Epidemics in Movies

[Announcer] This program is presented by the Centers for Disease Control and Prevention.

[Sarah Gregory] Hi, I'm Sarah Gregory, and today I'm talking with Dr. Daniel Curtis, an associate professor specializing in social responses to historical diseases at Erasmus University in the Netherlands. We'll be discussing how people in movies react to epidemic disease outbreaks.

Welcome Dr. Curtis!

[Daniel Curtis] Hi! Yeah, thanks for inviting me to speak.

[Sarah Gregory] This is a pretty interesting topic. We actually did a podcast in 2018 called the Zombie Condition in Literature, so this is a fascinating addition to that. What got you interested in investigating how infectious diseases were portrayed in films?

[Daniel Curtis] Well, I'm actually a historian, not really interested in films, per say, and in my work, I look at resilience, vulnerability, and coping capacity of societies throughout the past, basically. And in more recent years, this has sort of gravitated more towards epidemics and famines. But my coauthor, Han Qijun, is a scholar of film and culture, mainly focusing on the representation of Chinese families within Hollywood cinema. So, basically we just decided to bring together our kind of respective interests.

[Sarah Gregory] Okay, so how did you go about gathering the information for your study?

[Daniel Curtis] So, at the base is a number of catalogs and databases of films, so yeah, your classic databases such as IMDB and so on. And we essentially just manually searched through these databases to find epidemic-related films. Not really an easy task, because we tried to limit the scope for the interest of, you know, a small paper. So we decided to remove all films that were not really grounded in reality or semireality—so, removing zombie films or films about apocalypse or bioterrorism, for example.

[Sarah Gregory] Okay, once you had the information you needed, what did you do with it and how did you conduct this review?

[Daniel Curtis] Well, really it's just simply a case of watching many, many films again and again. You know, sometimes a number of times, going back through particular scenes, analyzing characters and the narratives, and so on—trying to find recurring features within this large corpus of films. The paper that we wrote for *Emerging Infectious Diseases*, this is a kind of meta-review of numerous films, it sort of observed patterns over time. But at the moment, we're also working on a sort of follow-up paper where we just zoom in on three really important films: one being *Contagion* from 2011—it's quite well known—*Blindness*, and *The Painted Veil*, where we sort of zoom in much more specifically on some of the mechanisms.

[Sarah Gregory] Look forward to reading that one, too! Yeah, we…a lot of *Contagion* was filmed here at CDC, you know?

[Daniel Curtis] Yeah, that's right! It's a pretty…it's a great film, actually, I think.

[Sarah Gregory] Yeah! They actually asked people here, employees, if they wanted to be in the film as extras walking around and stuff, but I didn't volunteer. You state in your article that films illustrate two ways that epidemics can affect societies, so tell us about those…

[Daniel Curtis] Yeah. We make a distinction between two essential responses both connected to fear. And this first response leads to a kind of breakdown in sociability, which is kind of informed by concern over broader moral failings within society at large, leading to things like scapegoating, prejudice, and violence. This is actually connected to something called an "outbreak narrative." This is a concept developed by American scholar Priscilla Wald, who said that, basically, a fear of the spread of disease is developed in only one direction, from so-called marginalized, deviant, or underdeveloped groups to native, mainstream, or developed society. And we often see that in different forms of othering and Orientalization. You know, it's no surprise to me that the "patient zero" in *Contagion* is a chef from Macao, or the first infected person in *Blindness* is a Japanese man, or in *The Painted Veil*, we see this kind of timeless, rural Chinese village as the nexus of infection and is portrayed as fortunate to receive selfless…this selfless Western bacteriologist who is risking his own life to save others.

The second kind of social response that we talk about, to epidemics, also leads to a breakdown in sociability, often in this form of violent resistance or unrest against medical or political authorities, but interestingly, it's kind of paradoxically in order to protect or retain aspects of normal life under threat…perceived freedoms and liberties, and customary traditions and practices. That is to say, things like quarantine, disruption to economic activity, changes to burial practices…societies don't always accept these very readily. You know, we see that in the context of Ebola, for example.

