Lying to Each Other

When Internal Medicine Residents Use Deception With Their Colleagues

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Background: While lying is morally problematic, physicians have been known to use deception with their patients and with third parties. Little is known, however, about the use of deception between physicians.

Objectives: To determine the likelihood that resident physicians say they would deceive other physicians in various circumstances and to examine how variations in circumstances affect the likelihood of using deception.

Methods: Two versions of a confidential survey using vignettes were randomly distributed to all internal medicine residents at 4 teaching hospitals in 1998. Survey versions differed by introducing slight variations to each vignette in ways we hypothesized would influence respondents' willingness to deceive. The likelihood that residents say they would use deception in response to each vignette was compared between versions.

Results: Three hundred thirty surveys were distributed (response rate, 67%). Of those who responded, 36% indicated they were likely to use deception to avoid exchanging call, 15% would misrepresent a diagnosis in a medical record to protect patient privacy, 14% would fabricate a laboratory value to an attending physician, 6% would substitute their own urine in a drug test to protect a colleague, and 5% would lie about checking a patient's stool for blood to cover up a medical mistake. For some of the scenarios, the likelihood of deceiving was influenced by variations in the vignettes.

Conclusions: A substantial percentage of internal medicine residents report they would deceive a colleague in various circumstances, and the likelihood of using deception depends on the context. While lying about clinical issues is not common, it is troubling when it occurs at any time. Medical educators should be aware of circumstances in which residents are likely to deceive, and discuss ways to eliminate incentives to lie.

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A physician shall deal honestly with patients and colleagues, and strive to expose those physicians deficient in character or competence, or who engage in fraud or deception.

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Physicians share a commitment to care for ill persons with an increasingly broad team of clinicians. The team's ability to care effectively for the patient depends on the ability of individual persons to treat each other with integrity, honesty, and respect in daily professional interactions.

American College of Physicians

Truth has a way of shifting under pressure.

Curtis Bok, Address, National Book Awards (Saturday Review, February 13, 1954)

JUST AS the physician-patient relationship is built on trust, so too is the physician-physician relationship. Effective communication between colleagues relies on honesty. Lying to a colleague is morally problematic because of the harm it can cause to those who are deceived, to the patients under their medical care, and to the credibility of the medical profession. While there is nothing novel about the notion that lying causes problems, in fact little is known about the use of deception in physician-physician interactions.

What is known about the use of deception by physicians in other contexts, however, is cause for concern. Lying to patients about their diagnoses was ubiquitous in the United States until only a few decades ago, and is still common in many other countries. Physicians commonly use deception to resolve ethical dilemmas, particularly when dealing with insurance companies and when attempting to act in their patient's interests. Some physicians even participate in outright fraud. Cheating before and during medical school occurs frequently, and numerous physicians falsely represent their qualifications when applying to specialty fellowships. Many physicians in training say they have covered up mistakes in the medical record and lied to attending physicians about things they neglected to
SUBJECTS AND METHODS

QUESTIONNAIRE

We developed a survey to assess physicians’ attitudes toward using deception in their interactions with colleagues. The survey was drafted by first generating a list of situations in which internal medicine residents might be motivated to deceive a colleague. This list included key variables that were relevant to deceptive behavior: the nature of the deception (omission or intentional falsification), the consequences of the deception (nothing happens or one is caught), and the motivation for the deception (self-interest or patient well-being). From this initial list, 7 vignettes were developed and pilot tested for face and content validity with a sample of 12 residents and chief residents in internal medicine and family practice at 3 teaching hospitals. Based on comments from interviews with respondents, we eliminated 2 of the vignettes that were somewhat confusing and redundant, modifying the remaining 5 for the final survey instrument. These vignettes addressed 5 reasons a resident may be motivated to use deception: (1) to avoid extra work, (2) to protect a colleague, (3) to avoid embarrassment, (4) to protect a patient’s confidentiality, and (5) to cover up a mistake.

