MINIMAL/UNDERREPORTED BUT DEFINITE RISK OF DEATH/BODILY HARM THREATS (DBHTS) TO PAIN PRACTITIONERS: RESULTS OF NATIONWIDE SURVEY FROM UNITED STATES

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Abstract

Background: Many physicians have experienced or will experience patient who acts threateningly towards them at least once in their careers. However, there have been no studies to gauge the incidence rate and severity of patients' and/or patients' families' violence towards pain physicians.

Objectives: This nationwide survey was completed to evaluate the incidence of death/bodily harm threats (DBHTs) against pain physicians.

Methods: A questionnaire along with online assent form was uploaded on SurveyMonkey Online Portal. The uploaded survey web-link was sent to pain fellowship programs in the United States so that pain physicians and pain fellows can respond to this survey. The respondents were expected to anonymously complete the survey containing various questions relating to confrontational patients' experiences, how these experiences affected them, how those situations were handled, and how the respondents would act differently in the future secondary to their victimization by the confrontational patients.

Results: The response rate to the nationwide survey was extremely low (5.2% of anticipated numbers), most likely secondary to underreporting. Out of total 26 respondents across the United States, seven respondents reported receiving DBHTs (incidence of 27%). The median number of absolute DBHTs received in lifetime by these seven respondents was three (range being 1 to 21-30).

Conclusion: There is minimal/underreported but definite risk of DBHTs for pain practitioners and the improved reporting, awareness and discussions can help pain physician community to formulate efficacious strategies to the prevention and management of future DBHTs.

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Introduction

Patients' aggression towards physicians and other health care workers is a well documented occurrence in the field of medicine. Many physicians have experienced or will experience patient who acts threateningly towards them at least once in their careers. Surveys have found that 25% of physicians have encountered aggression from their patients[1]. For obvious reasons, practitioners of pain medicine are apparently at higher propensity for being victims of violence. However, there have been no studies to gauge the incidence rate and severity of patients' and/or patients' families' violence towards pain physicians. Therefore, this nationwide survey was completed to evaluate the incidence of death/bodily harm threats (DBHTs) against pain physicians, to understand the nature of this violence towards pain physicians, to gain insight on how the violent situations were handled by the victimized physicians, and to eventually propose and/or realize the best methods to resolve aggressive confrontational pain patients and their families inclusive of both immediate and long term management.

Methods

After institutional review board approval, the questionnaire (Appendix A) along with online assent form was uploaded on SurveyMonkey Online Portal (SurveyMonkey Palo Alto, California, United States). The uploaded survey web-link was sent to all pain fellowship programs in the United States. The email addresses for the contact persons for these programs were accessed from their free information pasted on their departmental websites. The individual pain fellowship program coordinators were asked to send the survey web-link, if deemed appropriate, to their programs' pain physicians and pain fellows. Subsequently, these respondents were expected to anonymously complete the survey containing various questions relating to confrontational patients' experiences, how these experiences affected them, how those situations were handled, and how the respondents would act differently in the future secondary to their victimization by the confrontational patients. The questionnaire included three types of questions that allowed dichotomous responses, multiple responses or open-ended responses. The survey also collected respondents' information regarding gender, age, years of experience, and whether or not the respondent had received prior training specific to handling confrontational patients. Additionally, the respondents were asked to provide confrontational patients'/families' characteristics including age, gender and if patients/families had known history of violence and/or psychiatric illnesses. It was anticipated that the time taken to complete the survey would have been less than twenty minutes. The survey web-link was open only for twelve weeks with one email reminder sent to the pain fellowship coordinators at the end of six weeks for improving the response rate to survey.

Statistical Analysis

Based on the scope of the survey we had anticipated at least 500 measurable survey responses and subsequent detailed regression analysis. However, due to underreporting by survey respondents, we had to limit statistical evaluations to Chi-squared tests, Fisher Exact test and one-way ANOVA for data analysis and $p < 0.05$ was considered significant.

