

Functional Medicine View on The Flu: The Alarming Reason Some People Die From the Flu

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Story at-a-glance

- **While influenza can indeed be deadly in rare cases, these deaths are typically the result of secondary infections, not the flu virus itself**
- **Research has highlighted the link between influenza and severe sepsis (blood poisoning). Symptoms of sepsis can mimic the flu, and are often overlooked. Without prompt treatment, the condition can be deadly**
- **Use of intravenous vitamin C, hydrocortisone and thiamine has been shown to reduce sepsis mortality nearly fivefold, from 40 to 8.5 percent**
- **Optimizing your vitamin D level is far more potent a preventive strategy than getting a seasonal flu vaccine. People with significant vitamin D levels may reduce their risk of respiratory infections such as influenza by 50 percent**
- **People with higher vitamin D levels may also benefit from additional vitamin D, reducing their risk of flu by 10 percent, which equals the effectiveness of the seasonal flu vaccine, including this year's vaccine**

According to the Centers for Disease Control and Prevention (CDC), the 2017-2018 flu season appears particularly virulent. Influenza activity increased significantly in December, with influenza A(H3N2) viruses predominating, and in a December 27 notice, the agency noted that "In the past, A(H3N2) virus-predominant influenza seasons have been associated with more hospitalizations and deaths in persons aged 65 years and older and young children ..."¹

While influenza can indeed be deadly in rare cases, what most health experts fail to tell you is that these deaths are typically the result of secondary infections, not the flu virus itself. Importantly, research has highlighted the link between influenza and severe sepsis — a progressive disease process initiated by an aggressive, dysfunctional immune response to an infection in the bloodstream (which is why it's sometimes referred to as blood poisoning).

Symptoms of sepsis are often overlooked, even by health professionals, and without prompt treatment, the condition can be deadly. Unfortunately, conventional treatments often fail, and most hospitals have yet to embrace the use of intravenous (IV) vitamin C, hydrocortisone and thiamine,² which has been shown to reduce sepsis mortality from 40 to a mere 8.5 percent.^{3,4}

How Influenza May Cause Lethal Sepsis

According to researchers, "Severe sepsis is traditionally associated with bacterial diseases ... However, viruses are becoming a growing cause of severe sepsis worldwide." As noted in the video above, some sepsis symptoms also resemble influenza, which can lead to tragedy. The video offers guidelines on how to tell the difference between the two.

Sepsis, without doubt, requires immediate medical attention, whereas most people will successfully recover from the flu with a few days to a week of bedrest and fluids. Just how influenza can lead to sepsis is a somewhat complex affair, described as follows:⁵

"Regardless of the etiologic agent, the inflammatory response is highly interconnected with infection. In the initial response to an infection, severe sepsis is characterized by a pro-inflammatory state, while a progression to an anti-inflammatory state develops and favors secondary infections ...

In the predominant pro-inflammatory state, Th1 cells activated by microorganisms increase transcription of pro-inflammatory cytokines such as tumor necrosis factor (TNF- α), interferon- γ (INF- γ), and interleukin-2 (IL-2).

[C]ytokines ... released from endothelial cells and subsequently from macrophages can induce lymphocyte activation and infiltration at the sites of infection and will exert direct antiviral effects. Subsequently, with the shift toward an anti-inflammatory state, activated Th2 cells secrete interleukin-4 (IL-4) and interleukin-10 (IL-10).

In certain situations, T cells can become anergic, failing to proliferate and produce cytokines. Type I IFN has a potent anti-influenza virus activity; it induces transcription of several interferon stimulated genes, which in turn restrict viral replication. However, influenza virus developed several mechanisms to evade IFN response ...

Viral infections such as the influenza virus can also trigger deregulation of the innate immune system with excessive cytokines release and potential harmful consequences. An abnormal immune response to influenza can lead to endothelial damage ... deregulation of coagulation, and the consequent alteration of microvascular permeability, tissue edema, and shock."

Signs and Symptoms of Sepsis

Common signs and symptoms of sepsis to watch out for include:⁶

- A high fever
- Inability to keep fluids down
- Rapid heartbeat; rapid, shallow breathing and/or shortness of breath
- Lethargy and/or confusion
- Slurred speech, often resembling intoxication

Should a few or all of these be present, seek immediate medical attention to rule out sepsis. Also inform the medical staff that you suspect sepsis, as time is of the essence when it comes to treatment. As noted in the featured video, hydration is of utmost importance, as much of the damage caused by sepsis begins with fluid loss.

Preventive Strategies That Can Reduce Your Chances of Influenza, Sepsis and Other Secondary Infections

Your immune system is your first-line defense against all types of infections, be they bacterial or viral, so the most effective way to avoid coming down with the flu is to bolster your immune function. While conventional health authorities claim getting an annual flu shot is the best way to ward off influenza, the medical literature actually suggests vitamin D optimization may be a far more effective strategy, and the evidence for this goes back at least a decade.