We developed 2 versions of each vignette, in which we varied circumstances in ways we hypothesized would influence respondents’ willingness to deceive. In an effort to decrease information bias, the deception enticements were varied between versions, so each version contained similar overall incentives to deceive. In the first vignette, residents were asked to exchange call with a colleague who either wanted to (1) attend a bridal shower or (2) be with her sick father. In the second, residents were asked to substitute their own urine for a colleague’s urine drug screen, when the chance of being caught was either (1) 0% or (2) 20% to 25%. In the third, residents were asked by an attending physician to report a laboratory result, when the likelihood of being ridiculed or reprimanded for not recalling the result was either (1) high or (2) low. In the fourth, residents were asked by a patient to protect the patient’s privacy by falsifying a diagnosis in the medical record, when the diagnosis was either (1) rheumatoid arthritis or (2) genital herpes. And in the fifth, residents who failed to perform a rectal examination were asked about the presence of blood in a patient’s stool, when the patient either (1) had an uneventful night or (2) had an acute myocardial infarction due to anemia from an upper gastrointestinal tract hemorrhage. The vignettes are presented in Figure 1.

OUTCOME MEASURES

Following each vignette, subjects were asked the following: “How likely would you be to use deception in this case?” Responses were recorded using a 5-point Likert scale ranging from “very likely” to “very unlikely.” Demographic information was obtained from each subject, and several questions were asked about attitudes toward, and experience with, deception. The survey was approved by institutional review boards at the 4 participating teaching hospitals: Pennsylvania State University College of Medicine, Hershey; Christiana Care Health System, Wilmington, Del; University of Pittsburgh, Pittsburgh, Pa; and University of Wisconsin, Madison.

SUBJECTS

The survey was distributed to all internal medicine residents at the 4 participating teaching hospitals. At each institution, the 2 survey versions were randomly distributed. To protect confidentiality, surveys were individually coded and no personal identifying information was elicited.

DATA ANALYSIS

The primary outcome of interest was the physicians’ stated likelihood of deceiving a colleague in response to each vignette. We hypothesized that the likelihood would be influenced by factors such as the consequences of being truthful, the chance of being caught, and the effect on patient confidentiality. To test these hypotheses, factors that could motivate residents to deceive were varied across survey versions, and the likelihood of using deception was compared between versions. In analyzing the data, we decided in advance to collapse and dichotomize the 5-point likelihood scale to a 2-point scale indicating “likely” (includes very likely and “somewhat likely” responses) vs “unlikely” (includes very unlikely, “somewhat unlikely,” and neutral responses) to deceive. Primary analysis of this dichotomized data used the Pearson $\chi^2$ test to determine differences in responses between survey versions. Odds ratios and 95% confidence intervals were also calculated. In a secondary analysis, we used the Wilcoxon-Mann-Whitney test to determine if the nondichotomized responses differed between the 2 versions.

We also hypothesized that residents would indicate that their peers were more likely to use deception than were they. The McNemar test was used to test for differences between subjects’ responses about their own behavior and that of their peers. Although we had no prior hypotheses about the relation between demographic variables and responses, we used the Pearson $\chi^2$ test to evaluate associations between demographic variables (age, sex, level of training, race, religion, religiosity, political identification, and ethics training) and the likelihood of using deception. Significant associations are reported in the results. All analyses were carried out using SAS statistical software (SAS Institute Inc, Cary, NC).

do, and lying about one’s role in authoring articles is commonplace.21-24

At the same time, physicians have strongly negative attitudes toward moral lapses. In his landmark sociological work on the management of medical error, Bosk found that attending surgeons tolerated residents’ technical errors but did not quickly forgive their moral errors. Is lying to a colleague one such serious moral transgression? If physicians are willing to use deception in other contexts, do they also use it with each other? In this article, we report findings from a survey of internal medicine residents about their likelihood of deceiving col-


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leagues to resolve various personal and professional dilemmas. We sought to answer 3 questions: (1) What is the likelihood that resident physicians say they would deceive other physicians in various circumstances? (2) What factors increase the likelihood of using deception? (3) Who do residents believe are more likely to deceive a colleague—their peers or their supervisors?

Of the 330 surveys distributed, 222 were returned, for a response rate of 67%. Of the respondents, 64% were men and the mean age was 30 years. The race distribution was as follows: 74%, white; 19%, Asian; 3%, African American; and other, 5%. There were no significant differences in respondent characteristics between survey versions for sex, age, race, political identification, training status, or ethics instruction (Table 1).

