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Trauma Providers' Knowledge, Views and Practice of Trauma-Informed Care

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Abstract

Background/Significance—Trauma-informed interventions have been implemented in various settings, but trauma-informed care (TIC) has not been widely incorporated into the treatment of adult patients with traumatic injuries. The purpose of this study was to examine health care provider knowledge, attitudes, practices, competence, and perceived barriers to implementation of TIC.

Methods—This cross-sectional study used an anonymous web-based survey to assess attitudes, knowledge, perceived competence, and practice of TIC among trauma providers from an urban academic medical center with a regional resource trauma center. Providers (nurses, physicians, therapists [physical, occupational, respiratory]) working in trauma resuscitation, trauma critical care and trauma care units were recruited. Descriptive statistics summarized knowledge, attitudes, practice, competence, and perceived barriers to TIC and logistic regression analyses examined factors predicting use of TIC in practice.

Results—Of 147 participants, the majority were nurses (65%), followed by therapists (18%), and physicians (17%), with a median 3 years of experience. 75% answered the knowledge items correctly and 89% held favorable opinions about TIC. 19% rated themselves as less than "somewhat competent". All participants rated the following as significant barriers to providing basic TIC: time constraints, need of training, confusing information about TIC, and worry about

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re-traumatizing patients. Self-rated competence was the most consistent predictor of providers' reported use of specific TIC practices.

Conclusions—Despite some variability, providers were generally knowledgeable and held favorable views toward incorporating TIC into their practice. TIC training for trauma providers is needed, and should aim to build providers' perceived competence in providing TIC.

Keywords

Trauma care; Psycho-social aspects of care; Acute stress disorder; Posttraumatic stress disorder; Wounds and injuries; Trauma providers' practice; Family; Nurses; Physicians

INTRODUCTION

Psychological consequences may develop and persist long after physical wounds of traumatic injury have healed. While the majority of injured adults experience full recovery (Zatzick, et al., 2011), a significant group goes on to experience negative psychological sequelae, including posttraumatic stress disorder (PTSD) and depression (Verger, et al., 2004; Zatzick, 2007; Richmond, Ruzek, Ackerson, Wiebe, Winston, & Kassam-Adams, 2011). A national study found that more than 20% of survivors of traumatic injury across the U.S. develop symptoms consistent with a PTSD diagnosis 12 months after acute care in-patient hospitalization (Zatzick, Jurkovich, Rivara, & Wang, 2008). Several risk factors appear to increase risk for persistent PTSD after an index event such as a traumatic injury, including prior exposure to traumatic experiences, overall life stress, more severe acute traumatic stress symptoms, maladaptive coping responses, and poorer social support (Richmond, et al., 2011; Ozer, Best, Lipsey, & Weiss, 2003; Brewin, Andrews, & Valentine, 2000). Emotional and psychological responses to physical injury, including PTSD symptoms, are the dominant contributors to poor functional recovery and lower health-related quality of life (HRQOL) (Richmond, et al., 2009) and can persist for as long as two years after injury (Holbrook, et al., 2005; Gauffin, Öster, Sjöberg, Gerdin, & Ekselius 2016; Zatzick, et al., 2008).

The impact of PTSD symptoms on health and functional outcomes underlines the importance of understanding and addressing factors that contribute to these symptoms, as part of comprehensive medical and nursing care of the injured adult. Trauma-informed care (TIC) offers a framework for health care providers and institutions in helping to avert persistent traumatic stress responses in injured patients. ("Trauma" in the context of "trauma-informed care" refers to psychological trauma rather than physical injury trauma.)

The primary elements of a trauma-informed approach in any service system have been defined by the Substance Abuse and Mental Health Services Administration as 1) realizing the widespread impact of trauma exposure, 2) identifying how trauma may impact patients, families, and staff in this system, 3) responding by applying this knowledge into practice and institutional policies, and 4) preventing re-traumatization (Substance Abuse and Mental Health Services Administration, 2015). At a minimum, trauma-informed approaches endeavor to do no harm, i.e. reducing potentially traumatic aspects of treatment and the delivery of care to avoid re-traumatizing patients. TIC shares many of the goals of patient-

and family-centered care, but adds further specific attention to mitigating the impact of potentially traumatic medical events and treatment (Stuber, Schneider, Kassam-Adams, Kazak, & Saxe, 2006; Bloom, & Farragher, 2013).

