are happening in the ED, you're getting every two weeks.

Dr. Christopher Colbert

Every two weeks, well, just in medicine in general. There's inherent bias in my conversation, of course. All roads lead to the emergency room. Everything leads to the emergency room. There is nothing that takes place in the world in general that emergency medicine physicians do not have a conversation or a point of view, whether it's gun control, STIs, public health issues, homelessness, updates in surgical procedures, where the diagnosis is made in the emergency room. All roads lead to the ER. So come on down and talk to an ER doctor and have some really great conversation, that humbled conversation, so that we can all move forward.

04:25

Dr. Jane Caldwell

Can you break down the difference between osteopathic and allopathic medicine?

Dr. Christopher Colbert

I can. I am an osteopathic physician. And there's osteopathic physicians and allopathic physicians. So that's your MD and your DOs. And that is a line drawn in the sand by definition based on one specific class. And that class is osteopathic medicine. Now, osteopathic medicine is the incorporation of manipulative techniques, meaning that it's the placement of hands on the patient to enhance lymphatic flow, also enhance and to assist with strains of muscles with the idea that enhancing this area or providing medical insight or manipulative medicine can enhance your patient's health. There's a lot of analogy to being a chiropractor, however, and I'm just giving this analogy for those individuals who are unfamiliar with osteopathic medicine. Just to give some context, it is a series of strain and counter strain techniques that can be utilized for back pain, headaches, enhancing lymph flow, muscle discomfort as well. And that is the only line that separates osteopathic medicine from allopathic medicine, where this is a continued class that is instructed at osteopathic medical schools, where allopathic medical schools, they may address this utilization of medical management and in conversation or maybe a couple of classes, but it's not all four years as it is in an osteopathic medical school.

06:15

Dr. Jane Caldwell

Don't you have more of an emphasis on preventative care?

Dr. Christopher Colbert

You know what? I don't believe so. I think that standard of care, which is a great question, very commonly asked. I believe the discussion in standard of care and the benefit of preventative management is discussed in both allopathic and osteopathic schools equally.

06:39

Dr. Jane Caldwell

Thank you for that clarification. You know, the data are showing that STI numbers are on the upswing again. Why do you think this is the case?

Dr. Christopher Colbert

So here we go. Let's just jump into the deep end of the pool on this one. Number one, one out of five people in the United States have an STI. And that translates to 68 million Americans. And almost half of this number, believe it or not, are between 15 and 24 years old. Just like everything else in medicine, there's a lot of factors that contribute to this. Numbers wise, like 11% of teenagers surveyed state that they receive information, complete information of STIs from their parents. So that means there's a whole lot, there's a huge population of individuals, that are getting a significant amount of their information on various aspects of STIs, behaviors, from someone outside of their family, which means that it's more of a timed information. So, a lot of this deals with education. There's always higher numbers in patients with limited resources, such as if you have limited access to education, limited access to healthcare and limited transportation, all of these attribute to higher numbers. And once we have sat back and have a root cause analysis, kind of what we're having right now. That's where you have the greatest impact on lowering these numbers. Until this aspect is addressed, these numbers are always going to reflect an increase.

08:06

Dr. Jane Caldwell

So how does this rise affect you and the emergency department?

Dr. Christopher Colbert

So that is very fair. Again, all roads lead to the emergency room. Whenever anything takes place, whenever anyone has a concern of health, you can go to any emergency room and receive treatment. And I think that's the really important aspect of this. You can't just show up at a family practice doctor's clinic or a dental clinic and say, hey, my tooth hurts or my stomach hurts. Unless you have some sort of means of payment. They just can't see you. However, those rules do not apply to the emergency room. Whether you have insurance, whether you don't have insurance, you go to the emergency room. People go to the emergency room, and because of this aspect, it's kind of the gift and the curse as well. I think more of the gift, but that can be a whole different conversation at a later date. We see stuff firsthand. My finger is on the pulse of what is going to happen, what's going to take place. And we have that lens as emergency medicine physicians, so we see the increase. We see the numbers and are setting aside certain policies to mitigate these numbers and the long-term sequela of STIs.

09:28
Dr. Jane Caldwell
What are the most common STIs that you're seeing right now?

Dr. Christopher Colbert
Gonorrhea and chlamydia, herpes. We've seen a huge increase in syphilis as well.

09:42
Dr. Jane Caldwell
So, what is the standard of care to diagnose and treat say syphilis in the ED?

Dr. Christopher Colbert
All right, so for STIs in general, so that includes your herpes, your gonorrhea, your chlamydia, your syphilis. It's a swab, meaning a urethral swab, so it is in essence a Q-tip. So, it's a urethral swab with women and a penile swab with men. Also, what we can utilize is a urine sample itself. So, either by swab or by urine sample, we can collect the data, if you will, and assess what is on the swab or what is within the urine to best identify the pathogen associated with the chief complaint.