The scenario in which the greatest percentage of residents indicated they were likely to deceive was to avoid exchanging call with a colleague. The one in which the fewest would deceive was to cover up a medical mistake. The likelihood of using deception in each of the vignettes was not related to any of the measured demographic characteristics, including postgraduate training year. Table 2 shows overall responses to each vignette. Thirty-six percent of respondents reported they were very or somewhat likely to use deception to avoid exchanging call, 6% were likely to substitute their own urine in a drug test to protect a colleague, 14% were likely to fabricate a laboratory value to an attending physician, 15% were likely to misrepresent a diagnosis in a medical record to protect a patient’s privacy, and 5% were likely to lie about checking a patient’s stool for blood to cover up a medical mistake.

![Figure 1](image_url)

**Figure 1. Clinical vignettes. Text within these brackets, < >, appear in survey version 1; and text within these brackets, [], are in version 2.**

**FACTORS THAT INCREASE THE LIKELIHOOD OF USING DECEPTION**

As hypothesized, residents’ responses to some of the vignettes demonstrated they were malleable about using deception with their colleagues; the alterations in vignettes between survey versions affected the likelihood of deception. In Figure 2, we show in descending order the percentage indicating they were very or somewhat likely to deceive in each vignette. As illustrated, the likelihood that residents would tell a “white lie” to a colleague to avoid exchanging overnight call was affected by the reason for the request. When residents were asked to exchange call so a colleague could be with her sick father, 29% indicated they were likely to use deception. When the colleague wanted to attend a bridal shower, 44% said they were likely to lie ($P = .02$, $x^2$ test). (Unless otherwise noted, statistical significance was consistent in the dichotomized data [analyzed by the $x^2$ test] and the nondichotomized data [analyzed by the Wilcoxon-Mann-Whitney test].)

The likelihood that residents would intentionally misrepresent a diagnosis in the medical record to protect a patient’s privacy was marginally correlated with the condition they were asked to misrepresent. If the patient did not want the resident to disclose the diagnosis of arthritis, 11% indicated that they would heed the patient’s request to write a different diagnosis in the medical record. However, when the diagnosis was the more stigmatizing condition of genital herpes, 19% indicated they would do so ($P = .07$, $x^2$ test).

The manner in which attending physicians responded to residents who were unable to recall a precise laboratory value had an affect on residents’ responses ($P < .001$, Wilcoxon-Mann-Whitney test, and
The likelihood that residents would substitute their own urine for that of a colleague who was required to submit to a drug screen was not significantly affected by the chance of being caught. If there was a 20% to 25% chance of being caught, 5% indicated they would do so, while if there was no realistic chance of being caught, 8% said they would do so ($P=.36$, $\chi^2$ test).

The likelihood that residents would lie about checking for blood in a patient’s stool was marginally correlated with the patient’s medical outcome. If the patient had an uneventful night, 3% indicated they would do so. If the patient had a myocardial infarction as a result of an undetected gastrointestinal tract hemorrhage, 8% indicated they would do so ($P=.09$, $\chi^2$ test).

In response to questions about general attitudes toward deception, most respondents indicated that deceiving colleagues was not acceptable behavior. As shown in Figure 3, 82% agreed with the following statement, “one should never deceive a colleague,” and only a few respondents agreed that it was acceptable to deceive a colleague even if no one gets hurt (4%), one does not get caught (9%), or it is in the patient’s best interest (17%).

### Table 1. Physician Demographic Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Survey Version</th>
<th>1 (n = 110)</th>
<th>2 (n = 112)</th>
<th>$P$†</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male sex</td>
<td></td>
<td>65</td>
<td>64</td>
<td>.94</td>
</tr>
<tr>
<td>Age, mean, y</td>
<td></td>
<td>30</td>
<td>30</td>
<td>.76</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td></td>
<td>77</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td></td>
<td>15</td>
<td>22</td>
<td>.79</td>
</tr>
<tr>
<td>African American</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Self-identified political orientation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liberal</td>
<td></td>
<td>21</td>
<td>22</td>
<td>.46</td>
</tr>
<tr>
<td>Moderate</td>
<td></td>
<td>46</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>Conservative</td>
<td></td>
<td>31</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Training status, postgraduate year</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>35</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>38</td>
<td>29</td>
<td>.45</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>24</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>&gt;4</td>
<td></td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Had an ethics course during school or residency</td>
<td></td>
<td>93</td>
<td>92</td>
<td>.62</td>
</tr>
<tr>
<td>Discussed deception, truth telling, or both during the ethics course</td>
<td></td>
<td>67</td>
<td>65</td>
<td>.56</td>
</tr>
<tr>
<td>Discussed deception as it related to medical colleagues</td>
<td></td>
<td>28</td>
<td>31</td>
<td>.79</td>
</tr>
</tbody>
</table>

* Data are given as percentage of physicians unless otherwise indicated. Percentages may not total 100 because of rounding.
† Fisher exact test.

