

Erin Welsh

Hi, I'm Erin Welsh and this is This Podcast Will Kill You. Welcome to another episode in our miniseries of bonus content that we've been putting out over the past few months. If this is your first time tuning in, these bonus episodes are a way of exploring more deeply some aspect of what Erin and I talked about in our regular season episode the previous week. So for instance we followed up our multiple sclerosis episode with the bonus episode on the Epstein-Barr virus and our chlamydia episode with a bonus about other chlamydia species affecting koalas and other animals. The beauty of these bonus episodes is that we get to enlist the help of an expert and absolutely pepper them with questions both on the topic of interest as well as their careers. I have really enjoyed putting these episodes together and I've learned so much about an incredibly wide range of topics and this particular bonus episode is no exception.

Last week Erin and I told the story of tetanus, a deadly but fortunately vaccine-preventable disease that is caused by the spore-forming, toxin-producing, anaerobic bacterial species *Clostridium tetani*. Most of you are probably familiar with tetanus and like me have a healthy fear of stepping on a rusty nail. But what many of you may not know is just how prevalent neonatal tetanus used to be and still is today in places with limited access to vaccines. Neonatal tetanus usually occurs when the umbilical stump becomes infected with the tetanus bacterium, which can happen while cutting the cord with a non sterile tool for example. And if you haven't listened to the tetanus episode yet I recommend that you stop here, go listen to it, and then come back to this episode.

But I'll give a quick recap here anyway just to kind of preface what we'll be talking about in this bonus episode. While discussing the history of tetanus last week, I spent a fair amount of time talking about neonatal tetanus among enslaved people in the American South before the Civil War. Neonatal tetanus in the South was an extremely prevalent and deadly infection, said to be responsible for up to 2/3 of the deaths among infants born to enslaved people. And this led to it having a reputation of being a disease of the South, especially of enslaved people. And last week I asked whether it was indeed a quote "disease of fatal frequency" solely of the South or whether northern physicians simply weren't looking for it as much. I used the example of neonatal tetanus in the South during this time to illustrate two different themes.

One is that you have to consider the focus of medical studies as a factor of time and place. Southern doctors were more likely to observe neonatal tetanus because they were employed by enslavers to monitor the health of enslaved people. Whereas northern doctors lacked both the reason to look for this disease as well as the opportunity, for lack of a better word, to observe it in a larger group of people, especially those whose consent was not or could not be given. And the other theme is how the institution of slavery is one example of a structure that led to physicians making observations of populations rather than individuals, giving them a bird's eye view of how disease spreads. And this is what basically led to the birth of epidemiology.

These two themes are not at all of my own creation but rather feature extensively in the latest book by my guest for this episode, Dr. Jim Downs. Dr. Downs' book 'Maladies of Empire: How Colonialism, Slavery, and War Transformed Medicine' is a new and necessary reexamination of how we tell the story of the origins of epidemiology. Did this field come about during a London cholera epidemic with John Snow and the Broad Street pump? Or did it emerge in army hospitals, on slave ships, and within colonies as physicians collected information or outright exploited non consenting subjects? Dr. Downs joins me in this bonus episode to explore some of the ideas presented in his fantastic book and I cannot wait to dive in. So let's just take a quick break here and then we'll get started.

TPWKY

(transition theme)

Jim Downs

My name is Jim Downs, I'm the author of 'Maladies of Empire: How Colonialism, Slavery, and War Transformed Medicine'. I am currently the Gilder Lehrman National Endowment for the Humanities Professor of History and Civil War Studies at Gettysburg College.

Erin Welsh

Awesome. Thank you so very, very much for joining me today. I am so excited to discuss your book because I feel like it fits in really well with a lot of the themes that we discussed on the podcast, especially the importance of placing our understanding of medical or scientific developments in this broader historical context. So let's get into that context. In your book you explore how colonialism, slavery, and war during the period of the 1750s through the 1860s led to this huge shift in medicine. People began to study populations rather than individuals, essentially kicking off the field of epidemiology. Can you explain what it is about this period that led to this revolution in thought?

Jim Downs

Right, so the key word there would be 'population'. So doctors had studied patients since the beginning of time and there have also been scores of doctors throughout the early modern period and even before then that also studied populations. But what you see happening beginning in 1755 is the rise of studies of populations and that's not coming purely out of a medical question. It's coming out of the biggest social transformations of the mid 18th century, namely the rise of the slave trade and then the expansion of colonialism and the growth of empire. And then both of those forces kind of coalesce by the mid 19th century with the rise of war, the Crimean War and the Civil War, which again battlefields become laboratories in which populations are again studied.