Systematic adoption of TIC practices is not standard in most health settings (Zatzick, Jurkovich, Wang, & Rivara, 2011; Ziegler, Greenwald, DeGuzman, & Simon, 2005). A recent national survey of 391 adult level I and level II trauma centers found that just 7% of centers incorporate routine screening for PTSD symptoms (Love, & Zatzick, 2014). Providers specializing in care of injured patients may perceive that they lack the time, knowledge, and resources to focus care on the psychological aspects of traumatic injury (Kassam-Adams, et al., 2015).

Trauma-informed pediatric health care, including the care of traumatically injured children, has begun to be better defined and described (Kassam-Adams, et al., 2015; Marsac, et al. 2016; Weiss, et al., 2017; Alisic, 2016; Alisic, 2017). However, infusion of TIC for the treatment of adult patients admitted to hospital trauma centers has not been explored. This cross-sectional study takes an initial step in addressing that gap by examining trauma providers' attitudes, knowledge, and practices of TIC and barriers to the implementation of TIC.

METHODS

Trauma providers were recruited from an urban tertiary academic medical center with a regional resource trauma center to complete an anonymous web-based survey. All trauma providers (nurses, physicians, therapists [physical, occupational, respiratory]) working in trauma resuscitation, trauma critical care, and trauma nursing care units were eligible to participate and received information about the survey via flyers, emails, and announcements at staff meetings. Email invitations included a brief statement on the survey's objective, a secure link to the web-based survey, and an estimated time for completion. To reduce barriers to honest self-reporting of knowledge and performance, no personal identifiers were included in the survey; thus, data were reported anonymously. Respondents were informed that their consent to participate was implied by voluntarily choosing to complete the survey. Data collection took place during a four-week period between August 2015 and September 2015. Four raffles with gift cards were held as incentives for providers to complete the survey. The Institutional Review Board of the University of Pennsylvania approved the study.

The providers' attitudes, knowledge, and practice of TIC were assessed using the trauma provider survey: a 38-item self-report instrument consisting of 5 categories. It was originally developed for pediatric providers (Kassam-Adams, et al., 2015) and was adapted slightly (e.g. referring to a patient's "family members" rather than "parents") to be appropriate for providers serving adult patients. The survey assessed five domains: knowledge regarding injury-related posttraumatic stress and TIC (11 items); opinions regarding TIC (6 items); self-rated competence in TIC (10 items); recent (past 6 months) use of specific TIC practices (6 items); and perceived barriers to implementation of TIC (4 items). Respondents rated each item for knowledge, opinions, self-rated competence, and perceived barriers on a three-

or four-point Likert scale with anchors appropriate for each category, e.g. knowledge was rated as “Strongly Disagree”, “Disagree”, “Agree”, or “Strongly Agree” and self-rated competence was rated as “Not Competent”, “Somewhat Competent”, or “Very Competent”. Respondents provided yes/no ratings for “recent practice” items. We also collected provider demographics including gender, age, race, ethnicity, role, number of years in role, and highest degree obtained. The web-based survey data were collected by REDCap, a secure data capture tool hosted by the University of Pennsylvania (Harris, et al., 2009).

DATA ANALYSIS

We first examined respondent demographics and survey item responses with descriptive analyses. We examined the internal consistency for survey domains (Cronbach’s alpha). We created summed scores for 3 survey domains (knowledge, opinions, self-rated competence). Potential associations among demographic variables and survey items or summary scores were examined using chi square analyses or logistic regression. Bivariate analyses using chi-square, Student’s t-test, and Fisher’s exact test were used as appropriate. For our multivariable models, the three and four-point scales were dichotomized, so that for the questions for which “Agree” was wrong, a response of either “Agree” or “Strongly Agree” was coded as incorrect and for the questions for which “Disagree” was wrong, a response of either “Disagree” or “Strongly Disagree” was coded as incorrect. Demographic variables were entered into multivariate logistic regression models for each question. Finally, participants above and below the sample median for years of experience, provider role, educational level, and other demographics were compared. Statistical significance was set at a p value of <0.05. All data analyses were performed using IBM SPSS Statistics 22.0 (IBM Corp., Armonk, NY, USA).

RESULTS

One hundred forty-seven trauma providers completed the survey (Table 1). Most of the respondents were nurses (n=95, 83% females) with a median age of 33 years (IQR 29–42 years), followed by therapists (n=27, 74% females) with a median age of 34 years (IQR 31–37 years), and physicians (n=25, 20% female) with a median age of 31 years (IQR 29–43 years). The years of experience providing care to trauma patients varied to some extent among the three professional groups; nurses with a median time of 2 years (IQR 1–7 years), therapists with a median time of 3 years (IQR 1–10 years), and physicians with a median time of 4 years (IQR 2–11 years).

