



Fact or Fiction?

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Change the Health Rules - Scare the People

Be cautious when you here that some disease has all of a sudden increased in numbers. Someone may have changed the rules. Examples include Alzheimer's, diabetes, blood pressure, autism, obesity and AIDS in Africa.

The National Center for Health Statistics (NCHS) substantially changed the data for many causes of death in 1999. One was Alzheimer's which jumped by at least 55% above the level reported in 1998. This increase did not reflect a sudden surge in mortality but a change in classification which has a substantial bearing on the epidemiology of the disease.¹

Another ailment that's up in the last twenty years is diabetes. Aggressive educational programs designed to encourage more testing, and mass screenings of millions of Americans have contributed to the increase. However, most importantly, the definition of diabetes has been changed from a fasting blood sugar of 140 to a blood sugar of 126. So, just like some other health issues, millions of Americans became diabetic overnight.²

Heart issues

In 1997, the definition of hypertension was changed from 160/100 to 140/90, instantly adding 35% more Americans (13.5 million) to the numbers labeled as hypertensive. Then, in 2003, another change was made. A normal blood pressure reading went from <130/85 to <120/80. A new definition, "prehypertension," 120-139 systolic over 80-89 diastolic, was also created. This increased to 58% the number of Americans who believed their blood pressure was high.³

In a report in the *British Medical Journal* (BMJ), Julia Hippisley-Cox and her colleagues concluded that misdiagnosis of heart disease has led to massive over-prescribing of drugs.⁴ Flaws in the way doctors routinely calculate risk led to misinforming patients they are were in danger of developing life-threatening heart disease. The researchers tracked 1.28 mil-

lion healthy men and women aged between 35 and 74 over a period of 12 years to April 2007. As Polly Curtis reports, "The traditional way of calculating risk from heart disease involves a score based on smoking, blood pressure and 'good' and 'bad' cholesterol, along with age and sex. The BMJ study compared this measure against a new, more sophisticated test, which also takes into account social deprivation, genetic factors and weight. It found that the former over-predicted the number of people at high risk of developing cardiovascular diseases by 35%. It concludes that 3.2 million adults under the age of 75 are at risk of developing cardiovascular illnesses compared with the 4.7 million previously estimated."⁵ This indicates that anti-cholesterol drugs statins are massively and needlessly over-prescribed in the UK.

The Problem with Autism and Weight Statistics

Why is autism on the rise? Scott Lilienfeld and Hal Arkowitz suggest changes in diagnostic and legal practices have played a key role. For decades it was 1 in 2,500, then from 1993 to 2003, a 657% increase occurred. Now it is 1 in 166. In 1980, the American Psychiatric Association manual listed six of six criteria that defined autism. In 1994, the manual required any eight of sixteen criteria. In addition, the 1980 version contained only two diagnoses relevant to autism, while the 1994 version contains five such diagnoses. Legal changes cited by Lilienfeld and Arkowitz relate to an amended version of the Individuals with Disabilities Act, passed by Congress in 1991. This required school districts to provide precise counts of children with disabilities and resulted in sharp surges in the reported numbers of children with autism. Yet, these numbers are not based on careful diagnoses of autism or on representative samples of populations. They note, "As a consequence, researchers rely on 'administrative based estimates' which come from government data submitted by schools, and

will arrive at misleading conclusions about autism's prevalence."⁶

Reportedly, two out of every three folks in the U.S. are either overweight or obese. I, for one, am included in the overweight category. In my case it happened overnight in 1998. Perhaps the same thing happened to you. It wasn't because I had gone on a binge of eating and drinking. Rather it was because a committee convened by the National Heart Institute redefined overweight to be a body mass index (BMI) of 25 or more for both men and women (Body mass index equals your weight in kilograms divided by the square of your height in meters. If you prefer to use English units, its your weight in pounds divided by the square of your height in inches, then multiplied by 703). I had a BMI of 25.8, so I was now overweight. Before 1998, a man was officially overweight with a body mass index of 27.8 and a woman at 27.3, but now the rules had changed (For more on BMI see this column, September 2005).