So ultimately it's the ways in which... Imagine the slave trade, it's about the movement, the violent, brutal transport of enslaved Africans to the Caribbean, to North America, to South America. And it's all done for economic purposes. But it ultimately created major medical crises and so there were doctors deployed on those ships to care for the crew. But ultimately they realized that so many people were becoming sick and dying on those ships that they began this massive effort to study the spread of epidemics. And what I also noticed, and this is what I think separates my work from maybe someone who has found the doctor from 13th century Venice, is that these doctors are all tied together through a military network and the military is a massive bureaucracy and the military demands these physicians to document their observations and to keep records.

So now what ends up happening is doctors are now in contact with what's happening on various slave ships throughout the Atlantic, they're trading information, they're developing preventative protocols, they're coming up with treatments. Whereas before there was no real mechanism, there was no real umbrella to knit these doctors together. And one of the things I'll say before because I could talk about this forever and ever and ever, one of the things that blows my mind as someone living in the 21st century was that the creation of what we understand as the American Medical Association is a relatively new phenomenon. It gets developed in the 1840s. So prior to the creation of those professional networks, sure there were societies, sure there was the circulation of some journals, but really the military creates a bureaucracy that allows for the studies of populations that leads to the development of epidemiology.

Erin Welsh

It's incredibly fascinating and I don't think I had a true appreciation for just how much bureaucracy did in terms of the creation of epidemiology. And I also want to talk about a couple other tools that are key in studying the spread of disease and populations. And that is statistics and mapping. And can you talk about how those two tools were involved also in these aspects of colonialism, slavery, and war?

Jim Downs

So between 1750 and 1850, this is a century prior to the development of germ theory and the discovery of microbes and to the understanding really of how bacteria leads to the spread of disease and even to how virus leads to the spread of disease. So oftentimes all doctors could do was count. They could count. And this goes true for the cases at field hospitals. They could count the number of people there are a minute, the number of people who die, the number of people who are released. So statistics emerges as a way of trying to create a rational order to respond to what seems to be really irrational and that is the rapid morbidity and mortality. So that's part of what happens. The other part of it is that colonialism is obviously very much invested in numbers. And so there's already a built-in investment in cataloging things and thinking about things in terms of numbers. There is an early science before statistics called nosology which is a sort of branch of science that develops that again draws on quantitative and empirical analysis. So you see that work within the medical records.

But the other part of this that's really fascinating is that if you think about empire, empires require maps. Empires require maps to not only track voyages but also as a way to assert power over a particular geography. And so mapping is integral, it's essential to colonial and imperial endeavors. And so these maps are already situated. When an epidemic blows up, it's just coloring in the map, it's filling out the map, it's using the map to tell a different story. So today when we're thinking about outbreaks of COVID and we're thinking about mapping and surveillance and all of these are important and critical hallmarks of epidemiology and necessary for us to understand how disease spreads. The genealogy, the origin of that mapping practice, whether or not it's efficacious, originates with colonialism and empire.

Erin Welsh

And the history of medicine in general I feel like is often told as this series of discoveries and accomplishments, right, with the leading protagonist as the scientist. Logic triumphing over superstition. But as much as we may like to pretend that there's a natural orderly progression in medical knowledge, the truth is that it's driven by many different factors, in part by shifting incentives and opportunity. So can you talk a bit about how colonialism, slavery, and war incentivized understanding the spread of disease while also providing opportunities for physicians to study these populations of disenfranchised or oppressed individuals in a way that they hadn't been able to previously?

Jim Downs

Right. So just to give a concrete example to sort of answer your question, one of the chapters of the book looks at an explosion of what they don't know at the time, they call it fever, this is the sort of mystery of the chapter is that they don't know what it is. It ultimately is yellow fever. And so an outbreak of yellow fever happens and the ship, there was a British vessel and it was policing the coast of West Africa for any signs of the international slave trade. Ultimately the ship stops at Cape Verde just as a holding place before it makes its voyage back to London. When it stops, when it eventually arrives at London, everyone says this ship is infected with yellow fever and you need to be quarantined.

And there's this explosive debate about lockdowns and about quarantine and about all of the things that I was writing about in 2017 which I thought people are never going to understand, they're not gonna understand quarantine. I was literally in a coffee shop in New York being like how do I... I can't call the chapter Quarantine, no one's going to get that. And the year 2020 was like, 'Hold my beer. You have no idea what's coming.' So ultimately what happens is there's a question of how did this originate? Where did it originate? And so the British military and the government send the doctor to Cape Verde and when he arrives there he begins this massive effort to interview all of the people on the island. And basically what he's doing is contact tracing and he's drawing on the narratives and the testimonies of mostly enslaved and colonized washerwomen because they had been dealing with the quote "dirty linen" and this could be potentially infectious.

