# Aggressive Patient Behaviors Related to Medical Care: A Cross-Sectional Self-Report Survey

Randy A. Sansone, MD; Shahzad Farukhi, MD; and Michael W. Wiederman, PhD

Objective: To examine the selfreported prevalence of aggressive and/ or disruptive behaviors by patients as related to their medical care.

Method: In a cross-sectional, consecutive sample of internal medicine outpatients (N = 397), respondents reported on 17 aggressive and/or disruptive behaviors related to their medical care. Data were collected during November 2010.

Results: In this sample, 48.9% of respondents endorsed at least 1 of the proposed aggressive behaviors; 9.1% endorsed 1 behavior, 20.4% endorsed 2 behaviors, 10.3% endorsed 3 behaviors, 5.5% endorsed 4 behaviors, and 3.5% endorsed 5 or more behaviors (the maximum being 11). The most commonly reported behaviors were talking negatively about medical personnel to family (41.3%) and friends (39.5%), threatening to hit or strike medical personnel (7.1%), and refusing to pay a bill because of dissatisfaction or anger (6.8%). No participant reported being escorted off premises by security or being charged with assault in a medical setting. For those who reported 1 or more aggressive behaviors, there were no gender differences, but younger and better educated patients were more likely to report such behaviors.

Conclusions: While the majority of patients do not evidence aggressive behaviors related to their medical care, a small minority do report such behavior, some of which can be disruptive as well as dangerous.

Prim Care Companion CNS Disord 2011;13(4):doi:10.4088/PCC.11m01160 © Copyright 2011 Physicians Postgraduate Press, Inc.

Submitted: February 8, 2011; accepted April 1, 2011. Published online: August 11, 2011 (doi:10.4088/PCC.11m01160). Corresponding author: Randy A. Sansone, MD, Sycamore Primary Care Center, 2115 Leiter Rd, Miamisburg, Ohio (Randy.sansone@khnetwork.org).

n the context of the patient-clinician interaction, there L is always the potential for various forms of aggressive behavior by patients. Among physicians in training, 50% of trainees in 7 Canadian residencies reported psychological abuse by patients. In a New Zealand study of residents in various programs, 67% reported verbal threats by patients; 54%, physical intimidation; 41%, the observation of damage to the treatment facility; and 39%, physical assaults.<sup>2</sup> In addition, the

results from a survey of psychiatry training directors revealed a mean of 1.26 physical attacks on residents per program during the 2-year period specified in the study.3 Other trainees, such as student nurses, also commonly report aggressive experiences with patients.<sup>4</sup>

Studies of practicing physicians have revealed potentially alarming prevalence rates of patient aggression toward them as well. For example, 71% of a sample of practicing female Canadian physicians reported verbal abuse by patients, and 33% reported physical assault in the preceding 12 months.<sup>5</sup> In 2 surveys of psychiatrists in the United States, 35% to 42% reported previous serious assaults by patients.<sup>6,7</sup>

As for primary care settings, in particular, a US study of primary care physicians revealed that 61% had been bullied by a patient to write a prescription; 33%, cursed at; and 10%, verbally threatened.8 In this same physician sample, 41% reported having had a patient removed from their office.8 Cook and colleagues9 surveyed Canadian general internists and found that three-quarters had experienced emotional abuse by patients, with 38% of female and 26% of male respondents reporting physical assaults. In another study, 58% of primary care physicians in Spain reported aggression by patients, with 85% acknowledging verbal abuse and 12.5%, physical abuse. 10

It seems reasonable to assume that, in primary care settings, nurses and office staff are at least as likely as physicians to be at risk for patient aggression. In addition, a number of investigators believe that violence in the primary care setting is on the increase.<sup>11</sup> However, all of the studies we located were from the perspective of medical care providers; we were unable to find any empirical endeavors that directly surveyed patients about their personal histories of abusive behaviors in the medical setting. Such information from patients provides not only a unique perspective to this area of study but also a broader one. The purpose of the current study was to examine the self-reported prevalence of particular aggressive and disruptive patient behaviors among a sample of internal medicine outpatients.

## **METHOD**

### **Participants**

Participants were men and women, aged 18 years or older, who were patients at an internal medicine clinic being seen for nonemergent medical care. The

#### **CLINICAL POINTS**

- A number of studies have examined aggressive behaviors by patients through data provided by clinicians, but no previous study has examined such behaviors as reported by patients.
- In this study, a sizeable percentage of participants (48.9%) reported at least 1 aggressive behavior related to the medical setting.
- The most commonly reported aggressive behavior reported by patients was talking negatively about medical personnel to family (41.3%) and friends (39.5%), followed by threatening to hit or strike medical personnel (7.1%) and refusing to pay a bill because of dissatisfaction or anger (6.8%).

outpatient clinic is staffed by both faculty and residents in the Department of Internal Medicine and is located in a midsized, midwestern US city. The majority of patients recruited for this study were seen by resident physicians, who are the preponderance of providers at this site. We excluded some individuals with compromising medical (eg, pain), intellectual (eg, mental retardation), cognitive (eg, dementia), or psychiatric symptoms (eg, psychotic) that were severe enough to preclude the candidate's ability to successfully complete a survey (only a very small portion of individuals with these conditions were excluded; n=10).

