# The physician at the movies



Matt Damon in Contagion. © Warner Bros. Pictures

### Peter E. Dans, MD

# **Contagion**

Starring Gwyneth Paltrow, Matt Damon, Jude Law, Laurence Fishburne, Kate Winslet, Marion Cotillard.

Directed by Steven Soderbergh. Running time 104 minutes. Rated PG-13.

In English, Mandarin, and Cantonese.

hen I agreed to write this column in 1991, my charge was to discuss films that had a medical theme and to look at films with a medical eye. As the quality of the movies has deteriorated, I have found this more difficult to fulfill. However, *Contagion*, to this one-time infectious disease specialist, seemed to fit the bill and I decided to take one for

the team by reviewing it. Let's get one thing straight at the outset: despite its all-star cast, I don't think this is a very good film.

The movie opens with a cough. Next we see ten minutes of short flashbacks to the onset of an illness in a married woman going home to Minneapolis from a business trip to open a casino in Hong Kong. After a wild night in a casino, she adjusts her return so she can spend a seven-hour layover in Chicago with her ex-lover. People exposed to her are shown taking the disease to London, Tokyo, San Francisco, Chicago, and Minneapolis, accompanied by ominous onscreen population figures of how many inhabitants could possibly be affected in each city with each post-Outbreak day.

At this point, we are transported to the Centers for Disease Control and Prevention (CDC) in Atlanta where a doctor (Laurence Fishburne) has just parked his car and is chatting with the attendant about the football pool and the attendant's son who has attention deficit disorder (ADD). The doctor promises to help, which he will later do, but not as we expect. As the doctor reaches his office, his assistant tells him of a suspicious death of the woman in Minneapolis, and that her son and her husband have contracted an unknown disease. The son subsequently dies, while the husband (Matt Damon) survives and tries to piece together what happened to his wife who was so well when they parted. Cut to the lover, who starts coughing on a Chicago bus. When he gets off, he collapses and dies. This adds more confusion for the poor husband, who later recovers



Left, Marion Cotillard. Right, Chin Han in Contagion. © Warner Bros. Pictures

and searches for answers.

The rest of the film is devoted to successive fragments of stories involving sending an Epidemic Intelligence Service (EIS) officer (Kate Winslet) to Minneapolis to obtain specimens and to try to make sense of an attempt by a San Francisco lab to isolate the offending organism. There are visits to the Level 4 labs at the CDC, with lots of jargon like "fomite," "pathognomonic," "paramyxovirus," "phylogenetic," and "R-Naught number," all of which may be intended to impress viewers—the last one confused me. We are transported to Geneva, where the WHO gets involved and an investigator (Marion Cotillard) is dispatched to Hong Kong, where the authorities are none too pleased with being implicated. Interspersed are rantings about the CDC by a blogging journalist (Jude Law) because they have refused to recommend his forsythia-based drug to combat the epidemic, instead helping Big Pharma corner the market.

The films shows attempts to grow the organism, named MEV-1, in tissue culture and then develop a vaccine with an attenuated strain, and efforts to isolate the sick and quarantine contacts. Homeland Security gets involved, and we see a gymnasium set up for all those affected. Meanwhile deaths

mount, with the mortality at twenty percent and there's neither a treatment protocol nor a vaccine. Homeland Security runs out of body bags. There's a riot for food and an emptying of stores. People become violent when lining up for forsythia and the doses run out. The president makes a statement on day twenty-six from an undisclosed location telling the populace not to worry and that the CDC has things under control. Unfortunately the EIS officer gets the disease and the CDC chief tries unsuccessfully to get her back to Atlanta. He does, however, get his wife from Chicago back to Atlanta by eluding border checks. Meanwhile the WHO investigator is kidnapped by Chinese officials and is held hostage so that if a treatment or vaccine is discovered, their people will get to the head of the line. At this point, I debated whether to don a face mask to watch the rest of the film, but mercifully a vaccine is finally produced and given out by lottery and the outbreak is controlled. The story is brought full circle at the very end and we see how the disease originated, but not before we have endured 133 days of flashbacks. What became painfully clear to me in watching this film is that Steven Soderbergh either has ADD or is trying to inflict it on us.

