Doctors Admit Not Knowing

Benjamin H. Levi & Michael J. Green

Milton S. Hershey Medical Center, Penn State University

Abstract

Objectives: To determine whether physicians are willing to admit when they do not know the answer to a medical question.

Methods: An anonymous survey was sent to all Pennsylvania members of the American Academy of Pediatrics (n = 2,051), of whom 1,165 completed the item (57% response rate). Standard descriptive statistics were generated, and analyzed against responder characteristics.

Results: 96.5% of respondents correctly admitted not knowing the answer to the medical question posed. We found no significant differences in responses based on gender, age, race, expertise, or practice type.

Conclusions: The vast majority of pediatricians surveyed were willing to admit when they did not know the answer to a medical question.

Background

According to common wisdom (and some empirical research), doctors do not like to say "I don't know" (Atkinson, 1984; Bosk, 1980; Light, 1979; Waitzkin, 1985). Some attribute this to arrogance, narcissism, the culture of medicine, and/or the fact that confidence (or at least the appearance of confidence) is highly valued (Banja, 2004; Beagan, 2001; Pilpel et al., 1998). Others point to the risks of admitting that one doesn't know — namely, the potential for undermining perceived physician expertise, weakening professional authority, and thereby diminishing patients' trust in their physician (Atik, 2000; Jureidini et al., 2003; Marshall, 1997).

Nevertheless, there are many things (even within the relatively narrow confines of medical practice) that physicians don't know. In great measure, this stems from the inescapable uncertainty that exists within clinical medicine. Partly, this is attributable to physicians providing care to individuals rather than statistical norms, and partly to the absence of definitive answers from medical science. It is common for medical students to be told that half of what they will learn in medical school and residency is wrong, but we don't yet know *which* half. Of course, even if we knew, there is far too much information for any one physician to remember it all (Weed, 1997). Consequently, more than just intellectual humility demands that physicians should admit when they don't know the right answer; the scientific integrity of medicine demands it as well.

To investigate whether doctors are willing to admit when they don't know, the following item was included in an otherwise unrelated survey on pediatricians' reporting of suspected child abuse. "Please indicate your agreement with the following: *Children with a Leimkuhler's fracture have a significant likelihood of having been abused*." Respondents were given three options: "know to be true," "know to be false," and then as the third option either "don't know" or "would be guessing"—randomly assigned so that 50% of respondents received "don't know" as their third option and 50% received "would be guessing." In point of fact, there is no such thing as a "Leimkuhler's fracture." Hence, the only appropriate answer is the third option, "Don't know" or "Would be guessing." Our hypothesis was that a greater percentage of physicians would assert knowledge —i.e., select "know to be true" or "know to be false"—when receiving "Don't know" as the third option, versus "Would be guessing."

Method

An anonymous survey on mandated reporting of suspected child abuse was sent to all Pennsylvania members of the American Academy of Pediatrics (n = 2,051). Of these, 1,165 completed the item (57% response rate). The main outcome for the item discussed here was frequency of "know to be true" or "know to be false" responses, compared by survey version. Descriptive statistics were generated including means, medians, and standard deviations for continuous variables and frequency tables for discrete variables. Associations between demographic factors and the main outcome measure were characterized using contingency table analysis; significance levels were determined by Pearson's chi-square statistic and two sample t-tests. The study received approval prior to survey distribution from the IRB of the Penn State College of Medicine. Waiver of informed consent was granted in accord with federal regulation (45 CFR Part 46.116[d]). Protected health information was not accessed for this study.

Results

Overall, 96.5% of respondents chose option three ("Don't know" or "Would be guessing"), and the percentage was not significantly different between the two groups (49% "Don't know" vs. 47% "Would be guessing," p = .47). Additionally, we found no significant differences in responses based on gender, age, race, expertise with child abuse (self-identified), frequency of reporting child abuse, or practice type. This last demographic variable is notable insofar as it shows no increased tendency to assert knowledge (i.e., to choose "Know to be true" or "Know to be false") among either residents (i.e., novices), subspecialists, academic physicians, or general pediatricians (p = .77).

Among the 43 respondents who asserted knowledge (i.e., indicated they "knew to be true" or "knew to be false" that a child with a Leimkuhler's fracture had a significant likelihood of having been abused), a greater percentage selected "Know to be true" (84%) over "Know to be false" (16%, *odds ratio* 5.25). Moreover, this pattern persisted when responses were analyzed by gender, age, ethnicity, expertise with child abuse, frequency of reporting child abuse, or practice type.

Discussion

Our findings are reassuring insofar as they counter widely held beliefs about physicians' willingness to admit not knowing the answer to a question. Moreover, they do so in convincing fashion, with 96.5% of pediatricians providing an honest appraisal of what they did and did not know. The fact that this phenomenon held across so many demographic variables provides some evidence for trusting that pediatricians do not fabricate answers or feign knowledge they do not possess. Until similar investigations are carried out with other specialties, however, it is unclear how generalizable these findings are for physicians as a whole.

It is interesting that when physicians did incorrectly assert knowledge, they disproportionately asserted that the statement was true, as opposed to false. Possible explanations for this include 1) a human or perhaps professional bias to believe associations (here between a named fracture and child abuse) to be true rather than false; 2) recall bias — insofar as respondents associated "Leimkuhler's fracture" with something they knew (or believed) to be true; and 3) the psychological ease of claiming that one knows something, compared with admitting ignorance.

There are several important limitations to the present study, foremost among them that our survey was limited to pediatricians and (being embedded in an otherwise unrelated survey) comprised one question only. A more thorough exploration of physicians' willingness to admit not knowing would require including multiple specialties, and constructing additional questions that varied in terms of their content, format, and phrasing. An additional limitation is that physicians' responses on a survey may differ from their actual clinical behavior with patients and families. Relatedly, physician candor may be affected by the person with whom s/he is communicating—particularly whether that person is perceived as a patient/parent versus a fellow physician, a nurse, a researcher, etc. So, too, responses may vary depending on whether a physician may remain anonymous or not. Lastly, the 57% response rate limits generalizability since the views of non-responders are not known.

Additional Observations

In addition to the candor expressed by the vast majority of respondents, it was further reassuring that several physicians who were expert in investigating or treating child abuse contacted us to learn what a Leimkuhler's fracture was—as they had never heard of it, and did not wish to remain "ignorant." On a more personal note, it was interesting that several respondents googled the terms *Leimkuhler* and *fracture*, and reported back that they actually found a match: A professor at the University of Leicester in Great Britain who did mathematical modeling of materials fractures. To our surprise, this mathematician turned out to be the brother of an old housemate, from whose name we derived this fictitious fracture.

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Author Note: Funding was provided by the Children Youth Family Consortium at Penn State University and The Children's Miracle Network. No one involved with this study has a financial relationship with either funding body; nor was either funding organization involved in the study design, survey execution, data analysis/ interpretation, or manuscript preparation. Correspondence concerning this article should be addressed to Benjamin H. Levi, bhlevi@psu.edu.