Results

The response rate to the nationwide survey was extremely low (5.2% of anticipated numbers), most likely secondary to underreporting. Out of total 26 respondents across the United States (Figure 1), seven respondents reported receiving DBHTs (incidence of 27%). The demographics of the respondents who denied receiving or who reported receiving DBHTs were insignificantly different (Table 1). Though these seven respondents reported DBHTs' frequency as once in a month (29%), once in a year (57%) or once in lifetime (14%), the median number of absolute DBHTs received in lifetime by these seven respondents was three (range being 1 to 21-30). However detailed objective description in terms of survey-questionnaire's completion for DBHTs was completed for eight out of total ten threat descriptions reported

by these seven respondents. The age of respondents at the time of receiving DBHTs (n = 10) was 39.8 ± 6.76 years. DBHTs were evenly distributed in two time periods: five each in 1994-2000 period and 2008-2012 period. The respondents were primarily practicing in academic pain practice setting (60%) when they received DBHTs; other pain practice settings with incidence of DBHTs were personal office setting (30%) and private group practice (10%). Similarly, the respondents practicing with equal weightage to both interventional and medication based pain management (80%) more commonly received DBHTs as compared to respondents practicing primarily interventional pain management (10%) or primarily medication based pain management (10%). The perpetrators of DBHTs were primarily in the age group 31-40 years (60%); other age groups were 21-30 years (10%) and 41-50 years (30%). Male perpetrators (80%) outnumbered female perpetrators (20%). Patients themselves represented the major perpetrators of DBHTs threatening either on their own (70%) or along with their families (20%). DBHTs almost always happened in the outpatient setting (90%) with remaining 10% in inpatient setting. DBHTs were delivered face-to-face (60%), through third person (30%) and anonymously (10%) with three perpetrators vividly describing the intended execution methods of DBHTs as "handgun in purse; loud and threatening stance", "gun to your head", and "if I (the patient) go down, I am taking so and so with me". The respondents were not aware (60%) whether the perpetrators were on psychiatric medications at the time of DBHTs. Majority of respondents (60%) denied the presence of warning (premonitory) signs of violence before DBHTs. Neither of the ten DBHTs had sexual overtones nor these DBHTs were actually executed by the perpetrators. Further descriptions were completed for only eight DBHTs and these descriptions included perpetrator's personal reasoning for DBHTs, respondents' perceptive reasoning for receiving DBHTs (Table 2), respondents' actions in response to these DBHTs with long term effects of DBHTs on the respondents (Table 3). The respondents also suggested various interventions' preventive role (if any) against future DBHTs (Table 4).

Discussion

At the time of initiating the survey, the working hypothesis was that pain physicians are exposed to confrontational/violent patient populations who are suffering from underlying unrelenting physical conditions; and the interplay of opioid medication failure or abuse, poor rapport with pain management

