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Sexual Violation of Patients by Physicians: A Mixed-Methods, Exploratory Analysis of 101 Cases

Sexual Abuse

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Abstract

A mixed-method, exploratory design was used to examine 101 cases of sexual violations in medicine. The study involved content analysis of cases to characterize the physicians, patient-victims, the practice setting, kinds of sexual violations, and consequences to the perpetrator. In each case, a criminal law framework was used to examine how motives, means, and opportunity combined to generate sexual misconduct. Finally, cross-case analysis was performed to identify clusters of causal factors that explain specific kinds of sexual misconduct. Most cases involved a combination of five factors: male physicians (100%), older than the age of 39 (92%), who were not board certified (70%), practicing in nonacademic settings (94%) where they always examined patients alone (85%). Only three factors (suspected antisocial personality, physician board certification, and vulnerable patients) differed significantly across the different kinds of sexual abuse: personality disorders were suspected most frequently in cases of rape, physicians were more frequently board certified in cases of consensual sex with patients, and patients were more commonly vulnerable in cases of child molestation. Drawing on study findings and past research, we offer a series of recommendations to medical schools, medical boards, chaperones, patients, and the national practitioners database.

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Introduction

The American Medical Association's (AMA) Principles of Medical Ethics commits its members to "providing competent medical care, with compassion and respect for human dignity and rights," reporting "physicians deficient in character," and regarding "responsibility to the patient as paramount" (AMA, 2014-2015). Although data indicate that most physicians practice medicine with integrity (Federation of State Medical Boards [FSMB], 2014), sexual misconduct is one of the common reasons for disciplinary action by medical boards (Arora, Douglas, & Dorr Goold, 2014; Grant & Alfred, 2007).

The FSMB defines "sexual violations" as "engaging in any conduct with a patient that is sexual or may be reasonably interpreted as sexual . . ." Data indicate that sexual violations cause significant harms to patients. Some data suggest that patients who enter into "consensual" sexual relationships with their physicians are typically not mentally healthy, and these encounters occur most often where considerable disparities in power, status, and emotional vulnerability exist between physician and patient, rendering consent inapplicable (Carr, 2003). However, sexual misconduct includes much more than sexual intercourse with patients; it includes masturbating in the presence of patients, genital contact, and rape or sodomy (FSMB, 2010). Psychological sequelae of sexual misconduct for patients include depression, anger, drug and alcohol abuse, trust issues, and posttraumatic stress symptoms (Carr, 2003). These and other sequelae are similar to those observed in the general population of survivors of sexual violence (Centers for Disease Control and Prevention, 2016).

It is not possible to provide an accurate estimation of the frequency of sexual violations in medicine. Most patient-victims do not report sexual violations (Teegardin, Robbins, Ernsthausen, & Hart, 2016); one study estimated that fewer than 1 in 10 victims choose to report it (Tillinghast & Cournos, 2000). This is significantly lower than the overall rate of 36% of cases of rape or sexual assault in the United States reported to police by female victims (U.S. Department of Justice, 2016). Reasons for failing to report may include shame, fear of not being believed, not being aware of the abuse (e.g., if the patient was sedated), complicity in the violation (e.g., trading sex for drugs), and being confused as to whether abuse occurred (e.g., not realizing that an ungloved vaginal exam was unnecessary) (Carr, 2003; Ernsthausen, 2016). Hospitals or physician employers sometimes ignore reports of abuse or push for a resignation rather than reporting physicians to medical boards or law enforcement (Ernsthausen, 2016; Norder, Ernsthausen, & Robbins, 2016). When incidents of sexual abuse are reported to the National Practitioner Data Bank (NPDB), which tracks complaints against physicians, the most commonly used category of complaint is "Not applicable" (Grant & Alfred, 2007), suggesting that even when sexual violations are reported, they may not be defined as such. Moreover, NPDB policy prohibits the public—including researchers

and reporters—from accessing identifiable records (U.S. Department of Health and Human Services, 2015), making it impossible to pursue further details on vaguely labeled cases. In reviewing board orders, court records, and news reports, *Atlanta Journal-Constitution (AJC)* investigative reporters “found about 70 percent more physicians were accused of sexual misconduct than the 466 classified as such in the public version of the data bank from 2010 to 2014” (Ernsthausen, 2016).

The best available prevalence statistics derive from imperfect sources: self-reports or cases actually reported to authorities, which, as noted above, is likely fewer than 10% of all cases. The percentage of physicians self-reporting sexual contact with patients ranges from 3% to 12% of male physicians and 1% to 4% of female physicians (Carr, 2003). Approximately, 7.1% of all sanctions issued from 1994 to 2002 by the FSMB were for sexual misconduct (Grant & Alfred, 2007). A recent summary of disciplinary reviews of physicians by the Council on Ethical and Judicial Affairs AMA found 11% of cases involved sexual contact with patients (Arora et al., 2014).

Prior Research

Due to the secrecy surrounding sexual misconduct in medicine, very little is known about the factors that cause or correlate with it. AbuDagga, Wolfe, Carome, and Oshel (2016) were the first to analyze NPDB data on sexual misconduct cases. They found that a greater number of abusers were 40 to 59 years of age when compared with the general population of physicians, but no other individual traits could be examined as NPDB’s publicly available data do not include gender or medical specialization of abusers. They also found that 87% of victims were female, but were unable to determine the patients’ presenting medical complaints or the types of sexual abuse that occurred.

