

Public Health and the Law

'Lumping It': The Hidden Denominator of the Medical Malpractice Crisis

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Introduction

There has been considerable discussion of our medical malpractice "crisis", with analyses of causes, suggestions for remedies, and, inevitably, increasingly acrimonious attributions of blame.¹⁻⁴ We are told that there are increased numbers of lawsuits and more frequent and higher-cost judgments and out-of-court financial settlements. These increase physicians' (and agencies' and facilities') malpractice insurance premiums and encourage the use of unnecessary visits, tests and procedures, so-called "defensive medicine". The combined costs of premiums, settlements, and defensive medicine represent an annual cost which may be as high as \$12-\$14 billion per year.² The costs associated with malpractice are so high and increasing so rapidly that some physicians say that they may be forced to curtail or even end their medical practices, which in turn may jeopardize at least some citizens' access to health care.

From a public health perspective, such discussions concern numerators. Numerators are certainly important. They include costs of malpractice premiums, which are undeniably rising, and fear of lawsuits, which undeniably affects the ways some physicians and other health professionals behave. However, denominators also have a place in such discussions. The denominator of the medical malpractice formula includes all of those people who experience illness or injury, or who believe that they experience illness or injury. All have a right to seek compensation and what Frances Miller calls "emotional vindication" for their experiences and assurances that those responsible for their illness and injury will be unable to do further harm.⁵

There is evidence, derived mainly from studies of hospital patients, that the denominator of iatrogenic illness and injury is large.⁶⁻¹⁰ For example, Steel, *et al*, reviewed the records of 815 consecutive admissions to a university teaching hospital in 1979 and found that 290 (36 per cent) showed evidence of at least one iatrogenic illness. Of these, 76 records (9 per cent of all admissions) showed signs of "major complications" and 15 (2 per cent of all admissions) experienced iatrogenic complications which were "believed to have contributed to . . . death."⁹ An earlier review of discharge data from a sample of California hospitals found that about 5 per cent of records showed evidence of "disability caused by health care management."¹⁰ Since the data for both of these studies were derived exclusively from reviews of hospital

records, they beg a number of important questions. How many similar episodes took place in outpatient or long-term care settings? What proportion of the cases to which the studies refer were aware of their iatrogenic illness or injury? What proportion of those who were aware filed formal complaints or claims?

More generally, how many people believe that they have experienced illness or injury as a result of medical treatment? What proportion of those episodes result in lawsuits or other formal proceedings (e.g., disciplinary actions or hearings before malpractice tribunals)? What proportion of the aggrieved, though they may not like it, "lump it", in Marc Galanter's words,¹¹ either because they are too poor, too timid, or too resigned to initiate litigation; or because they believe that they can never win in litigation, or because litigation is not part of their problem-solving set? What factors distinguish cases which result in formal actions from those which do not?

To begin to answer these questions and to address a series of related methodological questions, a pilot study of public perceptions of iatrogenic illness and injury was undertaken in the State of Maine. Maine was chosen for opportunistic reasons, because colleagues were about to undertake a larger survey of a random sample of adult residents of Maine, which included substantial social and demographic data, to which a short series of questions could be added at relatively low cost.

A pilot study allowed two kinds of questions to be addressed. One kind was substantive, having to do with the prevalence of public perceptions of iatrogenic illness and injury—was the level high enough to make more definitive research feasible? The other was methodologic—would people discuss their experiences and in what terms?

There are real concerns about the validity of self-reports of iatrogenic illness or injury. How can a lay person know whether he or she or some other person has suffered harm as a consequence of medical treatment? How can they know whom to blame? In another sense, related to the malpractice lawsuit denominator, there is no higher standard of validity than self-reports. Regardless of whether there is "objective" evidence of iatrogenic illness or injury, there will never be a lawsuit unless someone believes that he or she or a close relative has been harmed.

There were two phases of the pilot study: 1) a screening phase, to identify those who had personally experienced, or who felt that close relatives had experienced, illness or injury which they attributed to medical treatment or treatment in a health care facility; and 2) a series of intensive interviews with those who screened positive and who agreed to a subsequent interview.

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TABLE 1—Maine Malpractice Study, Screening Phase

Reported Episodes	Respondent (N = 63)	Other (N = 63)
Where did the episode happen?	%	%
Office	46	31
Hospital	43	51
Other	11	18
Type of professional involved		
Physician	68	86
Dentist	13	5
Nurse	10	6
Chiropractor	5	0
Other	4	3
Type of error		
Inaccurate diagnosis	38	41
Wrong procedure (Non-Surgical)	24	26
Wrong procedure (Surgical)	16	20
Wrong prescription drug	18	12
Other	4	2
Consequences (Primary)		
Illness-pain	40	48
Death*	2	10
None	16	8
Acute effects	11	0
Additional costs	8	0
Unnecessary procedures	7	7
Unnecessary visits or admissions	7	7
Further diagnostic procedures	7	10
Disability	0	7
Other	7	3
Are [the consequences] still a problem (% Yes)?	38	38
Do you think that you [other] will ever recover (% Yes)?	43	30

*One respondent reported a child-birth event which led to the death of a neonate.