The filmmakers extend a special thanks to the CDC. If I were in their place I would've made sure my name was left off this picture. The film's CDC officials mean well but show a remarkable lack of urgency or competence. The chief's attempt to get his wife home safely and his access to early vaccine further diminish his stature, although he tries to compensate for this by giving his vaccine dose to the parking attendant's kid. But then again the Centers for Disease Control is not what it was in the days of CDC chief Alex Langmuir, who must be turning over in his grave. When I was a medical resident in the early 1960s, doctors were subject to being drafted, and becoming an EIS officer was very well sought-after, deservedly so. In the past few decades, the agency has enlarged in size and scope and seems to have lost its focus, becoming more politicized and bureaucratic. The other identifiable institution is the University of Minnesota Hospital, which is shown to better advantage. The movie was praised by reviewers as raising questions about our preparedness for a pandemic, but a recent event involving the detention of Japanese students arriving at Auckland's airport led the health directors to admit they overreacted to an airport flu scare.2 Then again, maybe there is cause for worry with the recent publication of a process to genetically alter avian influenza to make it more transmissible.3 I must admit to being a little spooked during a recent flight by a nearby passenger's persistent cough, knowing that air is re-circulated.

The film may be useful for a discussion led by knowledgeable people about how to really respond to such an event in an Internet and global age. If you want to see how past movies have handled virus outbreaks, rent *Panic in the Streets*, *A Matter of WHO*, and *Outbreak*. You'd make better use of your time, though, reading *The Medical Detectives* by Berton Rouché,<sup>4</sup> whose marvelous stories helped make the *New Yorker* such an outstanding magazine in its heyday.<sup>5</sup>

#### **Addendum**

I thought it might be interesting to ask Dr. Gabor Kelen, Johns Hopkins Medical Institutions' Professor of Emergency Medicine and Director of Emergency Services, for his reaction to the film, since he would be one of the lead persons in our area were such an event to take place:

The movie *Contagion*, like all epic disaster movies, is more entertainment than fact. There are a few strains (pun intended) that are reasonably portrayed. The ending, which shows animal-to-animal-to-human-to-human transmission as the explanation for the seed of the epidemic, is very plausible, even likely. The charlatan opportunist played by Jude Law, hoping to capitalize on people's fears by promoting snake oil (forsythia) as a cure, is also very plausible. In fact we see this routinely in daily life, notably by those pushing various (very expensive) cancer cures (remember Laetrile), which are in fact useless. Finally, when law enforcement breaks down (in this case due to decimation of the force),

and there are perceived shortages of medicine, some lawlessness will occur, but not likely as widespread as portrayed. For example, during the H1N1 epidemic there was none of the hysterical lawless behavior displayed in the movie by citizens of any country as a means to procure the precious few aliquots of vaccine that was initially available. Similarly, during the great influenza outbreak of 1918, there was no widespread panic, nor was there widespread panic during SARS. On the other hand there was sporadic lawlessness experienced in New Orleans during Hurricane Katrina, although in truth even this was overhyped by the media and sporadic at best. Still we have not experienced a pandemic as lethal as that portrayed in the movie, and thus the panic and lawlessness shown in the movie could perhaps yet happen.

What is clearly fiction is the manner in which a vaccine was developed. This was pure fantasy. The idea that a rogue scientist would somehow break into his own lab and without any help be able to determine the secret to vaccine development is completely unreal. It could never happen. The idea that another rogue scientist would inject himself with the vaccine to prove its effectiveness has some historical basis, as early developer of vaccines did inject themselves and even family members. However, in these early days, there was no readily approved scientific method. Also, a single "success" as in any pandemic, no matter how widespread and lethal, would be unconvincing. In the worst imaginable pandemic, there would be those who have natural immunity or would not show (any, much, or severe) clinical symptoms even if infected. Consider that Native Americans were not completely wiped out by smallpox. Certainly, one individual success would hardly spawn worldwide mass production of vaccine.

The portrayal of the WHO and the CDC gets mixed reviews. On the one hand they are portrayed as hard at work and able the gauge the epidemic, but seem helpless if not bumbling to stop it. One need only to consider SARS, Avian Flu, and H1N1, in recent history to conclude the excellence with which the world body and the HHS in the United States handled these recent epidemics.