A few studies have focused on physician participants in courses that address boundary violations, which may include sexual harassment of patients or colleagues as well as sexual misconduct involving patients. MacDonald and colleagues (2015) identified risk factors for referral to such courses. They found that 5% of participants scored in the moderate-to-severe range on a childhood trauma questionnaire, and that these scores were correlated with attachment anxiety, avoidance, and maladaptive beliefs. They concluded that their findings “support a potential link between childhood adversity and boundary difficulties” (p. 489). This conclusion, however, ignored the fact that 95% of participants did not have elevated childhood trauma scores, nor did their study include (or reference) a comparison group of nonviolating physicians to establish a control baseline.

Based on data from two cohorts of participants in their course on boundaries in medicine, Swiggart, Dewey, Ghulyan, and Spickard (2015) found that 35% to 36% of referrals were for sexual violations, with the remainder referred for sexual impropriety or sexual harassment. Participants consistently displayed a lack of knowledge of sexual boundary rules, for example, rules prohibiting physicians from dating patients prior to explicitly terminating the patient–physician relationship. Their findings do not address the many forms of sexual violation in which a lack of knowledge is an unlikely

cause, such as molestation of children, trading prescriptions for sex with a drug-addicted patient, sexual abuse of a mentally ill or cognitively impaired patients, masturbating in the presence of a patient, sodomy, or rape of an anesthetized patient. A 2003 review article by Carr (2003) estimated that over 50% of physicians guilty of sexual violations receive psychological or other treatment and return to practice (often with monitoring requirements). The 2016 AJC investigation arrived at the same figure of 50% (Teegardin et al., 2016). A 2009 review of studies of disciplinary boards that reported the gender of the physician found that 97% of sexual abusers were male (Sansone & Sansone, 2009). Studies from reports by state medical boards indicate that actions for sexual violations occur most commonly in the medical fields of psychiatry, family/general practice, and obstetrics/gynecology (Carr, 2003; Sansone & Sansone, 2009; Tillinghast & Cournos, 2000). However, the mean and median year of publication of the 15 studies reviewed by Sansone and Sansone (2009) was 1995—more than 20 years ago—and most of the studies examined data from earlier time periods. A recent review of participants in a physician health program found that physicians who were previously disciplined for a boundary issue were more likely to commit a sexual offense (Brooks, Gendel, Early, Gunderson, & Shore, 2012). This finding is consistent with the AJC investigation of sexual abuse in medicine, which reported on the “grooming” behaviors of physician offenders who may “test the waters to establish a general atmosphere of forced intimacy and to see if his target will protest” (Hart, 2016).

In summary, most studies that aim to understand factors associated with sexual misconduct in medicine are limited in important ways: They review data prior to 1995; other than physician gender and specialty, they do not have access to data about the physicians themselves or the practice context in which the abuse occurred and they do not differentiate more severe sexual violations (as outlined above by the FSMB) from other sexual boundary issues like inappropriate comments and flirting.

Present Study

This study examined sexual violations by physicians practicing medicine in the United States, which were reported from 2008 to 2015. We focused only on sexual abuse of patients by physicians; we did not examine inappropriate relationships with colleagues, subordinates, or trainees, or sexual abuse of nonpatients.

This study was exploratory. Our aims fall into two broad categories: Descriptive and theoretical. Our descriptive aim was to characterize the nature, duration, and number of violations; the patient-victims; the setting of the violation; the physician; the investigation; and the consequences to the physician. Our theoretical aim was to use a criminal law framework to examine how the motives, means, and opportunities in these cases culminated in sexual misconduct.

As with many studies that incorporate qualitative research methods, we strove to ensure a sample size large enough to guarantee saturation (Corbin & Strauss, 2014; Hennink, Hutter, & Bailey, 2011). With relatively homogeneous populations, samples as small as 12 frequently suffice to ensure saturation (Guest, Bunce, & Johnson, 2006). However, based on our previous research on professional breaches of conduct in

medicine, we assumed sexual misconduct to be equifinal (George & Bennett, 2005), meaning that multiple causal pathways to sexual misconduct exist, necessitating a larger sample. Moreover, our research plan included comparing clusters of cases (formed statistically or theoretically), which also necessitated a sample large enough to produce multiple clusters of sufficient sample size to analyze statistically. Based on these considerations and our experience with similar projects, a sample size of ~100 was supportable (Vogt, Vogt, Gardner, & Haeffele, 2014).

Method

Design Overview

This study used an ex post facto, “causes of effects” case study design (Bennett & Elman, 2006; Silva, 2010). We used a case analysis method because it is best suited to studying phenomena that cannot be studied (for reasons of ethics or practicality) using a prospective design (George & Bennett, 2005). We first identified 101 applicable cases of sexual violations, which represented 100% of cases identified through reviews of the literature. Next, each case was examined using a criminal law theoretical framework to understand the factors that characterized it and enabled it to occur. We then examined the set of cases as a whole to determine whether specific causal patterns or typologies emerged. Such mixed-methods approaches are commonly used to study complex social phenomena that may arise from diverse clusters of causal conditions, and they can yield rich exploratory findings (George & Bennett, 2005). In practice, this approach involved four sequential steps: (a) identify cases and case documents through systematic literature reviews, (b) conduct qualitative content analysis of documents to generate descriptive data on case attributes, (c) develop a theory of how each individual case occurred using a criminal law framework, (d) conduct cross-case analysis to identify typologies of cases and statistically test for significant differences across case types. Each step is described in detail below.