Methods

The screening sample consisted of 249 randomly selected adult residents of Maine. All interviews took place by telephone. Respondents who were screened had previously consented to participate in a longer interview, which included extensive demographic data and a series of questions related mainly to alcohol use and traffic safety. The response rate on the larger survey was 78 per cent. No one who consented to participate in the longer interview refused to answer the questions about iatrogenic illness and injury.

The screening questions were designed to learn: 1) whether respondents believed that they or close relatives had experienced harm as a result of medical treatment; 2) if so, how many times this had happened; 3) when the most recent episodes had taken place; 4) some details of the episodes (such as the nature of the illness or injury and the type of health professionals and facilities involved; and 5) their descriptions of the events and their short- and long-term consequences. The screening questions were designed to take five minutes of interview time.

The second round of interviews included more detailed questions about reported episodes of iatrogenic illness and injury: How did respondents know that they or their dependents had experienced harm? What did they do? With whom did they discuss the episode? In what order did they approach different sources of advice or help? Did they seek legal advice? Do they plan to do so in the future? What factors promote or inhibit different types of responses?

The second-round interviews were supposed to include all respondents who reported in their screening interviews that they, personally, or a close relative, or both had experienced iatrogenic illness or injury (N = 126 episodes,

involving 92 respondents). Since respondents could have reported incidents which they personally experienced, which relatives experienced, or both, the unit of analysis is the event, rather than the respondent. Of the 63 events which respondents reported having happened to them personally during the screening phase, second-round interviews were completed on 42 (67 per cent). The main sources of attrition were refusals of permission for second interviews (10 cases), refusals of second interviews after having initially agreed to interviews (six cases), and inability to contact respondents (five cases).

While administering the second round of interviews, it became clear that many respondents had reported episodes involving relatives about which they knew very little. For example, a parent described an event involving an adult child who lived away from home. We therefore decided to include in the second interviews only those respondents who reported personal experience (as opposed to hearsay) in their respective relatives' episodes of iatrogenic illness or injury. This more rigorous standard eliminated 16 of 63 episodes involving relatives. Of the 47 remaining episodes described in the screening interviews, there were 16 completed interviews (36 per cent). There were 18 refusals of permission for second interviews, seven refusals of second interviews after having initially agreed to interviews, five cases of inability to contact or interview respondents, and one case where the respondent denied that iatrogenic illness or injury had actually taken place.

There were no statistically significant differences of age, gender, education, income, and employment status between those who screened positive and agreed to interviews and those who refused. All second-round interviews took place by telephone, and averaged about 20 minutes. The screening

TABLE 2—Maine Malpractice Study, Second Phase*

Responses to Episodes	Respondent (N = 42)	Other (N = 16)	Total (N = 58)
Respondent discussed event with			
Household member	40	15	55
Other friends and relatives	31	12	43
Other health care professional	23	10	33
Health care professional involved	13	5	18
Attorney	3	4	7
Social worker, counselor or paid advice giver	4	2	6
Clergy	3	1	4
Other (spoke or wrote)	1	3	4
Respondent first discussed event with			
Spouse	12	4	16
Other friends or relatives	12	3	15
Parent	5	0	5
Child	3	1	4
Health care provider involved	4	0	4
Other provider	5	4	9
Other	1	1	2
Respondent has not discussed event with a lawyer, because**			
Event was not serious	10	8	18
Event was not serious enough to sue	7	0	7
Harm was unintentional	3	1	4
Not the "suing type"	12	2	14
Do not like lawyers	4	0	4
Too costly	4	1	5
Did not think of it	9	0	9
Too hard to win suits	8	2	10
Other	8	2	10

*The data are reported as numbers, rather than percentages, because the sample size is relatively small.

**Asked only of those who reported that they had not consulted lawyers.

phase was in the field between October and December 1986; the second phase, between February and May 1987. Tests of the statistical significance of differences between respondents who did and did not consult attorneys about their experiences were based upon chi-square.

Results

Reported Episodes of Iatrogenic Illness or Injury

About one-fourth (26 per cent) of respondents asserted that either they or a close relative had experienced at least one episode of harm as a result of medical treatment or treatment in a health care facility; 12 per cent indicated that both they and at least one relative experienced harm.