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## Of Gods and Men (Des hommes et des dieux)

Starring Lambert Wilson, Michael Lonsdale, Farid Larbi, and Jacques Hurlin.

Directed by Xavier Beauvois. Running time 120 minutes. Rated PG.

In French and Arabic with subtitles.

This remarkable film, whose English title was curiously and somewhat significantly inverted from *Of Men and Gods*, was the most important movie of 2011, although it wouldn't be a surprise if you missed it. The Academy of Motion Picture Arts and Sciences did not recognize it in any category and even where it was shown, it left town quickly. The Baltimore County Public Library, which purchases multiple copies of the

violent and profane junk that passes for feature films today, never bought a copy of the DVD even when asked to do so.

Yet Wall Street Journal critic Joe Morgenstern called it "one of the most beautiful movies I know." Washington Post critic Ann Hornaday said that "Xavier Beauvois's haunting, exquisitely crafted film achieves a flawless balance between taut, truth-based contemporary drama and the timeless question of spiritual commitment and obedience." Kenneth Turan gave it four stars, describing it as "a thrilling adventure of the spirit." It is based on the true story of nine French Trappists of the Monastery of Our Lady of Atlas, established in 1947 near the Muslim village of Tibhirine in the Atlas mountains about sixty miles from Algiers. The eldest, Luc (Michael Lonsdale), is a physician who conducts regular free clinics for the populace. Many come to him for advice, including a young girl who has



Back row, from left: Lambert Wison, Jacques Herlin, Loïc Pichon, Michael Lonsdale, Philippe Laudenbach; front row, from left: Olivier Rabourdin, Jean-Marie Frin, Xavier Maly in Of Gods and Men (Des hommes et des dieux). Sony Pictures Classics/Photofest.

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From left, Lambert Wison, Michael Lonsdale, Philippe Laudenbach in Of Gods and Men (Des hommes et des dieux). Sony Pictures Classics/

been pledged to marry someone she doesn't love. He tells her that he had many loves before finding his "true love" sixty years before and that she will find hers. The monks help the illiterate residents with letter writing and getting photos for their required identity papers. They work the land and join happily in a Muslim boy's coming-of-age party.

The first part of the film is idyllic, reflecting a decade of leadership by Father Christian (Lambert Wilson). He had fought on the side of the French in the Algerian war. After entering the Cistercians, he dedicated his life to establishing a strong relationship with Muslims, inviting them to share meals and discuss their religious beliefs at the monastery. A student of the Quran, which is seen prominently on his desk, he notes that devout Muslims identify with the monks because they both have ritual daily prayers. He is often more critical of his co-religionists, something that probably had its roots in his familiarity with prejudiced elites in France and Algeria. In addition, his great-great-aunt had been a member of the order of the Society of Helpers, which served the sick, poor, and outcasts, especially blacks, in New York City and St. Louis in the 1880s, fighting against religious prejudice in the church at the time. 4p38 Indeed many of Father Christian's colleagues find that he is "too sensitive" and loathe to criticize Muslims or the Quran.

In 1993, the comity is pierced when a radical Islamist stabs a young girl in the heart for not wearing her *hijab*. This is followed by a manifesto issued by a Muslim terrorist group, GIA Commandos or (Armed Islamic Group), stating that "Foreigners have thirty days to leave the country. If they do not they are responsible for their own deaths." It is issued with

an emblem of the Quran with crossed swords and signed by Abu Mariam (Father of Mary). <sup>4p138</sup> This is followed by the proclamation of a *fatwa* to legitimize the killing of unarmed civilians that will lead the terrorists to paradise rather than to hell, where they would otherwise go, condemned to drink boiling water and putrid blood. <sup>4p140</sup>