And I think the thing that links both of these kinds of responses is basically a breakdown in trust on a number of different levels. This can be on the institutional level, on the societal level, or on the interpersonal level. And I think films emphasize how things like suspicion and prejudice are not features which suddenly emerge out of new conditions created by fear of the pathogen. They're actually ingrained features of society before the appearance of epidemics, often informed by structural inequalities based on race, gender, socioeconomic status. To me, it's not unexpected that communities struggling to trust authorities and officials when afflicted with Ebola are places that have already had to deal with failed governments and regional conflicts, and so on.

[Sarah Gregory] We're not seeing that so much though with this COVID-19 though, are we— resistance to, say, quarantine? It seems like people are cooperating more.

[Daniel Curtis] Yes, but I mean…I think with China it's a very, very specific case…a very unusual case with a very unusual kind of political context. And I think it also depends…so, it's not everything is just about violence and strong…strong reaction against quarantine and isolation, but sometimes it's more sort of passive resistance…the idea that people just really want to do ordinary things, basically.

[Sarah Gregory] So how do you see film differing from real life? And, then, what are some of the potential problems with these film representations?

[Daniel Curtis] Yeah, well I guess films may be grounded in reality, but of course, they're not reality, you know…fear, panic, chaos…they're features in films which are likely just to be retained for entertainment purposes. A problem I think is actual, like news reporting and social media, other forms of popular culture, such as novels, television shows, films, they can also influence people's trust, especially when this information provided about an epidemic disease is seen as sort of grounded in scientific fact by society. And I think that audiences might be more inclined to take the information on when educational messages are reinforced by emotive kinds

of stories, you know, so we see even highly implausible situations, such as those seen in the zombie movies. Scholars still suggest that they have very significant public health implications.

So what I'm saying basically is that films are very effective mediums for delivering messages, but actually, the problem lies in the nature of the message. I think, to my mind, films should avoid perpetuating othering and Orientalization, but instead find ways to critique this process.

[Sarah Gregory] So you kind of touched on this a little bit just now, but did you find any upside to any of the films in societal reactions?

[Daniel Curtis] Yeah, I think the one thing that we see in some of these films is that…and while epidemics often exacerbate, maybe pull apart, preexisting inequalities, this might not always be a kind of universal rule. And I think sometimes the demand of dealing with an epidemic may also bring to light previously unseen elements of social cohesion based on maybe empathy or compassion. So I think it…these films kind of show the problems of simply seeing epidemics deterministically, inevitably creating prejudice and discord or inevitably leading to acts of kindness or courage, but to sort of see the more nuanced picture that both can actually coexist simultaneously, and the lines between the two could be more blurred than it appears on the surface.

So, if I just point to an example: In the film *Blindness* in 2008, it shows this issue very well. You have this man played by Danny Glover. At the end of the film, he kind of…he kind of reflects upon his status, both pre- and post-blindness. This film is about a kind of a disease which leads to blindness, essentially. And he notes that, sort of prior to the disease, his overall status was defined by his otherness, and it sort of hints at maybe lines of racial discrimination, maybe it's through poverty, maybe it's just simply that he has to wear an eye patch, it's life. But for him, the disease is a kind of egalitarian process, but it's the first time he's actually accepted as a person just like any other. So I think this is also an interesting sort of angle on society and epidemics.

[Sarah Gregory] How do you think pandemic films impact reactions and thinking during real outbreaks? Again, we already talked about this a little bit, but like what we're experiencing now with COVID-19 or what has been happening with Ebola…?

[Daniel Curtis] As I said, we take our cues from popular culture. So if in films you have Orientalization and othering—some of these examples that I mentioned, things like *Contagion*, *Blindness*—then we are likely, it stands to reason, that we are also going to see these things in society itself, and this has sort of come out during this process of dealing with COVID-19. You know, we've seen racist abuse of…of Asians, basically, in different parts of Europe, in different parts of North America, various different examples. So, yeah, I think there is a real connection between the two.

[Sarah Gregory] So, clearly we'll have to wait and see what happens with this COVID outbreak and how it ultimately turns out. But, from this point in time, what kind of a film do you envision for it?