Table 1 shows that about equal proportions of reported episodes took place in hospitals and outpatient settings, with a small fraction in ambulances, first aid stations, or nursing homes. Most episodes involved physicians, but dentists account for a substantial proportion of episodes in which respondents were personally involved. Almost half of episodes involved people whom respondents considered to be their "regular" providers.

Respondents were asked to assess the gravity of their own or their relatives' experiences on a scale ranging from 0 (not at all serious) to 100 (life threatening). The median score for both personal experiences and relatives' experiences was about 50, but the range of scores was narrower for events involving relatives: a higher proportion (about 40 per cent) of these events had scores between 75 and 100.

Table 1 confirms that, in general, the events which involved respondents themselves tended to be less serious and to have fewer and less serious enduring consequences than those which involved relatives. Indeed, many appear to describe non-events. These include original diagnoses or

prognoses which proved to be wrong and which, by the respondents' own assessments, had no ill effects of any sort. Others refer to painful or frightening episodes which had few, if any, enduring consequences. For example, root canals were performed on the wrong teeth; or respondents reported experiencing allergic reactions to medications about which they say doctors and nurses had been previously informed. A significant minority describe serious episodes, with significant residua, including permanently impaired physical or emotional function and death.

Reported Responses to Episodes

Table 2 shows that most respondents reported that they discussed their own and relatives' experiences of iatrogenic illness or injury with friends and relatives, especially those in their households. Relatively few discussed their experiences with attorneys, not many more than reported discussions with social workers, counselors, or clergy. Although the questionnaire did not ask specifically about lawsuits, it appears from the content of the interviews that only one of those persons who contacted a lawyer initiated a suit.

No respondents reported contacts with medical societies, licensing agencies, or the Attorney General's office. On the other hand, relatively large proportions discussed their experiences with health care professionals, either those involved in the original episodes or others. In fact, many of these contacts appear to have involved "second opinions" which reportedly confirmed respondents' suspicions that they or their relatives had experienced harm.

There was also a series of questions about the order of priority of persons with whom respondents discussed their experiences. As Table 2 indicates, family and friends were the most common response as well as the first priority response. First-order discussions with health professionals

were also common, mainly health professionals other than those directly involved. Discussions with attorneys, on the other hand, were not only relatively rare, but low-order responses: no higher than fourth-order in reference to events' involving respondents and second-order for events' involving dependents. Many of the reported events were still in process at the time of the interviews. The median episode happened three to four years ago, so it is possible that more respondents will contact lawyers. However, in response to a question about plans to seek legal advice (asked only of those who had not yet done so) only one respondent reported such plans. Table 2 helps to explain why so few respondents contacted lawyers. Responses reflect a combination of respondents' assessments that events were not serious (or not sufficiently serious, in respondents' judgments, to merit lawsuits), concerns about the costs of litigation, the low likelihood of favorable outcomes, and antipathy to lawyers.

Cross-tabulations show no significant associations between respondent ages, incomes, genders, education, or employment status and the likelihood of consulting lawyers about either respondents' own or relatives' problems of iatrogenic illness or injury. Likewise, there was no statistically significant relationship between respondents' assessment of the severity of the illness or injury (on a scale of 0-100) and decisions to speak with lawyers. Some who experienced problems which they considered relatively minor (scale score 0-24) consulted lawyers; others who experienced problems which they considered severe, even life-threatening (scale score 75-100) did not.

Discussion

It is easy to dismiss or belittle the data. For example, one might argue that Maine's physicians (or patients) may not be typical at least in reference to the quality of medical care. Or it could be argued that lay people have unrealistically high expectations of their physicians, or that they do not or cannot understand the complexity of health and illness and therefore cannot credibly attribute blame for unsatisfactory outcomes of medical care.

Such criticisms may have considerable merit. However, even if they do, these data, combined with those from other sources^{1,5-6,9-10} should not be dismissed too quickly. They may contain deeper truths about the nature and causes of our medical malpractice crisis (or crises) and the ways in which they may be alleviated or resolved.

At one level, the data suggest that some putative solutions of the malpractice problem—for example, the substitution of a no-fault alternative to litigation—may dramatically increase rather than reduce costs. Litigation, which entails time, financial costs, and, most significantly, contact with attorneys, appears to discourage large numbers of people from seeking redress. If this barrier was removed, there might be a vast reservoir of potential claims against a no-fault pool.

At another level, the data tell a great deal about the natural history of lawsuits and, perhaps, about ways in which physicians and other health care professionals might intervene. Stereotypes notwithstanding, these data suggest that very few people who believe that they experience iatrogenic illness or injury discuss these experiences with attorneys; those who do so, appear to follow long and circuitous routes. Many more discuss their problems with health professionals, including those professionals whom they hold responsible for the problems, and at a much earlier stage.

