

Emergency Care Practitioners' Barriers to Mental Health Assessment, Treatment, and Referral of Post-Injury Patients

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ABSTRACT

Objective: Nearly half of all severely injured patients suffer some form of post-trauma mental stress, but little is known about factors that influence emergency care practitioners' decisions to refer injured patients to mental health care services. This study aimed to: (1) advance our understanding of the practice barriers that hinder mental health assessment, treatment, and referral of injured patients in emergency care settings, and (2) determine the preferred learning format of emergency care practitioners who desire to gain knowledge about mental health problems after injury.

Methods: Using a mail survey research design, data were collected from a random sample of emergency medicine physicians and nurses in Wisconsin and New York.

Results: Data was provided by 108 respondents with an average of 16 years of emergency care experience. More than half indicated they never refer trauma patients for mental health follow-up. Primary reasons for not dealing with trauma-related mental health issues were insufficient time and lack of symptoms. Providers who were most satisfied with their hospital's capacity to support mental health care were significantly more likely to refer patients. The top preference for receiving additional training related to mental health needs of trauma patients was on-site lectures.

Conclusion: Injured patients rely on emergency care practitioners to provide multidimensional care. However, few practitioners facilitate mental health referrals for post-trauma victims, despite their known value.

INTRODUCTION

Many injured patients struggle to cope with adverse psychological sequelae related to their traumatic event. For example, a survey of 560 adults in the United States conducted 1 week after the terrorist attacks of September 11, 2001, found that 44% of the respondents experienced 1 or more substantial symptoms of stress.¹ For most individuals, post-traumatic psychiatric symptoms are fleeting. However, for some, consequences of trauma that affect many areas of functioning can persist long after the traumatic event has ended.

The mental health disorder usually associated with exposure to a traumatic event is post-traumatic stress disorder (PTSD). As described in the Diagnostic and Statistical Manual of Mental Disorders—Fourth Edition, the diagnosis of PTSD requires patient exposure to a traumatic event that is associated with intense feelings of fear, helplessness, or horror that persist for more than 1 month.² Indications in 3 categories are required: (1) a re-experiencing symptom, (2) avoidance or numbing symptoms, and (3) arousal symptoms. For example, an individual involved in a severe motor vehicle crash may suffer from recurrent nightmares, may avoid driving, and may become hypervigilant.

PREVALENCE OF TRAUMATIC EVENTS AND PTSD

Reviews of research on the prevalence of exposure to traumatic events show rates varying from moderate to quite high, depending on the population sampled and the methods used to define and ask about experiences (see Table 1). For example, the World Health Organiza-

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tion has estimated that between 1900 and 1988, hurricanes alone left 1.2 million people without homes and directly affected the lives of 3.5 million people.³ During this same time, earthquakes, typhoons, and cyclones affected another 26 million people, and 10 million of these were left homeless.

In another study, Midwestern young adults who were participants in a health maintenance organization were interviewed and asked whether they had experienced an event outside the range of normal human experience.⁴ About 40% of them said they had. However, because health maintenance organization participants have been shown to be in a higher socioeconomic bracket than the general population, this survey's findings may be unrepresentative of the general population's experience.

Kessler et al conducted a prevalence study and reported very different results on the lifetime history of trauma.⁵ They used a version of the Diagnostic Interview Schedule to interview a nationally representative sample of nearly 6000 people aged 15 to 54 in the United States. These authors found that 51% of women and 60% of men reported at least 1 traumatic event having occurred at some point in their lives.

Research reviews of prevalence of PTSD indicate estimates that 25%-30% of those exposed to extreme stressors develop PTSD.^{6,7} For example, in a national telephone survey (using random digit-dial telephone methods) of adult women, 12.3% of respondents (17.9% of those exposed to a traumatic event) had a lifetime history of PTSD.⁸ Studies examining the lifetime prevalence of PTSD differ on the methodology used to diagnose the disorder. Those studies that utilized the revised National Institute of Mental Health Diagnostic Interview Schedule, in which information on exposure was obtained by only a single question,^{4,9} yielded lower estimates than studies that used a multi-item list.^{5,8,10,11}

Injured patients' first medical contacts are often emergency health care practitioners. These responders are in an ideal setting to assess which patients are at high risk for PTSD, and to encourage the injured to seek psychological counseling at the first signs of emotional stress.