Knowledge of injury-related posttraumatic stress

The majority of the participants answered the knowledge items correctly (Table 2). Most participants (93.8%) were aware that almost everyone who is seriously injured or ill has at least one traumatic stress reaction soon after the event. However, less than half of the participants (nurses 34.8%, physicians 44%, therapists 18.5%) were aware that many individuals experiencing serious injury or illness will cope well on their own. There were also a lower proportion of correct answers (51%) regarding the lack of association between the severity of the physical injury/illness with risk for development of PTSD symptoms.

Opinions of trauma-informed care

Overall, the vast majority of the participants held favorable opinions about TIC (Table 3). However, nearly one third of the participants (physicians 44%, nurses 25%, therapists 19%) answered that they did not have colleagues whom they could turn to for help with a patient experiencing significant traumatic stress.

Self-rated competence in providing trauma-informed care

Table 4 shows that the majority of participants rated their skills in providing TIC as “somewhat” or “very competent”. Nearly all of the participants answered that they were very or somewhat competent in responding calmly and without judgment to a patient’s strong emotional distress (99.3%) and in engaging with patients so they feel comfortable talking to and being comforted by nurses, physicians, and therapists (93.2%). In contrast, almost half of the physicians (48%) and therapists (44.4%) rated themselves as “not competent” in educating patients about common stress reactions and symptoms, and about half of the physicians (48%) and therapists (51.9%) rated themselves as ‘not competent” in understanding the empirical evidence behind assessment and interventions for traumatic stress. Further, almost 1 in 2 physicians reported that they were not competent in avoiding or altering a situation within the hospital that a patient might experience as traumatic (44%) and in understanding how traumatic stress may present differently in different ages, genders, or cultures (44%).

Implementing Trauma-informed practice

The most frequently endorsed trauma-informed practices in the past 6 months were teaching patients specific ways to manage pain and anxiety during a procedure (72.8%) and asking questions to assess a patient’s symptoms of distress (65.3%) (Table 5). Greater than half of the participants reported asking questions to family members to assess symptoms of distress. However, fewer than half reported teaching families what to say to their family member after a difficult experience and informing families about reactions that indicate that their family member may need help.

Barriers to implementing trauma-informed care

Participants rated four factors that were barriers in providing basic trauma-informed assessments and interventions: time constraints, need of training, confusing information and evidence on trauma-informed practices, and worry about further upsetting or re-traumatizing patients. The majority of the participants listed all factors as barriers. Time constraints were rated as “significant” barriers by nurses (48.4%), physicians (60%), and therapists (29.6%).

Exploring associations between key variables

Provider age, gender, race, or ethnicity was not associated with summed scores for self-rated competence, knowledge, or favorable opinions of TIC. Those with greater than five years of experience in the role of trauma provider reported higher self-rated competence in TIC, and were more likely to ask patients specific questions to assess their distress (79% vs. 59%; $\chi^2 = 7.92$, df = 1, p = 0.005). No differences between nurses and physicians were found regarding knowledge of traumatic stress or TIC. However, nurses reported more favorable

opinions about TIC than MDs (91% vs. 48%; $\chi^2 = 39.37$, df = 1, p = 0.000). Regarding specific practices performed during the past six months, 52% of nurses vs. 24% of physicians indicated they "provide information to family about emotional or behavioral reactions that indicate their family member may need help." ($\chi^2 = 7.52$, df = 1, p = 0.023). Also, 64% of nurses vs. 44% of physicians "teach patient specific ways to cope with upsetting experiences." Providers who reported that they had a close family member who sustained a serious traumatic injury requiring hospitalization had no difference in knowledge, self-rated competence in providing TIC, or reported TIC practices, but did endorse more favorable opinions of TIC.

In multiple logistic regression analysis, knowledge and opinions of TIC were not associated with any reported TIC practices. However, self-rated competence was modestly associated with *all* TIC practices, with odds ratios ranging from 1.13 to 1.29 (see Table 6).

