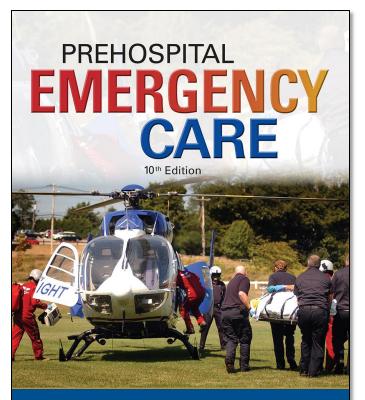
#### PREHOSPITAL EMERGENCY CARE TENTH EDITION



# CHAPTER 41

The Combat Veteran

JOSEPH J. MISTOVICH • KEITH J. KARREN Medical Editor Howard A. Werman, MD

ALWAYS LEARNING *Prehospital Emergency Care,* 10<sup>th</sup> edition Copyright © 2014, 2010, 2008 by Pear Mistovich | Karren

 $\begin{array}{c} \mbox{Copyright} @ 2014, 2010, 2008 \mbox{ by Pearson Education, Inc.} \\ \mbox{All Rights Reserved} \end{array} \textbf{PEARSON} \end{array}$ 

#### Learning Readiness

• EMS Education Standards, text p. 1145

ALWAYS LEARNING Prehospital Emergency Care, 10<sup>th</sup> edition Copyright © 2014, 2010, 2008 by Pearson Education, Inc. All Rights Reserved **PEARSON** 

# Learning Readiness Objectives

• Please refer to page 1145 of your text to view the objectives for this chapter.

# Learning Readiness Key Terms

• Please refer to page 1145 of your text to view the key terms for this chapter.

# Setting the Stage

- Overview of Lesson Topics
  - The Psychophysiology of Stress Response
  - Combat Veterans
  - The Nature of PTSD
  - Assessing and Providing Emergency Care to Combat Veterans

#### Case Study Introduction

EMTs Jenny Samuels and Deena Middleman arrive at the scene of a minor, single-vehicle collision. The driver is the only patient, and seems to be inordinately angry about having missed his turn and skidded into a utility pole. A police officer on the scene says, "I'm a vet. Something tells me this guy is, too. There is something more to this than the accident."

#### Case Study

- What are some clues that Jenny and Deena might look for in helping determine if the patient is a combat veteran?
- How can they assess whether the patient is a risk to himself or others?
- What special considerations are there in the interaction with this patient?

#### Introduction

- Combat veterans comprise less than 1% of the population, but can present unique challenges related to posttraumatic stress disorder.
- PTSD can affect anyone who has undergone a significant trauma.

The facial expression often known as the thousand yard stare may be a reaction to the abnormal stresses of combat.



ALWAY'S LEARNING *Prehospital Emergency Care,* 10<sup>th</sup> edition Copyright © 2014, 2010, 2008 by Pearson Education, Inc. All Rights Reserved **PEARSON** 

- The stress response is a result of sympathetic nervous system (SNS) activity.
- Epinephrine and norepinephrine are released by the adrenal glands.
- The body is prepared for action.

- SNS effects:
  - Increased heart rate
  - Blood channeled to core
  - Dilated pupils
  - Slowed food digestion

- SNS effects:
  - Increased blood pressure
  - Sharpened senses
  - Release of clotting factors
  - Hyperalert state

- Normally, the parasympathetic nervous system (PNS) balances the SNS.
- In PTSD, the SNS remains activated.

