Medical Harm: Patient Perceptions and Follow-up Actions

Heather G. Lyu, MD,* Michol A. Cooper, MD, PhD,* Brandon Mayer-Blackwell, BS,* Nicole Jiam, BA,* Elizabeth M. Hechenbleikner, MD,* Elizabeth C. Wick, MD,* Sean M. Berenholtz, MD, MHS,† and Martin A. Makary, MD, MPH*‡

Objectives: Much research has been conducted to describe medical mistakes resulting in patient harm using databases that capture these events for medical organizations. The objective of this study was to describe patients’ perceptions regarding disclosure and their actions after harm.

Methods: We analyzed a patient harm survey database composed of responses from a voluntary online survey administered to patients by ProPublica, an independent nonprofit news organization, during a 1-year period (May 2012 to May 2013). We collected data on patient demographics and characteristics related to the acknowledgment of patient harms, the reporting of patient harm to an oversight agency, whether the patient or the family obtained the harm-associated medical records, as well as the presence of a malpractice claim.

Results: There were 236 respondents reporting a patient harm (mean age, 49.1 y). In 11.4% (27/236) of harms, an apology by the medical organization or the clinician was made. In 42.8% (101/236) of harms, a complaint was filed with an oversight agency. In 66.5% (157/236) of harms, the patient or the family member obtained a copy of the pertinent medical records. A malpractice claim was reported in 19.9% (47/236) of events.

Conclusions: In this sample of self-reported patient harms, we found a perception of inadequate apology. Nearly half of patient harm events are reported to an oversight agency, and roughly one-fifth result in a malpractice claim.

Key Words: patient harm, medical errors, medical malpractice, patient safety

(J Patient Saf’2014;00: 00–00)

There has been significant resource allocation to draw attention to issues of patient safety given the prevalence of medical errors and the estimated 29 billion dollars of annual cost.1 However, despite substantial efforts to prevent and reduce patient harm, it remains common.2 Moreover, limited research has been conducted on patient perceptions of episodes of harm.

Patient perceptions and satisfaction with the current health care system are important for health care professionals to understand. Although some patient perceptions may not reflect the true nature of events surrounding patient harm, perceptions of mistakes have been shown to play an important role in patient satisfaction.3,4 which can affect a patient's trust in his/her clinician and medical recommendation compliance.5,6 Patient perceptions of bad experiences with physicians can threaten the relationship between patients and clinicians and increase the practice of defensive medicine.7 Perceptions of harm also increase the likelihood of malpractice claims.

In this study, our objective was to describe the perceptions of patients who report that they have experienced preventable harm caused by a medical error. We also report on the patients’ subsequent actions after harm.

METHODS

We analyzed a patient harm survey database composed of responses from a voluntary online survey administered to patients by an independent nonprofit news organization, ProPublica (New York, NY), through a social media site during a 1-year period (May 2012 to May 2013). The patient harm social media site was launched in May 2012. Patients were invited to take an online patient harms questionnaire.

We collected data on patient demographics and characteristics related to the acknowledgment of patient harms as evidenced by an apology to the patient and/or the patient's family, the reporting of patient harm to an oversight agency, whether the patient or the family obtained the medical records, as well as the presence of a malpractice claim.

The survey response database was deidentified before our analysis. All analyses in the study were conducted using STATA 12.0 (StataCorp LP, College Station, TX). This study was waived by the Johns Hopkins Institutional Review Board.

RESULTS

There were 236 patients who completed the patient harm questionnaire. The mean age at time of incident was 49.1 years (range, 0–92 y) (Table 1). A total of 62.7% (148/236) of the patients had private insurance, 26.7% (63/236) of the patients had Medicare, 6.3% (15/236) had Medicaid, and 4.2% (10/236) had no insurance coverage. A total of 55.9% (132/236) of the patients had 100% insurance coverage; 28.8% (68/236) of the patients had partial insurance coverage, 5.5% (13/236) of the patients had no insurance coverage, and 9.7% (23/236) of the patients did not know about the status of insurance coverage at the time of the incident. The patients paid a mean of $14,024 per event (range, 0–1,000,000 US dollars).

