Spotlight on:
Tamar Krishnamurti, PhD

Core Faculty Member Tamar Krishnamurti, PhD is an Assistant Professor of Medicine at the University of Pittsburgh and an Assistant Research Professor in Carnegie Mellon’s Department of Engineering and Public Policy. With a diverse background in biological anthropology, psychology, business, and engineering, Dr. Krishnamurti’s research focuses on risk perception and communication, specifically within the field of maternal health.

See a preview of our interview with Dr. Krishnamurti below and
CBHST: What advice do you have for healthcare professionals for communicating risk to patients?

Tamar: There’s a whole body of literature on health-risk communication, and, as a non-physician, I often wonder whether it trickles down into the day-to-day of actual clinical practice. A lot of the time, we think people are bad at understanding risk, and, in my experience, that’s not necessarily true. Risk just needs to be framed in a certain way. There was a classic study conducted in the 70’s by Dr. Sarah Lichtenstein in Oregon. She asked people to estimate the number of deaths in the United States from multiple different causes. People are pretty good at determining the relative risk - whether you’re more likely to die from a car accident or botulism, for example. But they’re not great at absolute risk. Health risk information is often presented in absolute terms, though, which can be problematic. For example, I recently worked on a study led by a CMU grad student that looked at how physicians communicate prognostic information to patients. I can tell patients they have a 75% chance of dying in the next 3 years or 90% chance of dying in the next 5 years - these things are essentially the same, statistically, reflecting an equivalent hazard rate. We found that people tend to weigh the time frame of their prognosis more heavily than the percent survival. They think they’ll live longer if you only give them the 5 year time frame, rather than the 3 year. This is a small bias that really changes people’s perception. I’d advise healthcare professionals to understand a patient’s perspective and to then let them unpack the risk information you’re giving them. Give them multiple reference points and scenarios that are relevant. Providing more context and allowing an absolute risk to become more relative should help decrease some of the bias in how we, as humans, understand risk.