

## Why Doctors Should Be More Empathetic--But Not Too Much More

Research is revealing what goes on in the brains of health care workers when they see patients as objects

By Omar Sultan Haque and Adam Waytz | Tuesday, April 26, 2011 | 11 comments

If possible, think back to a time you or a loved one had to be in a hospital for a significant amount of time. What do you remember from the experience?

Many people report an eerie feeling about their stays in hospitals. Even if everyone treating you was kind, attentive, hard working, efficient and competent, you may still have had a sense that—compared to other situations in which people were intensely looking after you—something was different about being in the hospital. With all the measuring, palpating, listening for abnormal body sounds, injecting, and imaging of your innards, you may have felt treated like a kind of object, rather than a complete person. You may have felt, in a word, dehumanized.

Dehumanization is generally a negative state of affairs. Few patients like to be objectified, and when in a hospital, most desire empathy from their caregivers. It is for these reasons that the regular reaction to dehumanization in medicine is to condemn it outright. The medical establishment regularly institutes various forms of empathy-awareness programs.

A curious observer might ask a more basic question: why is a lack of empathy a perennial problem in clinical settings in the first place? Why the perpetual need for empathy education? Certainly not every profession has these hurdles, nor requires such measures.

Recent research on how medical professionals' brains function sheds light on these questions. Specifically, two experiments by Jean Decety and colleagues of the University of Chicago have examined the neuroscientific basis of pain empathy in physicians.

In one experiment, physicians who practice acupuncture (as well as matched non-physician controls) underwent functional magnetic resonance imaging (fMRI) while watching videos of needles being inserted into another person's hands, feet and areas around their mouth as well as videos of the same areas being touched by a cotton bud. Compared to controls, the physicians showed significantly less response in brain regions involved in empathy for pain. In addition, the physicians showed significantly greater activation of areas involved in executive control, self-regulation and thinking about the mental states of others. The physicians appeared to show less empathy and more of a higher-level cognitive response.

This finding raised a further question. Perceiving pain in others typically involves two steps. First people engage in the emotional sharing of pain with another person, and then they make a cognitive appraisal of the emotion. Do physicians automatically feel empathy for the pain of others, but then quickly suppress it? Or is the cognitive suppression of empathy even deeper; has it become more automatic? Is it possible that the physicians no longer even experience the first step of empathy for pain that regular people show on their brain scans?

The investigators repeated the same experiment but rather than looking for changes in brain blood-flow by using fMRI, they assessed the brain's event-related potentials (ERP). Results showed that when viewing the painful needle sticking, the physicians did not even show the early empathy response. The physicians had apparently become so good at empathy suppression that there was no early response to worry about.

Why might these effects exist? It could be that, compared to other professions, the people that gravitate to healthcare tend to be less

empathic. This seems unlikely. Furthermore, studies of physicians show that they are often the most empathic and caring towards the beginning of medical school, and that they become steadily less empathetic with more clinical training. The more likely culprits are therefore the nature of medical training and the intrinsic demands of the profession.

Whether during a surgery, biopsy, physical exam, or even a simple blood draw, healthcare professionals routinely must inflict pain on others to make them better in the long run. Physicians also need to have daily communication with patients who are physically injured, bleeding or otherwise suffering. Being too focused on the patient's pain can make the doctor less effective. Suppressing the response to others' pain may in fact free up information processing resources to more effectively solve clinical problems. This argument explains the finding that physicians get less empathic as they see more patients and progress through their training. In addition, a recent study of hospital nurses found that they cope with stress on the job by dehumanizing patients, which presumably makes them more effective at their jobs.

Despite these findings, there can be no doubt that empathy is crucial to a successful healthcare system. Empathy is invaluable for motivating the whole process of delivering care, for ensuring effective communication (who wants to talk about embarrassing symptoms to a frigid doc?), and for building long-term relationships of trust between doctors and patients.

The job of any physician is therefore part empathic and part problem solving. This constitutes an inherent trade-off in medicine because the human brain does not have infinite computational resources or time to perform both tasks equally well. One must be caring while also figuring out a proper diagnosis, prognosis and treatment, often under conditions of uncertainty.

Just as only using one's cognitive problem-solving skills would not necessarily lead to the best outcomes for patients, only employing one's empathic and emotional skills doesn't lead to the best outcomes, either. Empathy is not an inherent good in medical care, but a relative one. As with deliberative reflection and abstraction, empathy is also useful only in certain degrees and in certain contexts, but can be unproductive or destructive in others. A surgeon, for instance, should be highly empathic when discussing surgical options with an upset patient, but will need to regulate empathy during the surgery.

The key is knowing when empathy is called for and when it is detrimental. It should not be the goal of physicians, then, to be more empathetic. They should aim instead to find the right balance, the golden mean that optimizes care.

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