Cognitive Errors



Thinking Clearly When It Could Be Child Maltreatment

Antoinette L. Laskey, MD, MPH

KEYWORDS

- Cognitive errors Child maltreatment Confirmation bias Anchoring
- Implicit biases

KEY POINTS

- Cognitive errors occur in every profession. Dozens of cognitive errors have been demonstrated to happen in medicine, many leading to poor patient outcomes.
- The diagnosis of child maltreatment can be susceptible to cognitive errors because of conditions of high stress, limited or questionable quality of data, and the subtlety of some diagnoses.
- Errors may be avoided through deliberate efforts to consider alternative diagnoses, avoiding premature closure, seeking objective input without social cues, and multidisciplinary collaboration.

Medical decision making is an exercise in process management: health care providers must gather data from multiple data sources, sometimes simultaneously, interpret signs and symptoms, sometimes without adequate history to fully understand the information provided, and direct patient management including further diagnostics and treatment, often without complete data. Most of the time the process seems to work adequately, that is, the patient is appropriately diagnosed and treatment. Yet there continue to be studies that demonstrate failures in diagnosis and treatment related to factors that seem to be unrelated to the medical condition and more related to the patient's specific demographic characteristics. ^{1–4}

It is important that the diagnosis of child maltreatment be made accurately. Failure to correctly diagnose an abused child as abused (a false negative) could result in that child being returned to a potentially dangerous environment. Conversely, the over-diagnosis of child abuse (a false positive) could result in a child being removed from an environment wherein no one has caused harm to the child. The potential for errors

Disclosures: None.

Department of Pediatrics, Primary Children's Hospital, University of Utah School of Medicine, 675 East 500 South, Suite 300, Salt Lake City, UT 84102, USA

E-mail address: Antoinette.laskey@hsc.utah.edu

Pediatr Clin N Am 61 (2014) 997–1005 http://dx.doi.org/10.1016/j.pcl.2014.06.012 in decision making related to child abuse extend far beyond the health care arena and include law enforcement, social welfare systems, prosecutorial decisions, and judge or jury decisions. Understanding the potential pitfalls in decision making is especially important for process improvement. Social psychologists have spent considerable effort in understanding how humans think, but only relatively recently have physicians looked to the literature to understand what clinicians can do better.

Humans have evolved to process an astonishing amount of information, often dealing with large simultaneous sensory inputs assaulting all of their senses. How is it that we are able to take in information, filter out what is not immediately relevant, and arrive at a reasonable conclusion? Are there shortcuts we can use to improve our processing speed without sacrificing the quality of the decision making? Perhaps most importantly, is it possible to avoid cognitive errors that we make and are compounded when community professionals from other disciplines, such as law enforcement and child protection services, are involved in a decision process?

COGNITIVE PROCESSES: AN OVERVIEW

Humans routinely make decisions in an overwhelming, complex environment. There are also limited cognitive resources available at any given moment to process all of the information available. Given the inability to completely process all of the data, humans have adapted by using cognitive shortcuts, which can be both hardwired and derived. One easy-to-appreciate example of a hardwired shortcut is that of recognizing potential danger. It does not take a prior experience with a potential threat, such as an obviously hostile animal, to realize that care must be taken.

Derived shortcuts also are common occurrences that increase over the course of a lifetime. Driving represents a classic example of a derived shortcut. Memories of learning to drive often will conjure the stress associated with the myriad of data bombarding the novice driver. It is only after years of practice that the process becomes nearly fully automated. What was once a difficult, stressful, and complex effort changes into a background process that frees the mind to handle other tasks. However, this automation can be an impediment to rapid responses to the unexpected. Deviations from the norm will take longer to recognize and process when one is not fully engaged in the task at hand.

Just as driving or tying one's shoes, or doing any number of complex learned tasks becomes less of an elaborate mental juggling act, so too does one's ability to complete tasks associated with the work. In the early years of a person's career, every part of the job requires thought and deliberation. As one gains experience and feedback on process and decision making, the process becomes more refined and automated. However, just as automation improves efficiency in tasks such as driving, it can also decrease the ability of an individual to recognize and respond to deviations from the norm.

Decision theory is the study of identifying what is known, what is unknown, and the other factors involved in arriving at an optimal (and therefore correct) decision. Social psychologists use multiple techniques to understand the processes involved in decisions. Decisions are very often reliant on heuristics, which are the shortcuts used to aid in decision making sometimes referred to as rules of thumb; new, incoming data are constantly incorporated and compared with previously gathered information. If they match previously acquired data, a shortcut in the thought process may be used to arrive at the answer. Heuristics can certainly be helpful in improving efficiency, but also may lead one astray if they compound biases in the thought process.

Biases may be either explicit or implicit. An implicit bias is one that an individual holds without being aware. Implicit biases can be difficult for an individual to

Download English Version:

https://daneshyari.com/en/article/4173795

Download Persian Version:

https://daneshyari.com/article/4173795

<u>Daneshyari.com</u>