Acknowledgment of Patient Harm

A total of 9.3% (22/236) of the respondents stated that the medical facility voluntarily disclosed the harm. An additional 9.3% (22/236) of the respondents stated that the medical facility acknowledged the harm under pressure, 37.7% (89/236) of the respondents stated that the medical facility denied responsibility, and 43.6% (103/236) of the patients did not respond. A total of 7.6% (18/236) of the respondents stated that the physician voluntarily disclosed the harm, 8.9% (21/236) of the respondents stated that the physician acknowledged the harm under pressure, and 46.2% (109/236) of the respondents stated that the physician denied responsibility, 37.3% (88/236) of the patients did not respond. A total of 11.4% (27/236) of the patients or their families reported that they received an apology from the facility or the physician.

From the †Department of Surgery, School of Medicine, ‡Departments of Anesthesiology/Critical Care Medicine and Surgery, School of Medicine, and ‡Departments of Health Policy and Management, Johns Hopkins Bloomberg School of Public Health, Johns Hopkins University, Baltimore, Maryland. Correspondence: Martin A. Makary, MD, MPH, Department of Surgery, Johns Hopkins Hospital, Halsted 616, 600 N. Wolfe St, Baltimore, MD 21231 (e-mail: mmakary1@jhu.edu).

The authors disclose no conflict of interest.

Copyright © 2014 by Lippincott Williams & Wilkins
Other studies have estimated that as
Both
This demonstrates that, in addi-
Volume 00, Number 00, Month 2014
The
I tc a na l s om a k et h e mm o r ek n o w l -
Nevertheless, more extensive guide-
One such strategy is the Dis-
J Patient Saf –
These low rates of disclosure and apology
Moreover, clinicians can strengthen patient trust
Our study illustrates the
These findings
malpractice claim of 7.6:1.
how to avoid complications and errors in the future.\(^{15}\) Patients have indicated that the key ele-
It can also make them more knowl-
edgeable about their care delivery and how to address systemic and individual issues involved in a patient harm incident.\(^{15}\) Both the Joint Commission and the National Quality Forum state that patients should be informed about all outcomes of care, including unanticipated outcomes.\(^{15}\) Furthermore, more extensive guidelines for clinicians specifying the content, timing, or extent of disclosure are needed.
We found that only 9.3% of medical facilities and 7.6% of cli-
icians voluntarily disclosed the harm to patients and their fami-
lies. Furthermore, only 11.4% of patients or their families received an apology from the facility or the provider. A previous study reported that less than one-third of medical errors are disclosed to patients.\(^{7}\) These low rates of disclosure and apology after patient harm demonstrate the hesitation of health care workers to fully open the doors of communication with patients. A common explanation for this lack of disclosure is that clinicians recognize the importance of disclosure but lack the moral courage to participate in an open discussion.\(^{15,20}\) Moreover, poor communication can stem from a fear of the consequences of disclosure; some institutions believe that disclosure can encourage, rather than discourage, medicolegal action.\(^{15}\) Our study illustrates the opportunity to improve communication between patients and cli-
icians by developing standards of disclosure that describe the key information that should be shared with patients (Fig. 1).
We found that more than 30% of patients paid at least part of their bill, with a mean payment per patient of $14,024. The total cost of the annual medical liability system, including defensive medicine, was estimated to be $55.6 billion in 2008, or 2.4% of total health care spending.\(^{21}\) This demonstrates that, in addition to negatively affecting the therapeutic relationship, adverse incidents and medical malpractice claims have a significant cost burden on patients, physicians, institutions, and the health care system overall.
In the future, patient advocates and medical professionals should work together to reach a consensus on definitions of full disclosure and informed consent. Medical and graduate training programs can play an important role by introducing trainees to skills necessary to manage adverse events in a transparent and patient-centered manner. Strategies that allow physicians to approach disclosure as a process that combines timely acknowledgment with a thorough investigation followed by apology, when appropriate, should be developed.\(^{15}\) One such strategy is the Disclosure, Apology, and Offer model, which emphasizes honest

