I went to work with a "cold" …

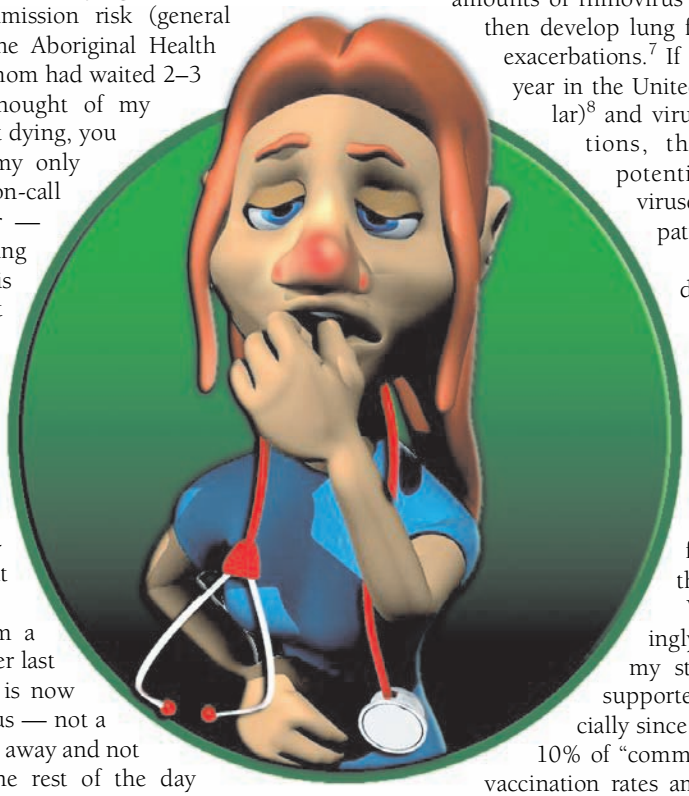
Dawn E DeWitt

A cold never killed anyone … did it?

I went to work with a cold. My nasty sore throat woke me early, so I spent the time emailing our incoming clinical students:

> Get your influenza vaccinations before you start your clinical rotations — influenza kills people, vaccinating health care workers decreases mortality in nursing homes, and vaccination reduces other viral infections and days off work or school, and meets duty of care for oneself and others![1,2]
>
> Sincerely, your (vaccinated) Clinical Dean

Sneezing and miserable, I considered staying home, abandoning the 20 complex, high-admission risk (general medicine) patients scheduled at the Aboriginal Health Centre and the hospital, many of whom had waited 2–3 months for an appointment. I thought of my mother — "Go to school, you're not dying, you only have a cold!" Memories of my only previous sick day resurfaced: as an on-call intensive care unit senior registrar — feverish, achy, sneezing, nose running like a faucet, I had decided this wasn't good for anyone. Caving at the prospect of working all night sick, I settled for guiltily calling in a fellow registrar. My "chief" had then rung — "How are you?" — *Oh no, they think I'm skiving off!* Peer pressure is strong stuff. So, this time, with patients waiting and my past lurking, I took some paracetamol, packed some tissues, and went to work.



My first patient, recovering from a lung resection for bronchiectasis after last winter's viruses almost killed him, is now surviving his first postoperative virus — not a drama. After warning him to stay far away and not shake my hand, I got through the rest of the day constantly apologising to my patients and colleagues, suppressing sneezes, washing my hands, and touching as few things as possible.

After clinic, an email explained the coincidental absence of my medical students — "Sick with cough, unable to attend". A colleague's voice from the doorway wryly observed, "You're sending the students mixed messages about getting vaccinated and duty of care while working with a cold yourself, potentially infecting everyone in sight". I responded blithely, "I'm more dedicated to my work than the students are (*different generation*), and besides, a cold never killed anyone" … but then, a moment of evidence-based-medicine horror hit me — *That's true, right?* Although my work-despite-a-cold ethic hasn't done **me** any harm (misery aside), I salved my skiving-off guilt with my greater desire to "do no harm", collected kilos of paperwork and my laptop, and retreated home for a day in isolation.

A hasty MEDLINE search for "common cold AND mortality" from 1997 to 2007 revealed 68 papers. Of these, the 13 highly relevant papers (gulp) fell into three categories: chronic obstructive pulmonary disease (COPD) or asthma complications (eight); childhood morbidity and deaths, largely related to cold medications (four); and HIV-related deaths (one).

I quickly discovered that over 50% of COPD exacerbations are attributed to respiratory viruses — no big surprise.[3] More concerningly, rhinoviruses are now well established culprits causing significant morbidity and even mortality.[4-6] Indeed, only miniscule amounts of rhinovirus are needed to infect patients who then develop lung function changes typical of COPD exacerbations.[7] If COPD causes 4% of all deaths per year in the United States (Australia should be similar)[8] and viruses cause half of COPD exacerbations, then about 2% of mortality is potentially attributable to respiratory viruses. I began to worry about my patient with bronchiectasis.

On the other hand, at least I hadn't done any harm by prescribing over-the-counter cold medications with worrying potential for harm for any of my adult patients, let alone any children.[9] Hmm … non-steroidal anti-inflammatory medications seem to have evidence for relief (as long as I don't have hypertension, stomach ulcer, heart failure, or kidney disease),[6] so I think I'll take some.

What about vaccination? Reassuringly, at least for my reputation among my students and staff, several reviews supported influenza vaccination,[10,11] especially since influenza viruses account for up to 10% of "common colds".[6] Distressingly, however, vaccination rates among health care workers are less than optimal — 82% of doctors and 40% of nurses had been vaccinated in one emergency department study (the best rates I could find).[11]

One dilemma remains. I, like 80% of doctors, worked with an illness for which I would have "sick-listed" my patients,[12] but given that I care for under-served patients in a rural area with a shortage of doctors, is it worse to stay home and reschedule patients for appointments weeks to months later or to risk exposing them to my virus-laden self? Mortality rates for residents of rural and regional areas in Australia are 10% higher than for city-dwellers[13] — largely due to health care access issues. My personal vaccination campaign should decrease the frequency of my own (and my students' and staffs') "colds" and, if I'm sick less often, this should increase access to me, thus decreasing my patients' morbidity and mortality. Sadly, the evidence suggests that if I were working in an intensive care unit or a medical ward with

high-risk COPD patients, I could justify staying home, but in my general medicine role and doctor-shortage situation, the mortality trade-offs suggest that I should probably go to work with a cold next time too (sigh).

But as for you, dear health care providers: first, do what I say and what I do (get vaccinated against influenza); and second, do what I say and not what I did, and consider staying home with your own cold — because, you never know, it just might kill someone …

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