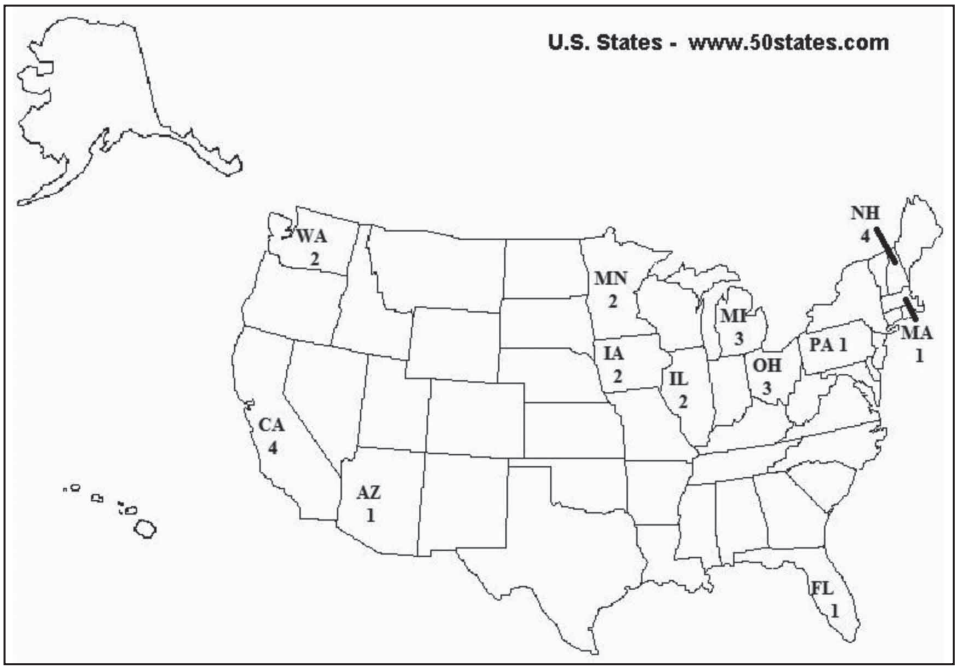

Fig. 1
Survey Respondents' Distribution across United States as shown on the Map (adapted from Free Online Map available at http://www.50states.com/maps/usamap.htm)

Table 1

Demographics of Respondents of Survey about Death/Bodily Harm Threats (DBHTs) incidence

	Respondents who denied receiving any DBHTs (n = 19)	Respondents who reported receiving any DBHTs (n = 7)	P Value (significant if <0.05)
Experience of Practicing Pain Medicine (in years)	Mean±SD: 9.1 ±10.7 Median: 4; Mode: 1 Range: (0-33)	Mean ±SD: 10.4 ±8.3 Median: 7; Mode: 15 Range: (2-25)	0.77
Respondent's Sex			
Females	6 (32%)	2 (29%)	0.64
Males	13 (68%)	5 (71%)	
Respondent's Medical Residency's Specialty			
Anesthesiology	17 (89%)	6 (86%)	0.63
Physical Medicine and Rehabilitation	2 (11%)	1 (14%)	
Prior Education for Confrontational/Violent Patients	2 (11%)	1 (14%)	0.63

Table 2

Reasons for Death/Bodily Harm Threats (DBHTs)

Perpetrator's Reasons for Perpetrating DBHTs (n = 8)	
Poor Pain Control	7 (88%)
Loss of Function	1 (13%)
Worsening of Other Symptoms	0
Distrust for the Physician	3 (38%)
Others: ‵wanting opioid medication"	
Physician's Perceptive Reason for Receiving DBHTs (n = 8)	
Poor Pain Control	3 (38%)
Loss of Function	1 (13%)
Worsening of Other Symptoms	0
Poor Rapport	2 (25%)
Opioid Diversion	1 (13%)
Opioid Dependence	2 (25%)
Opioid Abuse	5 (63%)
Opioid Tolerance	1 (13%)
Litigation Potential of Physician	0
Less Options for Pain Doctor Shopping	2 (25%)
Others: None	

Table 3

Post-hoc scenarios of Death/Bodily Harm Threats (DBHTs)

Physician's Response to DBHTs (n = 8)	
Threat Ignored	4 (50%)
Law Enforcement Agency Involved	4 (50%)
Only Hospital Security Involved	2 (25%)
Patient's Discharge from Practice	4 (50%)
Litigation against the Perpetrator	0
Compliance with the Perpetrator's Demands	0
Others: "documented in patient chart and discussed with primary team that we would not continue as consultant team," "considered buying Kevlar vests for myself and staff"	
Effect of Receiving DBHTs on Physician (n = 8)	
No Effect	3 (38%)
Increased Anxiety and Hyper-vigilance	4 (50%)
Changed Ways of Pain Practice	1 (13%)
Changed Place of Pain Practice	0
Changed City of Pain Practice	0
More Complacence to Patients' Demands	1 (13%)
Initiated Patients' Criminal Background Check	0
More Stringent in Pain Management Plans	3 (38%)
Stopped Practicing Pain Medicine	0
Others: "My secretary quit due to family threats.," "Eventually left the practice, although not directly related to this episode"	

Table 4

Preemption against Death/Bodily Harm Threats (DBHTs)

