

# The digital revolution: Health benefit or bane?



This week, a series of health stories touch on the health impacts of the Internet and ubiquitous mobile devices.

First of all, let me go on record as saying that the advent of instantaneous online health information has revolutionized my career. When I started out, in the 1970s, we had only books and medical journals and newspapers. Researching an article involved a trip to the library and a time-consuming descent into “the stacks” to find some dusty tome relevant to the problem at hand.

Now, I frequently consult the computer to get an answer when a patient confronts me with a challenging clinical puzzle. Alternatively, I give patients “homework” on the Web so they can better understand what I’m prescribing for them. I blog, post on Facebook and even tweet (@drRonaldHoffman) health information.



I’m fond of saying that should I lapse into a six-month coma and were to awake ten minutes before a live broadcast of Health Talk armed with just a single iPad for show prep, I could fill two hours with the latest up-to-date health stories and it would sound seamless!

But we're coming to realize that the Internet has some real downsides when it comes to health. For example, if you were to look up the term "headache" on WebMD, you would be presented with the following frightening potential scenarios:

- Tumor
- Abscess (an infection of the brain)
- Hemorrhage (bleeding within the brain)
- Bacterial or viral meningitis (an infection or inflammation of the membrane that covers the brain and spinal cord)
- Pseudo tumor cerebri (increased intracranial pressure)
- Hydrocephalus (abnormal buildup of fluid in the brain)
- Infection of the brain such as meningitis or Lyme disease
- Encephalitis (inflammation and swelling of the brain)
- Blood clots
- Head trauma
- Sinus blockage or disease
- Blood vessel abnormalities
- Injuries
- Aneurysm (a "bubble" in the wall of a blood vessel that can leak or rupture)

Yikes! Maybe you were just suffering from eyestrain and neck tension from too much effort trying to read the fine print on your Droid?

Perhaps it's not a coincidence that this week *The New England Journal of Medicine* chose for its famous brain-teasing "Case of the Week" (that usually turns out to be some exotic parasite acquired during a trip down the Zambezi River, or an almost unheard-of case of ectopic menstruation from the tonsils, or some rare genetic disease that effects two extended families in Paraguay) the newly dubbed condition of "cyberchondria."

In this case, a woman, age 40, presents to the hospital with

weight loss, abdominal pain and anxiety. She is convinced that she is going to die of pancreatic cancer. Her tests keep turning up negative, but she is relentless in her conviction that something is being missed. She confesses to spending up to eight hours per day on the Internet researching her symptoms, ignoring her kids and husband. <http://www.nejm.org/doi/full/10.1056/NEJMcpc1215968>

After exhaustive workups reveal no cancer, she is referred to a psychiatrist. She is given medication and psychotherapy. But here's the unique part: She is told to completely *abstain* from going on the Internet!

It's hard at first as she goes cold-turkey, but she keeps her vow not to stoke her fears with lurid disease accounts online and voila! In a few months she's better, no longer convinced that every twinge of her nervous stomach is a harbinger of doom!

It would be unfortunate if this unusual case were to prompt physicians to dismiss patients' profound convictions that something dire is going on in their bodies. Patients sometimes know best. I recently presided over a case where an apparently nervous woman with "irritable bowel syndrome" was not worked up aggressively enough by her gastro and ultimately *did* turn out to have pancreatic cancer.

Alternatively, when conventional medical tests turn out negative, too often women especially are diagnosed as "hypochondriacs"; simple changes to diet or lifestyle could make a world of difference for them.

Another big news story on the cyber-front this week features a plea from the American Academy of Pediatrics to put kids on a digital diet:

"Parents should ban electronic media during mealtimes and after bedtime as part of a comprehensive 'family media use plan,' according to new recommendations from the American

Academy of Pediatrics.”  
<http://online.wsj.com/news/articles/SB10001424052702304655104579163822957456490>

“Excessive media use is associated with obesity, poor school performance, aggression and lack of sleep,” said Marjorie Hogan, co-author of the new policy and a pediatrician.”

“Families should have a no-device rule during meals and after bedtime, the guidelines say. Parents should also set family rules covering the use of the Internet and social media and cellphones and texting, including, perhaps, which sites can be visited, who can be called and giving parental access to Facebook accounts.”

Good luck with that!

The Academy also stressed that children two or younger should log *no* time viewing TV or electronic devices, lest it interferes with normal behavioral development and brain maturation.

In a similar vein, this week I spoke with Camilla Rees on the Intelligent Medicine podcast <http://www.dev.drhoffman.com/podcasts/channel-1/drhoffman-com-2013-10-29-89.mp3> about the potential for harm to kids from EMFs generated by cellphones and Wi-Fi. In addition to cancer, it is thought that these invisible waves might cause a host of health problems, even ADD and autism.

The term “digital dementia” has been coined to account for why our kids are increasingly unfocused and their test scores are declining.

Whether it’s the harmful effects of EMFs, the distractibility induced by endless texting and surfing, or the potential for kindling cyberchondria, the Internet revolution has brought decidedly mixed health blessings.

This afternoon, I took a break from email and posting on Facebook and Twitter to take a long walk in Central Park.