10:33
Dr. Jane Caldwell
Are you seeing resistance to standards of care for certain STIs?

Dr. Christopher Colbert
We are, we are. And what's fascinating about this is that there's still a lot of variability. As an example, when treated for an STI, you receive a shot and a collection of pills. So that's your ceftriaxone and your doxycycline. How we define resistance is failed outpatient management, meaning that you were treated two weeks ago with your shot, which was ceftriaxone, and your doxycycline, which are your pills. So, if the person comes back two weeks later, one week later, that's concern for resistance. But as I stated earlier, there's a lot of variables that attribute to this as well. Did you take all of your medication? Are you still intimate with the individual who has the actual bacteria as well?

But because of that, we have certain small populations that come back quite often. And so, you don't know which came first, the chicken or the egg. Is it the behavior that is still maintained after being treated? Or is it that there is just resistance? But because of this activity, it builds resistance. So, what we could treat for chlamydia five years ago in 2015 was with Zithromax. But now there are new guidelines that were initiated in 2021. So 2015, there were new STI guidelines for management and in 2021, there were updated management guidelines. And it has to do with resistance. And again, this is just an evolving process. But that contributes to the resistance is what I've communicated.

12:17
Dr. Jane Caldwell
So, when you say resistance, you mean antibiotic resistance?

Dr. Christopher Colbert
Antibiotic resistance exactly, meaning that what worked four years ago no longer works.

12:22
Dr. Jane Caldwell
But what I'm hearing also is you're seeing patient resistance, so resistance to the regime, the treatment. They might not refill pills, for example. Is that something else that you're seeing?

Dr. Christopher Colbert
Yes, but I don't define that as resistance in the patient. That is more an effective behavior. As an example, if I'm allergic to peanuts, there are certain places that cook with peanut oil, so I can't go back to that restaurant to eat food. So, I come to the emergency room for anaphylactic reaction. We treat you with your required medication and then you leave, but then you eat at the same restaurant three days from now because you love the food. There's nothing wrong with the food, but you have an allergy. So, it's not a resistance. Resistance by definition is meaning that an expected medication will have an effect with an expected pathogen. So, resistance by definition is I'm providing that expected medication and not identifying a difference in the pathogen.

13:28
Dr. Jane Caldwell
Gotcha. OK.

So, if I were to come to the ED and I suspect I have an STI, what would be the first test you would order for me?

Dr. Christopher Colbert
Now the first test I would order for women, the first thing we get is a pregnancy test and then you get the urethral swabs. And from there, and believe it or not, the swabs take two to three days to return. And so, here's the rub, here in lies the rub, not all emergency rooms treat sexually transmitted infections the same. So, this is where you have a question of root cause analysis. There are some ERs that will see the patients and complete the exam and not treat the patients but will discharge the patients to a free clinic and provide the instruction, "Here's your diagnosis, this is what we think this is. If you walk four blocks, five blocks down the street to this quote/unquote free clinic, which exists, they will treat you with the required antibiotic". Which again, another discussion for another time, but you can tell within this conversation where there are flaws in the system for that.

14:50
Dr. Jane Caldwell
But still they're going to this other facility, and they don't have the test results back. So are you advocating giving antibiotics as a precautionary measure prior to getting test results?

Dr. Christopher Colbert
So that's a perfect question. Specifically, with STIs, it is standard of care guidelines that you treat patients without getting the results. And because STIs are the hidden endemic of the United States; 68 million people suffer from an STI. If we had 68 million people that walked around with a black eye, something that everyone can see, there would be a collective response where everyone says, whoa, wait, why do you have a black eye? But because we don't quote/unquote see this, the response is lukewarm for something that honestly has a huge financial burden on the United States, on the medical system, and on patients as well.

15:50

Dr. Jane Caldwell

So why don't emergency departments have more rapid tests, tests that maybe you get results when the patient is still there with you in the clinic?

Dr. Christopher Colbert

Two to three days is a pretty good turnaround. Two to three days is honestly a pretty good turnaround. And however, as I communicated, it is a huge expense to a hospital. So now this is just you talking to Christopher Colbert, not Dr. Colbert. This Christopher Colbert said when we have meetings and discussions, the hospital has to sit down and state, "Hey, how are we going to allot money? This is where money is going. How can we save money" And one of the ways to save money is to make this diagnosis and have the patients find access to a quote/unquote free hospital and receive their antibiotic. Where I'd raise my hand and say, "Well, what if they don't have the transportation to get to that free clinic? What if they don't have the time?" What if that free clinic—anything free has a long line. I don't care what we're talking about. If it's free donuts, if it's free coffee, if it's free management for healthcare, it's going to be a long line. And I get that.