Benefits of Early Prevention/Intervention

Effective treatments for PTSD patients have proliferated recently, including both psychotherapy and pharmacotherapy. Prompt diagnosis and initiation of treatment is important in preventing needless suffering and allowing comorbid conditions (such as alcohol abuse disorders) to manifest. Although for some people PTSD symptoms dissipate without professional treatment, early treatment leads to improved outcomes. In a large epidemiological study, Kessler et al explored the

Table 1. Prevalence (%) of Exposure to Trauma and Post-traumatic Stress Disorder (PTSD)*

Study	Exposure		PTSD	
	Male	Female	Male	Female
Breslau et al ⁴	43.0	36.7	6.0	11.3
Norris ¹⁰	73.6	64.8	—	—
Resnick et al ⁶	—	69.0	—	12.3
Kessler et al ⁵	60.7	51.2	5.0	10.4
Breslau et al ⁹	—	40.0	—	13.8
Stein et al ¹¹	81.3	74.2	—	—
Breslau et al ¹⁹	92.2	87.1	10.2	18.3

* From Yehuda.²⁰ Adapted with permission.

consequences of trauma in 5877 persons 15 to 54 years of age.⁵ The authors found that 459 individuals had PTSD. Relying on retrospective reports, they found a 28% remission in cases of PTSD 1 year after the traumatic event. This improved to a 38% remission by the second year and seemed to reach a plateau of 60% remission by about year 6 post-injury. Interestingly, participation in mental health treatment (although not necessarily for PTSD) accelerated the rate of remission.

Little is known about factors that facilitate or act as barriers to the provision of initial mental health assessments, interim treatments, and/or mental health referrals of injured patients seen in emergency care settings. In addition, there is a dearth of literature documenting the preferred training methods of emergency health care providers in the area of post-traumatic mental illness.

An exploratory study was conducted to examine current practices and attitudes related to early recognition and referral of injured patients to mental health care by emergency health care practitioners. Research objectives for this study were to: (1) determine personal and practice barriers that hinder mental health assessment, treatment, and referral of injured patients, and (2) determine the preferred format of emergency care providers who desire to gain knowledge about post-traumatic mental health problems.

METHODS

This descriptive, quantitative research study involved data collection using mail survey methods. A trauma-related attitudes, behaviors, and educational needs assessment questionnaire for emergency health care practitioners was developed, pilot-tested and refined by the investigators.

Sample and Procedure

The sample consisted of a randomly selected pool of 480 practicing emergency medicine physicians and nurses in Wisconsin and New York. A list of emergency medicine

physicians and nurses residing within a 30-mile radius of Manhattan, New York, and within the state of Wisconsin was obtained. Emergency care practitioners were identified by their membership in professional organizations (the American Medical Association and the American Nurses Association). These lists were secured through KMLists, Inc. (Marlton, NJ). KMLists generated samples of 120 nurses and 120 physicians in both New York and Wisconsin.

In November 2001, 480 potential study participants were mailed a detailed letter that indicated that by returning the survey, his or her informed consent to participate anonymously would be implied. An addressed, stamped envelope was provided for returning completed surveys. The envelopes were not marked or identified in any way, which maintained participants' anonymity.

Instrument

The instrument contained Likert-type questions requiring approximately 5 minutes to complete. Respondents were asked questions related to their personal and professional background and experience: age, gender, primary discipline, and years in current discipline. Respondents were also asked to estimate how many patients they see in a typical month who have been involved in a severe injury, and to estimate what proportion of post-injury patients they refer to a mental health specialist for evaluation and/or treatment.

Participants were then asked to rate the degree to which certain personal and practice barriers hinder proper assessment, treatment, and referral of injured patients. Specifically, the survey stated: "Certain practice barriers may limit health care practitioners from assessing post-injury patients for PTSD symptoms. To what extent are the following barriers experienced by you?" Participants rated factors on a 4-point scale (frequently, sometimes, rarely, never): (1) not enough time to conduct assessment; (2) not enough expertise to conduct assessment; (3) my professional role does not require me to conduct assessments; and (4) PTSD symptoms are not yet apparent when I see injured patients. Participants were also asked to "indicate how satisfied you are with your practice's and/or hospital's capacity to support a recommendation of mental health services for injured victims" with response choices of very satisfied, moderately satisfied, slightly satisfied, or not at all satisfied.

