

Statistics: Lies or Truth? Can you tell the difference?

Newtonbrook Secondary School, June 6, 2005

Two opinions about statistics:

“There are three kinds of lies: lies, damned lies and statistics” – Benjamin Disraeli

“Statistical thinking will one day be as necessary for efficient citizenship as the ability to read and write.” -- H. G. Wells

What would you believe in the following news reports?

What questions should you ask?

“Pulse”

compiled by Judy Gerstel

appearing on p. C3 of the September 26th, 2003, issue of the *Toronto Star*.

Implants not always uplifting

Women who have cosmetic breast enhancement surgery may have triple the risk of suicide compared to other women, according to a study reported in the October issue of the *Annals Of Plastic Surgery*. The suicide risk was particularly high in the first few years after implant surgery.

Researchers say their findings indicate the need for plastic surgeons to assess patients' mental health status before performing breast enlargement surgery.

The study included 2,166 Finnish women who'd had cosmetic breast surgery between 1970 and 2000. The study is the third in recent years to show a link between increased suicide risk and breast implant surgery.

For our own good

This advertisement in the American magazine *Health*, sold in Canada, promotes a drug for breast cancer - "Armindex significantly reduced the risk of breast cancer returning compared with tamoxifen ..." The ad appears a couple of pages after an ad for Rold Gold pretzels.

Drug companies spend about \$3 billion (U.S.) a year on direct-to-consumer advertising of prescription medicines.

This week, U.S. health officials announced they'll publish new guidelines for this kind of advertising. Requirements would include better presentations of drug risks and benefits instead of the tiny print summaries that appear on a page behind the big flashy illustrations.

Critics charge the ads encourage patients to ask their doctors for heavily advertised drugs, leading to unnecessary prescriptions and driving up health care costs.

But the president of Pfizer U.S. Pharmaceuticals, which blankets the airwaves with ads for Viagra and Lipitor, said consumers benefit from the ads.

"The unspoken truth about advertising of medicines is that it constitutes one of the largest and most successful public health campaigns in U.S. history."

Oh, sure. And the fox is hanging around the hen house just to protect the chickens.

Mind-body connection given boost

If you believe that thinking can make it so, you'll be pleased with results from a University of California study showing that Tai Chi can boost immunity factors that suppress shingles by 50 per cent.

The findings of the randomized, controlled clinical trial, reported in this month's edition of *Psychosomatic Medicine*, are the first to demonstrate a positive, virus-specific immune response to a behavioural intervention.

Study participants were older adults in a 15-week Tai Chi class. They also showed significant improvement in their physical health and ability to move through their day.

"Our findings offer a unique and exciting example of mind over matter," says Dr. Michael Irwin, a professor at the UCLA Neuropsychiatric Institute and director of the Center for Psychoneuroimmunology.

"The improvements in both immunity and physical functioning were significant by widely accepted measures of each, and all with no surgery, no drugs and no side effects."

Spousal support a royal pain?

Overly supportive spouses are not necessarily doing their partners a favour.

They could be prolonging the recovery of their injured spouses.

That's the conclusion of a study reported in this month's edition of *The Clinical Journal Of Pain*.

Researchers also found that there are differences between the way each sex responds to a "solicitous" spouse - which should come as no surprise.

"Spousal solicitousness is related to how male patients *say* they're doing and to how female patients are *actually* doing," says study author Roger Fillingim of the University of Florida.

He and his colleagues surveyed 114 female and 213 male chronic pain patients, most of whom were being treated for low back pain.

Men with highly attentive spouses reported higher levels of pain and more disability but despite their complaints, they did well on physical functions tests.

For women, it was just the opposite.

Women with highly solicitous spouses didn't report feeling more pain or being more disabled.

However, they performed more poorly on physical function tests than did women with less attentive spouses.

Purrfect explanation for everything

Wife reckless? Hubby morose? Blame the cat.

Kicking the cat may be a metaphor about venting frustrations on the innocent family feline, but it could be that Snowball or Fluffy really is to blame after all.

A Czech scientist told Reuters news service this week that his research showed a parasite called toxoplasma gondii in cats, rabbits or raw meat, may make women reckless and friendly.

Jaroslav Flegr of Charles University in Prague said the same parasite, however, makes men quiet, withdrawn, suspicious, jealous, morose and dogmatic.

He could not find a reason for the different reactions by men and women.

Flegr also believes that the parasite is responsible for up to a million deaths on the roads worldwide, making it the one of the deadliest parasitic diseases, second only to malaria.

"It is not much fun. Our research has shown that toxoplasmosis raises 2.6 times the risk of a traffic accident by prolonging the reaction time of infected people," he said .

"It is not only about driving accidents but also about the probability of being run over by a car."

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