### TABLE 1. Patient Characteristics

<table>
<thead>
<tr>
<th>Patient Characteristics</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age, mean (range), y</strong></td>
<td>49.1 (0–92)</td>
</tr>
<tr>
<td><strong>Insurance status</strong></td>
<td></td>
</tr>
<tr>
<td>Private insurance</td>
<td>148 (62.7)</td>
</tr>
<tr>
<td>Medicaid</td>
<td>63 (26.7)</td>
</tr>
<tr>
<td>Medicaid</td>
<td>15 (6.3)</td>
</tr>
<tr>
<td>Uninsured or self-pay</td>
<td>10 (4.2)</td>
</tr>
<tr>
<td><strong>Inpatient status</strong></td>
<td></td>
</tr>
<tr>
<td>Inpatient</td>
<td>207 (87.7)</td>
</tr>
<tr>
<td>Outpatient</td>
<td>29 (12.3)</td>
</tr>
<tr>
<td><strong>Type of harm</strong></td>
<td></td>
</tr>
<tr>
<td>Temporary disability</td>
<td>67 (28.4)</td>
</tr>
<tr>
<td>Permanent disability</td>
<td>97 (41.1)</td>
</tr>
<tr>
<td>Death</td>
<td>72 (30.5)</td>
</tr>
</tbody>
</table>

### DISCUSSION

In our self-selected sample, approximately 1 in 5 patient harms resulted in a lawsuit. This is similar to the Harvard Medical Practice Study, which reported an estimated ratio of adverse event to malpractice claim of 7.6:1.\(^5\) Other studies have estimated that as few as 2% to 3% of patients pursue litigation.\(^7\)–\(^9\) These findings all suggest that the vast majority of patient harms never result in a lawsuit.

In a previous study of medical malpractice claims, 3% of claims had no substantiated medical injuries and 37% of claims did not involve any medical errors.\(^6\)–\(^15\) One study reported that the factors that increase the likelihood of a patient filing a malpractice claim include a poor patient-physician relationship, media advertising by law firms, recommendations by other health providers or professionals to seek legal advice, patient perceptions of nondisclosure by the clinician, and financial concerns.\(^12\) The specific role of each factor in determining the likelihood of med-
communication between patients and clinicians and is driven by the institution in which the harm occurred. This model was implemented at the University of Michigan Health System in 2001. Since its introduction at the University of Michigan Health System, there has been a reduced rate of malpractice claims and a decrease in the number of lawsuits. Strategies such as the Disclosure, Apology, and Offer model can be incorporated into existing systems such as the Center for Medicare and Medicaid Services–sponsored Partnership for Patients, a national effort designed to reduce preventable harm and hospital readmissions. Changes to institutional culture that allow everyone to embrace increased transparency and foster better communication with patients and their families can also address patient desires and needs for full disclosure.

There are several important limitations of this study. The study sample was limited to an active group of self-selected harmed patients willing to voluntarily report their incidents in a public forum. This selection bias may have yielded exaggerated findings. In addition, we cannot draw any definitive conclusions about rates of patient harm and disclosure because they are based on patient reports. Nevertheless, we believe that the database used in this study includes perceptions among a subset of patients who report that they have been harmed.

CONCLUSIONS

Patient perceptions of medical errors leading to patient harm are important to study in the context of escalating health care costs and the dynamic political environment, particularly in regard to tort reform. We found that, despite patients' perceptions, hospitals and clinicians do not disclose completely information regarding their incident and that most will not file a malpractice claim. The lack of disclosure perceived by patients should be addressed with increased attention to transparency and improved communication efforts among all involved in quality patient care.

REFERENCES


© 2014 Lippincott Williams & Wilkins www.journalpatientsafety.com | 3