#### **Procedure**

During clinic hours, one of the authors (S.F.) positioned himself in the lobby of the outpatient clinic, approached consecutive incoming patients, and informally assessed exclusion criteria. With potential candidates, the recruiter reviewed the focus of the project and invited each to participate. Each participant was then asked to complete a 4-page survey, which took about 10 minutes. Participants were asked to place completed surveys into sealed envelopes and then into a collection box in the lobby.

The survey consisted of 2 core sections. The first section asked participants about their demographic information (eg, sex, age, marital status, racial/ethnic origin, and education level). The second section of the survey asked participants about 17 aggressive behaviors related to medical visits, each with a yes/ no response option. This author-developed behavioral listing was preceded by the query, "In dealing with medical personnel (office staff, assistants, nurses, doctors), either in an inpatient or outpatient medical (nonpsychiatric) setting, have you ever...?"

This project was approved by the institutional review boards of the community hospital and the local university. Completion of the survey was assumed to be informed consent, which was clarified on the cover page of the booklet. Data were collected during November 2010.

#### **RESULTS**

At the outset, 441 individuals were approached and 401 agreed to participate, for a participation rate of 90.9%. Of these, 397 completed the relevant study measures. Of these 397 respondents included in our analyses, 64.5% were female and 34.5% were male, ranging in age from 18 to 92 years (mean = 53.49, SD = 16.23). Most participants were white (89.4%); however, 6.5% of participants were black, 1.5% Asian, 1.5% Hispanic, 0.5% Native American, and 0.3% other, and 0.3% had missing data. With regard to education attainment, all but 7.6% had at least graduated high school, whereas 26.3% had earned at least a bachelor's degree.

The rates of endorsement for each specific behavior are listed in Table 1 for the entire sample. Nearly half (48.9%) of the respondents endorsed at least 1 of the 17 listed aggressive behaviors. Of the total sample, 9.1% endorsed 1 behavior, 20.4% endorsed 2 behaviors, 10.3% endorsed 3 behaviors, 5.5% endorsed 4 behaviors, and only 3.5% endorsed 5 or more behaviors (the maximum being 11).

The incidence of reporting at least 1 form of aggressive behavior did not differ between men (47.5%) and women (49.6%;  $\chi^2 = 0.75$ , P < .40). Similarly, among those who reported at least 1 aggressive behavior, the mean number reported by men (mean = 2.60, SD = 1.32) compared to women (mean = 2.54, SD = 1.52;  $F_{1.192}$  = 0.06, P < .85) did not differ. The total number of different forms of aggressive behavior endorsed was statistically significantly (though weakly) correlated with respondent age for the entire sample (r = -0.19, P < .001) and for women (r = -0.21, P < .001), but not for men (r = -0.15, P < .10). With regard to education, we compared those with a high school diploma or less (n = 154) to those with at least some college (n = 252). A 1-way analysis of variance (ANOVA) revealed that those with less education reported fewer different forms of aggressive behavior (mean = 0.86, SD = 1.33) compared to those with more education (mean = 1.51, SD = 1.76;  $F_{1.394}$  = 15.51, P < .001).

Table 1. Frequency of Endorsement for Each of 17 Listed Aggressive and Disruptive Patient Behaviors Related to Medical Care (N=397)<sup>a</sup>

Behavior	Frequency of Endorsement
(1) Yelled or screamed at medical personnel?	18 (4.5)
(2) Cussed at medical personnel?	8 (2.0)
(3) Verbally threatened medical personnel?	19 (4.8)
(4) Stormed out of an appointment with medical personnel?	16 (4.0)
(5) Threatened to hit or strike medical personnel?	28 (7.1)
(6) Threatened to contact the supervisors of medical personnel?	19 (4.8)
(7) Verbally threatened medical personnel with a lawsuit?	7 (1.8)
(8) Thrown medical equipment around the room?	2 (0.5)
(9) Refused to talk to medical personnel?	15 (3.8)
(10) Refused to pay your bill because of dissatisfaction or anger?	27 (6.8)
(11) Talked negatively about medical personnel to your family?	164 (41.3)
(12) Talked negatively about medical personnel to your friends?	157 (39.5)
(13) Lied about your medications or treatment to medical personnel?	10 (2.5)
(14) Been discontinued from a medical practice because of problem behavior?	6 (1.5)
(15) Been charged with disorderly conduct because of problem behavior in a medical office?	1 (0.3)
(16) Been charged with assault due to problem behavior in a medical office?	0 (0.0)
(17) Been escorted by security off the premises of a medical office?	0 (0.0)

We then conducted a follow-up analysis in which we examined whether the relationship between education and number of different forms of aggressive behavior endorsed varied by sex; however, there was no statistically significant interaction between respondent education and sex ( $F_{1,392} = 1.79$ , P < .20).

