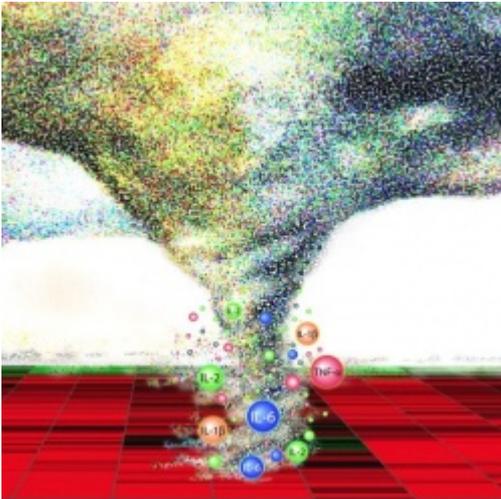


A Young Mother Died Because Her Flu Meds Were Too Expensive - Or Did She?



By Josh Bloom — February 12, 2018



Cytokine Storm. Image: American Society For Microbiology [1]

Always question the headlines. They are often wrong. [Here's a recent one from AOL News](#) [2]:

"Mom of 2 dies of the flu after deciding medication was too expensive."

AOL News, 2/20/18

The message is clear. Had Heather Holland been able to afford the \$116 copay for a box of Tamiflu, the flu that killed her would now be a thing of the past and she would probably be back to work. There is at least some implicit blame of the pharmaceutical industry as well. Just an ordinary story.

Except it's probably all wrong. There are a number of clues in the story that explain to us why this is so.

The original [story](#) [3] appeared in the Weatherford Democrat News on Monday, February 5th. According to her husband Frank, Ms. Holland, who died on February 4th, came down with the flu around Sunday, January 28th. Ms. Holland saw her doctor, who prescribed Tamiflu. But she decided that the \$116 co-pay was too expensive and did not fill the prescription.

Later in the week (the time interval is not clear) Frank Holland filled the prescription, but by Friday, February 3rd his wife was gravely ill; the Tamiflu made no difference. By Saturday Ms. Holland was hospitalized and undergoing dialysis. She died the next day.

What *really* happened in this awful story can be gleaned from clues, which no one in the press

seemed to notice. Once we understand what these clues mean, a very different story emerges.

1. Timing: If Ms. Holland did not see her doctor immediately after she felt ill, chances are that the absolute earliest that she could have begun Tamiflu treatment would have been a day or two after she came down with the flu. Tamiflu is a highly imperfect drug **(1)**. Its efficacy is modest at best, and to derive any benefit from it, the victim of the flu must take the drug within 24 (possibly 48) hours of the beginning of symptoms. After that, it won't work. And in this case, it didn't matter. Keep reading.
2. Sudden deterioration: This year's flu is killing people in at least two different ways: 1) from secondary infections, such as pneumonia, and 2) directly and rapidly because it provokes a violent overreaction of the immune system, which creates a very dangerous condition called a cytokine storm. **(2)** Cytokine storm is very similar to septic shock, another serious malfunction of the immune system that kills about 50% of those who develop it.
3. Treatment by the hospital: As is the case with sepsis, a cytokine storm commonly causes [rapid irreversible kidney damage](#) ^[4]. This explains why Ms. Holland received dialysis and died shortly thereafter. There is no other reason that she would be given dialysis **(3)**.
4. Cause of death: The fact that Ms. Holland died from kidney failure, not pneumonia, makes it almost a given that she was the victim of cytokine storm. Tamiflu [will not protect](#) ^[5] you from a cytokine storm.

So, the real story is really quite different from what is being told in the press. Ms. Holland did not die because she couldn't afford flu medication. The medication would have made no difference. She died because she was unfortunate enough to have an immune system that went haywire when presented with a particular flu strain. The only thing that might have made a difference would have been a flu shot (assuming she hadn't gotten one already).

I cannot stress enough how important it is to get this vaccine. It is extremely safe and even though the strains in the vaccine don't do a very good job of matching those that are circulating, it still can offer partial immunity to whatever strain you catch **(4)**. This one's a no-brainer.

NOTES:

(1) See: [It's The Flu Season From Hell. Should We Take Tamiflu?](#) ^[6]

(2) See: [This Year's Flu Is Different - It Kills In Two Ways](#) ^[7]

(3) Unless Ms. Holland already had severe kidney disease. This was not mentioned in any of the stories and would be unlikely for a healthy woman that age.

(4) Dr. Richard Whitley, Distinguished Professor of Pediatrics, Division Director Pediatric Infectious Diseases at the University of Alabama, private communication.

COPYRIGHT © 1978-2016 BY THE AMERICAN COUNCIL ON SCIENCE AND HEALTH

Source URL: <https://www.acsh.org/news/2018/02/12/young-mother-died-because-her-flu-meds-were-too->

expensive-or-did-she-12566

Links

[1] <http://mibr.asm.org/content/76/1/16/F7.expansion.html>

[2] <https://www.yahoo.com/lifestyle/mom-2-dies-flu-deciding-152716318.html>

[3] http://www.weatherforddemocrat.com/news/local_news/weatherford-teacher-dies-from-flu-effects/article_fc4f5dd6-d1d9-5bbc-9663-2d2c52a22998.html

[4] <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3672521/>

[5] <http://www.cytokinstorm.com/>

[6] <https://www.acsh.org/news/2018/01/10/its-flu-season-hell-should-we-take-tamiflu-12388>

[7] <https://www.acsh.org/news/2018/01/29/years-flu-different-it-kills-two-ways-12483>