Participants indicated their preferences for the following methods of ongoing or continuing education for post-trauma mental health problems (e.g., training in PTSD) on a 4-point scale: (1) topic-specific conference, (2) presentation at annual convention of professional organization, (3) teleconference, (4) video educa-

tion tapes for home or office viewing, (5) audio cassette, (6) clinical rounds, (7) CD-ROM, (8) Internet, (9) on-site lecture, and (10) other. Data analyses included descriptive statistics and measures of correlation.

RESULTS

Response Rate

Of the 480 instruments mailed, 54 were undeliverable (returned to investigator), and 109 surveys were completed and returned, leading to a response rate of 26% (109/426). One respondent was eliminated from analyses because of incomplete data, resulting in a usable sample of 108 respondents.

Participant Demographics

Of the 108 respondents, 73 (68%) were from Wisconsin and 35 (32%) were from New York, including 56 (52%) females and 52 (48%) males. Physicians made up exactly half of the respondents, and nurses and nurse practitioners together constituted the other half. For comparisons involving respondents' disciplines, 2 groups were formed: physicians and nurses (included nurse practitioners). In terms of discipline, there was a marked difference in gender distribution (physicians were 82% male and nurses were 85% female). The sample size was not large enough to further analyze interactions of discipline and gender on survey responses.

Overall, survey participants had substantial work experience. The mean years in current discipline was 15.7 years. The average number of severely injured trauma patients these practitioners saw each month was about 14. The mean percentage of such patients referred to mental health care providers was <1%, with 55% of respondents indicating they refer none of their trauma patients to mental health care providers.

Barriers to Assessment, Treatment, and Referral

The first research objective was to determine the personal and practice barriers that hinder proper assessment, treatment, and referral of post-injury patients. The frequencies of reported barriers to assessment are shown in Table 2. The barrier reported as being experienced "frequently," most often was a lack of time. Perceived lack of PTSD symptoms when seen by participants, lack of expertise, and the belief that the participant's professional role is a hindrance also appear to be roadblocks for many participants.

Among those who do and do not refer injured patients to mental health care services, one might expect there to be a difference with regard to satisfaction with the capacity of their practice and/or hospital to support such referrals. A t-test analysis found that these groups

differ, $t = -3.29$ ($P = .001$). Those who refer injured patients to mental health care providers ($M = 2.69$, $SD = 1.00$) are significantly more satisfied with their practice's and/or hospital's capacity to support a recommendation of mental health services for injured patients than those who do not refer ($M = 1.96$, $SD = 1.00$).

Preferred Training Formats

Frequencies of preferred training formats reported by participants are shown in Figure 1. Results indicate that on-site lectures (endorsed as "strongly prefer" by 41.4% of respondents) and topic-specific conferences (endorsed as "strongly prefer" by 40.8% of respondents) were the most preferred methods of ongoing or continuing education. Teleconference (endorsed as "strongly prefer" by 5.2% of respondents) was the least endorsed method of training formats.

DISCUSSION

The responses to our survey made it clear that the emergency care practitioners in our sample experience personal and practice barriers that limit their ability to provide injury patients with comprehensive post-traumatic mental health assessments, interim treatments, and referrals. However, those who do refer injured patients to mental health care services expressed greater satisfaction with their organizations' capacity to support such a recommendation.

When considering specific institutional protocols for successful post-traumatic health care that includes psychological care (e.g., anticipatory counseling), attention must be given to intangible barriers and logistical problems. The most significant barrier experienced by emergency care practitioners was a lack of time to conduct assessments. Persons interested in developing interventions should consider tailoring their strategy to account for this barrier. Perhaps designated personnel, e.g., social workers or spiritual counselors within the emergency department should be trained to conduct assessments.

Very minimal numbers of referrals of injured patients to mental health care practitioners were reported. Most respondents (80.8%) indicated that they frequently or sometimes lack expertise to conduct assessments. This finding reveals a complex situation in which injured patients must rely on the medical staff in emergency rooms to provide multidimensional care, even if they don't expect it, while many practitioners do not perceive themselves as capable providers of that care.