#### **DISCUSSION**

In this study, nearly half of the participants reported a history of aggressive behaviors related to medical care, with the most frequent being talking negatively about medical personnel to family (41.3%) and friends (39.5%), followed by threatening to hit or strike medical personnel (7.1%) and refusing to pay a bill (6.8%). While the former 2 behaviors are somewhat indirect, the latter 2 behaviors are clearly more confrontational, particularly the item dealing with physical threat. We did not explore whether respondents had actually ever assaulted medical personnel, but previous data indicate that 39% of resident physicians reported such behavior from patients.<sup>3</sup>

Interestingly, no respondent indicated that he/she had been escorted off the premises of a medical site or charged with assault. Yet, in a previous study,8 we found that 41% of clinician respondents had to have a patient removed from the premises. One difference may be that the current study was undertaken in a large center on the campus of a local hospital that has security personnel. The earlier study entailed small private practice sites, none of which have local security. It may be that the potential presence of security in a larger site deterred assaultive behavior from patients.

With regard to methodology, surveying clinicians versus patients could result in some unforeseen differences. Explicitly, because each physician is typically responsible for a large number of patients,

numbers alone might heighten the risk of exposure by physicians to patient disruptive behaviors. In turn, each disruptive patient most likely has exposure to only a small pool of physicians. Given the sample size of patients in this study, perhaps these few challenging patients were literally hidden in the numbers.

In looking at the number of reported behaviors by participant, 5.5% reported 4 or more behaviors. This finding indicates that a small portion of the larger patient population has engaged in multiple aggressive behaviors—a likely reflection of these individuals' overall tendency toward aggression. While this percentage appears small, it represents a significant minority of individuals. Note that we did not ask how many times the respondent had engaged in a particular behavior, but only if they had ever engaged in a behavior.

The potential limitations of this study include the selfreport nature of the data (eg, were respondents actually being fully candid?) and the use of a nonstandardized scale for the assessment of aggressive behaviors by patients related to medical care (we could not locate a relevant scale). In addition, some disruptive patients may have already been terminated from this practice site, resulting in lower reported rates of such behavior. Finally, some patients who may have had histories of disruptive behaviors (eg, those with psychiatric disorders, dementia, mental retardation) may have been excluded at the outset of the project. However, unlike any previous study, this is the first to examine patient self-report data on aggressive behaviors related to medical care. While a slight majority of patients report no such behaviors, a small and significant minority report multiple aggressive behaviors. On the basis of reluctance to disclose, embarrassment, denial, or forgetfulness, findings are likely to represent the proverbial "tip of the iceberg."

Possible areas for future research might include examining patient versus physician ratings of patient presentations in terms of aggression, ratings between patients and physicians of ranges of a given disruptive behavior in the medical setting to compare perceived thresholds for aberrant behavior, and surveys of spouses regarding their perceptions of partner aggression in medical settings.

Author affiliations: Department of Internal Medicine, Wright State University School of Medicine, Dayton, Ohio (Drs Sansone and Farukhi); Department of Psychiatry Education, Kettering Medical Center, Kettering, Ohio (Dr Sansone); and Department of Human Relations, Columbia College, Columbia, South Carolina (Dr Wiederman). Potential conflicts of interest: None reported.

Funding/support: None reported.

#### REFERENCES

 Cook DJ, Liutkus JF, Risdon CL, et al. Residents' experiences of abuse, discrimination and sexual harassment during residency training. McMaster University Residency

- Training Programs. CMAJ. 1996;154(11):1657-1665.
- Coverdale J, Gale C, Weeks S, et al. A survey of threats and violent acts by patients against training physicians. Med Educ. 2001;35(2):154–159.
- Sansone RA, Taylor SB, Gaither GA. Patient assaults on psychiatry residents: results of a national survey. *Traumatology*. 2002;8(4):211–214.
- 4. Hinchberger PA. Violence against female student nurses in the workplace. *Nurs Forum.* 2009;44(1):37–46.
- 5. Stewart DE, Ahmad F, Cheung AM, et al. Women physicians and stress. *J Womens Health Gend Based Med.* 2000;9(2):185–190.
- Dubin WR, Wilson SJ, Mercer C. Assaults against psychiatrists in outpatient settings. J Clin Psychiatry. 1988;49(9):338–345.
- 7. Madden DJ, Lion JR, Penna MW. Assaults on psychiatrists by patients. *Am J Psychiatry*. 1976;133(4):422–425.
- 8. Sansone RA, Sansone LA, Wiederman MW. Patient bullying: a survey of physicians in primary care. *Prim Care Companion J Clin Psychiatry*. 2007;9(1):56–58.
- Cook DJ, Griffith LÉ, Cohen M, et al. Discrimination and abuse experienced by general internists in Canada. *J Gen Intern Med.* 1995;10(10):565–572.
- Moreno Jiménez MA, Vico Ramirez F, Zerolo Andrey FJ, et al. Analysis of patient violence in primary care. *Aten Primaria*. 2005;36(3):152–158 [Article in Spanish].
- 11. Naish J, Carter YH, Gray RW, et al. Brief encounters of aggression and violence in primary care: a team approach to coping strategies. *Fam Pract*. 2002;19(5):504–510.