17:03

Dr. Jane Caldwell

So, we were talking about me coming in and running some tests. What would you test for a male? How would that differ from a female patient in the ED?

Dr. Christopher Colbert

There's no pregnancy test for the male and everything else would be the same. Yeah. No, but that's fair. That's a fair question. It's still a swab or it's a urinalysis. So it's a sample of the bacteria and it's still a swab or a Q-tip, which you introduce into the penis to collect the swab. And that's called the penile versus the urethral swab.

And again, those results take three to four days. If you suspect STI and the patient provides a history which is concerning for an STI, you treat that patient right there. And you encourage the patient to communicate with whoever their partner is to seek treatment as well. Because again, this is an endemic. This is a silent endemic.

18:02

Dr. Jane Caldwell

So, what I'm hearing sound like disparities to me because people going to the ED don't have access, you mentioned, to transportation or maybe they don't have the funds to go and purchase prescription drugs. How can we try to eliminate some of these disparities and reduce STIs?

Dr. Christopher Colbert

So, here's the thing, I'm going to nerd out with you real quick. The highest incidence is on college campuses. Huge college campuses, but they have the resources on college campus. The college campuses, I don't care where you go, invest a lot of money on reproductive concerns. And they're quote/unquote free to the students, but you're paying for your college tuition. So that's part of the bill. That's part of going to any college USA. That's part of the bill where we provide barrier protected intercourse, birth control pills.

If you're diagnosed with an STI, they treat you on campus. And so, in relationship to the diagnosis and poorly controlled sequelae or poorly controlled poor outcomes, it's significantly lower than the actual real world is because it's a controlled environment. And it's just a model which we could think of as a means of really addressing your concerns. Those three things, education, medical access, and transportation are huge. And I don't care what we're talking about, whether it's breast cancer diagnosis, colon cancer diagnosis, children with different congenital concerns, if those three aspects, education, medical access, and transportation, have a huge impact on communities that do not have these, and the numbers are higher, and the morbidity and mortality for those patient populations are higher as well.

19:53

Dr. Jane Caldwell

So, you talked about education quite a bit. I understand you're the chair of continuing medical education at the ACOEP. What is the ACOEP in particular doing to promote awareness of STIs?

Dr. Christopher Colbert

I am. I am. So, across the board, whether it's ACOEP, I'm also a member of the American Academy of Emergency Medicine (AAEM) and an assistant program director. Our themes are pretty much the same. It's having the constant dialogue similar to what we're doing now. So, it's education. Believe it or not, it's just education. It's just putting on a condom.

Dr. Jane Caldwell

<laughter> Ha ha! Right, right.

Dr. Christopher Colbert

It's literally putting on a barrier. Protected intercourse has a huge impact. And I tell patients all the time, because the biggest conversation is, well, I don't like wearing condoms. I was like, if you don't like wearing condoms, changing diapers is really going to get under your skin.

20:49

Dr. Jane Caldwell

I know that you're really active in education and both traditional and social media. And I have several questions to you concerning medical education and public awareness. And which do you think is more impactful, regular media or social media?

Dr. Christopher Colbert

So that is a great question, and this is a part of why I am passionate with incorporating with education is that to me, it's not even social media anymore. It's your digital presence. I think maybe years ago we would say, oh, well social media, it's Facebook, it's Instagram. Now this is just a way in which everyone receives their information.

21:31

Dr. Jane Caldwell

Say that again, digital presence. How would you define that?

Dr. Christopher Colbert
Digital presence is the message that I want to portray. And the only true hack in life is consistency. Where you have, as long as you are continuous with a message, and you will always have someone who listens, but you want someone to kind of comply or just make informed decisions.

Take for example, when there is an intimate act that is seen on TV or seen on social media in any capacity, there is very little possibility that they take the time to show barrier protection utilized before intercourse. That's huge. So that means that activity is not relatable when two people engage in a moment of physical activity, relatable meaning that "I've seen this before." You can see a million people throw a baseball on TV right now on YouTube, or on Facebook or Instagram or X, I think is what it's called. But the act of putting on a condom, you don't see. So that behavior is not reinforced.

However, to go on to continue with your initial question is reference to, I think that bad medicine, poor insight or malicious messaging. I put that on the category of malignancy. I do. It's just malignant. It's just malignant behavior. And so in under malignancy is cancer. I do. That's why I make my analogy. And the best way to decrease that is to, in all aspects, is to enhance quality education.

23:17
Dr. Jane Caldwell
Do you consider yourself a medical influencer?

Dr. Christopher Colbert
On a very small scale, on a very small scale, and utilizing resources to promote discussion, to promote a positive lens of which something that many people share in so much shape or form themselves or their family is the best way to move forward collectively.