Respondents also cited a lack of PTSD-related symptoms in the emergency room setting as a significant barrier to mental health referrals. Given what is known about the prevalence of post-traumatic psychological mental health

Table 2. Frequencies (%) of Barriers to Assessing Post-injury Patients

Barrier	Frequently N (%)	Sometimes N (%)	Rarely/Never N (%)
Not enough time to conduct assessment (n=104)	67 (64.4)	24 (23.1)	13 (12.5)
PTSD symptoms are not yet apparent when I see injured patients (n=104)	57 (54.8)	33 (31.7)	14 (13.5)
Not enough expertise to conduct assessment (n=104)	48 (46.2)	36 (34.6)	20 (19.2)
My professional role does not require me to conduct assessment (n=103)	36 (35.0)	33 (32.0)	34 (33.0)

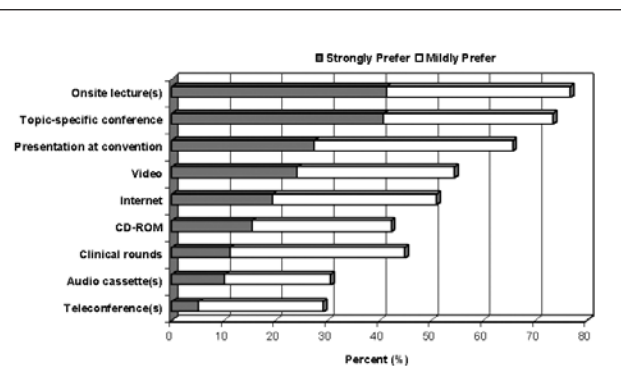


Figure 1. Respondents' format preferences for receiving further training in posttraumatic mental health assessment, treatment and referral options.

problems, it is likely that some peritraumatic reactions (that are known to predict later PTSD symptomatology) go undetected in emergency room settings. Better training about the prevalence of these reactions and means to assess them may help to overcome this barrier.

After considering logistical barriers, training must be addressed. Training programs could assist emergency care providers by (1) educating practitioners of maladaptive post-traumatic responses that are predictive of later PTSD, (2) underscoring the importance of knowing institutional referral procedures, (3) emphasizing the importance of being knowledgeable of local mental health resources for injured patients, and (4) providing an ethical rationale for their comprehensive, proactive care.

In addition to developing content of training, it is necessary to find appropriate methods of training. Although there is an increasing trend in distance learn-

ing and individual training, this study revealed that emergency care practitioners prefer training in which the educator is present. Specifically, topic-specific conferences and on-site lectures were the most preferred methods of training. Consistent with past research, the least preferred method for training was via teleconference.¹² This information may provide guidance for future continuing education and training opportunities for emergency care practitioners.

Organizational barriers to appropriate assessment and treatment include the evaluation process, professional training, and institutional constraints.¹²⁻¹⁸ Understanding the organizational and professional barriers that prevent referral may lead to a better understanding of how collaborative efforts between health care practitioners and mental health care providers might be successful. If it is impractical to expect trauma physicians and emergency department nurses to address mental health outcomes of their patients, then institutional practices might consider alternatives that ensure assessments occur somewhere along the continuum of care from admission to discharge. This should lead to practices that improve the early detection and referral of injured patients who are likely to suffer from the psychological aftermath of their trauma.

CONCLUSION

The current literature makes it clear that a substantial portion of the large number of patients who experience major trauma and injury can be expected to experience symptoms of post-traumatic stress. The literature also makes it clear that such patients would benefit substantially from early appropriate mental health treatment. Yet our study results indicate that there are substantial barriers that impede emergency care practitioners from providing initial assessment, treatment, and referral to the injury patients that they see. Lack of time, perceived capabilities, and institutional support are all frequently cited as reasons for not providing such services. A need to change this situation might best be met through direct training of the providers, rather than through indirect media training.

ACKNOWLEDGMENTS

The authors wish to thank emergency medicine staff of Marshfield Clinic and St. Joseph's Hospital Emergency Department (Marshfield, Wis) for providing pilot test feedback on the survey instrument. Ms. Shannon Lee expresses gratitude for general guidance provided by Steven Saunders, PhD, on project implementation. Gratitude is extended to Marshfield Clinic Research Foundation for

providing assistance in the preparation of this manuscript through the services of Alice Stargardt.

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