Now what's fascinating is these women had no idea he was coming but they understood the incubation period, they had already mapped where it spread from one place to another, they had sort of figured out this house got infected but this house didn't get infected. And he puts together their story and he produces what I call the largest inventory of a patient narrative of black people in the 19th century. So to go back to your question, we often say he's the hero, he figured this out, he traced it. And look, he did a lot of work. The point is to not discredit his work but the point is as many medical anthropologists have said, as many people interested in narrative medicine have been talking about, it's about centering the patient narrative. That his knowledge, his ideas could not exist without their contribution.

And so when doctors eventually figured out it was yellow fever, it wasn't just from McWilliams' identification of pathology, it was about washerwomen noticing the black vomit and to know wait a second, I know these people are sick but something's up here, the vomit is black and not to just say oh they ate something bad. They were noticing the symptoms and then it becomes codified through his formal publication. And so my work is to try to say how does the experience of colonialism and slavery and war create new opportunities of knowledge production? And how can we also acknowledge patients' contribution to science?

Erin Welsh

Right, exactly. Because it's not just about these individuals that formerly hadn't been recognized as the sources of information themselves and local knowledge but also the individuals themselves whose bodies gave up this information. And so how do we incorporate that more into storytelling of the history of science and medicine?

Jim Downs

So I think it is just the word you said there, storytelling. It's about how we narrate the story. So a colleague of mine who's a preeminent historian of medicine whose name I won't say, but he's really smart and he's written about the Cape Verde incident. I actually uncovered it in the archive in 2013 and I was sitting on it because it takes a while to work on a book. And so that was going to be one chapter and I was working on other chapters. In the meantime he uncovered it as well and he wrote a chapter on it but he turned the doctors into the protagonist in the story. I turned the washerwomen into the protagonists in the story. Neither one of us is right, history is an interpretation, but it's about how we tell the stories. In his account these women don't even appear. In my account they've been lifted off the page as purely just informants and cast as important contributors to the development of knowledge. And so that's what I think the answer is, it's talking about why and how the patients matter.

There's also a new book called 'Medical Bondage' by Deirdre Cooper Owens about the rise of gynecology in the American South that developed as a result of J. Marion Sims' experiments on enslaved women. Again Deirdre Cooper Owens, a very good friend of mine, a very good colleague is not saying that Sims isn't important, she's actually putting it in the context of many other doctors that were like Sims, but she's also giving voice and giving textual space in the manuscript to the enslaved women, not just as objects of study but rather as interlocutors, as people who were there and who were contributing to this new development of ideas. And sometimes I feel like I think it's really academic and people are like, 'Yeah, that sounds really cool but I don't see it working out.' And then I have one word for you: loss of smell and taste.

When the COVID pathology first came out And I was one of the people who first got COVID in March of 2020, I was actually flying from LA to New York, I felt a little tired but I thought it was jet lag. I felt a little nauseous, I thought it was something that ate at the airport. I noticed immediately I lost my sense of taste and smell. It was not reported as part of the pathology. It wasn't until Kelly Ripa on her morning television show read an article in the New York Times and all my friends in LA were like, 'Jim, Kelly Ripa has read this article in the Times.' And so the question becomes how did the loss of taste and smell become part of the pathology of COVID? And it became part because patients started reporting it and doctors did not dismiss it as silly. I'm sure a bunch did, right. But a bunch didn't. And so then it becomes recognized as a hallmark of it.

So in other words when I say recognizing patients, we have to say that we are in a process of recognizing patient narratives even today. So it's not just the academic theory that sounds good, it's actually how we understood what COVID is and how we're going to understand what long COVID is as well, right. It's gonna be patients reporting and doctors then going through that material and making sense of it and saying, okay this works, that doesn't work. But the patient is important. The patient is an architect of knowledge in these moments.

Erin Welsh

Absolutely. And I feel like the shifting definitions of disease or the boundaries around disease classification are always changing.

Jim Downs

Exactly.

Erin Welsh

And it's it's a topic that we've talked about before on the podcast in the context of symptoms vs signs, signs being things doctors can observe, symptoms being things that patients report. And how that shift of being able to measure these signs like temperature or heart rate, that kind of took the attention away from the patient. And I feel like it's all still happening, we still don't do a great job of it.

Jim Downs

Right.

Erin Welsh

But one of the things I thought was really interesting in your book is that it kind of went up into right before germ theory became a thing, started. And yet still there were these hypotheses or these prevailing notions of the way disease spread, namely miasma theory or contagion theory. Can you talk about how those two prevailing thoughts influenced this birth of epidemiology?

