## Is Vaccination Dissent Dangerous?

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The internet makes it easy to find information that is contrary to official vaccine recommendations. These unofficial web sites have been criticized for being emotional, factually incorrect, unduly influential, and dangerous. A review shows that the criticisms are wildly exaggerated, and that dissent from official medical policy is serving a very constructive role.

Vaccination web sites generally fall into two camps—those that endorse the official vaccine schedule and those that do not. As with any other subject, the information on web sites varies in quality.

Two recent studies in medical journals have lamented the availability of so-called *antivaccination* web sites. These studies surveyed vaccination information on the web, and found dozens of vaccination sites that did not endorse the official vaccine schedule and that provided an assortment of contrary claims and arguments. Apparently, the authors are alarmed at the sight of such dissent from medical authorities.

These two studies are grossly inaccurate in their most central claims. One study in  $JAMA^1$  claimed to describe 22 web sites that were chosen on the basis of containing "content specifically opposing vaccination for human infants or children." In fact, few, if any, sites express such an opinion. They promote allowing parents to make an informed choice, and usually believe that the medical authorities are not giving a balanced view of the risks and benefits of vaccines, for various reasons.

The other article about finding "antivaccination activists" with internet search engines also had serious errors. Its abstract said that 43 percent of hits for "vaccination" and "immunization" were antivaccination, including the first 10 retrieved by a Google search (www.google.com). But the paper shows the proportion was really 24 percent, and the first site retrieved by Google is a directory with a balanced set of links.

These studies suggest that there is a dangerous antivaccination movement, which through the influence of unofficial web sites might result in disease outbreaks. It is hard to see how anyone could be concerned about this prospect in the U.S., as the vaccination rates are at an all-time high.<sup>3</sup> More vaccines are being added to the schedule with only token opposition.

To support the idea that antivaccination movements can be dangerous, there have been several studies purported to document how such movements have caused great harm in the past. Two of the most common examples involve Sweden and Japan in the 1970s. Both countries used the DTP vaccine, like most of the developed world, to protect against diphtheria, tetanus, and pertussis.

Manufacture of the DTP vaccine in Sweden was defective, and the vaccine was ineffective. Eventually, critics complained about the high risks and low benefits of DTP, and by 1975 usage declined. Meanwhile, there was a public controversy in Japan over serious adverse effects that were associated with DTP. Because of public pressure, the government dropped the pertussis vaccine, and offered just the DT vaccine. Pertussis rates rose. To halt the rise, Japan introduced the acellular DTP (now called DTaP) vaccine in 1981. It was much safer than DTP, and the public accepted it. Pertussis rates dropped back down.

No doubt the vaccine critics in Sweden and Japan greatly irritated the medical authorities by undermining public support. But Swedish and Japanese patients benefited from their efforts. Sweden was using a inferior DTP vaccine while its neighbors in Europe were using a much more effective vaccine. In Japan, the public protests persuaded the authorities to switch to the much safer DTaP vaccine.

The U.S. has mandatory vaccination, and the vaccine makers and medical authorities are less responsive to consumer demands. The U.S. FDA did not even approve the DTaP vaccine until 1996, and DTP has only recently been phased out. If the U.S. did not have mandatory vaccination, or if the U.S. had a more active antivaccination movement, American patients might have been able to receive the safer DTaP vaccine in 1981, at the same time as Japanese children, preventing many serious lifelong neurologic handicaps.

While vaccination critics have succeeded in getting the authorities to switch to safer vaccines in some cases, the process has been slow and incomplete. The federal advisory committees are still being run like a private club of drug company insiders. Marginal and poorly tested vaccines are regularly added to the official mandates with little public opposition. Vital vaccine data and policy rationales are withheld from the public. The CDC and the drug companies lobby the states to pass stricter and more coercive vaccination laws. There is an imbalance of power and influence, and it favors the proponents of aggressive vaccination policies. We need more vaccination critics so that the issues will be debated in a more open and scientific manner, and so that parents and others can make safe and informed vaccination decisions.

There is every reason to believe that unofficial vaccination web sites will continue to serve a positive and useful role in our society. Government and other official web sites would be doing a public service if they were to provide links to web sites that are critical or present other points of view.

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- <sup>3</sup> U.S. Department of Health and Human Services. Press release, July 6, 2000.