Would it not be possible for these physicians, nurses, and dentists to respond more directly, candidly, and sensitively to their patients' concerns and queries? The experiences of the Maine respondents suggest that they think so, as does Jeffrey Harris, who wrote recently that "[p]erhaps as much as one third of malpractice claims can be traced to communication errors."⁴ Improved communication about physicians' own and their colleagues' practices, in the form of more candid admissions of uncertainty and more careful explanations of risks, might reduce anger and frustration and might even mean fewer lawsuits.

Finally, and most significantly, the data suggest that we may have inaccurately or incompletely characterized the malpractice crisis. The crisis may be the high level of iatrogenic illness or injury for which people receive no compensation. Or, it may be a crisis of confidence and credibility of physicians and health care institutions. Or the crisis may be that personality or attitudinal barriers prevent the "right" cases (those which involve the most egregious errors or the most serious and enduring consequences) from coming to trial, while those which have less serious consequences do. Whatever the crisis or crises of medical malpractice and malpractice insurance, there is no evidence from these data that it is a crisis of consumers' or lawyers' avarice, vindictiveness, or greed.

Intriguing though they are, the data have uncertain reliability and validity, because they are cross-sectional and retrospective, they rely exclusively upon respondents' accounts, and they are derived from only one state. Before drawing firm conclusions about a crisis or crises of medical malpractice, there is a considerable research agenda, including:

- Studies in numbers of jurisdictions of the prevalence of people's beliefs that they or close relatives have suffered iatrogenic illness or injury.

- Validation studies comparing lay persons' and expert panels' assessments of iatrogenic illness and injury and their respective attributions of cause and liability. Ideally, the expert panels should include not only physicians, who can determine whether harm has taken place and whether it is attributable to professional errors, but also attorneys, who can assess the likelihood of successful legal outcomes. There is a clear need for a more sophisticated understanding of attorneys' roles in the natural history of medical malpractice suits.

- Longitudinal studies of the processes by which people who believe that they or their relatives have experienced illness or injury decide to seek remedies. These data suggest that there is widespread misunderstanding of both attorneys' and physicians' roles.

Summary

In a recent article, Miller has reminded us that medical malpractice litigation is not simply an economic problem which inhibits medical practice and increases health care costs. She argues that it has three broader "societal objectives": reparation, emotional vindication, and deterrence.⁵

Viewed in the broader perspective of social values, the Maine data suggest that our current approach to medical malpractice does not perform well. Significant numbers of respondents believe that they have been neither vindicated nor compensated for their own or their relatives' illness, injury, or death; and that they have not had the opportunity to protect others from harm. As Miller suggests in her review

of British alternatives to medical malpractice litigation, there may be more efficient and effective means of reparation.⁵ There may also be more direct and less costly means to deter incompetent practitioners and vindicate those who are harmed.

We shall never discover these alternatives if we view the medical malpractice "crisis" as a simple or straightforward problem of costs of premiums, costs of settlements, and costs of judgments; numerators. Medical malpractice litigation is the expression of deep and highly complicated problems, which cannot be solved or even significantly alleviated by false solutions motivated only by concerns of costs and cost containment. They can be addressed only by careful, thoughtful, and comprehensive analysis.

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The Death Master File

An article published in this Journal several years ago¹ dealing with the usefulness of the Social Security Administrations's (SSA) Master Beneficiary Record for identifying deaths mentioned an SSA file then in preparation—the Death Master File (DMF)—which represented an improvement in both coverage and content. This communication provides more information about the DMF.

As the article indicated, deaths before 1977 which triggered the payment of a lump-sum amount of \$255, which are not available on the Master Beneficiary Record, are included in the DMF. Information is also being entered into the DMF from the files of the Supplemental Security Income and Black Lung programs. On a negative note, the passage of the Omnibus Budget Reconciliation Act of 1981, which eliminated the payment of the lump-sum benefit except to surviving spouses and beneficiary children, causes SSA to miss many deaths which otherwise would have been routinely recorded.

The content of the DMF record includes: Social Security number, first and last name of the decedent, dates of birth and death, State and zip code of last residence, and zip code to which the lump-sum payment (if any) was mailed. The State and zip code, which is important for determining where a request for a death certificate should be addressed, is missing in about 18 per cent of the records.

Strengths of the DMF are its accessibility and currency. A major weakness is that coverage is good only for deaths of older persons. At the present time there are approximately 40 users who purchase the file and its updates; most users are insurance companies and pension fund administrators.

A copy of the DMF may be obtained through a reimbursable service agreement. The cost of the file at 6250 bpi is \$1,538. Updates, at \$790 each, are available on a quarterly, semiannual, or annual basis. Address correspondence to Ted Kalandros, Director, Office of Pre-Claims Requirements, OSR, Social Security Administration, Room 3-A-19 Operations, 6401 Security Blvd., Baltimore, MD 21235.

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