Dr. John Cannell, founder of the Vitamin D Council, was one of the first to introduce the idea that vitamin D deficiency may actually be a causative factor in influenza. His hypothesis⁷ was initially published in the journal *Epidemiology and Infection* in 2006.⁸ It was subsequently followed up with another study published in the *Virology Journal* in 2008.⁹

The following year, a large, nationally representative study¹⁰ confirmed that people with the lowest vitamin D levels indeed reported having significantly more colds or cases of the flu.

Since then, a number of studies have come to similar conclusions. Most recently, a scientific review^{11,12} published last year concluded that vitamin D supplementation boosts immunity and cuts rates of cold and flu. In all, 25 randomized controlled trials were included in the review, involving nearly 11,000 individuals from more than a dozen countries. People with significant vitamin D

deficiency (blood levels below 10 ng/mL), taking a vitamin D supplement reduced their risk of respiratory infections such as influenza by 50 percent.

People with higher vitamin D levels also benefited, although not as greatly. Overall, they reduced their risk by about 10 percent, which the researchers stated was about equal to the effect of flu vaccines. Coincidentally, 10 percent is the effectiveness rate of this year's flu vaccine.¹³ The take-home message here is that vitamin D supplementation far exceeds the flu vaccine in terms of effectiveness, and the more deficient you are, the greater its protective effects.

Aside from vitamin D, loading up on vitamins B1 and C may go a long way toward keeping you healthy through the flu season and beyond. Influenza has also been successfully treated with high-dose vitamin C.¹⁴ Taking zinc lozenges at the first sign of a cold or flu can also be helpful.

Zinc boosts immune function and plays a vital role in activating your body's T cells (white blood cells tasked with destroying infected cells). If you fall victim to frequent bacterial infections or colds, your body might be trying to tell you it needs more zinc.

Be Aware of This Life-Saving IV Protocol

If you or a loved one succumbs to sepsis, whether caused by influenza or some other infection, please remember that a protocol of IV vitamin C with hydrocortisone and thiamine (vitamin B1) can be lifesaving.¹⁵ So, urge your doctor to use it. Chances are, they might not even be aware of it.

This sepsis treatment protocol was developed Dr. Paul Marik, a critical care doctor at Sentara Norfolk General Hospital in East Virginia, and clinical use has proven it to be remarkably effective for the treatment of sepsis, reducing mortality nearly fivefold.

Marik's retrospective before-after clinical study^{16,17} showed that giving patients IV vitamin C with hydrocortisone and vitamin B1 for two days reduced mortality from 40 percent to 8.5 percent. Of the 50 patients treated, only four died, and all of them died from their underlying disease, not sepsis. Importantly, the treatment has no side effects and is inexpensive, readily available and simple to administer, so you really have nothing to lose by trying it.

The only contraindication is if you are glucose-6-phosphate dehydrogenase (G6PD) deficient (a genetic disorder).¹⁸ G6PD is an enzyme your red blood cells need to maintain membrane integrity.

High-dose IV vitamin C is a strong pro-oxidant, and giving a pro-oxidant to a G6PD-deficient individual can cause their red blood cells to rupture, which could have disastrous consequences. Fortunately, G6PD deficiency is relatively uncommon, and can be tested for. People of Mediterranean and African descent are at greater risk of being G6PD deficient. Worldwide, G6PD deficiency is thought to affect 400 million individuals, and in the U.S., an estimated 1 in 10 African-American males have it.¹⁹

This Year's Flu Vaccine Is a Poor Match to Circulating Strains

Sadly, flu deaths are inevitably used to incite fear, and the recommended remedy is annual flu vaccination. As recently reported by *lohud.com*, an affiliate of the USA Today Network:²⁰

"Doctors urged New Yorkers to get flu shots as pediatric deaths surfaced recently while a potentially record influenza season approached its peak cycle. The public-health warning comes after authorities in New York and Connecticut reported their first flu-related deaths took the lives of two children ...

'Influenza is a significant threat to public health, and we are strongly encouraging anyone who has not already gotten the flu vaccine to get one immediately,' said Health Commissioner Dr. Howard Zucker."

Considering the many studies showing flu vaccines have a dismal success rate even when well-matched to circulating viral strains, the fact that vaccination continues to be touted as your first-line of defense against influenza suggests this annual campaign is more about generating conformity for profit, opposed to actually improving and protecting public health.

In January 2015, U.S. government officials admitted that, in most years, flu shots are — at best — 50 to 60 percent effective at preventing lab confirmed type A or B influenza requiring medical care.²¹ At the end of that same year, a CDC analysis²² revealed that, between 2005 and 2015, the influenza vaccine was actually less than 50 percent effective more than half of the time.