Identifying Cases and Case Documents

We conducted two literature reviews: The first was aimed at identifying cases; the second was aimed at identifying documents associated with individual cases. To be eligible for inclusion, a case had to involve a physician as the sexual abuser, involve a patient as the victim, be described in at least five documents including either medical board or legal documents (to enable content analysis of rich and trustworthy information), and be reported between the period of July 1, 2008 and June 30, 2015. The reporting time frame was established to support two methodological goals. First, we aimed to identify and analyze at least 100 cases because such a sample size is generally adequate for qualitative content analysis to identify relevant variables and establish trustworthy patterns (Vogt et al., 2014); hence, we searched back to 2008. Second, we aimed to ensure that case reporting was complete, including reporting on

investigations and penalties; hence, we coded no cases that were so recent that complete investigation and reporting could not be guaranteed (Simonton, 2003).

To identify cases, we used the LexisNexis Law database, which archives statutes, case judgments, and legal opinions, and provides access to medical board and regulatory documents, as well as U.S. newspaper articles. With the assistance of two law librarians, we developed a Boolean search strategy, which was used to search LexisNexis Law:

((Physician OR Doc OR Doctor OR Dr OR Surgeon OR Psychiatrist OR Pediatrician) w/20 (Charg! OR Accus! OR Convict! OR Revok! OR Suspen! OR Disciplin! OR Fine! OR Sanction! OR Probation OR Censure! OR Arrest! OR Guilty)) w/40 (Rape OR Molest! OR Fondl! OR (Sex! w/2 (Assault! OR Abus! OR Misconduct OR exploit! OR boundary OR touch! OR contact OR behavior OR intercourse OR imposition)).

The search returned 5,420 records, 707 of which were relevant to sexual abuse of patients by physicians. The project coordinator reviewed the 707 records and found 149 distinct cases. Of these 149 cases, 48 were excluded as ineligible: 10 cases were too recent (i.e., the case had not yet been resolved either through board, criminal, or a civil action), 21 cases lacked adequate literature to enable content analysis, and 17 cases were either too ambiguous or the protagonist was exonerated. We investigated the remaining 101 eligible cases.

The project manager assigned cases to research assistants (RAs), who were provided the material located through LexisNexis Law. RAs then conducted supplemental literature searches for each case to ensure adequate descriptions of the abuse, the physician, and the work environment. These searches were conducted using the sexual offender's name in a wider variety of databases and search engines, including LexisNexis Law, Google, the relevant state medical board websites, state circuit court access sites, Health Grades, the American Board of Medical Specialties' Certification Matters website, and the U.S. Office of the Inspector General's exclusions website. The mean number of documents or sources consulted for each case was 17, with an average of two legal documents and 25 pages of medical board documents examined.

RAs uploaded all literature to Adobe PDF Portfolio, which allowed the team to read, mark up, and search all documents associated with each case or all cases combined.

Qualitative Content Analysis: Generating Descriptive Data on Case Attributes

The first step in qualitative content analysis is to generate data through coding (Roller & Lavrakas, 2015). Our coding approach was deductive insofar as most codes were generated through the research team's prior literature reviews (DuBois, Anderson, et al., 2012; DuBois, Kraus, & Vasher, 2012) and research on diverse kinds of professional wrongdoing that involved coding more than 300 cases (DuBois et al., 2013; DuBois et al., 2016). Our approach was inductive insofar as new variables specific to

sexual abuse of patients were identified during the coding process, and insofar as some existing variables needed to be operationally defined in new ways in the context of sexual abuse of patients. Accordingly, all cases were content analyzed twice: once using our initial deductive codes, and once using new and revised codes.

We developed a coding datasheet in Excel to code variables. Our final codebook tracked 58 variables: three variables describing the work setting, 11 variables describing the physician-abuser, four variables describing the patient-victims, nine variables describing the case characteristics and whistle-blower (where applicable), four describing the investigation, seven describing the consequences to the physician, a taxonomy of six different kinds of sexual abuse, and a taxonomy of 14 different kinds of professional wrongdoing in medicine that might accompany the sexual abuse. Forty-seven variables were coded dichotomously (yes/no); the remaining variables were coded as ordinal (e.g., physician age and duration of the sex abuse) or categorical (e.g., medical specialization practice ownership model).