Jim Downs

Yeah. So one of the things to think about is that, so miasma theory would just be people would notice everyone's getting sick and they don't understand how and they can see it as a contagious phenomenon, they can say well this person got sick, then that person got sick, so they believe in contagion. And then they're like well where's the origin? And so they would turn to rotten vegetation, corpse, an unsanitary mass of trash. And they would say from that unsanitary mass of trash there would be these poisonous vapors emanating from it and these poisonous vapors are moving through the air and that's what's getting people sick. And then people said no, I don't think so. And so colonialism becomes another important testing ground to figure that out. One of the places is in Malta which is in the center of the Mediterranean and it's an important quarantine hub, it's an important quarantine hub for ships going from Europe to the Middle East, it's an important hub from North Africa to Europe.

And so what happens is you have two populations of people that begin to be studied, Muslim migrants and washerwomen. And the first is the washerwomen, they come up in the Cape Verde chapter and they come up here again. And as a historian when I saw them in Cape Verde I thought it was interesting, it's important. When I saw them again in Malta, I was like these are an important group of people that are central to the development of knowledge in medicine during this period and have not really been cast as leading thinkers or leading actors. And so what happens is the ships go into a port, the ship's quarantined, it's isolated, no one can come on and off, they have to wait two weeks in order for whatever is there to eventually not be there. And so these washerwomen ultimately are going on the ship to collect the dirty linens and then return the linens and some doctor recognizes they're not becoming sick.

And so automatically they become the subjects to actually prove that contagion doesn't work and they become the subjects for doctors to launch these massive investigations into what causes people to become sick because it can't be miasma and it can't be contagion. And so the washerwomen are definitely part of the medical treatise but the other major group are Muslim migrants. Muslims who are returning from the annual pilgrimage, the Hajj, are in ships, they're in Egypt, they're in Malta. they're in other places. And again, going back to your first question, it's a population. They start realizing that these ships are quote "infected", they say they're infected, they placed them into quarantine, and then they realize plague or cholera or another epidemic is not spreading. So it sort of undermines this argument that contagion is there.

And again, think about it, if you're in a small town or you're in a big city and you're trying to figure out if contagion works, there's no real mechanism to actually figure it out. But think about how colonialism around this sort of movement of Muslims creates a massive bureaucracy within those ports that allows doctors to record copious information about who's on the ships, what they're doing on the ships, and how they're being under constant surveillance. And so all of a sudden now these are major test subject populations that begin to undermine contagion theory and lead to epidemiology, meaning leading to a more investigative method of understanding outbreak.

And so just one of the points that happens is that these doctors are stationed all throughout the world, these British doctors, they're in the ports in Malta, they're in Jamaica, they're in the Caribbean, they're in India, they're in South America. And what happens is when they return to London they say, 'We've learned a lot.' And they create the Epidemiological Society in 1850. So that the actual deployment of these physicians throughout the empire and their arrival back to London to create the epidemiological field proves how this was a global practice and it grew out of these key moments.

Erin Welsh

And that's kind of where the classic story of epidemiology usually begins, right, with John Snow and the Broad Street pump in the London cholera epidemic of the 1850s. But that story, as you point out in your book, is really only a small piece of the puzzle of how epidemiology truly began. So how do you think that story should be told today? And where does John Snow fit into it?

Jim Downs

What I would say is the story of John Snow and the origins of epidemiology is that he remains a really important critical figure in tracing the origin of cholera to the water pump. That is absolutely his discovery and he ought to be lauded for that. What I would add is that he is not a lonely pioneer sort of courageously going into the poor neighborhood in London to search for the cause of cholera, what caused it to spread. He's part of a larger cohort of physicians and he's part of a group of doctors who have been studying the origins of epidemics from the 1830s, 1840s, and even earlier. And so the story that I spoke about earlier about John McWilliams going to Cape Verde to study the origin of yellow fever, he and John Snow rubbed shoulders at the Epidemiological Society. They knew each other. So McWilliams actually goes first, McWilliams goes to Africa first and he does the interviews first, he creates maps first, he does the investigations first.

So John Snow is actually following in the footsteps of imperial doctors who walked through the west coast of Africa to uncover the spread of cholera. Yet he is actually part of a larger movement of physicians who have begun this practice of investigating the cause and spread of disease. And so he's not a lonely pioneer, he's among a whole group. So while his discovery that cholera is related to the water is genius, his methods he learned from other doctors. And that's something that I think needs to be recognized within public health textbooks and so forth, that there was this whole group of people who actually were doing those methods. But here's the point, their methods did not develop purely out of laboratory science. Their methods developed because slavery and colonialism had made populations available. So when we think about their methods, it's not just to say hey, Snow has these methods. His methods came out of slavery and colonialism and it came out of the ways in which those institutions built environments that allow doctors to study people. So that's the piece that really needs to be sort of underscored.

