

NCLEHA News

The Risk of Inadequate Risk Communication

by

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Improved understanding of the principles of risk assessment and subsequent risk communication has become more important to both government and industry in recent years, but both government and industry officials have been notoriously ineffective as practitioners of risk assessment and risk communication.

Major, expensive, poorly designed governmental programs continue to be developed without considering risk or priorities as dictated by risk assessment and the closely related science of epidemiology. In fact, some programs continue to develop without responsible political leaders even understanding the problem they think needs solving.

In the absence of risk assessment, risk communication and epidemiology, we spend huge sums of money on the wrong priorities, on ineffective programs, and confusing methodologies.

In the field of public health, emotional responses based on limited scientific understanding of problems by well-meaning citizen groups become magnified by the news media resulting in political leaders scrambling to get out-front on minor issues while much more serious issues receive minimal attention.

In this same vein, Americans spend billions of dollars on sickness treatment measures-affecting a comparative few (and many of these expensive treatment measure are of questionable efficacy and have low cost-benefit). At the same time, legislators spend a mere pittance for public health programs; which we know would significantly enhance health status and lower rapidly escalating health care costs; which have a high cost-benefit; and, which are directed toward the majority of our citizens. Our political leaders think and act in terms of health care and treatment of drug abuse, alcoholism, teenage pregnancy, developmental disabilities, cancer, heart disease, injuries, and violence rather than attacking the root causes including joblessness, low educational levels, and lack of targeted preventive services.

The science of risk assessment allows us to project what will happen as a result of certain actions or exposures. Risk assessment also helps place risks in perspective and recommend priorities for spending in order to be cost-effective and enhance the health status of Americans. Risk assessment helps us realize that tobacco use is more dangerous than planes, and that we smoke billions of cigarettes killing 390,000 people every year (almost 50/hour) while warning about:

- an artificial sweetener because of a one-in-a-million chance it will cause cancer, or
- banning grapes because two grapes are found to contain cyanide, or
- attempting to ban apples containing low levels of a product which might cause cancer if an individual consumed a bushel per day for 70 years, or
- being alarmed about extremely infrequent exceedances of an unscientific federal carbon monoxide standard that has not been demonstrated to cause any health problems.

We also know that assessing risk tells us that people are more concerned about risks being imposed on them than those they impose on themselves -- those life-style issues which have more impact on our health, health care costs, quality of life, and life expectancies. People tend to overestimate rare but dramatic risks, to underestimate common events, and to disdain changing preconceived notions about risks and priorities. When evidence is presented that contradicts our preconceived notions, we are quick to dismiss the evidence as erroneous or biased.

The news media tend to feed this system and play a major role in insuring the inappropriate use of limited public funds due to sensationalism of minor, isolated problems. Increasingly, I have learned to withhold judgment on problems and priorities

until I have better knowledge of the true research defining the problem rather than the frequently exaggerated version presented by the media.

Political leaders frequently desire to be out front, even if on the wrong issues so as not to say "There go my people and I am their leader."

Unfortunately, we do not live in a zero-risk society or environment, nor will our economy allow us to target every miniscule issue in a major fashion. Knowing this, public health professionals must place public and environmental health risks in priority and perspective and be able to more clearly articulate and communicate such risks and priorities to the public and to our political leaders.

As EPA Administrator William Reilly recently stated, "the challenge to those of us who wish to see further progress on the environment is to steer a course between scaring the country to death on the one hand, and boring the country to death on the other."

To meet this challenge, we must more effectively understand, develop and utilize risk assessment and risk communication.

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