[Daniel Curtis] Yeah, well I think again, to return to the same point, an important point of departure for any film based around this outbreak I think would have to reflect upon this process of Orientalization and othering. Not just perpetuate it, but actually deal with the issue critically…try to deal with why we are…why societies move towards that kind of line of thinking. But also, I think I would be interested to see a film that also reflects upon the ordinary lives of citizens, especially the poor and the marginalized, because these often get pushed into

the background in favor of more macroscopic elements of overall disease management, you know. So we see it, again, with COVID-19. We see a lot of attention paid towards implementation of quarantines and, you know, stringent quarantines, stringent rules and regulations regarding the movement of people, but less attention actually paid to…the actual lives of individuals that are undergoing that quarantine. And that, I think, is sometimes lost. I think films are really a great opportunity to address that, because they focus in on protagonists…they focus in on actual characters.

[Sarah Gregory] Yes, I think that's a nice vision, I'd like to see that too. You said that you're not really a film guy yourself, but what are your favorite types of movies?

[Daniel Curtis] Yeah, I'm not a film scholar, but of course I do like film, not necessarily disease-related ones. I have to say I don't really like one particular genre, but if I was able to sort of put together my top five films, I would say *E.T.*, Spielberg, 1980s, I guess; *Kes*, a sort of British film from the 60's; *Isle of Dogs*, which is a recent film by Wes Anderson—also related to disease actually because these dogs on the island, they get dog flu and then they're sent off to some separate, isolated island called *Trash Island*, so that is sort of disease related; *American Honey*, I like, and also *Call Me By Your Name*. They're my top five films.

[Sarah Gregory] What was the second…I think the second one you said?

[Daniel Curtis] *Kes*. It's a British film about a young boy from a sort of working class, northern English town who, basically, befriends a kestrel, and just about him training his kestrel in this kind of mining town.

[Sarah Gregory] Ah. I haven't heard of that one…interesting. Nice selection of movies! They all kind of varied.

So tell us about your job? You work, as we said, at the Erasmus School of History, Culture, and Communication. That sounds pretty unique and fascinating. What do you enjoy most about it, and what kinds of things do you like to do when you're not working?

[Daniel Curtis] Yeah, it's a nice job, mainly because I have an 800,000 euro project, which will take place all the way up until 2024. And this, what, allows me to employ other people—postdoc, PhD—but it also attempts to look at the redistributive impact of epidemic diseases in historical perspective—not only how epidemics redistribute wealth, property, resources, but also how they affect social mobility for young people that maybe lose a parent or both parents, for example, in a short space in time. And also how they affect the perception of inequality and fairness.

At the university, I teach a course called, "Epidemics, Famines, and Development in Historical Perspective," and I have a new book out this year together with some other coauthors called, *Disasters and History*.

[Sarah Gregory] *Deductive History*?

[Daniel Curtis] Sorry—*Disasters and History*.

[Sarah Gregory] Excellent!

[Daniel Curtis] Yeah. When I'm not working, I like to travel, eat nice food, cycle, watch a bit of football, and drink the odd Belgian beer.

[Sarah Gregory] Pretty much everybody cycles in Netherlands, right?

[Daniel Curtis] Yeah, yeah, it is kind of…enforced, basically, upon you, in a way. But I also like to cycle for fun as well.

[Sarah Gregory] Okay, very nice. Yes, when I went to Amsterdam, I always knew that everybody cycled, but I was really awestruck by the number of bicycles everywhere!

[Daniel Curtis] Yes, you have to be prepared. You have to have eyes in the back of your head, otherwise it's easy to get run over.

[Sarah Gregory] Yeah! Well, thank you so much for taking the time to talk with me today, Dr. Curtis.

[Daniel Curtis] Yup, not a problem.

[Sarah Gregory] Listeners can read the February 2020 article "Social Responses to Epidemics Depicted by Cinema" online at cdc.gov/eid.

I'm Sarah Gregory for Emerging Infectious Diseases.

[Announcer] For the most accurate health information, visit cdc.gov or call 1-800-CDC-INFO.