Erin Welsh

One thing I was thinking about was how these early epidemiologists or the people that we would now reflect back on and call early epidemiologists, how did they view themselves? Did they view themselves as physicians? Did they view themselves as practicing a new kind of science? When did that recognition sort of shift or take place?

Jim Downs

It's interesting. That's a great question. And I think that they viewed themselves as physicians, they understood that, most of them are doctors, they're not the way that we would think of someone who has a master's in public health as an epidemiologist today. And I think they see themselves as beginning a new science, beginning a new form of information gathering and knowledge production. And I think that's in part because they created the Epidemiological Society. It's really interesting. If I could critique my own book, I was so into the source, so into the stories, there's so many things that I kind of thought okay, I have to hit this, I have to do that. After publishing the book I'm like wow, I could have really just did an entire chapter in the Epidemiological Society. But it seemed to me like it was such an obvious piece but that was just me being so in my head and thinking everybody knew this and everybody doesn't know this. And so the reality of it is for them to actually create a society signals that they see their work as different from typical patient care, clinical practice and that they see their work as sort of embarking on a new mode of scientific inquiry.

Erin Welsh

So you talked about how bureaucracy, statistics, mapping, how all of those tools are really important in creating this notion of epidemiology and this new way of seeing things. But without something like journalism perhaps would it have stayed a little bit more closely enveloped in colonialism or in slavery or in in wartime?

Jim Downs

Right. So that's a great question. So one of the things that I noticed is that the Crimean War figures into the book as its own chapter in large part because the Crimean War is often considered one of the first major wars, major modern wars. And that is to say that it was one of the first times you had British journalists deployed to the battlefield and were reporting back exactly what was happening. And one of the things, and I talk about this in the book, one of the journalists is talking about combat but also talking about the high rates of morbidity and mortality among the British troops. And the British public would have known about unsanitary conditions in prisons, they would have known about them in hospitals which at the time were not for middle class people, they were basically shelters for the poor and dispossessed. So they may have thought about hospitals as dirty places, they may have thought about prisons as incubators for medical disorders, but those were populations of people they really didn't care about.

Now that they've sent their sons, their fathers, their husbands, their brothers to the war and they're actually becoming sick and dying in the hospital, then it's like wait a minute, you're basically exposing hospitals as these unsanitary places and people are now becoming invested in why. And so that's what sort of inspires Florence Nightingale, who is a major figure in the book, to lead a corps of nurses to Crimea. And when she gets there, she does care for the wounded soldiers. She does put bandages on them and provides comfort and does all of this other stuff. But she's also very much interested in why more soldiers are becoming sick and dying in British hospitals and noticing they're not becoming sick and dying in the French and the Russian hospitals.

And so she becomes an epidemiologist in many respects and within the nursing literature and among some schools of public health, she is recognized for her contributions. But by and large within the larger history of medicine, she's recognized as a pioneering nurse but not as a pioneering epidemiologist. And when she returns back to London from Crimea, she meets with Queen Victoria and with Prince Albert in their Scottish home, which I actually think if you watch Downton Abbey, it's in Downton Abbey, at some point they go (laughs). Anyway so she meets there, so we're just trying to create some images. And Albert says, 'Listen, I have a tutor and he's a statistician.' And so he teaches her statistics. And so this goes back to your earlier question about statistics as a sort of way of understanding and measuring epidemics. She becomes inducted into the National Statistics Academy, she is one of the first women, if not the first. And so she's a leading thinker.

And of course I want to say this too, she's a problematic person in lots of ways. There's a lot of literature coming out about how she's racist, she's a white supremacist, she's all of those things. But my argument is that she's also leading the field of epidemiology and both things can be true. She can be a white supremacist and she could be a statistician.

Erin Welsh

We've talked a lot about these early physicians, early epidemiologists observing groups of people without their consent or observing people who can't or have not given their consent. But it's not just about observation. A lot of the times sometimes it is outright exploitation and so the dehumanization extends even further. And there's one example in particular that I'm thinking of that you discussed in your book involving smallpox. And I was wondering if you could describe this instance for our listeners and also share your thoughts on why so many examples of exploitation like this seem to have been largely erased from medical history.

Jim Downs

Okay. So just first, a lot of the stories of exploitation have been erased in large part because the notion of sort of medical ethics is not really a thing, bioethics is not really a thing until the mid 20th century. So that's part of it. A lot of this comes out of the Nuremberg Trials and that sort of begins a public conversation about what the boundaries of doctors and the boundaries of scientific practice, etc. One of the things that I study and I study it both in this book and in my first book 'Sick From Freedom' is the fact that most people don't know this. And this is the sort of like mind blowing thing that I sort of uncovered without being self aggrandizing but it was just really going through, sitting in Washington, DC reading medical records and finding references to smallpox and being like wait a minute, I study Civil War, I study the reconstruction. I don't know anything about this. I've never heard it. I checked all the indexes of the major books. No one has mentioned it.