The coding datasheet included operational definitions of all variables. Some variables (such as gender, age, duration of the case, and board certification) were relatively easy to operationalize. Here, we describe the several variables that required significant deliberation by the team because they are not manifest. We defined “suspected personality disorder” as meeting at least two criteria for *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-5*; American Psychiatric Association [APA], 2013) diagnosis of antisocial personality, such as engaging in illegal behaviors (apart from the sexual abuse) or exhibiting a lack of remorse (e.g., repeated wrongdoings even when it was evident that the behavior was harmful; APA, 2013). The classification of sexual crimes diverges significantly across jurisdictions. While the federal Uniform Crime Reporting program recently redefined rape to include most forms of sodomy (U.S. Department of Justice, 2014), we defined *rape* as penetration of the mouth, anus, or vagina by a penis without consent, and “sodomy” as penetration of the anus or vagina by anything other than a penis without consent (Tracy, Fromson, Long, & Whitman, 2012). We adopted the distinction between rape and sodomy—widely recognized in state criminal law—because a more specific taxonomy of behaviors enabled us to examine whether the two behaviors exhibited different patterns. We operationalized “lack of oversight” (an environmental factor that provides opportunity for misconduct) in the following manner: “In no instance was another person in the room when the event occurred.” We used the “no instance” threshold because this provided the best indicator of causality: If abuse occurred with someone present (e.g., a chaperone such as a nurse or a family member), then presumably lack of oversight was not essential to the perpetration. All patients are vulnerable: They typically present with health concerns and are generally expected to comply with physician orders, including undressing. Nevertheless, we wanted to identify patients who were especially vulnerable. We operationalized “vulnerable” as belonging to a protected class (e.g., minors or older adults) or exhibiting cognitive impairments (e.g., due to anesthesia or severe mental illness).

For several reasons, we used one RA as the primary coder of each case: First, identifying, reading, and coding all documents associated with a case required more than

20 hr; second, in past studies using a similar methodology, we had very high interrater reliabilities for coding of variable (DuBois et al., 2013); third, we identified alternative means of ensuring the trustworthiness of coding. With respect to the latter, following coding by RAs, a PhD-level member of the team read two to three key documents on the case and examined the completed coding datasheet to ensure completeness, accuracy, and consistency. Concerns with coding were discussed at weekly team meetings. In addition, we examined the frequency with which different RAs used codes; when scores were discrepant (significant chi-square test, $p < .05$), we investigated whether this was due to true differences in the cases, and if not, provided further training on coding or refined our definitions of variables to ensure consistent use of codes.

Identifying Causal Factors in Individual Cases Using a Criminal Law Theory

A second phase in qualitative content analysis involves *interpreting* data generated in Phase 1 (Roller & Lavrakas, 2015). We applied a criminal law framework to each case by asking what provided the motive, means, and opportunity (MMO) needed to give rise to sexual abuse of a patient (Jones, 2010; Maguire, Reiner, & Morgan, 2007). In criminal law, the broad meaning of motive is “an emotion or state of mind that prompts a person to act in a particular way . . .” (Leonard, 2001, p. 445). As psychological states, motives cannot be known directly; thus, “it is necessary to resort to circumstantial evidence of its existence” (Leonard, 2001, p. 447). Based on systematic literature reviews (DuBois, Anderson, et al., 2012; DuBois, Kraus, & Vasher, 2012) and past coding of cases (DuBois et al., 2013; DuBois et al., 2016), we developed a deductive coding scheme for perpetrator traits and motives as well as environmental factors that might provide opportunity. Traits and motives include sex, substance abuse, ambition, suspected antisocial personality disorder, carelessness, severe mental disorders, financial gain, poor problem solving, job pressure or stress, and other; environmental factors included ambiguous norms, vulnerable victims, corrupt moral climate, oversight failures, conflicting roles, lack of oversight, and other. It was generally not necessary to form a theory of the means of sexual abuse, as most adult males (100% of our sample) have the means by definition.

In the Excel codebook, RAs were provided with lists of MMO variables. The codebook operationally defined each of these variables, explaining how they might provide a motive, means, or opportunity for the sexual abuse. RAs were required to provide a rationale for the variables they selected, writing their own theory of the case—that is, they were required to explain how it arose using the MMO framework. These codes and rationales were examined by a PhD-level coinvestigator using the same process described above.

Developing Typologies of Sexual Abuse in Medicine

In a previous study of 100 cases of improper prescribing of controlled substances by physicians, our team successfully developed and validated typologies through a two-fold process: Qualitative cross-case analysis of cases (George & Bennett, 2005) and

cluster analysis (Namey, Guest, Thairu, & Johnson, 2008). The purpose of typology development was to identify how the causal factors in individual cases clustered together across cases in meaningful ways to explain the occurrence of sexual abuse. It is important to note that typology development may be used to reduce data—that is, to identify a small number of meaningful patterns among a larger set of cases (Namey et al., 2008)—or to identify the full universe of possible causal patterns, which in principle could equal the number of cases (Elman, 2005; Ragin, Shulman, Weinberg, & Gran, 2003). In this study, as with our previous study, we adopted a data reduction approach; we sought to identify from our 101 cases a small number of meaningful causal patterns using qualitative analysis guided by MMO theory and statistical analysis to confirm the patterns.

Findings

Our data analysis yielded two kinds of findings: Findings from our Phase 1 coding, which generated descriptive data on case attributes, and findings from our Phase 2 coding of causal factors and the accompanying cross-case analysis aimed at reducing these data to typologies or meaningful clusters of causal factors.