Preventive Role (if any) against Future DBHTs (n = 8)	
Unavoidable and Unpredictable	4 (50%)
Better Pain and Symptom Control	1 (13%)
Better Patient-Family-Physician Rapport	0
Vigilance to Warning Signs of Violence	0
Increased Private Security	1 (13%)
Criminal Background Check for New Patients	1 (13%)
Coordination with Law Enforcement Agencies	1 (13%)
Improvement in Opioid Dispensing Practices	3 (38%)
Continuing Medical Education of Difficult Patient Encounters	0
Others: "More thorough chart review and discussion with primary team prior to meeting patient. They wanted us to be the "bad guys" and in that sense they succeeded. I discussed this with them afterwards.," "Tighter control on new patients. It was clear this patient was only seeking opioids and we had no intention of providing them."	

team, and potential role of interfered cash-flow for diverting patients/families will not come distant second as predisposing factor for DBHTs to pain physicians. There has been some data in other medical specialties. Physicians who work in emergency services or intensive care units are at risk because the patients and their families are angry and confused secondary to sudden emergent turn of events in their lives; and the physicians and health care workers are evaluating and managing the emergent clinical scenarios as well as communicating with the patients and their families at the same time wherein the patients and their families may be completely new to that emergency department with no pre-existent patient-physician rapport[2-4]. The characteristics of the patient and the physician themselves are possible factors[4] secondary to which facilities have to decide implementation of appropriate organizational control and preventative strategies against such occurrences[5]. While there is a substantial amount of literature relating to patient and visitor violence in the healthcare field as a whole, there seemed to be a lack of information specifically regarding instances involving pain physicians, who all besides psychiatrists and anesthesiologists seem to be at the greatest risk of patient or visitor violence[4,6].

The first observation of this survey was the extremely low level of response rate that may be secondary to few concerns of anticipated respondents. First of all, the online surveys are often plagued with low response rates which thus interfere with statistical power of the results and validity for the populations. Secondly, the anticipated respondents of this particular survey could have been worried about sharing their victimization as receivers of DBHTs with associated medico-legal dilemmas on anonymous online web-portal. Thirdly, the reported incidence of DBHTs being assumingly low would have prevented responses from the anticipated respondents who have yet not been exposed to DBHTs. Therefore, secondary to these factors, it cannot be judged whether 27% incidence of DBHTs among the actual respondents is a reflection of true incidence (contrary to assumingly low incidence) in general pain physicians' population or it is reflective of falsely high incidence secondary to underreporting by anticipated respondents who have not been exposed to DBHTs.

The second observation of this survey was that even though the respondents varied from 0-33 years into their pain practice, the ten DBHTs reported in the survey were received in the first ten years of respondents' pain practice with most common occurrence in the third year of their pain practice. However, paradoxically, the respondents who denied receiving DBHTs were primarily in their first couple of years of pain practice (Table 1: Median 4 years and Mode 1 year). Additionally, there was general lack of prior training among the respondents for dealing with confrontational/violent patients/families scenarios. Although 88% of the total respondents (n =26) never received the training, the respondents (n = 10) who had received DBHTs did not think that continuing medical education of difficult patient encounters have any role in preventing future DBHTs. However, the physicians who are naïve to DBHTs can be prevented from lingering trauma of victimization to DBHTs by improved pain management practices as suggested by the respondents (Table 4) without forgetting the values of continuing medical education about the difficult patient scenarios serving as a potential tool to create awareness among pain physicians' population.

The third observation of this survey was middle aged male patients outnumbering others as perpetrators of DBHTs with three out of ten perpetrators (30%) giving vivid utterances involving gun-related violence which reflects that DBHTs even if assumingly minimal needs serious attention of pain management teams. The saving grace of absence of sexual overtones in DBHTs should not deter the pain management teams from developing gender-oriented and gender-focused requirements of dealing with future DBHTs in practice of pain medicine. The present survey could not come to any conclusion about warning signs related to pre-existent psychiatric illnesses or history of violence in the perpetrators but their existential role in DBHTs in general cannot be overlooked. Moreover, the society in general has implicit interests in ensuring conscientious prevention and appropriate management of DBHTs against pain practitioners because pain practitioners are one of the major prescribers of controlled substances (opioids) and their complacent attitudes developing from the incidence of DBHTs can worsen the existing critical socioeconomic issues related to opioid abuse, dependence and diversion.