### Table 2. Overall Responses to Each Vignette

<table>
<thead>
<tr>
<th>Vignette Question†</th>
<th>Very Likely</th>
<th>Somewhat Likely</th>
<th>Neither Likely nor Unlikely</th>
<th>Somewhat Unlikely</th>
<th>Very Unlikely</th>
</tr>
</thead>
<tbody>
<tr>
<td>How likely would you be to tell a “white lie” about being busy so you can avoid taking a call?</td>
<td>7</td>
<td>29</td>
<td>19</td>
<td>31</td>
<td>14</td>
</tr>
<tr>
<td>How likely would you be to provide your own urine sample for Frank to use?</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>11</td>
<td>81</td>
</tr>
<tr>
<td>How likely would you be to fabricate a potassium value?</td>
<td>4</td>
<td>10</td>
<td>5</td>
<td>26</td>
<td>54</td>
</tr>
<tr>
<td>How likely would you be to falsify information in the medical record?</td>
<td>5</td>
<td>10</td>
<td>8</td>
<td>24</td>
<td>53</td>
</tr>
<tr>
<td>How likely would you be to say you checked the stool for blood when you did not?</td>
<td>0</td>
<td>5</td>
<td>3</td>
<td>21</td>
<td>70</td>
</tr>
</tbody>
</table>

* Data are given as percentage of physicians. Row totals may not be 100 because of rounding.
† Some questions may vary in wording with the exact question given in Figure 1.
Deception in everyday life is common, and people tend to lie about these essentially private matters. While we would not condone such behaviors without causing lasting harm. Although it has been argued that lying even in private erodes a person's credibility to such an extent that a private liar cannot be trusted to be truthful in other settings. In the absence of evidence that this “private” behavior negatively impacts patients, it is a reasonable subject for debate whether the medical profession ought to be concerned about deceptions of this nature.

Serving one's self-interest by deceiving colleagues about matters directly related to patient care is a more serious transgression. While fewer respondents indicated they were likely to lie about clinical than nonclinical issues, the fact that 19% said they would fabricate a laboratory value when concerned about being ridiculed, and 8% would lie to cover up a serious omission on the physical examination, is quite disturbing. In these matters, we would hope that no residents would deceive, for such deceptions undermine effective clinical communication, can erode trust between residents and attending physicians, and may even have a direct bearing on a patient's medical outcome. More data would be helpful to learn about the consequences of such deceptions, and to understand whether residents have morally compelling reasons to defend such behavior, because on initial assessment, these deceptions appear to be unjustified.

First, all deceptions are not morally equivalent. There are different ways in which a person can deceive, and different motivations for doing so. For instance, a deception can be an unmistakable lie or an incomplete disclosure. It can be intentional or unintentional, explicit or implied, overt or secret. Similarly, a deception can be well-meaning or malicious, motivated by altruism or self-interest. Each of these types of deceptions may have different moral significance, requiring a distinct justification. While there is widespread agreement that explicit lying is morally suspect behavior, there is debate about whether physicians have a similar duty to avoid all other forms of intentional deception, a point that is illustrated in our study.

For example, 44% reported being likely to lie to an unhelpful colleague who asked him or her to exchange call to attend a bridal shower, and most residents said their colleagues were even more likely than they were to lie in this situation. While we would not condone such actions, it should be no surprise that medical residents are likely to lie about these essentially private matters. Deception in everyday life is common, and people tend to lie more frequently to those to whom they do not feel close. Furthermore, many believe (and act on the belief) that individuals can separate their private and public behaviors without causing lasting harm. Although it has been argued that lying even in private erodes a person's credibility to such an extent that a private liar can...
sues. Among the few residents who said they were likely to substitute urine, handwritten explanations emphasized the duty one has to friends and colleagues and the unreasonableness of mandatory drug screening policies. The survey was not designed to elicit full justifications for these practices. In general, however, when one opposes a particular policy, secretly violating it is among the least favorable ways to rectify the situation. Alternatively, one could refuse to abide by the policy (an act of civil disobedience that could have personal consequences) or, preferably, arrange for an open exchange of ideas, such as a debate, a petition, or a letter to an appropriate governing organization.

