DO CELLULAR PHONES REALLY KILL?

BY MICHAEL FUMENTO

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On Jan. 20, the most dangerous aspect of cellular telephones was drivers who failed to watch the road while talking.

The next day, all that would change.

That's when David Reynard, appearing on *Larry King Live*, declared he was suing NEC America Corp. because its cellular phone had given his wife a fatal brain tumor.

Reporters ran with the story, ABC's *20/20* broadcast its own scary report, cellular phone makers' stocks plummeted, and all over America cellular telephones clicked off.

So valiantly "broke" the story, once again saving us all.

Some have called it a reasoned response. But others say it shows there's a serious problem with brains in this country that has nothing to do with cellular phone usage.

"It's perfectly godawful," said Alexander Langmuir, former chief epidemiologist for the federal Centers for Disease Prevention and Control of the cellular phone controversy. "It's totally irrational."

Indeed, the stocks recovered most of their losses and the nation's landfills have not yet filled up with discarded cellular phones.

But it's a good bet that the industry's effort to expand its customer base will be hurt by the scare.

And no doubt many who continue to use the phones will suffer the anxiety of thinking they may be "dialing for death," as one talk show promotion put it.

In what some have described as the "circus-like" and "technophobic" atmosphere that has surrounded the cellular phone controversy, scientific facts have been obscured, including some so important they quickly could have calmed the hysteria.

One of these is that brain cancers, which in recent years have killed such notables as CIA director William Casey, Republican National Committee Chairman Lee Atwater and football star Lyle Alzado, are by no means unusual. Many Americans own cellular phones, and therefore a number of cellular phone users will get brain cancer just by chance.

The American Cancer Society predicts 17,500 brain cancers will be diagnosed this year, and that about two-thirds will be fatal.

About 10 million Americans, or 4% of the population, own cellular phones and about a third of these are the handheld variety with an antenna attached to the unit. From this number of people, one would expect about 180 brain cancers and 120 deaths in cellular phone users this year just by chance.

Despite this, the media presented it as a matter of terrible importance that, along with Reynard's wife, a couple of cellular-phone using corporate CEOs also recently died of brain cancer.

Bad, bad telephone!

Add to that as many as six other persons with brain cancer that Reynard's lawyer says have contacted him and that leaves a total about 170 short of being out of the ordinary even if all those cancers were diagnosed in just one year.

Another medical aspect generally ignored is that tumors require a fairly lengthy time to develop, depending on the particular type.

"Tumors don't just happen to appear in weeks or months," said Ronald Warnick, director of the division of neuro-oncology in the department of neurosurgery at the University of Cincinnati. "In general, they take years to develop from a normal cell into one that's fully malignant."

CAUSES UNKNOWN

While little is known about specific causes of brain cancer, one factor linked to the deadly disease has been therapeutic radiation of the head for such problems as fungal skin infections. Studies show that brain cancers suspected to have come from radiation therapy took nine to 15 years to develop.

Reynard, however, claimed he gave his wife her phone after she became pregnant and that she developed symptoms of her tumor during the same pregnancy. That gave her just a few months — not years — to develop the cancer.

A 1991 article in the medical journal *Cancer* presented a table of brain cancers dating back to the 1950s that occurred after therapeutic radiation of the head. There were 84 in all.

Of these, the maximum time between treatment and the appearance of brain tumor symptoms was 25 years, with the average being nine years.

Only one case had a latency of less than one year, a three-year-old boy who developed symptoms four or five months after radiation therapy.

The authors of the study said it was not likely that the boy's tumor arose from the therapy itself, but from the spread of leukemia, which prompted the therapy.

"The brain is the most frequent site of a second malignancy after leukemia," noted the authors.

Excluding the boy's case would mean that, of the 84 cases presented in the article, not a single one had a lag time as short as Mrs. Reynard's.

Warnick said that what was relevant was not Mrs. Reynard's phone but her pregnancy.

"During pregnancy there's an increase in blood flow and it's very common to have a tumor that's preexisting to present (show symptoms) during that time," said Warnick.

Reynard's only other piece of evidence against the phone, other than the fact of its use, was that it "appeared that (the tumor) was in the location directly next to the antenna, and the tumor seemed to be growing inward from that direction."

But Warnick said that such a location, just behind the ear, "would be a place of frequent tumor growth."

Unlike ionizing radiation, such as that in X-rays, nobody claims that the emissions from cellular phones disrupt the body's DNA. Still, this does not rule out the possibility that they could cause cancer through some other mechanism.

NO LINK

Edward Steino, president of Motorola Inc.'s General Systems Sector, told a news conference that some 10,000 studies indicate there is no link between cellular phones and tumors or health problems.

That isn't true, as even some of the company's spokespersons acknowledge. While there have been many health studies, few have looked at the possibility of tumors caused by cellular phones because there was no reason to suspect cellular phone transmissions as a carcinogen.

In one of those few studies, Stephen F. Cleary of the Medical College of Virginia found that subjecting cancerous cells removed from a human tumor to radio waves resulted in those cells growing 30% faster than they previously had grown, but the frequencies used were above and below those used in cellular phones.

