

◆ *Serving Readers' Decision-Making Needs*

Speaker:

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SARS. We've all read reports related to this hot topic. Many readers have sought information on this deadly disease because they had to make a decision: Should they go on that business trip or send their kids to camp? The speaker, Baruch Fischhoff—a professor in the Departments of Social and Decision Sciences and of Engineering and Public Policy at Carnegie Mellon University and a researcher in the Center for Risk Perception and Communication (sds.hss.cmu.edu/risk/)—provided a communication strategy that focuses on readers' needs. This strategy could be applied whenever science must be made useful for laypeople or for professionals in other specialties.

The strategy consists of four steps: (1) analytically identify the most critical information for decisions facing the audience; (2) empirically determine current beliefs; (3) close the most critical gaps, recognizing the audience's information-processing limits; and (4) evaluate, repeating as needed.

Fischhoff gave several examples of risk-communication programs, ranging from informed consent and sexual assault to breast implants and vaccinations. For identifying the critical information (step 1 above), the questions that apply to SARS might be as follows: What are my chances of exposure? What are my chances of getting sick? What are my chances of being untreatable? For step 2 in the communica-

tion strategy, analysis may reveal incorrect information. For example, although teenagers receive an abundance of information about pregnancy and sexually transmitted diseases, they may erroneously believe that every act of sexual intercourse results in pregnancy in fertile people and may never learn how oral or anal sex is linked to disease. The informed-consent example highlighted an important point regarding step 3: patients are overwhelmed with information at a very stressful time. However, only a few of the adverse events related to surgery would affect a patient's choice to undergo the procedure. The

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informed-consent process should focus on the probability and meaning of the most important events.

"People will do sensible things if they get relevant information in a concise, credible form with adequate context and without needless distractions", Fischhoff stated. If citizens do not understand a message, communication must have failed. Failures may be related to a variety of barriers, such as reporting style, the ignoring of complementary disciplines, and authors' assumptions that what they report is based on "common knowledge".

So what can be done? First, authoritative summaries of the cognitive research

on decision-making are needed. If writers have greater understanding in the behavioral sciences—such as the availability heuristic principle (people find cues to probability in how easy an event is to remember or imagine), the effect of emotions on understanding (fear and anger affect the prediction of risk differently), and the need for mental models for information-processing—they will be more successful communicators.

In addition, although principles related to communicating for decision-making are available, more examples are needed. Standard reporting formats could be helpful in this regard; not only could they embed intelligence but they could also make it easier for readers to quickly find the information most relevant to them. Using translators to transform highly specialized information into a decision-relevant form could improve communication, as could consulting behavioral-decision researchers before finalizing a text. Another step forward would be to require authors to place their research results in context, that is, to show how their results affect the cumulative meta-analysis.

Clearly, some fields of science are difficult to communicate. Very low probabilities, cumulative risk associated with repeated exposure, and incommensurable comparisons are just a few. Nevertheless, the lay public is demanding knowledge—useful knowledge—and it is in the best interest of society to give them well-thought-out reports. Just as poor communication can undermine decision-making, create feelings of helplessness, and erode public faith in authorities, good communication can empower people, strengthen trust, and even improve public health. 🗣️