Descriptive Data on Case Attributes

Our data set included diverse kinds of sexual abuse of patients. For each case, the primary form of sexual abuse was defined as the behavior that was the focus of investigation—typically the most serious of the forms of abuse; for example, in a case that involved both sodomy and inappropriate touching, we would typically treat sodomy as the primary form of abuse. In 33% of cases, the primary form of abuse was inappropriate touching; in 31% of cases, it was sodomy; in 16% of cases, it was rape; in 14% of cases, it was child molestation; and in 7% of cases, it was consensual sex. As indicated in Table 1, perpetrators often committed multiple kinds of sexual abuse, as well as other ethical violations associated with interprofessional relationships (e.g., sexual harassment), financial fraud, improper prescribing, and criminal behavior. This multifactorial nature of the cases complicated analysis aimed at characterizing specific kinds of abuse (see “Cross-case analysis” subsection below). Chi-square analyses indicated that physicians who primarily engaged in child molestation, sodomy, and rape were much more likely to also act inappropriately toward patients through touching/comments (87%-100%), compared with physicians who engaged in consensual sex (0%), $p < .001$ (Cramer’s V , a fourfold point correlation, was used to indicate effect size; $V = .78$). Furthermore, physicians who engaged in child molestation were more likely to commit other sexual offenses with patients (e.g., exhibitionism, voyeurism; 43%) than physicians engaging in other forms of sexual abuse (6%-19%), $p < .05$, $V = .31$. Finally, physicians who raped patients were more likely to also improperly prescribe pharmaceuticals (56%) than physicians engaging in other forms of abuse (13%-30%), $p < .05$, $V = .33$.

Table 1. Primary Form of Sexual Abuse With Accompanying Violations.

Primary form of abuse (n)	Touching/ comments	Consensual sex	Other sexual offense	Interprofessional relationships	Fraud	Improper prescribing	Other illegal behavior
Consensual sex only (7)	0%	100%	14.3%	14.3%	0%	14.3%	28.6%
Touching/comments only (33)	100%	6.1%	6.1%	12.1%	6.1%	30.3%	12.1%
Child molestation (14)	100%	14.3%	42.9%	14.3%	7.1%	28.6%	42.9%
Sodomy (31)	93.5%	9.7%	19.4%	12.9%	9.7%	12.9%	12.9%
Rape (16)	87.5%	25.0%	12.5%	12.5%	25.0%	56.3%	25.0%
Cramer's V (p)	.78 (<.001)^a	.20(.26)^b	.31 (.04)	.02 (1.00)	.23 (.24)	.33 (.03)	.27 (.11)

Note. "Primary Form of Abuse" represents the *primary* (main) form of sexual abuse perpetrated by the physician; "Accompanying Violations" refer to other forms of abuse or misconduct engaged in by physicians with a given primary form of abuse; for example, consensual sex was the *primary* form of sexual abuse for seven physicians; among those seven, one physician (14.3% of seven) also engaged in an "Other Sexual Offense," and so forth. We combined offenses that involved inappropriate comments with inappropriate touching. These cases always involved inappropriate touching; in some instances, they also involved inappropriate comments. We defined "rape" as penetration of the mouth, anus, or vagina by a penis without consent, and "sodomy" as penetration of the anus or vagina by anything other than a penis without consent. "Other Sexual Offense" includes exhibitionism, voyeurism, showing pornography to patients, and stalking. "Other illegal" primarily involves arrests for child pornography in child molestation cases, driving under the influence and improper prescribing among physicians engaging in consensual sex, and rape of nonpatients or improper prescribing among physicians engaging in rape. "Inter-professional relationships" refers to inappropriate relationships with colleagues—for example, sexual harassment of a nurse. Significant differences in the rates of accompanying violations across kinds of sexual offenses are indicated in boldface.

^aExcludes the "touching/comments only" cell.

^bExcludes "consensual sex only" cell.

Table 2. Frequency of Case Attributes (N = 101).

Workplace		Case characteristics	
Nonacademic, private practice	94.1%	Accomplice involved	1.0%
Physician practice size		Professional wrongdoing > 1 type	88.1%
Solo	38.6%	Wrongdoing in >1 environment	24.8%
Small	6.9%	Repeated sexual abuse	96.0%
Large	41.6%	Duration of abuse in main workplace	
Other/unknown	12.9%	<1 year	26.7%
Physician ownership		1 to <2 years	14.9%
Solo	38.6%	2 to <5 years	27.7%
Joint	2.0%	5 + years	30.7%
Employee	49.5%	Patients always examined alone	85.1%
Other/unknown	9.9%	Missed opportunity to blow whistle	26.7%
Abuser description		Whistle-blower ignored	16.8%
Age > 39 years	92.1%	Whistle-blower relationship to abuser	
Gender: Male	100%	Patient	69.3%
Born outside the United States	15.8%	Peer/physician colleague	3.0%
Trained outside the United States	25.7%	Nurse or other staff	4.0%
Specialty		Other/unknown	17.8%
Internal/general	14.9%	Investigation	
OB-GYN	12.9%	Board investigation	94.1%
Psychiatry/neurology	16.8%	Criminal investigation	89.1%
Pediatrics/family	39.6%	Civil proceedings	48.5%
Other	15.9%	Others were found guilty	2.0%
Board certified	30.7%	Consequences	
Literature mentions some antisocial personality traits (personality)		Loss of licensure	87.1%
Evidence of severe mental illness	3.0%	Financial penalties	43.6%
Substance addiction	5.0%	Prison, criminal probation or service	54.5%
Significant personal problems	6.9%	Mandated treatment or education	29.7%
Poor professional skills/performance	6.9%	Discontinued practicing medicine	74.3%
Victim characteristics		Loss of job/professional opportunities	98.0%
Number of victims: 5+	57.4%	Increased oversight/monitoring	34.7%
Patient-victim age			
Adult	60.4%		
Senior	1.0%		
Child	9.9%		
General	28.7%		
Women	89.1%		
Racial minority	1.0%		

Note. OB-GYN = obstetrics-gynecology.