23:40
Dr. Jane Caldwell
But how do you keep it positive? I mean, how do you deal with trolls and science deniers?

Dr. Christopher Colbert
Oh, I get trolls. I get trolls. Again, the reality is there is always going to be cancer. There's always going to be malignancy. But what we can do is decrease that risk. How do you mitigate that risk? Meaning that you need to have, as an example, regular colonoscopies, regular breast exams, regular, you know, discourage smoking. It's that constant messaging as stating, hey, my name is Christopher Colbert. I'm an evidence-based emergency room physician. I can provide resources for you to read as well. And I can exchange in conversation after you read that. You have to have constant positive messaging and informative messaging that is complete, where it's just not half of a story. And then I just quote/unquote, let you figure out the rest. That is not what you were doing. You're providing limited information and hoping, what the intent that the audience assumes and carries on with that direction of just poor messaging.

24:50
Dr. Jane Caldwell
How effective do you think podcasts are in conveying message to the science curious?

Dr. Christopher Colbert
Oh, very, very positive. And because patients come to the emergency room and state, I listen to a podcast or I Google this or I have, my apologies as a printer going off, and we have to answer this question again. But I have patients that literally come to the emergency room and state, I listen to this podcast, I Google this, I listen to X, Y, and Z, and they'll take that information and engage in the ED with a physician or with their primary care physician, which has a huge positive effect in reference to expanding our conversation and mitigating negative sequela from poor information.

25:38
Dr. Jane Caldwell
So, kind of as a wrap up, what do you see as emerging trends, both positive and negative, that you will expect to encounter in the emergency room in the years to come?

Dr. Christopher Colbert
Believe it or not, there's a silver lining on the misinformation effort is that, yeah, it is, I know, or maybe I'm just telling myself that. But the silver lining is that now, you know, 10 years ago, people would just come to the emergency room and the doctor would say, take this, and they would say, okay, and leave. Now patients inquire.

Dr. Jane Caldwell
I like to hear that. What is the silver lining?

Dr. Christopher Colbert
Now it's, "So well, doctor, I read, or I heard this, and I read this and my neighbor's, my neighbor's mailman sister used to work in a hospital," and they're blah, blah. And they say blah, blah. And I understand how as physicians that kind of rubs us the wrong way because you're running off of poor information. But to me, you're initiating a conversation where 10 years ago, people would just come to the hospital and state, I have this. And the doctor would say, well, take this. And they would say, well, thanks, you're a great doctor. Well, no, there has to be an understanding of what you're doing, of your medical process. Don't get me wrong, yay for doctors, blah, blah. However, this is your health. Enquire, find answers, and due to this, and that's what I define as the silver lining on this cloud is that now everyone asks, everyone, they may not accept the answer. However, engaging the process of being an informed individual of your own health is a benefit for everyone.

27:20
Dr. Jane Caldwell
On a personal note, what is the next big thing for you, Dr. Colbert?

Dr. Christopher Colbert
I'm always trying to push the envelope collectively on medicine so that everyone can take a bite out of really good health. In January, I am organizing a, in Chicago, we have a conference that brings in local news anchors, medical students, and residents. And we're going to have a panel discussion on messaging and how to message. How to have a conversation when clearly someone has received limited information, but is making a decision, not only for themselves, but also for their children. "I don't believe in vaccinations." Like I had two weeks ago, I had a patient that was positive for diphtheria. I had this whooping cough,

literally. And I was like, wow, that cough sounds unique. And then you sit and speak to the family, and they are like, "I don't believe in vaccinations." I'm like, ugh, "Okay, well, let's talk."

And here's the thing, even if you don't believe in vaccinations, those viruses believe in you. I understand, but that's a point of conversation we need to have because your child's immune system is not as robust as an adult. And we ended up admitting that child. And mind you, in the grand scheme of things, the child will be okay, and the family will learn, but we don't want to learn by poor cause of judgment through our children. Like that's not the way I want to learn. I don't want to learn by tripping on an obstacle and breaking my arm. If you could just kindly let me know, hey, there's a rock in the road right there, I would be mindful of the steps. I will take that consult. I'll accept your advice. I don't have to trip, neither do you, but sometimes you just have to have a discussion, which I'm a huge advocate of.

Dr. Jane Caldwell
Well, I hope you will send us a link to that discussion. That sounds very, very interesting. Well, Dr. Colbert, I want to thank you once again for joining us. It was wonderful to have you back. And I hope we'll see you again real soon.

Dr. Christopher Colbert
On Medical Grounds is an amazing resource that provides great insight and a huge impact on the population, so on the community just in general. So, thank you for just bringing a great resource, a quality resource as well for many, many people. And I enjoy talking about science and I appreciate the invitation. Thank you ever so much.

Dr. Jane Caldwell
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