

# Psychological Science and Health Care Policy

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Gerd Gigerenzer

There are many areas of psychological research that inform the public, but few are more crucial than health care. Enter two reports — one about experimentally supported treatments in mental and behavioral health care and another about the proper interpretation of health statistics — published in *Psychological Science in the Public Interest (PSPI)* and discussed during the annual *Psychological Science in the Public Interest* symposium at the APS 21st Annual Convention.

## Making Sense of Health Statistics

“In western countries, most of us know how to write and to read, but we haven’t taught the public, nor many experts, statistical thinking,” said APS Fellow Gerd Gigerenzer of the Max Planck Institute. As he and his colleagues explain in their report “Helping Doctors and Patients Make Sense of Health Statistics” (*PSPI*, Vol. 8, No. 2), not only is the public misinformed on statistical data, but many people do not have the skills needed to evaluate such information.

This “collective statistical illiteracy,” as Gigerenzer refers to it, is mostly caused by a misrepresentation of information. Take, for example, the effect of a public warning in the United Kingdom in 1995 regarding oral contraceptive pills. The U.K. Committee on Safety of Medicines stated that the newer, third-generation contraceptive pills increased the risk of blood clots in the legs and lungs by 100 percent. In actuality, 1 out of every 7,000 women who took the earlier, second-generation pills developed a blood clot compared to 2 out of every 7,000 women who took the third-generation pills. There was a relative increase of 100 percent, but that phrasing is needlessly dire and caused thousands of women to stop taking their oral contraception. It is apparent, then, that these misinformed interpretations could play a huge role in a patient’s sense of security and in their ability to understand their health care options.

The goal, Gigerenzer emphasized, is to teach physicians, patients, and politicians to implement and understand “transparent representations,” such as making a distinction between a relative increase (100%) and an absolute increase (1 more out of every 7,000). Without an accurate interpretation of health statistics, he emphasized, “informed decision-making remains science fiction.”

## A Science-Based Approach to Clinical Psychology

As APS Fellow Timothy Baker of the University of Wisconsin-Madison explained, when you go to a physician, you expect that you are seeing someone who has been trained in a science-based curriculum; patients have the same expectation when seeking mental health care. However, it is not always the case. “When you’re seeing a clinical psychologist, there’s no branding that tells you, ‘this person was science-trained,’” said Baker, lead author of the *PSPI* report “Current Status and Future Prospects of Clinical Psychology: Toward a Scientifically-Principled Approach to Mental and Behavioral Health

Care” (*PSPI*, Vol. 9, No. 2 — set to be published this September). So the question is, how can we ensure that a psychologist is using experimentally supported treatments?

Baker and colleagues suggest a new accreditation system for reformed training in clinical psychology with established criteria for mental and behavioral treatment. In this system, decisions for treatment will be based on efficacy (using randomized control trials), effectiveness (analyzing the intervention in a real world setting), dissemination (studying the effectiveness of the treatment), reach (considering the target population and the extent from which they will benefit), cost effectiveness, and quality of life.

As Baker reiterated to the packed room, “Now is the time to reform clinical psychology by enhancing clinical training via a new accreditation system.” A new system to fulfill this mission, the Psychological Clinical Science Accreditation System (PCSAS), which began to accept applications this past June, is starting in a time when evidence-based treatments are more readily available but still aren’t being practiced (see <http://pcsas.org> for more information). For example, although cognitive-behavioral therapy (CBT) has shown to be the most effective treatment for Post Traumatic Stress Disorder (PTSD) and naturally has fewer side effects, many psychologists do not use this procedure. In a study Baker cited, only 30 percent of psychologists were trained to perform CBT for PTSD and only half of those psychologists elected to use it.

The authors call for an accreditation system that monitors the pulse of clinical psychology, adapts to changing economic health care needs, and still maintains the standards and scientific progress associated with experimentally supported treatments. This is the understanding in most other fields of health care and is the goal of PCSAS. As Baker put it, clinical psychology, like medicine, should always draw on “science as a touchstone of good practice.”