ORIGINAL ARTICLE

What Patient Attributes Are Associated With Thoughts of Suing a Physician?

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ABSTRACT. Fishbain DA, Bruns D, Disorbio JM, Lewis JE. What patient attributes are associated with thoughts of suing a physician? Arch Phys Med Rehabil 2007;88:589-96.

Objective: To address a neglected research area: the attributes of rehabilitation patients associated with "thoughts of suing a physician" (S-MD).

Design: The S-MD statement "I am thinking about suing one of my doctors" was administered to 2264 people, along with the Battery for Health Improvement (BHI 2). Items predictive of S-MD were identified.

Setting: Acute physical therapy, work hardening programs, chronic pain programs, physician offices, and vocational rehabilitation programs.

Participants: Participants included 777 rehabilitation patients and 1487 nonpatient community-dwellers.

Interventions: Not applicable.

Main Outcome Measures: We used a multivariate analysis of variance to determine which of the 18 BHI 2 scales predicted the S-MD statement. Items from the scales found to be predictive, plus other variables, were then used in a chi-square analysis that compared people who wished to sue with those who did not. We then used a stepwise regression analysis with significant items from the prior analyses to build a model for predicting a potential S-MD patient.

Results: The highest percentage (11.5%) of patients affirming the S-MD statement were those involved in workers' compensation and personal injury litigation, compared with only 1.9% of community-living subjects. Stepwise regression of BHI 2 variables produced a 13-variable model explaining 38.04% of the variance. A logistic regression of demographic variables (eg, education, ethnicity, litigiousness) explained 20% of the variance.

Conclusions: Anger ($P<.001$), mistrust ($P<.001$), a focus on compensation ($P<.001$), addiction ($P<.001$), severe childhood punishments ($P<.001$), having attended college ($P<.001$), and other patient variables were associated with thoughts of suing a physician.

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BECAUSE OF ITS RISING costs in both human and financial terms, medical malpractice has become a major concern in the health care field. It is estimated that in addition to more than $5 billion dollars in annual malpractice premiums and billions of dollars in court costs,[1] "defensive medicine" procedures performed to protect against increasing litigation add as much as $97.5 billion annually to the cost of medical services.[2] Thus, research into the causes of malpractice litigation is indicated.

In analyzing the reason for a malpractice suit, it is helpful to separate its causes into 4 general areas[3]: specific attributes of the injury (negligence vs none); provider (physician) attributes; the physician-patient relationship; and patient attributes. Research into specific attributes of the injury has indicated that negligence may not be a major factor in whether a lawsuit is initiated.

Actual negligence appears to be poorly correlated with the incidence of lawsuits.[4,5] For example, clinical analysis of 100 medicolegal cases found negligence to be an issue in slightly more than half (56%).[6] In those lawsuits where no negligence was found (44%), reasons for filing the lawsuit were: inability to come to terms with the disease or its end results (21%); lack of understanding of the disease process (16%); and unreasonable medicolegal action (7%).[6] Such data indicate that patients are sometimes dissatisfied with their care for reasons other than that of alleged negligence.

Some evidence suggests that another reason for initiating a malpractice suit pertains to patient dissatisfaction with the physician-patient relationship.[3,7-9] Here, information from the risk management services division of St. Paul Fire and Marine Insurance Company indicated that of 100 hospitalized patients who could legitimately bring a malpractice action against a medical care provider for failure to act or for acting inappropriately, less than 10% did.[10] Similar studies found litigation rates of 16%[11] and 13%.[5] This finding may be explained by the strength of the patient-physician relationship[5,10] and physician-patient communication.[9,12]

Research into provider (physician) attributes associated with malpractice suits has also been limited. It appears that the number of lawsuits incurred by a medical practitioner does not relate to the quality of medicine practiced.[13] One study,[14] however, found that a surgeon's tone of voice may be related to his/her malpractice history. Similarly, another study[9] found that the amount of time spent with a patient, good communication skills, and use of humor were also associated with a practitioner not having a malpractice claim history.

There has been a paucity of research into patient attributes associated with the initiation of a malpractice suit. At present, it appears that women[15] and people who are more affluent and have a higher education level[16] are more likely to initiate malpractice suits. Nothing is known about the personalities of

the patients initiating lawsuits[17] except that on the basis of clinical observation, some studies have concluded that patient anger was a factor.[3,18,19] Thus, at present, we have little knowledge about patient attributes that are associated with the initiation of a malpractice suit. This is significant because others[20] have postulated that because of these patient attributes, the initiation of some lawsuits may be secondary to reasons that the physician can "neither anticipate nor control." These patients may have a "low threshold" for filing a lawsuit.[21] If such patients can be identified, they might be treated with greater care.[21]

This study addressed medical malpractice by investigating a group of patients who reported thoughts of suing a physician. We attempted to discern some patient attributes associated with these thoughts. To our knowledge, this is the first such study to be reported.