DISCUSSION

The findings of this study indicate that despite some variability with regard to teaching patients how to cope with difficult experiences, providers were generally knowledgeable and held favorable views to integrating TIC into their practice. Providers' knowledge varied regarding how individuals cope after injury, as well as which factors put patients at increased risk for traumatic stress responses. For instance, most participants incorrectly believe that increased anatomical severity of injury/illness increases a patient's risk of development of PTSD symptoms, though research consistently finds that traumatic stress reactions are not associated with severity of physical injury (Zatzick, et al., 2002; Brasel, & Bradley, 2010). The gap in knowledge regarding which patients are at risk for traumatic stress could lead to under recognition of the needs of some patients presenting to the trauma center with injuries (Alisic, Jongmans, van Wesel, & Kleber, 2011).

Providers reported competence in providing care that incorporates psychosocial considerations, and endorsed implementation of a range of these skills into their current practice. These results are positive in that they indicate an openness toward providing TIC, and some prior awareness about how traumatic experiences may affect patients emotionally and behaviorally. Importantly, however, results indicate the need for provider training, particularly in supporting patients during potentially traumatic medical procedures, as well as skills' training for clinicians in patient and family teaching for emotional and behavioral responses to stress, and ways to support adaptive coping during recovery from serious injury.

This study reinforces findings from previous research in a sample of pediatric nurses providing trauma care, which found that experience in pediatric nursing and self-rated competence were independently associated with reported practice of TIC (Kassam-Adams, 2015). Summed scores on knowledge, opinions, and competency are strikingly similar to those in the prior study of a sample of pediatric trauma nurses. For instance, in the current study, 20% of nurses in our sample, and 24% of *all* trauma providers felt "not competent" eliciting details of a traumatic event from a patient without re-traumatizing them, which echoes the previous study (Kassam-Adams, 2015), among whom 19% rated themselves as "not competent" in this important clinical skill.

While trauma providers in this study did not rate their competence as highly as nurses in the pediatric study in understanding how traumatic stress may present itself differently in patients of different ages, genders, or cultures (16.3% vs. 28%), they reported greater competence in responding to a patient's questions about whether he/she will die (29.9% vs. 16%). The history of trauma that many patients may have been exposed to prior to and in addition to their injury experience place them at high risk for acute stress responses, reinforcing the need to increase provider competence in talking with patients about traumatic experiences without re-traumatizing them (Kazak, et al., 2006; Alisic, Conroy, Magyar, Babl, & O'Donnell, 2014).

LIMITATIONS

A strength of this study is the inclusion of staff in diverse roles in a level I trauma center (nurses, nurse practitioners, physicians, surgeons, physical, occupational, and respiratory therapists) that represent multiple practice areas (trauma resuscitation, trauma ICU, and trauma nursing unit). This is in keeping with a central tenet in TIC, which seeks to achieve system-wide penetration of TIC into an organization in order to make TIC a "universal precautions" approach (Marsac, et al., 2016). This study also included staff with varying levels of trauma provider experience. Not all trauma providers working with patients elected to take the survey, which introduces a potential for selection bias. Also, this study does not seek to evaluate efficacy of implementation of TIC in terms of implementation or patient outcomes, but rather seeks to provide an initial needs and barriers assessment regarding future implementation of a validated TIC protocol in an urban trauma center. Because this study surveyed providers working in one trauma center in an urban area in one US state, these results may not be generalizable to providers in other types of settings or regions. Future work should examine knowledge, opinions, and barriers to TIC in larger national samples in a variety of regions.

IMPLICATIONS FOR TRAUMA NURSING PRACTICE

This study's findings indicate that efforts to improve trauma-informed nursing care should focus on specific knowledge and skills related to supporting patients through traumatic stress reactions and identifying those at highest risk for problematic emotional responses to injury. While systematic training of all providers is needed, it may be particularly important for trauma nurses at the bedside, who are the closest point of contact for patients, and who are uniquely positioned to observe, identify, and support patients experiencing distress. In addition, building a "universal precautions" approach will allow trauma nurses to treat each patient they care for as if they have experienced a traumatic event, just as donning gloves before a procedure is performed as a universal precaution for blood-borne pathogens. Integration of TIC training into nursing curricula and hospital employee orientations can support trauma nurses in developing awareness of thoughtful interventions to minimize re-traumatizing patients. An example of an evidence-based TIC protocol that has been used in pediatric settings is the "DEF protocol," which expands the "ABC's" to help nurses address distress, emotional support, and family needs in a systematic manner (Stuber et al., 2006). Other tools and information, and materials for patient education, available in several languages, can be found at www.HealthCareToolbox.org.