- A combat veteran is different from a war-era veteran.
- Each veteran has individual issues.

continued on next slide

ALWAYS LEARNING *Prehospital Emergency Care,* 10<sup>th</sup> edition Copyright © 2014, 2010, 200 Mistovich | Karren

Copyright © 2014, 2010, 2008 by Pearson Education, Inc. All Rights Reserved PEARSON

A history of combat service may be relevant to the emergency your patient is now experiencing. A variety of clues may help identify the patient as a combat veteran, such as a "high and tight" military haircut. (Photo: © Fotolia)



Prehospital Emergency Care, 10th edition ALWAYS LEARNING Mistovich | Karren

 $\begin{array}{c} \mbox{Copyright $\&$c$ 2014, 2010, 2008 by Pearson Education, Inc.} \\ \mbox{All Rights Reserved} \end{array} PEARSON$ 

- Identifying a combat veteran:
  - Military haircut
  - Military clothing
  - War memorabilia
  - Photographs
  - KIA bracelet

- Identifying a combat veteran:
  - Tattoos
  - Combat patches
  - Commendations
  - American flag
  - Veteran license plate

- Identifying a combat veteran:
  - Military vocabulary/demeanor
  - Respect for authority
  - Reluctance to seek assistance

- Less than 1% of the population, or about 22 million individuals, are combat veterans; 250,000 are women.
- Ages range from the 20s into the 80s.

continued on next slide

ALWAYS LEARNING *Prehospital Emergency Care,* 10<sup>th</sup> edition Copyright © 2014, 2010, 2008 by Pearson Education, Inc. **PEARSON** All Rights Reserved **PEARSON** 

- Phrase questions carefully.
  - Use, "Where did you see combat?" instead of, "Did you see combat?"
  - Do not ask if the veteran has ever killed anyone.

- 98% of combat veterans were under fire.
- 90% know someone who was killed.
- 80% saw dead bodies.
- 40% know someone who has committed suicide.

- Two-thirds have severe relationship problems.
- 25% of the homeless are veterans.
- Two-thirds have PTSD.

- PTSD is a collection of signs and symptoms.
- PTSD is a reaction of a normal person to an abnormal situation.
- There is sustained SNS activity.
- Memories linger and are disruptive to the person.

- PTSD four essential features:
  - The veteran's response involves feelings of anger, fear, horror, and helplessness.
  - The individual relives events through flashbacks, unwanted thoughts, or nightmares.

- PTSD four essential features:
  - The person avoids anything that reminds him—physically or emotionally—of the trauma.
  - The person might display anxiety or anger, with much time spent in a state of perceived imminent threat.

- Associated signs and symptoms
  - Guilt
  - Shame
  - Avoidance of others
  - Depression

- Associated signs and symptoms
  - Paranoia
  - Hostility
  - Feeling they will not live much longer
  - Agitation and anger

- Associated signs and symptoms
  - Physical responses include pain, which may be vague or unfocused
  - Signs of premature aging

continued on next slide

ALWAYS LEARNING *Prehospital Emergency Care,* 10<sup>th</sup> edition Copyright © 2014, 2010, 2008 by Pearson Education, Inc. **PEARSON** All Rights Reserved **PEARSON** 

- Alcohol and drug use
  - Common because of constant heightened SNS activity
  - 40% of veterans engage in pathological use of alcohol or drugs.
  - Denial is common.

- Danger to self or others
  - Combat veterans are no more likely to be violent toward others than other veterans are.
  - Combat veterans' suicide rate is 30% higher than that of other veterans.
  - Prediction of who will be a danger to himself or others is difficult.

- Factors in assessing danger
  - Ensure your own safety first.
  - Involve others where you can.
  - A past history of violence is a good predictor of future violence.
  - Talking about suicide or homicide will not increase its likelihood of happening.

- Factors in assessing danger
  - Get rid of any possible weapon.
  - A tense, agitated, yelling, pacing patient, or one who has not slept or is intoxicated is at risk of becoming violent.
  - Use physical restraints only as a last resort; they will exacerbate the patient's state.

- Factors in assessing danger
  - Trust a "gut feeling" of impending danger.
  - The suicide formula: pain or turmoil that is believed to be unchangeable, unending and unbearable

- Factors in assessing danger
  - Anniversary reactions increase risk for violence.
  - 70% of suicides have previously told someone of their intent.

- Signature wounds of combat veterans
  - In Iraq and Afghanistan, improvised explosive devices (IEDs), resulted in amputations and traumatic brain injury (TBI).
  - TBI is an alteration in brain function as a result of external force.