AIDS in Africa

Here's a list of four major symptoms and several "minor" symptoms that have been found to be associated with AIDS:

Major symptoms: Weight loss of 10% or more, pronounced weakness or lack of energy, diarrhea lasting for more than a month, fever, either prolonged or intermittent.

Minor symptoms: A cough persisting for more than a month, chronic ulcerative herpes infection, swollen glands.

From these symptoms, in 1985, a new "definition" of AIDS for adults in Africa was derived by mixing and matching the two lists. If you had at least three of the four major symptoms and one of the minor symptoms, you were diagnosed with AIDS. Note there was no mention of HIV.⁷

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Table 2
Common names for brass alloys

Admiralty or Naval brass:	30% zinc + 1% tin for enhanced corrosion resistance in sea water.
Alpha brass	25 - 35% zinc; can be cold worked to produce forgings and drawings with an alpha or FCC (face centered cubic) structure.
Alpha-beta brass or Duplex Brass	35 - 45% zinc used in hot working applications (temperatures above the recrystallization temperature). This alloy contains both α (FCC) and β (BCC) crystal structure. The BCC structure is harder/stronger than the FCC.
Beta Brass	45 - 50% zinc content, typically used for castings. The structure is all BCC.
Aluminum brass	Contains 1 - 3% aluminum for added corrosion resistance
Arsenical brass	Contains up to 1% arsenic for higher melting point applications such as boiler components.
Cartridge brass	30% zinc brass suitable for deep drawing (cold working).
Bronze	5 - 10% zinc content; may be called bronze or "Gilding metal," but is not a true bronze (copper-tin alloy). Copper-zinc bronzes may be used in some munitions applications.
High brass	35% zinc content; has a high level of hardness and is typically used for fasteners and springs.
Low Brass	20% zinc content; yields a high level of ductility, as might be needed in producing flexible hose or pipe.
Muntz Metal	40% zinc and 0.5% - 1.0% iron. Muntz metal historically was used as an anti-fouling surface for boats/ships.
Red brass	Also known as gunmetal, one version of this alloy contains only 2% zinc and 10% tin (balance copper). This is not a true brass alloy.
White brass	More than 50% zinc content; this alloy was electroplated as an imperfect substitute for nickel during World War II. It proved to be very brittle and poor in corrosion resistance, even under chromium.
Yellow brass	About 33% zinc content.

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Tom Bethell reports, "Overnight, millions of Africans now had AIDS, by these criteria." The definition was so broad that 'almost anyone in any African hospital could be said to have it,' says Rian Malan. Let's say you're in the Congo. You go to a doctor because you're feeling weak. You've lost weight and have had a recurring fever for a few weeks and a persistent cough. Doctors are now free to say that you have AIDS. For a child, all they need is weight loss, diarrhea and a cough."⁷

Weird isn't it? No debate that AIDS is a terrible, debilitating disease. Yet, since the time this definition was put in place and cases have skyrocketed, the population of sub-Saharan Africa has increased (not decreased) by 299 million people - slightly less than the present entire population of the United States.⁸

Summary

Katherine Arnold notes, "Health stories rank third in topics covered on the evening network news. There are about 120 health or fitness consumer magazines in the United States and about 65 regional newspapers that cover health or medicine as a beat, and health news is at the top of

the list of important issues for people 50 and older."⁹

Clearly, we are bombarded by health stories, yet most folks have only a "headline, magazine or TV news" awareness of the issue of concern. More often than not, these stories overemphasize minute risks about which little can be done and ignore those that people can do something about. Repeated often enough, these scares eventually become myths and most people never hear the full story. Sometimes the rules for diagnosing diseases are changed but this gets lost in all the fear-mongering.

So my suggestion for you is, the next time you hear some new science or health scare fact, try to find the rest of the story and not just the headline scare. What was the sample size? Did some committee change the guidelines for an illness or disease? There are not mad cows on your block. Ebola is not lurking in your drain and you are not going to die from SARS, West Nile Virus or bird flu. Your family is not threatened by chemical assaults. They're threatened by people with a blood alcohol level of 0.25 driving two tons of steel. **P&SF**

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