Table 2 presents comprehensive frequencies for case attributes. Here, we highlight descriptive findings present in greater than 50% of cases. Although, approximately, 17% of physicians who completed a residency program over the past decade work

full-time in academic medicine (American Association of Medical Colleges, 2016), nearly all (94%) cases occurred in nonacademic, private practice settings. No other feature of the workplace such as practice size or physician ownership status characterized a majority of cases. Nothing peculiar to our sampling approach would explain this finding nor are reporting rules different for academic medical centers. One hundred percent of perpetrators were male (in contrast to the average of 66% of U.S. physicians being male), and nearly all (92%) were older than the age of 39 (in contrast to the U.S. average of 78% of physicians during our study period; Young et al., 2015). A majority (69%) of perpetrators were not board certified (in contrast to the U.S. average of 24% of physicians; Young et al., 2015). This rate was unexpectedly high, and led us to add it as an inductive theory of the case variable in efforts to reduce data to typologies or clusters. Most cases involved more than five victims (57%) who were adults (60%) and women (89%). In 96% of cases, the abuse was repeated; in 58% of cases, it lasted for more than 2 years. Nearly all (88%) cases involved multiple kinds of professional breaches. In 85% of cases, patients were always examined alone. The AMA, the American Academy of Pediatrics, and the American Congress of Obstetricians and Gynecologists all state that a patient's request for a chaperone should be honored, none of them require the use of chaperones, and only seven states require chaperones under some conditions (American Academy of Pediatrics, 2011; American Congress of Obstetricians and Gynecologists, 2016; AMA, 2014-2015). No data exist indicating how frequently patients are intimately examined without a chaperone or how often chaperone policies are violated. Whistle-blowers in 69% of cases were patients. Most cases involved investigations by medical boards (94%) and criminal prosecutors (89%). In a majority of cases (87%), the perpetrator lost or surrendered his medical license; however, the loss of licensure was often temporary or restricted to one state, and long term, a lower percentage discontinued practicing medicine (74%).

Cross-Case Analysis of Causal Factors and Typologies

We attempted to form clusters of cases based on the primary form of sexual abuse, practice type, board certification, suspected antisocial personality disorder, and opportunity factors such as a lack of oversight or particularly vulnerable patients using two-step cluster analysis (SPSS Statistics). The analysis was restricted to variables with distributions amenable to statistical analysis and that were expected to differentiate among sexual abuse types. The analysis failed to produce interpretable clusters, perhaps due to the significant overlap of sexual abuse and unethical behaviors engaged in by the physicians.

Next, we compared the primary sexual abuse groups on the remaining cluster variables, as shown in Table 3. Three variables differed significantly across the forms of sexual abuse: vulnerable patients ($V = .60, p < .001$), suspected antisocial personality ($V = .50, p < .001$), and being board certified ($V = .31, p < .05$). By definition, all child molestation cases involved especially vulnerable patients; in all other forms of sexual abuse, a minority of cases involved especially vulnerable patients, though sometimes vulnerability was induced (e.g., through drugging). Suspected antisocial personality

Table 3. Primary Form of Sexual Abuse With Physician and Environmental Characteristics.

Primary form of abuse (n)	Solo practice	Lack of oversight	Oversight failure	Vulnerable patients	Personality	Board certified	Male
Consensual sex only (7)	28.6%	100%	0%	28.6%	14.3%	71.4%	100%
Touching/comments only (33)	48.5%	78.8%	9.1%	18.2%	27.3%	39.4%	100%
Child molestation (14)	42.9%	85.7%	7.1%	100%	28.6%	28.6%	100%
Sodomy (31)	25.8%	80.6%	3.2%	16.1%	12.9%	19.4%	100%
Rape (16)	43.8%	100%	0%	37.5%	81.3%	18.8%	100%
Cramer's V (p)	.20 (.39)	.23 (.23)	.16 (.60)	.60 (<.001)	.50 (<.001)	.31 (.048)	—

Note. We combined offenses that involved inappropriate comments with inappropriate touching. These cases always involved inappropriate touching; in some instances, they also involved inappropriate comments. We defined "rape" as penetration of the mouth, anus, or vagina by a penis without consent, and "sodomy" as penetration of the anus or vagina by anything other than a penis without consent. "Lack of oversight" means that in no instances was another person in the room when the event occurred. "Personality" means the literature referenced at least two characteristics indicative of antisocial personality. All patients are vulnerable; we labeled patients as "especially vulnerable" when they belong to a protected class (e.g., minors or older adults) or exhibited cognitive impairments (e.g., due to anesthesia or severe mental illness). Significant differences in the rates of physician/environmental variables across kinds of sexual offenses are indicated in boldface.

disorder was present in a majority of rape cases (81%), but in a minority of all other cases. While this rate is high, our overall rate in the sample of 101 sexual offenders was 32%, which is largely in keeping with major studies of the prevalence of antisocial personality among male prisoners, which ranges from 35% to 47% (Black, Gunter, Loveless, Allen, & Sieleni, 2010; Fazel, 2002). A majority (71%) of physicians were board certified in the consensual sex cases, but in all other cases, only a minority were board certified, with rates dropping as low as 19% for sodomy and 18% for rape.