The gang slits the throats of Croatian newcomers who are helping the locals with their farming. Some of the monks are worried that they are on the terrorists' list to be exterminated. Christian is resolute in his belief that they will survive and rejects an offer of protection from the army as inconsistent with the order's beliefs of openness and of standing apart from the government. When even the terrorist leader Ali Fayattia (Farid Larbi) warns him that their lives are in danger, Christian stares the leader down and unilaterally makes the decision to stay. As the violence escalates, he holds another vote to satisfy those who are in favor of leaving for another place where they can carry out their good works and prayer in safety. Christian points out how dependent the villagers are on the monks for their revenue (jams and honey) and medical care. Luc sees as many as 150 patients a day. They decide to stay, saying that to do otherwise would violate their Christian ethic, but put in place some precautions in case of attack, such as locking the gates at night and drawing up escape plans, if needed. When the terrorist leader seeks medical care, Christian decides that Luc should help him over the objections of governmental officials who question saving a wretch who has the blood of innocent people on his hands. This is followed by a temporary respite; there is a lovely scene near the end when the regional abbot visits with supplies. However, the day of reckoning

finally arrives, and the monastery is emptied and the monks are taken away to what seems like certain death.

The movie poses the question: What would you do if your life were seriously threatened and you could escape? Would you stand your ground and live your faith no matter what the cost? Would you be like Brother Luc who says that he had met the devil in the Nazis and doesn't fear him? Movie critic Steven Greydanus suggests that the film may be seen as a test of the strength of the viewers' faith,<sup>5</sup> a test I may have failed by feeling that they ought to have left because they had so much to give and it was inevitable that they would be killed. Other questions arise, like the perennial one about what to do when a physician is asked to care for an evil person, in this case a terrorist who has killed many and is likely to kill more if he survives. Another very relevant issue is that the majority of the Muslim townspeople pictured in the film are law-abiding and want to live in peace with Christians, but they are intimidated into silence, and those who do speak up are killed by the more radical extremists. The killing of the young woman raises the issue of the imposition of Sharia law. The film also can be used as a vehicle for discussing how poorly the mainstream media covers the killing of Christians around the world and their systematic ejection from lands they settled hundreds of years before Islam. It is estimated that more Christians have been martyred for their faith in the twentieth century than in the previous nineteen centuries, and this persecution continues unabated in the new millennium.6

I'll conclude with the thoughts of one of the many long-distance friends I've met in the years of writing this column, John Neff, an A $\Omega$ A member who contacted me about reproducing a chapter of my book *Christians in the Movies: A Century of Saints and Sinners*<sup>7</sup> for a film discussion group that he has been part of for decades at Ohio State.<sup>8</sup> A film buff, he submitted the following thoughts about the film:

I'm an immunopathologist, which is probably why I separate my movie impressions into the immediate (the ones you talk about on the way home from the show) and delayed (the ones you awaken a sleepy wife at 2:00 AM to talk about, weeks later). My initial thought was that the film was so beautifully done and so well paced, it seemed to be an almost perfect tragedy with one major flaw: you know the outcome from the beginning. I thought this was a modern martyrdom; why didn't someone do something more to stop this? <sup>7</sup>

Later on I thought to myself that there had to be more to this; these men are principled, and faith-filled, but not martyrs (one said that he was not looking to be a martyr). I wondered what they were like, especially Luc (the physician). I couldn't—still can't—accept the fact that they stayed; they had so much more to give. I bought *The Monks of Tibhirine*<sup>3</sup> and learned that Christian was the son of a distinguished French military family, really an old aristocratic family. He had been raised in Algeria and had actually fought in the

war of independence on the French side. When Kiser (the author) began his research for the book, he interviewed Christian's older brother, a former director of the French nuclear arsenal. According to his brother, Christian knew well, very well, what danger he and the others were in. Kiser says that he will try to tell some of the truth of what went on at Tibhirine, but he knows he cannot tell it all. Articles in the Cistercian literature and the *Tablet* imply that we still do not know the truth. They were not martyrs if one uses that term in its classical sense; not only the Algerian government and military (corrupt to be sure) told them to get out, so did their own people, and trusted Muslim neighbors. Christian's unwillingness to leave may have been grounded in his studies with the White Fathers in Rome, a remarkable order devoted to both African conversion and Christian-Muslim reconciliation, before going to his monastery in Tibhirine. I think the deaths both tragic and unnecessary; probably an instance where belief (theirs that Christians and Muslims could live beside one another in the Atlas Mountains) and reality (that it was not possible at that time) were so far apart that some were going to get killed. Their bodies were never found, only their severed heads. I am moved deeply, but I wish I could have gone to that monastery and pleaded with them saying "Look, let's talk, there must be some other way . . . "7

Kiser's book suggests that it wouldn't have helped.

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