By taking all of these records from the military that have created this bureaucracy, I pieced together the fact that at the moment of emancipation, over 60,000 formerly enslaved people died of smallpox. And no one has sort of talked about that. Now if you think about it, it's actually not that surprising because during the Civil War more soldiers died from disease than from battle. So again, when we think of the Civil War we think of the heroic noble death at the battle of Gettysburg or the battle of Antietam, we don't realize that most people, most soldiers died not from battlefield wounds or battlefield combat, they died from infectious disease because there was no such thing as germ theory, they died from GI problems, they died from pneumonia, etc. So the smallpox epidemic fits within that context really well.

And so when smallpox began to spread among Confederate or Union troops, there were two ways of responding. The first was they could fall back on the century long belief of quarantining people, just literally taking someone who was infected and isolating them, and that would prevent the virus from spreading. The second was there was this whole question about vaccination vs inoculation. And inoculation was a practice developed here in the United States in the 17th century when an enslaved person told Cotton Mather, 'Hey listen, I know there's a smallpox epidemic.' And smallpox basically produced a vesicle and in it it gets filled with lymph fluid. He said, 'If you cut open the vesicle and then you cut open someone who's vulnerable, their arm, and you take the lymph from their arm and you put it into the arm of someone who is vulnerable, they can develop a mild version of the infection and then clear it.' Vaccination is the same practice but you use cowpox and there's a whole history of that.

So during the war, they're trying to get their hands on cowpox but it's hard to transport cowpox throughout a battlefield on a piece of glass. It's not happening, okay. And so that's not working. So they go to this thing of all right, let's go back to arm inoculation. But in the process they're not conferring immunity, they're actually transmitting things like syphilis and other bloodborne diseases and other problems. And so again the confederacy has a military bureaucracy, so the doctors are now able to say out of 80 troops, these are the 5 cases that have worked, these are the 20 that haven't worked, these are the 15 that have done X. Prior to that these physicians were isolated. There wasn't a smallpox epidemic in the South before the war, they didn't know what work, they didn't know what could work or what what didn't work or could whatever.

Here's the thing. Someone says we can't use the soldiers because it's causing more problems. Let's turn to enslaved infants and children because they fell back on this pro-slavery parable that enslaved people were in an idyllic countryside, they were in a very comfortable position, they were healthy, they were the happy slave. And so the confederacy basically deploys physicians throughout the South to go and purposely infect children and even better infants because they're even purer with smallpox, then they would come back two or three weeks later, they would check with their body had in fact taken the virus and if they had started to produce the lymph, and they would take the lymph and then use it to give it to white people as a form of vaccination. Now this is a really interesting point because I've studied smallpox for over 15 years, it's not in the literature, it's not really anywhere. The use of children to harvest vaccine matter was not invented however by these southern doctors. This is a practice that happens throughout Europe.

As I mentioned in the book, King Carlos of Spain wants to get people vaccinated in Mexico, so he infects a bunch of orphans in Spain, puts them on a boat, sends them to Mexico. Once they're in Mexico, he infects another group of orphans, sends them to Vietnam. This is the trafficking of children. I just gave a talk recently at the University of Virginia and then a medical historian said, 'I have a case. It's 1810. The orphans in England, the same thing was happening.' So this is a widespread practice around vaccination and its at a time when we didn't have medical ethics, these kinds of things were I think more common than not.

Now here's what's really interesting to me as a historian. It's often so banal, it's often so commonplace, there isn't the need to write it down. So it's like they don't think they need to write down these kinds of things. And so what happens is during a war the bureaucracy ends up capturing a lot of stuff. It ends up serving as a net and all of a sudden you're like wait a minute, why is this doctor being sent out? And this other doctor is telling 40 other doctors to do it. Wait, it's in the command. It's in the order. There's lots of medical practices and lots of medical ideas that aren't articulated but they're just understood.

Erin Welsh

Fascinating. We're going to take a quick break here and when we get back, I want to shift to talking about what it's like to actually be a historian and some of the other areas that you're interested in.

TPWKY

(transition theme)

Erin Welsh

Welcome back everyone. I have really been enjoying chatting with Dr. Jim Downs about how important it is to recognize the role that slavery, colonialism, and war has played in the development of epidemiology as a science. But now we're going to turn to some more personal questions. Besides the origin story of epidemiology, what other areas have you worked on?