Discussion

In this study, we examined 101 cases of sexual abuse of patients by physicians. For each case, we described case characteristics and identified factors that provided the motives, means, and opportunities for the sexual abuse. The primary motives in most of the cases appeared indistinguishable from the acts themselves. That is, no motive was apparent other than the performance of the sexual act itself. This is, for example, quite distinct from prescribing opioids for the sake of financial gain or to garner sexual favors. Yet, it is also consistent with the determination of motive in criminal law: Sexual gratification may count as a motive in sexual assault cases, and sexual fetish may count as motive in other sexual crimes (Leonard, 2001). Accordingly, we assumed that the act itself was motivating to the perpetrator and looked for other factors such as suspected antisocial personality disorders or substance use disorders that might additionally provide motive (in the sense in which the term is used in criminal law). The matters of establishing fundamental means and opportunity were also simple: Most people have the physical means of sexually abusing another person, and within Western cultures, most physicians have the social authority to instruct patients to disrobe and to examine them in a setting without oversight.

A striking feature of these cases is that they can occur without obvious “red flags”: Across all cases, except rape, cases commonly occurred without obvious signs of a personality disorder, they occurred in both solo and larger medical practices alike, and they involved patients who were particularly vulnerable as well as patients who exhibited no special vulnerabilities other than being a patient.

Thus, there were no necessary conditions for cases to occur except for the sexual urges of the physicians. The only highly consistent markers were male gender (100%), age > 39 (92%), not being board certified (72% of nonconsensual sex cases)—even though 75% of physicians were board certified during the period under investigation (Young, Chaudhry, Rhyne, & Dugan, 2011)—consistent examination of patients alone (85%) in nonacademic medical settings (94%). While this is actually a rich cluster of five variables that occurred in >70% of cases, it is also somewhat unremarkable: In the vast majority of physician encounters that involve these traits, no sexual assault occurs. Thus, these are best understood as risk factors for sexual assault, particularly when combined, rather than sufficient conditions.

Almost all cases involved repeated abuse (96%) of multiple victims that continued for more than a year (73%), a fact consistent with earlier studies indicating that a very strong predictor of board sanctions is previous board sanctions (Grant & Alfred, 2007).

Recommendations

We offer recommendations to medical schools, medical boards, chaperones, the NPDB, and patients.

For medical schools. Forty percent of our cases involved either inappropriate touching (commonly labeled a “boundary violation” in medicine) or consensual sex. Swiggart et al. (2015) observe that some such violations occur due to ignorance regarding professional standards. The basic material taught in sexual boundary remediation training courses should be a standard part of training in medical professionalism. Medical students who engage in rape or sodomy—for which ignorance can be no excuse—should not receive medical degrees, and should be reported to law enforcement when appropriate. Data indicate that professional breaches during medical training (medical school and residency programs) predict future breaches as a physician (Papadakis, Arnold, Blank, Holmboe, & Lipner, 2008; Papadakis et al., 2012; Papadakis et al., 2005; Teherani, Hodgson, Banach, & Papadakis, 2005). Medical students should be taught the prevalence of sexual abuse by physicians and be encouraged to be vigilant and to report suspected abuse. They should also be trained on best practices for responding immediately when abuse is observed, building on professionalism training programs that teach medical students, residents, and physicians how to respond to observed unprofessional behavior (Hickson, Pichert, Webb, & Gabbe, 2007).

For medical boards. As noted in our introduction, it was often difficult or impossible to obtain data on cases of sexual abuse in medicine. States should make board documents open access. Several states do not allow public access to any documents or put up barriers to obtaining them (such as having to submit a written request for documents or pay a fee per page). It is concerning that the FSMB’s 2010 report, “Addressing Sexual Boundaries: Guidance to State Medical Boards,” nowhere mentions the possibility of reporting cases to police or other authorities (FSMB, 2010). Boards should be mandatory reporters whenever patients—who are vulnerable by definition and expected to be compliant with physician orders—are sexually abused by physicians. At a minimum, boards should be held harmless if they report credible allegations of sexual abuse to authorities. At present, only 11 states have laws requiring medical boards to report sexual abuse to the police or prosecutors when the victim is an adult (Teegardin et al., 2016).

We do not expect impetus for such change to come from leading medical associations. The AMA not only lobbied strongly for the current secrecy of the NPDB, but it may also be moving in a counterproductive direction with its Code of Medical Ethics. In the 2015 version of the AMA Code, it stated clearly, “Sexual contact that occurs concurrent with the patient-physician relationship constitutes sexual misconduct” (section 8.14). The section of the code on “sexual misconduct” has now been renamed “Romantic or Sexual Relationships with Patients”; it remains open to the idea that such relationships “*may* exploit the vulnerability of patients . . . and ultimately be detrimental to the patient’s well-being” (section 9.1.1, emphasis added). Impetus for

change in reporting rules is thus more likely to come from the public and state legislatures, largely due to investigations by the AJC, other media outlets, and researchers.