The fourth observation of this survey was that perpetrators and physicians did not agree in regards to reasoning behind the DBHTs with perpetrators relating it to poor pain control (88%) and physicians relating it to opioid abuse (63%). This reflects that patients might not be able to personally recognize their evolution in opioid abuse that may have been secondary to prescription medications. Contrarily, the pain physicians' population prejudiced to opioid abuse as underlying cause for DBHTs might overlook poor pain control or opioid tolerance as the underlying causes in the event of aggressive future pain patients who are threatening their physicians.

The final observation of this survey was that even though DBHTs were ignored half-of-the-times with physicians denying any effect on them three-eighths-of-the-times, the post-hoc acts and effects of DBHTs on the rest of the respondents to the tune of staff quitting the pain practice eventually (Table 3) warrants that awareness, open discussions and preventative strategies among the pain physicians community should be instigated for future safety of pain practitioners and evolution of vigilant pain management policy making that is neither complacent to opioid abusers/diverters nor harmful to patients who are genuinely suffering from poor pain control. The preventative strategies as suggested in the survey (Table 4) may not include a comprehensive list and is a reflection of five respondents reporting eight DBHTs in detail (by completing the whole survey questionnaire). However, these strategies can be a good start to explore the final institution-specific population-adjusted universal guidelines for the pain practitioners across the country to prevent future DBHTs and their aftermaths. The United States is the global leader in consumption of prescribed opioids and hence, the pain practitioners here have the additional responsibility to reflect and manage their pain practice related difficult scenarios (that include the incidence of DBHTs) so that globally pain medicine practice is neither considered a high-risk medical subspecialty (and thus preventing the intelligent new crop of global physicians embracing this subspecialty) nor akin to misjudging the definite risk of DBHTs indigenous only to the United States by eventually sweeping the issue of local awareness about DBHTs under the rug.

Conclusion

In summary, there is minimal/underreported but definite risk of DBHTs for pain practitioners and the improved reporting, awareness and discussions can help pain physician community to formulate efficacious strategies to the prevention and management of future DBHTs.

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Appendix A

Survey Questionnaire [Incidence of Death/Bodily Harm Threats (DBHTs) to Pain Practitioners]

1. Are you a Pain Physician or Pain Medicine Fellow?

a. Yes
b. No =====

2. Which state do you presently practice?

a. Name of State

3. Which year did you first start practicing pain medicine as Pain Fellow/Physician after completing your residency?

a. 19--/20--

4. What is your sex?

a. Male
b. Female

5. In which specialty did you do your medical residency?

a. Anesthesiology
b. Physical Medicine and Rehabilitation
c. Neurology
d. Psychiatry
e. Others

6. Before starting your pain practice as a Fellow/Physician, were you given education/training regarding management of confrontational/violent person?

a. Yes
b. No
7. Have you ever received a death/bodily harm from a pain patient/patient's family?
a. Yes
b. No =====
8. How often have you received a death/bodily harm from a pain patient/patient's family?
a. Once in lifetime
b. Once in a year
c. Once in a month
d. Once in a week
e. More than once in a week
9. How many (TOTAL) death/bodily harm threats have you ever received from pain patients/ patients' families?
a. Number