Nonetheless, Cleary and his study have gotten a great deal of attention in the media in recent weeks. Getting far less play was the experiment of W. Ross Adey of the Veterans Affairs Medical Center in Loma Linda, Calif., which exposed human cells to cellular phone frequencies and found no abnormalities.

A search on the Nexis computer research service, which catalogues reports in newspapers, magazines, and television news shows, indicated that references to the Cleary study outnumbered those to the Adey study by over five to one, despite Motorola's attempt to publicize the Adey one.

At any rate, "To have a few cells in a petri dish doesn't tell you what is going on in the human body," notes Eleanor Adair, a Yale researcher and co-chair of a committee of scientists that sets safety standards for the electrical industry.

SLIGHT RISE

There has been a slight but steady rise in brain cancers in the U.S. over the last few decades, even taking into account the aging of the population. But that rise began long before the sale of cellular phones started in 1984. Almost all of the rise was among those older than 65.

Beware the vengeance of a cellular telephone.

Further, "Those cases are practically guaranteed to be attributable to better diagnosis. Those cases that were called strokes are now called brain cancer," according to Edward Sondik, deputy director of the Division of Cancer Prevention and Control at the National Cancer Institute in Bethesda, Maryland.

So how can one man appear on national TV, allege without proof that his wife got cancer from using a cellular telephone, and set off hundreds of panicky news stories, government advisories, and government studies?

"It has bothered me for a long time that anybody who claims a cancer risk, no matter how silly or far-fetched, gets instant credibility in the media, and I've never seen a branch of science that does that," said Byron Butterworth, a toxicologist at the Chemical Industry Institute of Toxicology in Research Triangle Park, N.C. "It's at a point where the media can't distinguish between real hazards and phantom hazards."

In 1991, Lyle Alzado claimed that his brain tumor was the result of steroid use. As with Reynard, the media gave his claim great credence, even though he had no medical background and even though numerous studies on the health effects of steroid usage had never linked them to brain cancer.

Alzado's charge did not set off a panic, since steroid usage in athletics was already illegal.

PUBLIC PREPARED

Still, "We know the general public has been prepared for this by endless media stories of the same kind," according to Aaron Wildavsky, a University of California at Berkeley political science and public policy professor who specializes in the public's attitude to risk.

Among such scare stories frequently cited are the apple growth-regulator Alar - which was pulled off the market after a media blitz by the Natural Resources Defense Council - household or school exposure to asbestos, video display terminals, and power lines, alleged to cause cancer.

Said Wildavsky, "The environmental movement replaces probability with possibility. If you ask scientists (whether the latest scare) is probable, they'll say it's extremely low. But then if you ask if it's impossible, they'll say, 'No, it's not impossible.'"

Added Butterworth, "All you have to do is say, 'Can you absolutely prove I'm wrong?' and that's their credibility, because you can't prove a negative."

Reed Irvine, head of the press watchdog group Accuracy in Media in Washington, D.C., charges this is just one more example of the media ignoring evidence in favor of a good story.

"They're looking every day for something to scare the public with, something sensational," he said.

GOVERNMENT ROLE

But what of the government's role in the scare?

Emitted in dangerous quantity by a cell phone antenna? Come on.

The FDA did not, as one major newspaper reported it would, issue an advisory warning "consumers against excessive use of cellular phones and unnecessary exposure to the devices' antennas."

But Reynard's story will result in government-sponsored studies that would not otherwise have been conducted.

Richard Adamson, a researcher at the National Cancer Institute and the designated spokesman on the cellular phone issue, admitted in an interview with *Investor's Business Daily* that the Reynard case was a flimsy basis from which to launch federally supported studies.

However, he cited public worry, the likelihood of being able to do the studies fairly cheaply, and the desire to simply expand knowledge about what causes brain cancer as justifications for the studies.

Still, he granted that "there were other leads that were probably more promising and have a much greater probability of leading to something."

He also said, "there's no question" the media, the government, and the scientific community could have handled the situation

better.

TOXICOLOGISTS TO BLAME

And Butterworth added that it was not just the media and the government that's at fault.

"We toxicologists are part of the blame," he said. "We love the science so much that we forget we have the obligation to tell what we find to the public."

Wildavsky also puts some of the blame on the cellular phone industry.

"What Motorola needs to do is train its board of directors on two subjects," he said. "One is that capitalism is good for your health" — meaning high technology contributes to a higher standard of living and longer, healthier lives.

"The other is the science of their subject," he said. "We have lost on this issue something terrible. If anything can work, you need great industries to understand the evidence."

Indeed, since the cancer scare began, the cellular phone industry has made virtually no mention of the fact that cellular phones actually save lives.

Two years ago, Motorola commissioned a Gallup poll of cellular phone users. It found that a fourth had already used their phones to report someone else's medical or health emergency.

HELPING OTHERS

A fourth of those polled also said they had used their cellular phones to call the police to warn of hazardous road conditions, and almost 40% had provided roadside assistance for someone else's disabled vehicle.

Moreover, 89% of female cellular phone owners polled claimed they felt safer because of their phones.

Said Randy Brashear, director of corporate relations for Motorola, "We were so busy assuring people our products are safe that we didn't really point out they save lives and protect property. Maybe we haven't made that case as strongly as we should have."

Read Michael Fumento's additional work on cell phones and on cancer.

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