For chaperones. Chaperones cannot be blamed for the sexual violations of physicians. Nevertheless, 19% of our cases of sodomy occurred with a chaperone, parent, nurse, or other individual in the room with the patient-victim and physician. Yet, only 6% of cases occurred in academic medical settings, where it is common to have residents involved in care and medical students *actively observing*. (In addition, nearly all physicians in academic medicine are board certified.) It is not enough for a chaperone to be present. If a nurse is in the room, doing paperwork or intentionally not observing to respect privacy or to avoid implying mistrust (factors sometimes explicitly mentioned in case literature), then it leaves open the possibility of inappropriate touching and sodomy (e.g., inserting a finger in an anus unnecessarily while making eye contact and smiling at a patient). Chaperones would benefit from formal training (Walzer & Miltimore, 1994) on how to respect privacy while providing appropriate oversight, and how to speak up when behavior appears to be inappropriate.

For the national practitioner data bank. As noted in our introduction, we are not able to provide trustworthy statistics on the prevalence of sexual abuse in medicine nor obtain crucial data on factors that might predict such cases except by using large convenience samples of cases that have been reported publicly or gone to court. NPDB should eliminate the category "Not applicable." It is unhelpful, overused, and unnecessary; it enables nonreporting of sexual abuse and other serious, sometimes criminal, offenses. NPDB should share identifiable data with researchers using the same protections of confidentiality via data use agreements that physicians routinely use when doing research with protected health information, including sensitive information such as patients' HIV status, genetic test results, and substance use history. Withholding this information from researchers thwarts a legitimate public health interest in understanding and preventing sexual abuse of patients.

For patients. Some of our cases involved minors being examined without parents or chaperones; some involved patients who suspected inappropriate behavior at the time of examination, but were too surprised or confused to speak up; other cases involved patients who ignored inappropriate remarks and touching until physician behavior escalated to sexual assault. Patients are never to be blamed for sexual abuse by physicians, and medical schools, medical boards, and the NPDB have responsibilities to protect patients through prevention, detection, and discipline. However, patients also need to be empowered when dealing with situations that are routinely experienced as disempowering.

If a patient is sexually assaulted, we recommend involving the police; lodging a complaint with health care administrators may enable physicians to maintain licensure, abuse to continue, and abuse to be underreported. If a patient is unsure why a physician is asking him or her to undress or questions the medical necessity of an examination, we recommend asking the physician for an explanation. We recommend

against allowing children to be examined alone. If a child or teenager requires a conversation or exam without a parent present, we recommend the presence of a nurse or other chaperone. If abuse occurs in the presence of a chaperone, we encourage patients or parents not to second guess themselves or think they did not see what they thought they saw. Sodomy can occur discretely and others may not notice; the presence of another may not be enough to discourage the behavior. Nineteen percent of our sodomy cases occurred with another person present in the examination room. Patients should be encouraged not to ignore inappropriate sexual remarks or inappropriate touching; sex abusers frequently engage in such activities as a form of grooming or testing the waters prior to more aggressive forms of abuse. In 94% of cases of sodomy and 88% of cases of rape, the abuse was preceded by inappropriate comments or touching of the victim or other patients.

Limitations and Future Research

A limitation of any content analysis approach using historical documents is that the absence of the variable in a document does not necessarily mean it was absent in the event described in the document; hence, the methodology risks underreporting the presence of variables.

General limits of an ex post facto design include the inability to obtain random samples from the larger population of cases and the inability to control for possible confounding variables using randomization. Accordingly, this study must be described as exploratory. It would be natural to call for a larger, more generalizable follow-up study; however, such a study will not be possible until fundamental changes are made to the way that we track and report such cases (U.S. Department of Health and Human Services, 2015).

These cases were skewed toward more serious crimes: Although accurate, comprehensive data on the frequency and kinds of sexual abuse in medicine are nonexistent for reasons explained in the introduction, we would expect that consensual sex and inappropriate touching are more common than rape (in part, due to the popularity of courses for physicians on “boundary issues”; Brooks et al., 2012; MacDonald et al., 2015; Spickard, Swiggart, Manley, Samenow, & Dodd, 2008); yet our sample included slightly more cases of rape and sodomy than consensual sex and inappropriate touching. We tried to minimize the impact of this by presenting our theory of the case variables (physician and environmental characteristics) broken down by type of abuse, comparing the frequencies across types.

Conclusion

Due to many factors, including vague, incomplete reporting and underreporting by patients and professional bodies alike, as well as rules shrouding disciplinary databases in secrecy, we cannot accurately estimate the prevalence of sexual violations in medicine. We do know that sexual misconduct in medicine goes well beyond the more commonly discussed concerns with sexual boundary issues and consensual sex with

patients; it can include crimes such as child molestation, sodomy, and rape. When sexual violations occur, they most often are repeated by physicians, who perpetrate such behavior for years before being stopped. These facts indicate the need for reform among state medical boards and the NPDB, as well as the need to educate patients and chaperones. In response to the sexual scandal in the Roman Catholic Church, a document was developed and endorsed by the United States Conference of Catholic Bishops (2001) committing bishops and church leaders to report all credible allegations to authorities, to provide training to those in regular contact with children on child safety, and to develop policies and procedures to prevent the transfer rather than removal of perpetrators. It is time for the AMA, the FSMB, and other physician leadership and oversight groups to provide similar leadership to protect patients from the small minority of physicians who engage in sexually abusive acts.

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