As mentioned, the 2017/2018 flu vaccine has an effectiveness rating of just 10 percent, due to it being poorly matched, yet the call for flu vaccination remains, while strategies that are 10 times more effective, such as vitamin D3 supplementation, are completely ignored!

Flu Vaccine Likely Raises Your Risk of Illness

The fact that flu vaccines offer negligible protection against the flu is bad enough, but evidence suggests the vaccine may even make you more susceptible to the disease. For example, Canadian researchers found that annual flu vaccination appears to increase your risk of pandemic illness, and cause more serious bouts of illness.

Data collected from Canada and Hong Kong during 2009-2010 showed that people who received the seasonal flu vaccine in 2008 had twice the risk of getting the H1N1 "swine flu," compared to those who had not received a flu shot.²³

A well-publicized ferret study²⁴ confirmed these results. Research²⁵ published in 2011 also warned the seasonal flu vaccine appears to weaken children's immune systems and increases their chances of getting sick from influenza viruses not included in the vaccine. Some health experts claim flu vaccination will help you develop resistance against strains that are not included in the vaccine, but research has actually shown the complete opposite to be true.

When blood samples from healthy, unvaccinated children and children who had received an annual flu shot were compared, the former unvaccinated group had naturally built up more antibodies across a wider variety of influenza strains compared to the latter vaccinated group.²⁶ Flu vaccines are also associated with debilitating and potentially lifelong side effects such as Guillain-Barré syndrome and chronic shoulder injury related to vaccine administration (SIRVA).

But what about the claim that you might contract influenza from your flu shot? There are many anecdotal reports of people developing the worst bout of influenza they've ever had, following a routine flu vaccination, and indeed, a Chinese study²⁷ published in 2012 appears to support such claims, finding that children had a 4.4 higher chance of contracting a viral upper respiratory infection following seasonal flu vaccine administration.

It's also worth noting that double-blind, placebo controlled trials for vaccines are not done. Instead, all a vaccine trial needs to demonstrate in order for the vaccine to be licensed is an antibody response.²⁸

Researchers have also highlighted the influence of bias in studies looking at influenza vaccine effectiveness. As noted in one 2010 study,²⁹ "Forgoing vaccination predicted death in those who had received vaccinations in the previous five years, but it predicted survival in patients who had never before received a vaccination. We conclude that bias is inherent in studies of influenza vaccination and death among elderly patients."

Beware: Tamiflu Can Trigger Psychosis

Should you or your child come down with the flu and your doctor or pediatrician recommends Tamiflu,³⁰ you should know this antiviral drug has been shown to shorten the duration of flu symptoms by less than 17 hours.^{31,32} It also does not reduce viral transmission and does not lower your risk of complications from the flu, such as pneumonia.^{33,34} Scientists have also warned that the risks far outweigh the benefits.³⁵

These risks include convulsions, brain infections, psychosis and other neuropsychiatric problems. Tamiflu made recent headlines after a 6-year-old girl started hallucinating and attempted to jump out a second story window.³⁶ "I don't think the 16 hours of symptom relief from the flu is worth the possible side effects that we went through," the girl's father told ABC7 News.³⁷

Indeed, a number of studies have observed that Tamiflu may cause psychiatric symptoms. Research³⁸ published in 2015 reported the case of a 22-year-old man who “complained of mood swings, suicidal feelings, auditory hallucinations, memory deterioration and insomnia” after taking the drug. Other studies³⁹ have found more than half of all children taking Tamiflu suffer side effects from the drug.⁴⁰

Dangerous Lies Told by the CDC

Prior to the global H1N1 scare, the U.S. government stockpiled \$1.5 billion of this basically useless antiviral — money that could have been spent in far better ways than merely enriching Roche's company pockets. As noted in an article about Tamiflu by The Atlantic, “The only people helped by the proven-to-be-ineffective drug are its manufacturers.”⁴¹

A 2013 Forbes article⁴² also spelled out a number of flaws in the science behind Tamiflu, and how benefits were overstated. Despite all of this overwhelming evidence, the CDC to this day continues to recommend both flu vaccines and antiviral drugs like Tamiflu.⁴³ They even continue to claim antiviral drugs “may prevent serious flu complications” — though the evidence clearly shows Tamiflu does no such thing.

The take-home message here is to do your homework, and not blindly follow public health recommendations. Also avoid falling prey to unreasonable fears. All deaths are tragic, but people die from influenza with and without flu vaccines. People also die without certain drugs, and from drugs.

Remember, optimizing your vitamin D to a level of 60 to 80 ng/mL may be one of the most effective flu prevention strategies out there. Also familiarize yourself with the signs and symptoms of sepsis, and urge your doctor to administer Marik's IV vitamin C protocol should you or a loved one be diagnosed with sepsis. It just might save your life.

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