A finding that is particularly concerning is that some residents said they were motivated to deceive to avoid being ridiculed and feeling embarrassed. When an attending physician belittles a resident for not recalling a specific laboratory value, this increases the likelihood (although significant only at \( P = .10 \)) that residents say they will lie to avoid this unpleasant consequence. Female residents in our study were particularly susceptible to such pressure, being 8 times more likely to indicate they would lie to an attending physician who ridicules than to one who does not (\( P = .005 \)). If this finding bears the scrutiny of additional study, then we have a serious problem with the all-too-common practice of using humiliation and belittlement as a teaching tool (in a recent study, \(^{38} 86\% \) of second-year residents said they had experienced public humiliation or belittlement during their internship year). While there are certain advantages to paying close attention to details, it is also clear that such scrutiny does not require one to ridicule or embarrass individuals under one's tutelage. Those involved in medical education should be aware of the adverse effects of certain teaching styles on resident behavior.

Finally, the rather striking difference in the willingness to use deception to avoid exchanging call compared with issues of clinical importance raises a provocative question about physicians' perceptions of their moral duties. Do residents believe they have different ethical obligations in their professional and private lives? Within the clinical context, when patient well-being is at stake, residents may view deception as an unacceptable breach of professional conduct and, therefore, morally unacceptable. In a nonclinical context, residents may revert to a preprofessional set of moral rules, where they may perceive the use of deception as less ethically troubling. \(^{32} \) In future research, it would be interesting to examine whether physicians operate from separate spheres of morality in their personal and professional lives.

This study has several limitations. We report what residents say they would do rather than what they have been observed doing. As a result, we have no way of knowing whether respondents actually use deception in these situations and how their self-reports differ from reality. The responses are also limited to internal medicine residents at 4 teaching hospitals; it is not known how their behavior is similar to or different from residents in other specialties, or from students or attending physicians. Furthermore, respondents could interpret the scenarios in multiple ways. For instance, it is not known whether residents would indicate they were likely, or unlikely, to deceive in the event that they would respond to a vignette in an accurate, but misleading, manner. We also lack information about nonresponders, and are unable to determine whether those who answered the survey are different from those who did not. Finally, responses may be affected by a social desirability bias. This occurs when respondents answer terms in such a way as to cast themselves in a favorable light or as they think a “good” person would answer, rather than to reveal their true feelings or beliefs. \(^{30} \) If, however, such a bias was present in our survey, the incidence of deception is likely to be even greater than that reported herein.

**CONCLUSIONS**

Most internal medicine residents report they are unlikely to deceive colleagues, even if no one gets hurt, one is not caught, and it serves a patient’s interests. However, many residents say they would lie to a colleague to avoid doing that person a favor, a practice whose significance to medical practice is debatable. Deceiving colleagues about clinical issues is less likely, but far more serious. A small percentage say they would falsify a medical record to protect patient confidentiality, fabricate a laboratory value to avoid ridicule, and lie about performing a neglected aspect of the physical examination to cover up a mistake. In light of these findings, what should medical educators do? We have several practical suggestions. First, we think it is important to address the issues of professionalism and collegiality as part of the ethics curriculum that is required for all medical residents. Small group discussions are particularly fitting, using actual or simulated cases such as those included in our survey. Second, educators need to be aware that residents, like any group of people, exhibit a wide range of moral behaviors, and, sadly, the possibility that the resident is not telling the truth should be included in the differential diagnosis. Doing so would require extra vigilance on the part of clinical preceptors, a task that could prove to be uncomfortable and logistically challenging. Third, attending physicians should be educated about the potential impact of their own teaching styles on residents’ behavior, so they can reduce the risk of being lied to. Fourth, residents need to be exposed to excellent role models who demonstrate not only the technical skills expected of physicians but the moral ones as well. Finally, it is crucial that educators become aware of the particular circumstances under which residents may be more likely to deceive, so they can take appropriate measures to reduce incentives for this behavior.

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