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Key Points

1. Providers generally held favorable views to integrating TIC into their practice and had some prior awareness about how traumatic experiences may affect patients emotionally and behaviorally.
2. There is a need for provider training in supporting patients during potentially traumatic experiences and in educating patients and families in recovery responses and coping strategies. Patients' prior exposure to injury increases their risk for acute stress responses, reinforcing the need to heighten provider competence in educating patients about traumatic experiences without re-traumatizing them.
3. A strength of this study is the inclusion of staff in diverse roles in a level I trauma center that represent multiple practice areas with varying levels of trauma provider experience.

Table 1

Demographic Characteristics	No (%)
Sex, No. (%)	
Female	104 (71)
Male	41 (29)
Age in years, median (IQR)	*36 (29, 20)*
Race, No. (%)	
Black/African America	13 (9)
Asian	8 (6)
White/Caucasian	118 (80)
Mixed	2 (1)
Prefer not to answer	6 (4)
Ethnicity, No. (%)	
Hispanic/Latino	4 (3)
Non-Hispanic/Latino	132 (90)
Prefer not to answer	11 (7)
Role, No. (%)	
Nurse	90 (61)
Nurse Practitioner	5 (4)
Therapist	21 (14)
Surgeon	15 (10)
Physician	9 (6)
Other	7 (5)
Number of years in role, median (IQR)	6 (1,8)
Highest degree obtained, No. (%)	
Diploma/AND	3 (3)
BSN *	73 (79)
MSN **/DNP ***	12 (13)
Other	4(4)

* BSN – Bachelor of Science in Nursing

** MSN – Master of Science in Nursing

*** DNP – Doctor of Nursing Practice

Table 2

Providers knowledge regarding injury-related posttraumatic stress

Knowledge items	Correct responses n (%)			
	All providers n=147	**Nurses n=95**	**Physicians n=25**	**Therapists n=27**
Prevalence, risk factors, and course				
1. Almost everyone who is seriously injured or ill has at least one traumatic stress reaction in the immediate aftermath of the event.	138 (93.8)	88 (92.6)	24 (96)	26 (96.3)
2. It is inevitable that most individuals who experience a life-threatening illness or injury will go on to develop significant posttraumatic stress or PTSD. (Disagree)	96 (65.3)	60 (63.2)	22 (88)	14 (51.8)
3. Individuals who are more severely injured or ill generally have more serious traumatic stress reactions than those who are less severely injured or ill. (Disagree)	75 (51)	52 (54.7)	8 (32)	15 (55.6)
4. Individuals who, at some point during the traumatic event, believe that they might die are at greater risk for posttraumatic stress reactions.	123 (82.3)	77 (81.1)	24 (96)	22 (81.5)
5. Many individuals cope well on their own after experiencing serious illness or injury.	49 (33.4)	33 (34.8)	11 (44)	5 (18.5)
Signs and symptoms				
6. The psychological effects of an injury or illness often last longer than the physical symptoms.	142 (96.6)	93 (96.9)	23 (96)	26 (97.3)
7. Individuals with significant posttraumatic stress reactions usually show obvious signs of distress. (Disagree)	101 (68.7)	67 (70.6)	19 (76)	15 (55.6)
8. I know the common signs and symptoms of traumatic stress in ill or injured patients.	93 (63.3)	66 (69.5)	11 (44)	16 (59.2)
9. Some early traumatic stress reactions in patients can be part of a healthy emotional recovery process.	143 (97.3)	91 (95.8)	25 (100)	27 (100)
Effectiveness of screening and intervention				
10. There are things that providers can do to help prevent longer-term posttraumatic stress in ill and injured patients.	144 (97.9)	92 (96.9)	25 (100)	27 (100)
11. There are effective screening measures for assessing traumatic stress that providers can use in practice.	111 (75.5)	70 (73.7)	20 (80)	21 (77.8)

Note. For items 2, 3, and 7 “disagree/strongly disagree” represents a correct response.