In Next Few Pages, We Will Inquire about ONLY FIRST FIVE Threats Received by You

Death/Bodily Harm Threat Number 1

10. What was your age (in years) when you received this death/bodily harm threat from a pain patient/patient's family?
a. Age in years
11. Which year did you receive this death/bodily harm threat from a pain patient/patient's family?
a. 19--/20--
12. What type of pain practice setting were you part of at the time of this death/bodily harm threat?
a. Academic Setting
b. Private Group Practice
c. Personal Office Setting
13. What form of pain medicine were you primarily practicing at the time of this death/bodily harm threat?
a. Primarily Interventional Pain Management
b. Primarily Medication Based Pain Management
c. Equal Weight-age to Abovementioned Two
14. What was the age group of the person who threatened you?
a. 0-10 yrs
b. 11-20 yrs
c. 21-30 yrs
d. 31-40 yrs
e. 41-50 yrs
f. 51-60 yrs
g. 61-70 yrs
h. 71-80 yrs
i. 81-90 yrs
j. 91-100 yrs
k. >100 yrs
15. What was the sex of the person who threatened you?
a. Male
b. Female
16. Who was the threatening person?
a. Patient
b. Patient's Family
c. Both
17. Where did you come in contact with this person who threatened you?
a. Inpatient setting
b. Outpatient setting
c. Intensive Care Unit Setting
d. Palliative Care/Hospice Setting
e. Emergency Department
f. Peri-operative Setting
18. How was this death/bodily harm threat delivered to you? (Multiple Answers allowed)
a. Anonymous
b. In person (face to face)
c. Through third person
d. On phone
e. By Email
f. By Regular Mail
g. By Fax
h. Any other Method
19. Was any specific killing/bodily harm method described in this death/bodily harm threat?
a. Yes ==== (Describe)
b. No
20. Was the person who threatened you on psychiatric medications?
a. Yes
b. No
c. Don't Know
21. Were there any warning signs (like history of violence) before the actual death/bodily harm threat?
a. Yes

b. No
c. Don't Know
22. Were there sexual overtones in this death/bodily harm threat?
a. Yes
b. No
23. What was the reason ACCORDING TO THE THREATENING PERSON for this death/bodily harm threat? (Multiple Answers Allowed)
a. Poor Pain Control
b. Loss of Function
c. Worsening of other symptoms
d. Distrust for the physician
e. Others
24. What was the reason ACCORDING TO YOU for this death/bodily harm threat? (Multiple Answers Allowed)
a. Poor Pain Control
b. Loss of Function
c. Worsening of other symptoms
d. Poor Rapport
e. Person/Family were apparently diverters
f. Opioid dependence
g. Opioid abuse
h. Opioid tolerance
i. Litigation potential
j. Less options for Pain Doctor Shopping
k. Others
25. Was this threat for bodily harm executed by the threatening person?
a. Yes
b. No =====
26. What happened to you when the bodily harm was executed? (Multiple Answers allowed)
a. No medical attention was required
b. First Aid was sufficient
c. You were hospitalized
d. You were in intensive care unit
e. You required long term physical rehabilitation
f. You required long term psychological rehabilitation
27. How did you handle this death/bodily harm threat? (Multiple Answers allowed)
a. Ignored the Threat
b. Involved Law Enforcement Agencies
c. Involved Hospital Security only
d. Discharged the person from your care
e. Filed a lawsuit against the person
f. Complied with the person's demands for medication/treatments
g. Other
28. How did this death/bodily harm threat affect you? (Multiple Answers allowed)
a. Did not affect you
b. You became anxious and hyper-vigilant for yourself and your family
c. You changed your ways of pain practice (interventional versus medication based)
d. You changed your place of pain practice
e. You changed your city of pain practice
f. You became more complacent to patients' demands
g. You started doing criminal background checkup of the patients
h. You became more strict with your pain management plans
i. You stopped practicing pain medicine
j. Other
29. How could you have prevented this event? (Multiple Answers allowed)
a. Unavoidable and Unpredictable
b. Better pain and symptom control in patients
c. Better patient-family-physician rapport
d. Being more vigilant to warning signs showed by the person towards violence
e. Increasing the private security for your pain practice
f. Criminal background checkup for all new pain patients
g. Coordinating and Follow up with law enforcement agencies regarding medication diversion
h. Improved practices in opioid dispensing
i. Continuing medical education/ training for management of difficult patient encounters
j. Others
30. Did you receive any other death/bodily harm threat?
a. Yes
b. No ====
31. Thank You

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