METHODS

The statement "I am thinking about suing one of my doctors" (S-MD), which was the focus of this study, was 1 of 600 questions and/or statements in the Battery for Health Improvement research version (BHI-R), and the Battery for Health Improvement 2 (BHI 2),[22] which is a shorter version of the BHI-R. We administered the BHI-R to subjects in this study and scored the BHI 2 scales from the BHI-R.

The BHI 2 is a standardized test intended for use in the psychologic assessment of medical patients and is based on a biopsychosocial theory[23] and has been integrated into clinical protocols.[24] To establish its validity and reliability, the test was examined under a formal process that included development of theory-based items, review by a panel of expert judges, confirmatory factor analysis, comparison of test scales to criterion variables, and analyses of test-retest and internal reliability.[22] The test has also received favorable third-party reviews.[25,26] A weakness of this recently published instrument is that it has not yet been used in any longitudinal studies.

The BHI 2 has 18 scales: 2 validity scales (self disclosure, defensiveness); 4 physical symptoms scales (somatic complaints, pain complaints, functional complaints, muscular bracing); 3 affective scales (depression, anxiety, hostility); 5 character scales (borderline, symptom dependency, chronic maladjustment, substance abuse, perseverance); and 4 psychosocial scales (family dysfunction, survivor of violence, doctor dissatisfaction, job dissatisfaction). We did not include the job dissatisfaction scale in the analyses in this study because many of the subjects were not in the workforce.[22]

We administered the BHI-R to 777 rehabilitation patients who were being treated for pain or a physical injury; they were from 30 states in all 4 geographic regions of the United States. They were recruited by posters or flyers given to them by their health care providers in a variety of settings: acute physical therapy, work hardening programs, chronic pain programs, physician offices, and vocational rehabilitation settings. The patients were also drawn from various payer systems (Medicare, private insurance, workers' compensation, auto insurance), and their diagnoses included a range of orthopedic injuries, headache and head injuries, fibromyalgia, and chronic regional pain syndrome. Any patient who wished to participate was accepted into the study. The only exclusion criteria were being less than 18 or more than 65 years old and being unable to read at the 6th grade level. Of the 777 patients, 527 were selected to approximate U.S. Census demographics for sex, age, ethnicity, and level of education.[22]

Another 1487 community-living subjects from 16 states in all 4 geographic areas of the United States were also administered the BHI-R in order to develop the nonpatient BHI-R control group. These subjects, recruited through newspaper advertisements and posters, were recruited to match the demographics of race, education, age, and sex. No subject was excluded on the basis of past or present medical or psychologic diagnoses. A subset of the community sample (n=725), representing the community norm group, was selected by matching the subjects to U.S. Census demographics for sex, age, ethnicity, and level of education. All community-dwelling subjects were asked if they had any serious medical conditions and those who reported having none constituted the "healthy" subset of the community sample.

The BHI-R was administered anonymously to all participants; they signed an informed consent stating that their information would be used for research purposes only and that no results or feedback would be given. Patients were informed that the information would not influence the course of their clinical care. The S-MD statement "I am thinking about suing one of my doctors" was scored on a Likert-scale format, with the responses being "strongly disagree," "disagree," "agree," and "strongly agree" being assigned scores respectively of 1 through 4. This made it possible to assess not only the presence of the thought of suing a physician, but also the strength of the associated feelings.

Data Analysis

Data were analyzed using the SPSS software.[a] Frequency and descriptive statistics were calculated to check all relevant characteristics of the data. Although the total number of patient and community subjects was 2264, the large number of variables (600, not including demographic data and other information) precluded the use of many statistical approaches. We addressed this difficulty by using a statistical means to identify promising groups of variables and then focusing on them. Additionally, there were different types of data, ranging from categorical data such as sex to continuous data such as standardized psychologic test scores. These differing types of data required different statistical approaches.

Before we conducted additional analyses, we randomly split the combined patient and community-dwelling subjects into a developmental phase sample (1811 subjects) and a cross-validation sample (453 subjects). The latter sample was used to assess validity and reliability of the S-MD regression equations. None of the cross-validation sample was used during the developmental phase.

In the preliminary step, we separated by patient and community-dwelling subsets the percentage of respondents who reported that they were thinking about suing one of their physicians (table 1). Next, we did a multivariate analysis of variance (MANOVA) to examine the relationship between all the 18 scales of the BHI 2 and the S-MD item. For this analysis, the S-MD variable was transformed to a dichotomy. Subjects were classified as having thoughts of suing their physician if they agreed or strongly agreed with the S-MD statement. The differences between the S-MD and non-S-MD groups on 14 of the 18 scales of the BHI 2 were highly significant (table 2).

Next, we used those BHI 2 scales from the MANOVA that were most closely associated with the S-MD item ($P<.01$) as independent variables in a stepwise regression equation (table 3) using the development group. Note that our purpose in this study was to make it possible to predict who will sue a physician, so in that sense, this is the primary dependent variable and all other variables are the independent ones. In the MANOVA, though, this distinction is reversed. This is because of an artifact of the particular statistical analysis and is not really indicative of the distinction between independent and dependent status because both types of analyses are attempts to