Table 3

Providers opinion regarding trauma-informed care (n=147)

Statement about trauma-informed care	Providers ratings, n (%)			
	Strongly agree	Agree	Disagree	Strongly disagree
1. Providers should focus on medical care for hospitalized patients as opposed to patient's mental health aftermath of the event. (Disagree).	3 (2)	21 (14.3)	94 (63.9)	29(19.7)
2. The way that medical care is provided can be changed to make it less stressful for patients.	32 (21.8)	104 (70.7)	10 (6.8)	1 (0.7)
3. Providers can teach patients how to cope with trauma.	29 (19.7)	108 (73.5)	10 (6.8)	0 (0)
4. Health care professionals should regularly assess for symptoms of traumatic stress.	47 (32.0)	96 (65.3)	4 (2.7)	0 (0)
5. It is necessary for providers to have mental health information about their patients in order to provide appropriate medical care.	45 (30.6)	92 (62.6)	10 (6.8)	0 (0)
6. I have colleagues I can turn to for help with a patient experiencing significant traumatic stress.	23 (15.6)	84 (57.1)	34 (23.1)	6 (4.1)

Note. For item 1 "disagree/strongly disagree" represents an opinion favorable to trauma-informed care.

Table 4

Providers self-rated competence in specific aspects of trauma-informed care (n=147)

Specific aspect of trauma-informed care	Providers ratings (n, %)		
	Very competent	Somewhat competent	Not competent
1. Engaging with traumatized patients so that they feel comfortable talking to you/comforted by you.	53 (36.1)	84 (57.1)	10 (6.8)
2. Responding calmly and without judgment to a patient's strong emotional distress.	87 (59.2)	59 (40.1)	1 (0.7)
3. Eliciting details of a traumatic event from a patient without re-traumatizing them.	25 (22.4)	86 (58.5)	36 (24.5)
4. Educating patients about common traumatic stress reactions and symptoms.	24 (16.3)	75 (51)	48 (32.7)
5. Avoiding or altering situations within the hospital that a patient might experience as traumatic.	29 (19.7)	85 (57.8)	33 (22.4)
6. Responding to a patient's question about whether he/she will die.	44 (29.9)	82 (56.8)	21 (14.3)
7. Assessing a patient's distress, emotional needs, and support systems soon after a traumatic event.	29 (19.7)	101 (68.7)	17 (11.6)
8. Providing basic trauma-focused interventions (assessing symptoms normalizing, providing anticipatory guidance, coping assistance).	38 (25.9)	85 (57.8)	24 (16.3)
9. Understanding how traumatic stress may present itself differently in patients of different ages, gender, or cultures.	24 (16.3)	84 (57.1)	39 (26.5)
10. Understanding the scientific or empirical basis behind assessment and intervention for traumatic stress.	16 (10.9)	82 (55.8)	49 (33.3)

Table 5

Providers report of specific trauma-informed practices performed in the past 6 months (N=147)

Specific trauma-informed practice	Have done this in the past 6 months, n (%)			
	All providers n=147	**Nurses n=95**	**Physicians n=25**	**Therapists n=27**
1. Ask a patient questions to assess his/her symptoms of distress	96 (65.3)	60 (63.2)	18 (72)	18 (66.7)
2. Ask family members questions to assess their symptoms of distress.	86 (58.5)	57 (60)	15 (60)	14 (51.8)
3. Teach a patient specific ways to manage pain and anxiety during a procedure	107 (72.7)	73 (76.8)	18 (72)	16 (59.3)
4. Teach a patient specific ways to cope with upsetting experiences	85 (57.8)	61 (64.2)	11 (44)	13 (48.2)
5. Teach family what to say to their family member after a difficult/painful/scary experience	116 (78.9)	77 (81)	21 (84)	18 (66.7)
6. Provide information to family about emotional or behavioral reactions that indicate their family member may need help	64 (43.5)	49 (51.6)	6 (24)	9 (33.3)

Table 6

Multiple logistic regression analysis predicting specific TIC practices (N=147)

Summed scores for self-rated competency	OR	P>|z|	[95% CI]
1. Ask a patient questions to assess his/her symptoms of distress	1.21	0.000	1.09 – 1.33
2. Ask family members questions to assess their symptoms of distress	1.21	0.000	1.10 – 1.43
3. Teach a patient specific ways to manage pain and anxiety during a procedure	1.13	0.016	1.02 – 1.24
4. Teach a patient specific ways to cope with upsetting experiences	1.16	0.001	1.06 – 1.28
5. Encourage patients to make use of their own social support system (family, friends, church, etc.)	1.18	0.005	1.05 – 1.32
6. Teach family what to say to their family member after a difficult/painful/scary experience	1.24	0.000	1.21 – 1.37
7. Provide information to family about emotional or behavioral reactions that indicate their family member may need help	1.29	0.000	1.16 – 1.43