Jim Downs

Yeah. I'm really interested in the history of gender and sexuality, that's always been a big piece. I have a book called 'Stand By Me: The Forgotten History of Gay Liberation' and there is a medical narrative to it and that's basically that when we think about the 70s, we think about it at least for white gay men as this huge orgy. And it's like how much of that is true and how much of that was used to rationalize and explain the spread of HIV? And what I learned was that policymakers, newspapers, journalists, public health people, doctors, we saw HIV, the explosion of HIV in the early 80s and we're like well, what caused this? And they immediately turned to sex culture. And while that's true to a point, it's not in another way.

And what it's done is it's actually turned the 70s into one note and it's failed to see that in the 1970s, for instance, there was the creation of the first ever gay church actually was in 1967. I never knew gay people created their own church, their own synagogues, their own prayer groups. So there's this whole religious movement that developed out of the 70s because you couldn't necessarily go to a gay bar, you could go to a prayer group. So that was interesting.

We talk about HIV/AIDS, we talk about the political networks that got the word out. It came out through the volunteer press, it came out from newspapers that gay men and lesbians and trans people created for themselves. And I tell my students this all the time, they couldn't put it on their resume. People have all these activities that are like, 'I'm putting it on my resume.' This doesn't go in the resume, they would get fired if it was on their resume. So they create a whole newspaper culture. So there's the first ever gay bookstore was created. And so I grew up at the time in the 90s where there were feminists and gay bookstores. A lot of those have basically died but in the 70s those were another site of community building and community spaces long before you had community centers. So when people say it's just the bars and the bathhouses and the beaches where gay people were coming together. I'm like no there's churches, there's bookstores, there's community centers and both can be true. There could be lots of sex and there could be that.

But the point that I came at it from a medical perspective which is really important especially as a gay man was that we got to stop this narrative about HIV spreads because of promiscuity. HIV spreads if you come in contact with the virus. You could have lots of sex with lots of different people and never catch HIV. You could have the completely monogamous and on your wedding night with another man have sex for the first time and be exposed to it. And that's it. So I'm trying to like really dispel those kinds of rumors and myths in the book and really point to the ways in which gay people try to create a sense of culture in order to create a sense of community.

Erin Welsh

Yeah. That's really fascinating. And is this something that you always wanted to research? When you were a kid, did you want to grow up to become a historian? When did you become interested in these in these fields?

Jim Downs

So I think when I was a kid I wanted to be a rapper/actress more powerful than three Cleopatras, that's Lauryn Hill. (laughs) No, I wanted to become an actor, I think, I mean mostly. Then it was when I was in college at University of Pennsylvania, a friend of mine said do you want to volunteer at the gay community center? And essentially we went there on Wednesday night and all of these men who had left Philadelphia or died of HIV stuffed all their belongings from the 70s into paper bags. And the gay community center, the William Way Center was at the time dealing with runaway youth, dealing with helping trans people, HIV testing, drag queen bingo, but knew that they had to keep their history because the major libraries and archives in the Philadelphia area, which is like the hub of history, a major historical hub, weren't taking them. And so everything was like stuffed into an attic. And I started looking at these documents and I wasn't a librarian but just writing down what I saw. And I learned that that's also what happened in New York and in other places, other gay places.

And so it was coming in contact with those sources and coming in contact with that history and understanding that history is doing political work, that's what sort of really got me interested. And then when I was in graduate school I read a lot of literature by black women and slave narratives and so I started researching the history of slavery and I again uncovered all of these major records about the period immediately following slavery which we call emancipation. And I just thought wow, that has to be told. It was the medical stuff mostly because most of the history is about the important moments, citizenship, suffrage. So I think it was for me the sources, it's always the documents. I might have lots of different questions, I might be interested in lots of different things, but what actually leads to the creation of a book is always going to be some kind of record, some kind of document that I don't think has been told.

Erin Welsh

What have you encountered as some of the biggest misconceptions about being a historian? When you introduce yourself and you say I'm a historian, what are some of the questions you get and the misconceptions you find?

Jim Downs

Okay. First of all yeah, I get questions all the time. I said I'm a historian, I'm not Wikipedia or Google. Oftentimes they have questions and they're such strange questions. But they already know the answer, it's like final Jeopardy. Every time I meet somebody it's like final Jeopardy, they're like do you know...? And I'm like yeah, I actually don't feel history questions, go on a game show. So that's one of them. I think this is one of the misconceptions. I think doing podcasts. I was trained by Eric Foner, I was trained by African American scholars, I was trained to bring what I've learned to the public. I was not trained to sit in a circle with other academics or in front of a big lecture hall and show people how smart I was.