- Signature wounds of combat veterans
  - 300,000 soldiers have been diagnosed with TBI.
  - Delayed effects include high cholesterol, hypertension, and diabetes.

## The Nature of PTSD

- TBI vs. PTSD
  - There is overlap in the signs and symptoms.
  - Loss of consciousness is not necessary for diagnosis of TBI.
  - Most TBIs have been diagnosed, but some may have been missed.
  - TBI and PTSD can coexist.

#### TABLE 41-1Signs and Symptoms of PTSD and TBI

Signs/Symptoms	PTSD	Concussion/TBI
Severe headaches	Х	Х
Drug/alcohol abuse	Х	Х
Sleep disturbance	Х	Х
Depression	Х	Х
Anxiety	Х	Х
Anger	Х	Х
Memory problems	Х	Х
Easily frustrated	Х	Х
Relationship problems	Х	Х
Traumatic event	X	Х
Easily fatigued	Х	Х
Bothered by certain smells	Х	Х
Automatic actions	Х	Х
Numbness		Х
Impulsive		Х

#### continued from previous slide

TABLE 41-1 Signs and Symptoms of PTSD and TBI		
Signs/Symptoms	PTSD	Concussion/TBI
Severe head/neck pain		Х
Trouble reading		Х
Lack of focus		Х
Clumsy		Х
Can't find right words		Х
Trouble understanding others		Х
Getting lost		Х
Disoriented		Х
Trouble swallowing		Х
Confusion		Х
Trouble hearing		Х
Blurred vision		Х
Dizziness		Х
Loss of sense of smell		Х

#### The Nature of PTSD

 Repeated concussions can lead to chronic traumatic encephalopathy (CTE). Click on the disorder that seems to occur at an unusually high rate in returning combat veterans.

#### A. Type 2 diabetes

B. Kidney failure

C. Osteoporosis

#### D. Diverticulosis

ALWAYS LEARNING Prehospital Emergency Care, 10<sup>th</sup> edition Copyright © 2014, 2010, 2008 by Pearson Education, Inc. All Rights Reserved PEARSON

- Do not ask the veteran if he has ever killed anyone.
- Provide structure and limits.
- Remind the patient you are there to help.
- Use a calm, firm approach.

- If you have not been in combat, do not tell the patient that you understand.
- Establish rapport.
- The patient may be reluctant to seek help.
- Find out what the person wants from the encounter with EMS.

- Do not assume PTSD, but do not rule it out.
- Ask about weapons ("How many weapons do you have, and are they secure?").
- Keep noise down, do not allow crowds, respect the patient's space and privacy.
- Explain what you are going to do.

- Diesel fumes, dust, and helicopters can be triggers.
- Combat vets have trouble asking for help.
- Take time to listen to the patient.

## Case Study Conclusion

Since the patient is ambulatory and has a minor mechanism of injury, and is displaying anger, Jenny and Deena let the police officer make first contact and establish rapport. After establishing rapport, the police officer introduces the EMTs.

"Hi. I'm Jenny. I would like to see if you are hurt and if there is any other way we can help."

#### Case Study Conclusion

During the assessment, Jenny finds that the patient struck his head on the driver's side window. She asks if he has ever had a concussion or brain injury before. The patient replies that he was injured by an IED in Iraq, and received shrapnel wounds and a concussion.

#### Case Study Conclusion

Although the current impact seems minor, Jenny is concerned about the history of previous TBI. She completes her assessment and gains the patient's cooperation in consenting to transport. She includes the history of previous combat injury in her written documentation and her verbal handoff report to hospital staff.

#### Lesson Summary

- PTSD is an intense emotional and physical response to abnormal trauma.
- The four essential features are visceral responses to trauma, reliving the trauma, avoiding reminders, and a demeanor of anxiety and anger.

#### Lesson Summary

- A TBI occurs in combat vets because of IEDs.
- There is overlap between signs and symptoms of TBI and PTSD.
- Be prepared to take time and listen to the concerns of the vet.