I was trained to say you learn this and you have a responsibility to get out there and to change the conversation and you don't do it by being aloof and being lofty, you do it by being real. And so like my advisor Eric Foner constantly was publishing in the nation, he's still alive, he's still doing lots of work. He always makes his work really accessible. And he never sat us down and was like, 'You need to do this.' It was by example. I remember once he was kind of late for class and NBC News was in the courtyard and he was like, 'Yeah, I got to do something on Andrew Johnson today.' I'm like oh my god he's on TV! I was like checking my hair and makeup, I'm like am I in the background?

And then within African American studies and being a part of that field and that world, there is a deep commitment among many to make knowledge accessible. So I think what most historians don't know, most people don't know is a lot of us spend a lot of time doing this work, doing podcasts, tweeting, writing articles for the mainstream press, making the information available.

Erin Welsh

Yeah. it's so crucial and it's something that I think not every graduate degree affords you, right. Not everyone gets that sort of training. And what other opportunities are out there for someone with a PhD or a master's in history?

Jim Downs

I think there's a lot. I think there's a lot in terms of just one of the great things about being a historian is you really learn how to research and you learn how to write. So that kind of goes into lots of other fields. I also should just give a sort of shout out to a company that I'm a partner of which is called History Studio. And what we do at History Studio is we provide historical consultation to the entertainment profession. And so there's lots of people out there that are making documentaries that are in desperate need of historians to serve as consultants, there's lots of people who are making feature length films and are doing series that are looking for historical consultants. And so I think that's one of the other ways. Lots of other historians traditionally go into museum work and other forms of public history.

But increasingly I think that historians are really good at learning how to read and write. And so one of my colleagues at History Studio, Erica Armstrong Dunbar is an executive producer on the show The Gilded Age. And The Gilded Age is a period piece, it's HBO. But she's brilliant. So if she reads the script, she knows how to identify what is a good storyline, what is right. And do you know what? She appears at the end of the episode, she's the first historian ever to testify and to frame an episode. Normally it's just the actors and the actresses and maybe the showrunners, she's framing it for the American public. And so she's actually changing and expanding the role of historians by actually getting on there, getting to the public, and saying this is what this episode meant, this is what it meant to be a black person in the gilded age, these were the kinds of indignities they faced, these were also the opportunities they confronted.

Because a lot of times it's very easy to say as a historian oh yes, black people suffered from discrimination. Yes but sometimes that obscures all of the major things they did. And what Dunbar says at the end of that episode is they created an entire publishing industry. There was a huge black newspaper, you have the whole industry of black newspapers that were developing during this time. So I think there's a lot that historians can do. I just think it's about people may not come to you as a historian, you have to come to them and you have to pitch them and you have to show what you can do. And then hopefully that will change more as we progress. So we'll see.

Erin Welsh

That is so cool. I've got one last question for you and then I'll let you go. And that is when someone asks you why it's so important to know history or learn history, what do you tell them? What's your answer?

Jim Downs

It's about learning how to frame and learning how to frame a contemporary issue. So NBC News just broke a story yesterday that came out of UG, University of Georgia, a study that white people don't really care about COVID because they've heard it only affects black people. And so we can talk about the merits of the study or not. The point is if you read this article in isolation, you can either just say it's rubbish and push it aside or you can just say oh it's surprising. But if you place it in historical context you say wow, it's actually part of a larger pattern. I mean this actually happened during the Civil War. White people didn't care that black people are dying of smallpox. This actually happened before. And even now with HIV, HIV is no longer the largest growing group of people to contract HIV in the United States are not gay white men, they are black het cisgender women in the South. And yet people don't think about it as much anymore. So when you think about history, it actually can illuminate patterns and it can actually help you better analyze and examine a particular issue.

TPWKY

(transition theme)

Erin Welsh

Thank you so much Dr. Downs for taking the time to chat with me today. I can already tell that this is a conversation that is going to stick with me for a very long time. And if you listeners would like to learn more about some of the things that we talked about today, do yourself a favor and go check out Dr. Downs' book 'Maladies of Empire: How Colonialism, Slavery, and War Transformed Medicine'. I'll post a link to the book as well as to Dr. Downs' faculty page on our website thispodcastwillkillyou.com.

Also on our website are the sources for all of our episodes, transcripts, quarantini and placeborita recipes, our bookshop.org affiliate account, Goodreads list, links to music by Bloodmobile, links to merch and Patreon and so much more. Listen, follow, and leave us a review on Amazon Music, Apple Podcast, or wherever you get your podcasts. And don't forget you can listen to new episodes one week early on Amazon Music or early and ad free by subscribing to Wondery Plus in the Wondery app. Thanks again to Bloodmobile for providing the music for this episode and all of our episodes. And thank you to you, listeners. I hope you liked this deep dive into the true origins of epidemiology. I know I had a great time. And a special thank you to our fantastic, generous patrons, we appreciate you so very much. We have got a brand new episode on a brand new topic coming out next week. So until then, keep washing those hands.